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Causes and Consequences of the War in Eastern Ukraine: An Economic Geography Perspective

VLAD MYKHENKO

Abstract

This essay provides an economic geography perspective on the causes and consequences of the war in eastern Ukraine. It focuses on the controversial proposition that the armed conflict in 2014 was triggered by domestic, economically determined factors. The essay argues that economic and material circumstances in the region had generated neither necessary nor sufficient conditions for a locally rooted, internally driven armed conflict. The role of the Kremlin's military intervention was paramount for the commencement of hostilities. As the human and economic costs of the war continue to mount, Ukraine's war-ravaged eastern regions face further depopulation, economic decline and erosion of development.

IN THE EARLY SPRING OF 2014, FOLLOWING THE VIOLENT COLLAPSE of the government of President Viktor Yanukovych in Kyiv, and the Russian occupation of Ukraine's Crimean peninsula, Moscow-backed militants began seizing regional government buildings and local police stations across eastern Ukraine. A brutal armed conflict then ensued. Since April 2014, the ongoing, albeit undeclared, Russo–Ukrainian war has already generated a weighty amount of academic research and policy advocacy (Maiorova 2017; Ash *et al.* 2018). The initial academic focus was firmly on the geopolitics of Russia's 'deniable' intervention into the so-called Ukraine crisis (Allison 2014), and on its broader security ramifications for the West (Biersack & O'Lear 2014; Kotkin 2016; Moravcsik 2016; Treisman 2016; Raik 2019).

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Matters on the ground developed quickly in July–August 2014. Since then, both academic research and investigative journalism have uncovered undeniable details of the Kremlin's special operations proxy war in Ukraine (Mitrokhin 2015; Sutyagin 2015; Bukkvoll 2016).¹ The Kremlin's 'hybrid warfare', usage of modern propaganda technologies and deployment of disinformation have also attracted a lot of attention (Laruelle 2016; Lutsevych 2016; Richey 2018).

By far the most controversial aspect of academic research regarding the 2014 events in Ukraine relates to the search for internal domestic causes of the armed conflict, given its portrayal by the Russian government as a 'civil war'.² As early as September 2013, Sergei Glaz'ev, adviser for regional economic integration to Vladimir Putin, forewarned that Ukraine's decision to sign a free trade deal with the European Union (EU) would provoke 'political and social unrest' and 'chaos', with 'separatist movements' splitting the Russian-speaking eastern and southern regions away from the rest of the country (Walker 2013). Two months later, Russian Prime Minister Dmitrii Medvedev cautioned about 'the tectonic split that ... is threatening the stability and existence of Ukraine as a state'.³ The main research purpose of this essay, thus, is two-fold. Firstly, it will critically assess the validity of hypothesised local causes for the armed conflict in eastern Ukraine. Secondly, it will provide an economic geography perspective on the consequences of the undeclared Russo–Ukrainian war for the region and its future. This study undertakes a descriptive and cartographic analysis of a specially compiled body of quantitative statistical data and qualitative evidence derived from three types of sources: the official databases of the Ukraine State Statistics Service⁴ and the International Monetary Fund;⁵ academic surveys, investigative journalism and private correspondence related to the economic situation in Ukraine's non-government-controlled territories; and output, income and employment figures published by the self-proclaimed Russian-controlled administrations in eastern Ukraine. The fieldwork part of this research comprises conversations by the author with internally displaced people, local and national government officials, and experts during several trips to Ukraine.⁶

Following this introduction, the essay discusses the key literature on the alleged local origins of the war in the east of Ukraine, identifying economic determinism as its main explanatory framework. It further exposes the theoretical underpinnings of economic

¹'Russia's Path(s) to War', *Bellingcat*, 21 September 2015, available at: <https://www.bellingcat.com/news/uk-and-europe/2015/09/21/bellingcat-investigation-russias-paths-to-war/>, accessed 12 July 2018; 'Russia's War in Ukraine: The Medals and Treacherous Numbers', *Bellingcat*, 31 August 2016, available at: <https://www.bellingcat.com/news/uk-and-europe/2016/08/31/russias-war-ukraine-medals-treacherous-numbers/>, accessed 12 July 2018.

²'On Russia's Position at the 69th Session of the UN General Assembly', Ministry of Foreign Affairs of the Russian Federation, 23 September 2014, available at: http://www.mid.ru/en/web/guest/general_assembly/-/asset_publisher/lrzZMhfoYRUj/content/id/1299603, accessed 13 June 2019.

³'Meeting of the Union State Council of Ministers', Russian Government, 13 December 2013, available at: <http://government.ru/en/news/8941/>, accessed 13 June 2019.

⁴'Statystychna informatsiia', Ukraine State Statistics Service, 2019, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.

⁵'World Economic Outlook Database', *International Monetary Fund April 2019 edition*, available at: <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx>, accessed 13 June 2019.

⁶While preparing this essay, the author visited: Kyiv (November 2016, February and September 2017, June 2018); Lviv (February 2017); Dnipro and Kryvyi Rih (September 2017).

determinism, rooted in historical materialism. Consequently, the essay introduces human geography of the Donets Basin (*Donetskyi basein* or Donbas) and critically assesses the economic role which this region had played nationally prior to 2014. Subsequently, the prewar socioeconomic conditions of the region in question are compared and contrasted with disruption and destruction brought upon Donbas by the first five years of the undeclared Russo–Ukrainian war. In addition to the analysis of the post-2014 demographic, output, employment and income trajectories, the essay highlights the consequences of the forced displacement and *de facto* partitioning of Donbas's economy since 2014. Finally, the essay provides an evidence-based critique of historically materialist justifications of the war in Donbas, before suggesting a plausible alternative. It is contended that the region's economic and material circumstances in the early 2010s had generated neither necessary nor sufficient conditions for a locally rooted, internally driven armed conflict. The role of the Kremlin's covert military intervention, aided by its local proxies, remains paramount, necessary and sufficient for the continuation of hostilities. In the meantime, Ukraine's war-ravaged eastern provinces face further depopulation, economic decline and erosion of development.

From culture to structure: economic determinism and the causes of the war in eastern Ukraine

The bulk of explanations accounting for the causes of the Russo–Ukrainian conflict are based on the foreign policy or geopolitics-centred considerations mentioned above. The rest of the literature focuses heavily on what Portnov (2015) describes as intellectually reductionist and essentialist 'cultural identity' and 'history' interpretations (Antoniuk & Prohniak 2015; Kuzio 2015; Kulyk 2019). Despite some earlier studies highlighting Ukraine's remarkable regional stability (Sasse 2007), it is not hard to find academic publications today describing the country as the doomed 'land of irreconcilable differences', where 'identity is a given that cannot be changed' (Molchanov 2016, p. 204) and 'history is irreversible' (Sotiriou 2016). Some authors have gone as far as to follow the official Russian government line, depicting the 'Ukraine crisis' as a 'clash of civilisations' affair, a civil war between Russophone and Russian Orthodox Ukraine and Galicia-based 'Catholic nationalist extremists' (Loshkariov & Sushentsov 2016; Petro 2016).⁷

Another—ostensibly more promising—strand of this literature claims that the armed conflict in eastern Ukraine was economically determined, one way or another. As summarised by Buckholz (2019), the economic determinist hypothesis suggests that the inhabitants of Donbas were particularly inclined towards separatism, either because of the region's economic exposure to Russia, or due to the region's economic significance and perceptions of discriminatory wealth redistribution within Ukraine. A common refrain running through economic determinism-driven arguments is that the conflict is a rational response based on the material interests of local industrial workers, vulnerable to economic shocks emanating from closer integration with the EU and fighting to

⁷See also Kuzio (2019).

preserve historical trading ties to the Russian market (Giuliano 2015; Zhukov 2016). At the same time, it has been argued that the war in Donbas was caused by a local push for fiscal autonomy or even self-determination from Ukraine, aimed at exploiting the industrial capabilities of its ‘cash-generating cities’ (Sotiriou 2016, pp. 61–4) and thereby establishing an economic base for the two breakaway ‘people’s republics’ (Matveeva 2016, p. 40).

Indeed, as argued by Zimmer (2004, 2007) and Osipian (2015), the region’s political identity was based on the founding myth of Donbas as the most developed region of the country (‘Donbas feeds the USSR’), and the associated notion that the nation’s entire economy (first Soviet, later Ukrainian) rested on Donbas (Horbulin 2015, pp. 117, 273; Libanova 2015, pp. 7, 25, 33–4; Maiorova 2017, p. 28). Consequently, ‘Donbas feeds Ukraine’ was a slogan later used by the former President Yanukovych’s Party of Regions (*Partiia rehioniv*) in the run up to the tumultuous 2004 presidential elections (Wilson 2016, p. 640). The ‘affluent independent Donbas’ storyline has also played a vital part in the Kremlin’s Ukraine civil war narrative. The subsequent role of President Putin’s aides, Glaz’ev and Vladislav Surkov,⁸ in directly instigating the ‘popular uprisings’ across Ukraine’s eastern and southern regions has been well documented (Toler & Haring 2017). For example, two months into the conflict, Glaz’ev insisted:

The Donets Basin, commonly called [the] Donbas, has all the possibilities to create its own autonomous financial system and Kiev understands this. ... Financial capabilities of [the] Donbas will allow the region to avoid a sharp decline in living standards that the rest of Ukraine will see. [The] Donbas can potentially increase its living standards by half, and become the most prosperous region of the new Ukraine.⁹

*Historical materialism and homo economicus: digging out the real basis
of social conflict?*

The emphasis given to rational human thinking based on real material interests is, certainly, a centuries-old idea that does not rest on an altered reality constructed by ‘fake news’. The assertion that social phenomena have their roots in the economic structure of society—in ‘social relations of production’—lies at the heart of Marxist historical materialism. In the preface of his 1859 treatise, *A Contribution to the Critique of Political Economy*, Karl Marx (1971) famously posited that all public life (‘the superstructure’) was determined by the prevailing mode of production (‘the base’): ‘The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness’. Further elaborations of

⁸‘The Glazyev Tapes: Getting to the Root of the Conflict in Ukraine’, European Council on Foreign Relations, 1 November 2016, available at: https://www.ecfr.eu/article/commentary_the_glazyev_tapes_getting_to_the_root_of_the_conflict_in_7165, accessed 13 June 2019.

⁹‘Donets Basin Has Potential to Set Autonomous Financial System—Putin’s Aide’, *Sputnik*, 10 June 2014, available at: <https://sputniknews.com/world/20140610190469813-Donets-Basin-Has-Potential-to-Set-Autonomous-Financial-System/>, accessed 13 June 2019.

the official communist dogma can be found in Joseph Stalin's pamphlet on *Dialectical and Historical Materialism*:

Whatever is the being of a society, whatever are the conditions of material life of a society, such are the ideas, theories, political views and political institutions of that society. ... Or, to put it more crudely, whatever is man's manner of life such is his manner of thought. ... Hence, the clue to the study of the laws of history of society must not be sought in men's minds, in the views and ideas of society, but in the mode of production practiced by society in any given historical period; it must be sought in the economic life of society. (Stalin 1951, pp. 25, 36–7)

Hence, the economic determinist arguments put forward by Giuliano (2015) and Zhukov (2016), seeking to explain the war in eastern Ukraine through the material interests of its industrial workers rationally uprising to preserve their jobs, have a long-standing theoretical pedigree, stretching back to the writings of Marx and Engels (Cornforth 1968; Ruben 1979). At first, it may appear that historical materialist explanations have so far permeated all social sciences and are very often invoked by non-Marxists or even anti-communists (Wood 2005). However, the vision of 'rational economic man' or *homo economicus* is not unique to Marxism. In its basic version, the rational economic man, in the words of Brown *et al.* (2018), is 'an imaginary person fought over by rival social scientists', ranging from *laissez-faire* economists and international relations theorists to child psychologists. For example, this is how *homo economicus* is defined in neo-classical economic theory:

In its ideal type case the agent has complete, fully ordered preferences (defined over the domain of the consequences of his or her feasible actions), perfect information and all the necessary computing power. After deliberation, he or she chooses the action that satisfies their preferences better (or at least no worse) than any other. No questions are raised about the source or worth of preferences, reason focuses on the efficient selection of the means to given ends ... Such a social theory is individualist and contractarian, with a pedigree that includes Hobbes's *Leviathan* and Benthamite utilitarianism. The satisfaction of individual preference, aided by felicific calculation, is what makes the social world go round. Social relations become instrumental, in the sense that they embody exchanges in the service of individual preferences. (Hargreaves-Heap & Clark 2008, pp. 1–2)

The 'rationality postulate' of neo-classical economics is more complex and sophisticated than that of the historical materialists, but the basic vision of self-interested individuals—who are rational in the sense that they are moved to maximise their most preferred outcome given the constraints upon choice—remains (Blaug 1992, pp. 229–34; Hargreaves-Heap & Clark 2008). In the following sections, the essay uncovers the real basis of social life in the prewar Donbas in order to establish whether the motives of the locals—their alleged preference for an armed rebellion—could have been economically rational and (pre)determined; that is, whether local economic agents could have been seeking to maximise their utility, in a broad sense, or their personal wealth, narrowly defined, through armed conflict.

Human geography of Donbas under post-communism

Donbas is an old mining region of eastern Ukraine, covering the area between the valleys of the Donets and lower Dnieper rivers. In terms of public administration, the Ukrainian Donbas

consists of two provinces, centred on the cities of Donetsk, founded in 1869 by Welsh ironmaster John Hughes, and Luhansk, founded in 1795 by Scottish industrialist Charles Gascoigne. The Donetsk coal-field itself stretches from Ukraine's Dnipropetrovska *Oblast'* (province) in the west (western Donbas), through the central Donbas, and crosses the Ukraine–Russia border in the east into Russia's Rostovskaya *Oblast'* (see Figure 1). The Russian or eastern Donbas consists of four districts (*raiony*) of Rostov province—Kamenskii, Belokalitvenskii, Krasnosulinskii and Oktyabr'skii, with a total population of 304,784 in 2010.¹⁰

The region has played a defining role in Ukraine's post-communist transformation (Swain 2007). Following the collapse of the Soviet Union, Donbas has suffered a devastating economic transition, plunging—alongside Ukraine—to the bottom of the world's human survival and development indicators. Overall, Ukraine's post-Soviet development was characterised by the deepest and longest economic depression experienced by any of the post-communist transition economies not affected by war, resulting in the loss of 60% of the gross domestic product (GDP) between 1990 and 1999 (Mykhnenko 2011). The impact of national economic decline on Donbas's economic fortunes was profound, accelerating the region's long-term demographic crisis. Under post-communism, Ukraine's crude death rate of 15.43 deaths per thousand people fell behind that of the war-ravaged sub-Saharan Africa (15.03), while the country's total fertility and population growth rates in the mid-2000s reached the historically lowest level ever recorded in the world. In terms of natural population change, during the past two decades Ukraine has been amongst the fastest shrinking countries on earth, well ahead of Bulgaria, Latvia, Russia and Hungary, the world's leaders in natural population decline (Mykhnenko *et al.* 2012a). Overall, between 1991 and 2014, Ukraine's total population fell by at least 6.8 million people. The population of Donbas on 1 January 2014 was officially estimated at 6,583,400, constituting 14.5% of Ukraine's total population, with Donetsk province accounting for 4,343,900 people (9.6% of Ukraine's total) and Luhansk province for 2,239,500 (or 4.9%; see Appendix Table A1). By the end of 2013, Donetsk province had lost 19% of its inhabitants from its peak in 1992, whilst population decline in Luhansk province was even steeper, over 22%. Thus, before the outbreak of hostilities in early 2014, the population of Donbas had already decreased by 1.7 million overall, shrinking almost twice as fast as Ukraine's on average.¹¹

Donbas's downward demographic and economic trajectories under post-communism have had a detrimental impact on the region's labour force. The Soviet economy of centralised planning was a full employment economy, based around the mobilisation of all labour recourses available. The continuous growth of the workforce in Donbas (and Ukraine as a whole) stopped in 1985, with the start of Gorbachev's *perestroika* reforms. Consequently, between 1985 and 2013, the workforce in Donbas shrank by one fifth, from 4,034,380 to 3,217,000 in total. By comparison, the total workforce in the country declined by 14%. In addition to natural population decline, fewer people were in work: under post-communism, Luhansk province reported a nine percentage point (pp) fall in the number of

¹⁰ 'Administrativnaya karta Rostovskoi oblasti', Government of Rostov Province, 1 June 2019, available at: <https://www.donland.ru/activity/859/>, accessed 14 June 2019.

¹¹ Data extracted from various editions of: 'Statystychna informatsiia', Ukraine State Statistical Service, 2019, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.



FIGURE 1. THE CENTRAL DONETS BASIN [DONBAS], ITS MAJOR CITIES AND LOCAL AUTHORITIES

Notes: In accordance with the 9 April 2015 Law of Ukraine No. 317-VIII ‘About condemning Communist and National-Socialist (Nazi) totalitarian regimes in Ukraine and banning propaganda of their symbols’, 103 place-names in Donetsk and 63 place-names in Luhansk provinces were renamed, including the following counties: *Bakhmutskiy raion* (formerly, *Artemivskiy raion*), *Nikolskyy* (ex-*Volodarskyy*), *Pokrovskiy* (ex-*Krasnoarmiyskyy*), *Lymanskyy* (ex-*Krasnolymanskyy*), *Manhushskiy* (ex-*Pershotravnevyi*), *Boikivskiy* (ex-*Telmanovskiy raion*, currently in what is officially known as ‘separate districts of Donetsk and Luhansk provinces’ (*okremi raiony Donetskoi i Luhanskoi oblastei*—ORDLO), *Sorokynskiy* (ex-*Krasnodonskyy raion*, currently in ORDLO), and *Dovzhanskyy* (ex-*Sverdlovskiy raion*, currently in ORDLO).

Sources: ‘Zakon Ukrainy. Pro zasudzhennia komunistychnoho ta national-sotsialistychnoho (natsystskoho) totalitamykh rehymiv v Ukraini ta zaboronu yikhnoi symboliky’, *Vidomosti Verkhovnoi Rady*, 26, 2015, available at: <https://zakon.rada.gov.ua/rada/show/en/317-19>, accessed 10 June 2019; ‘Postanova Verkhovnoi Rady Ukrainy. Pro pereimenuvannia okremykh naselenykh punktiv ta raioniv na tymchasovo okupovanykh terytoriiakh Donetskoi ta Luhanskoi oblastei’, *Vidomosti Verkhovnoi Rady*, 23, 2016, available at: <https://zakon.rada.gov.ua/rada/show/en/1351-19>, accessed 10 June 2019.

economically active 15–70 year olds, reaching 63.3%, whilst the corresponding decline in Donetsk province stood at 11pp (percentage points), thus dropping to 65.4%.¹²

The quality of the regional workforce has historically been low, geared towards hard manual labour, with the relative share of knowledge workers in Donbas being just over half of Ukraine's average. Due to an ageing workforce and early retirement amongst coal miners, by the end of 2013, a third of the region's total population—2,122,694 people—were of pension age and retired. The total annual pension outlays in Donbas topped US \$5.5 billion in current prices. These mandatory pension payments amounted to an unsustainable share of 20.0% of the aggregate regional GDP: ranging between 17.6% of GDP in Donetsk and 26.9% in Luhansk provinces (see Appendix Table A1). For comparison, public pension spending across high-income industrially advanced economies stands on average at 8% of GDP.¹³

Donbas economy before the war: Ukraine's dynamo or rust belt?

Following the depression of the 1990s, the Ukrainian economy grew at 8.7% per annum between 1999 and 2014. Over that period, Donbas's economy—the nation's second largest after Kyiv—was expanding at a much slower rate (6.3% p.a.), with Donetsk province registering 6.9% of annual economic growth, and Luhansk province trailing at 4.8%. To situate Donbas's regional economic performance within the Ukrainian spatial economy, the real annual growth rates of provincial GDP in the 1999–2013 period, their actual sizes in 2013 (valued in Ukrainian hryvnia, UAH) and the starting point GDP *per capita* in 1999 are displayed in Figure 2. The data show that, in the 14 years that preceded the war, Donetsk province was losing ground to all the other affluent regional economies, except for Zaporizhzhia and Poltava. In turn, Luhansk province was growing at the fourth slowest pace amongst 27 regions, falling further behind all of Ukraine's poorest provincial economies except Sumy and Chernihiv. A national prosperity dynamo the post-Soviet Donbas clearly was not (Gentile & Marcińczak 2012).

The structure of the regional economy and its relative weight in national production have been changing over time, with the services sector driving most economic growth in the region. Agriculture, which accounted for 10.1% of the value of Donetsk provincial output in 1988, declined to 4.2% in 2013, making the territory firmly dependent on food imports. The share of mining and manufacturing in total regional output have sharply declined too, from 70.6% of Donetsk provincial output in 1988 to 34.2% in 2013. Deindustrialisation affected Luhansk as well, with its combined share of mining and manufacturing activities declining to 39.9% of the provincial economy by the end of 2013. The total level of economic activity in the region as a whole stood at UAH220.03 billion (US\$27.52 billion at current prices), with Donetsk province accounting for three quarters of Donbas's aggregate GDP. The region's economic importance has continued in the traditional spheres of mining and quarrying, accounting for 29.4% of Ukraine's output, and also in

¹²Data extracted from various editions of: 'Statystychna informatsiia', Ukraine State Statistical Service, 2019, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.

¹³'OECD.Stat', Organisation for Economic Co-operation and Development, 2018, available at: <https://doi.org/10.1787/data-00285-en>, accessed 21 May 2018.

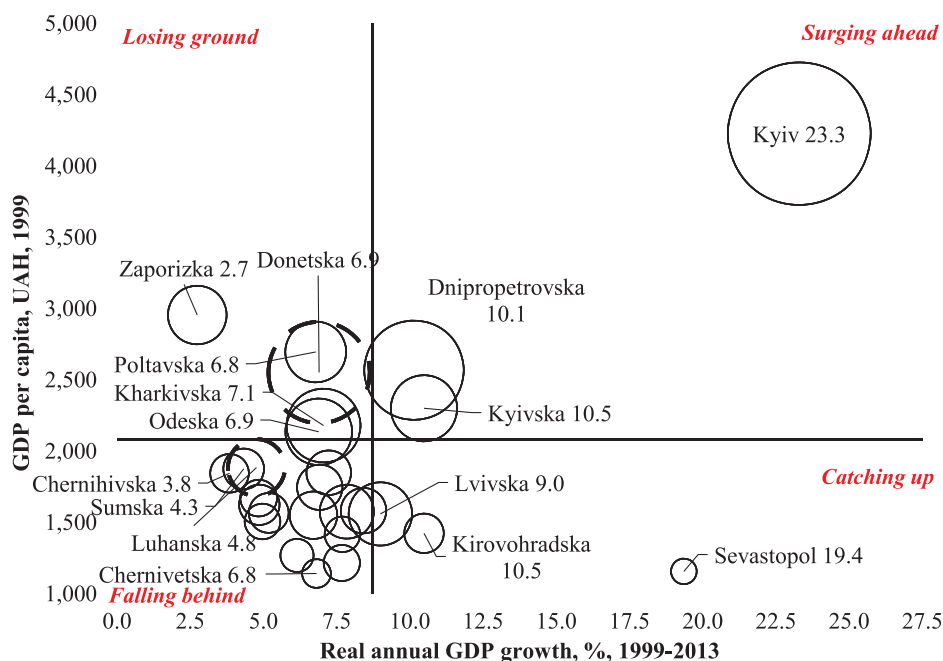


FIGURE 2. PROVINCES WITH DIFFERENT LEVELS OF GDP *PER CAPITA* IN 1999 (UAH), REAL ANNUAL GDP GROWTH IN 1999–2013 (%), AND BUBBLE SIZES OF THEIR RESPECTIVE ECONOMIES IN 2013 (UAH CURRENT PRICES)

Note: Grid lines represent the Ukraine average figures for GDP *per capita* in 1999 (UAH2,081) and real GDP growth in 1999–2013 (8.73% per annum). Bubbles representing the size of the economies of Donetsk and Luhansk provinces appear as dotted lines to ease differentiation.

Source: Calculated from 'The World Economic Outlook Database', International Monetary Fund, April 2018 Edition, available at: <http://www.imf.org/external/pubs/ft/weo/2018/01/weodata/index.aspx>, accessed on 21 May 2018; Ukraine State Statistical Service (various years), 'Statystychna informatsiia', available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.

manufacturing (21.0% of Ukraine's total output) and in energy supply (20.3%; see Appendix Table A1). Nevertheless, the overall significance of the Donbas economy for post-Soviet Ukraine has steadily declined, from a 17.3% share of Ukraine's GDP in 1996 to 14.5% in 2013. Luhansk province's relative decline during this period was particularly steep, from a 5% share to just 3.6% in 2013 (see Figure 3).

The real economy of the prewar Donbas: the firm base for a prosperous future?

Following the post-communist transition depression, economic recovery in the region from the late 1990s was largely driven by exports of goods and services, which peaked in 2011 at US\$24.66 billion, accounting for a remarkable 30% share of Ukraine's total exports, twice the region's population share. However, with the slowdown of the global economy in the 2010s, Donbas's exports dropped sharply to US\$16.75 billion in 2013, shrinking to 21.4% of Ukraine's total, though remaining the nation's top exporting region overall. That

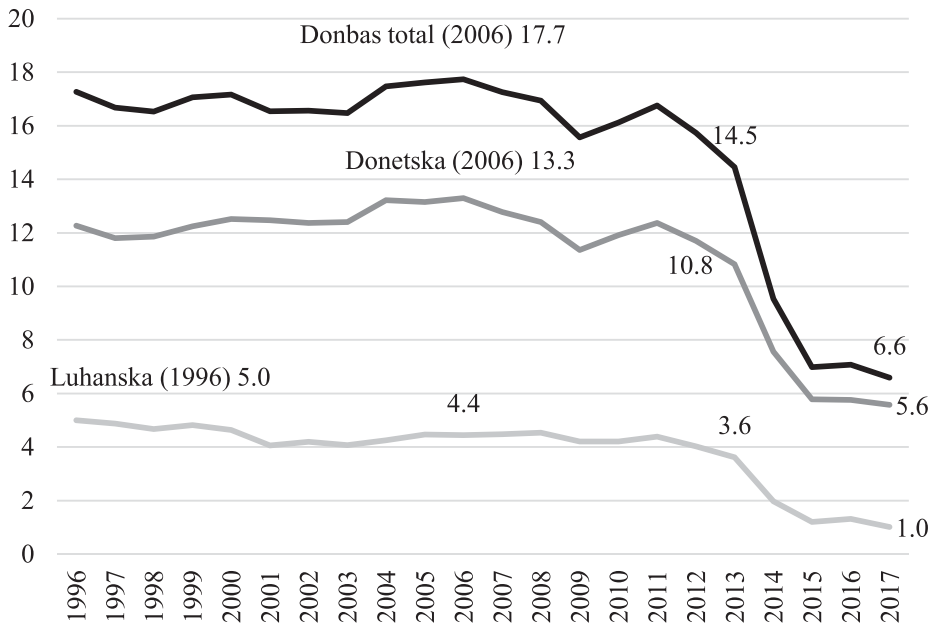


FIGURE 3. THE ECONOMIC SIGNIFICANCE OF DONBAS: PROVINCIAL SHARES RELATIVE TO UKRAINE'S GDP, 1996–2017 (%)

Source: Calculated from Ukraine State Statistical Service (various years), 'Statystychna informatsiia', available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.

year, Donetsk province exported US\$12.41 billion worth of goods and US\$640 million worth of services; Luhansk province's merchandise exports stood at US\$3.55 billion, with the export of services accounting for US\$157 million. In terms of trade composition, ferrous metals (steel), fuel (coal) and railway locomotives comprised three-quarters of the region's commodity exports, whilst transport (rail and sea) made up the bulk of the exported services. Russia and the other Eurasian Economic Union countries accounted for 32% of Donbas's merchandise exports in total, being the most important market for Luhansk province (41.4% of exports), and its heavy engineering and railway transport firms. The EU took 28.2% of Donbas's exports, whilst the largest share (39.8%) went elsewhere. Indeed, the bulk of Donetsk province's exports (44.8%) was destined for the markets outside of Europe and the former USSR (see Appendix Table A1).

Despite the region's foreign trade success, Donbas has failed to attract any significant amount of inward foreign direct investment (FDI). By the end of 2013, Donbas's share of national FDI stock had not even reached 8%, and the *per capita* FDI stock amounted to just US\$808 in Donetsk and US\$394 in Luhansk provinces, respectively. In terms of domestic capital formation, the region was more successful: between 2000 and 2013, Donetsk province reported a 37.4pp increase in capital investment, compared to Ukraine's 14.6pp increase. Since 2000, Luhansk province has more than doubled its capital stock, investing 8% per annum into domestic capital, on average. The export boom has turned Donetsk into a major business and asset management hub, with two dozen of Ukraine's top 200 companies maintaining their headquarters in the provincial capital, including

Metinvest, DTEK, ISD, DonetskSteel and Donetsk Railways. The surplus of local company profits from steel exports and other semi-processed manufactures was routinely channelled to offshore tax havens: by 2014, 83% of Ukraine's total outwards FDI originated from Donbas (see Appendix Table A1).

Some of the foreign cash windfall enjoyed by the largest Donbas firms has also found its way into the pockets of ordinary people. Donbas's annual gross personal income in 2013 reached UAH35,642 *per capita* (US\$4,459 or €3,359 in current market prices); Donbas's income level was 6% higher than the national average of UAH33,668. That was despite the fact that the region's output per head in 2013 was Ukraine's average: 14.5% of the country's total population generated 14.5% of its GDP (see Figure 3). The residents of Donetsk province were 12% (US\$500/€400 a year) better off than the average Ukrainian, with gross annual personal income in the province reaching UAH37,680 per head (US\$4,714/€3,551). The partial explanation for this was that salaries and wages in Donbas have been amongst the highest in the country: in 2013, an average employee in Donetsk province earned the country's second highest wage of UAH3,755 per month (US\$470/€366), whilst his or her counterpart in Luhansk province was paid UAH3,337 a month (US\$417/€325), the fourth highest wage in Ukraine. However, primarily as the result of scarce employment opportunities, the standard of living in Luhansk province was rather mediocre, standing in 2013 at UAH31,692 *per capita* a year (US\$3,965/€2,986), that is, 6% lower than the national average. In terms of gross disposable income, Donetsk province remained Ukraine's second most prosperous province throughout the 2000s (after Kyiv), whilst Luhansk province chronically lagged behind.

The war in eastern Ukraine: a donor region's revolt?

One of the two economic determinism-based hypotheses tested in this study postulates the war in Donbas to be the result of a separatist uprising by a wealthy region, trying to further its material interests and living standards by abandoning the 'net contributor' role and seceding from its poor, 'subsidised' neighbours. Yet in the simplest terms, by January 2014, Donbas's position overall was fiscally neutral. Given the region's output per head equalled Ukraine's average, Donbas—as a whole—was neither a net contributor to national inter-budgetary transfers nor a net recipient of equalisation subsidies from Kyiv. Taking into account the intra-regional development gap discussed above, the more affluent Donetsk province had probably continued to play its 'donor region' role in the Ukraine state budget in the run up to 2014 (Novikova 2016, Tables 4.4–4.5). Nevertheless, even there, the budgetary donor–recipient positions were not entirely straightforward. The fiscal transfer analysis of the Greater Donetsk conurbation reveals that, in 2010, Donetsk City Council transferred 39.4% of its own revenue 'surplus' to Ukraine's consolidated state budget, whilst the neighbouring municipality of Makiivka received up to 27.1% of its budget expenditure in the form of equalisation subsidies from Kyiv (Mykhnenko *et al.* 2012b). The politically explosive issue of inter-budgetary fiscal transfers was further complicated by Donbas's ever rising and nationally funded pension burden, and by the amount of explicit and hidden subsidies received by the local coal mines, steel mills, coking plants, chemical factories and coal-fired power generators in the form of generous state orders, output price controls and paltry environmental pollution penalties (van Zon

2007; Iwański 2015). Indeed, Donetsk province governor Serhii Taruta, addressing the administration staff on 27 March 2014, claimed the province was subsidised by the centre, living well beyond its means:

In the past there was a myth that Ukraine fed the entire Soviet Union. But when the Soviet Union collapsed, we learnt that was untrue. Today there is a myth that Donbas feeds Ukraine. Really, if one is to ask, I think that probably each and every Donbas inhabitant would say that he feeds the whole country. And yet, if we look at the statistics, we see that Donetsk province is a subsidised region and the state budget supplements our income.¹⁴

Furthermore, Luhansk province has been a constant drain on the public purse since the records began in 1996 (Mykhnenko & Swain 2010, pp. 154–55). Thus, the ‘donor-region’s revolt’ argument does not provide a very compelling reading, if one is concerned with a rational self-interested (or selfish) response based on perfectly understood material interests. Yet the accounting peculiarities of Ukraine’s public finance formation did not feature prominently amid the political intensity of early 2014. As a local witness observed, it was impossible to calm the pro-Russian separatist agitation:

These people are in a state of altered reality and painful consciousness and aggressively defend their image of the world from any attempt at intervention. [The] ‘image’ is established by the Russian [television] channels, local press and the Party of Regions, which has long worked on churning out the stereotypes ‘we’ll die without Russia’, ‘decaying Europe’, [the] ‘Donbas feeds Ukraine’ and the like. The most aggressive part of the population operates on pseudo facts that cannot be challenged, as they are unprovable. Professional psychiatrists characterise such behaviour as mass psychopathology. (Todorov 2015, p. 10)

The war in eastern Ukraine: a ‘rust belt’ rising?

The second economic determinism-based hypothesis investigated here suggests that the war in Donbas is a local rebellion rooted in the old industrial interests of Russia-bound exporters. To pursue the ‘rust belt rising’ hypothesis, Zhukov (2016) used micro-level data on violence during the first 12 months of the Russo–Ukrainian war across 3,037 population settlements in Donbas and its correlation (through Bayesian Model Averaging) with the following set of explanatory variables: ethno-linguistic population (‘proportion Russian-speaking’), economic structure (‘proportion of the local labour force employed in machine-building/mining/metals industries’), characteristics of the local military geography (‘population density’, ‘elevation’, ‘forest cover’, ‘distance to the nearest road’, ‘distance to the Russian border’) and the prewar political loyalties of the local population (‘proportion of the popular vote received by Viktor Yanukovych in the 2010 presidential election’). Zhukov (2016) claims a municipality’s prewar employment mix to be the strongest and most robust predictor of militant activity. His study concludes that where the ‘opportunity costs of insurgency’ were low, as in machine-

¹⁴‘Te, shcho Donbas hoduie Ukrainu—tse mif, oblast dotatsiina,—Taruta’, *Telekanal Novyn 24*, 27 March 2014, available at: https://24tv.ua/te_shho_donbas_goduye_ukrayinu__tse_mif_oblast_dotatsiyna__taruta_n426092, accessed 21 May 2018.

building company towns particularly exposed to trade shocks with Russia, the risk of armed conflict was greater overall and separatist violence was more frequent; the Ukrainian government had lost control of these areas earlier, and militants were able to hold territory gained for longer. By contrast, where the opportunity cost of rebellion was higher, as in cities dominated by Ukraine's relatively competitive and globally oriented steel industry, militants had difficulty establishing and maintaining control. Noticeably, neither local differences in ethnic-linguistic composition nor Donbas's prewar electoral allegiance to ex-president Yanukovich have turned out to be explanatory factors (Mykhnenko 2009).

Historically, Shulman (1999) highlighted an extremely high degree of alienation and foreign policy dissent between eastern and western Ukrainian business elites, fuelled by an imbalance in the sources—perceived or actual—of beneficial foreign economic ties. Shulman's conclusion, reached five years prior to the 2004 Orange revolution, was that Ukraine's asymmetrical international integration, with western regions moving closer to the EU and eastern regions clinging to their ties with Russia, had significantly weakened the country's unity and cohesion. A decade later, Mykhnenko and Swain (2010) portrayed the contemporary Ukrainian spatial economy as comprising three historically rooted and relatively geographically bounded regional economies that were functionally integrated yet externally orientated: each exhibited a degree of sector and/or commodity chain specialisation and was either dependent on exporting commodities and manufactures or on importing financial capital.

Whilst acknowledging the dangers of Ukraine's diverging spatial economy, one ought to distinguish between what Wilson (2016, p. 641) called 'baseline separatism', existing in many regions across the world, and a much more explicitly anti-Ukrainian economic interests-based 'master cleavage'. Most importantly, as previous studies testify (Mykhnenko & Swain 2010; Mykhnenko 2011), the areas over which the Ukrainian government lost control in 2014–2015 had never possessed a distinctively different industrial structure, which could have made them especially susceptible to an armed separatist rebellion in comparison with the neighbouring areas of eastern Ukraine. For some reason, Zhukov (2016) did not extend his municipality-level analysis to other heavily industrialised, coal-mining, steel-making and machine-building east Ukrainian towns in neighbouring Kharkiv, Zaporizhzhia and Dnipropetrovsk provinces. Others did offer such a comparison: working independently, Portnov (2015), Buckholz (2019), Stebelsky (2018) and Matsuzato (2018) compared the success or failure of pro-Russian militant movements across eastern Ukraine, contrasting the experiences in Kharkiv, Dnipro, Kramatorsk and Mariupol, with that of Donetsk and Luhansk. They concluded the difference was best explained through the preferences and actions of local political elites, in addition to the obvious factors of military geography. This last factor was foregrounded by Zhukov (2016): he found that armed insurgents in Donbas were able to establish control more quickly in densely populated localities that were accessible by road, situated at relatively high elevation and close to the Russian border, thus concluding that military geography was strongly and consistently predictive of armed conflict.

Socially constructing the domestic causes of the war in Donbas

A historical materialist reading of the secessionist 'Donbas feeds ungrateful Ukraine' argument would render it false, as this hypothesis is not based on a real economic conflict between Donbas's social forces of industrial production and the pan-Ukrainian social relations of

inter-budgetary fiscal transfers, geared towards spatial equalisation of income and support for poorer municipalities, including many shrinking cities across Donbas itself. It is contended that the economic explanation of the events in eastern Ukraine in early 2014 based on the rationality postulate cannot advance one's understanding of the war. The analysis provided so far questions the existence of necessary local conditions for an economically determined cause of the war in Donbas, be it of the 'donor region's revolt' type, or of the 'rust belt rising' variety. Furthermore, the local economic determinants were also not sufficient for an armed conflict to occur. It is important to highlight that even in peacetime decision-making circumstances, the application of the economic rationality concept is very problematic. As argued by a leading neo-classical economic theorist of the post-World War II era, rationality not only 'seems capable of leading to conclusions flatly contrary to observation' but also imposes 'the extremely severe strain on information-gathering and computing abilities. Behaviour of this kind is incompatible with the limits of the human being, even augmented with artificial aids (which, so far, seem to have had a trivial effect on productivity and the efficiency of decision making)' (Arrow 1986, pp. S397–98).

The war in Donbas was principally the end result of foreign instigation, intervention and invasion, aided and abetted by collaborating elements of the Yanukovych regime (Kudelia 2014; Malyarenko & Wolff 2018). Whilst 'economic rational man' was conspicuously absent from the streets of Donetsk and Luhansk in the tumultuous spring of 2014, pro-Russian agitators were not. As mentioned above, the deep-rooted myth that 'Donbas feeds the whole country' played a substantial part in pro-Russian secessionist propaganda at the time, convincing an increasingly militant minority. Myths often provide the framing for collective action. To investigate this possibility in the case of the Donbas conflict, classical Marxism or neo-classical economics should be put aside in favour of social constructionism (constructivism). This epistemological position holds that meaning-making, knowledge and understandings of the nature of reality are not the result of direct observation or perception but are constructed through social discourse and based on experience generated within human relationships (Berger & Luckmann 1967; Merz 2005). According to the basic tenet of social constructionism, 'what one takes to be true as opposed to false, objective as opposed to subjective, scientific as opposed to mythological, rational as opposed to irrational, moral as opposed to immoral is brought into being through historically and culturally situated social processes' rather than through the individual mind of 'the rational, self-directing, morally centred, and knowledgeable agent of action' (Gergen & Gergen 2008, p. 817).

Consequences of the war: human cost and economic losses for the Ukrainian Donbas

In the current context, the quest for causality has already moved beyond pure academic research and entered the sphere of the international law, with the aim of investigating crimes against humanity, establishing personal responsibility and delivering justice, including war reparations (Åslund 2018). Between 14 April 2014 and 15 February 2019, the war between the combined forces of pro-Russian separatists and Russian regular army units operating in Donbas against their Ukrainian adversaries resulted in at least 40,000–43,000 conflict-related casualties, as reported by the Office of the United Nations High Commissioner for Human Rights (OHCHR 2019, p. 6). According to this conservative estimate, the war has claimed 12,800–13,000 lives, with at least 3,321 civilians and over

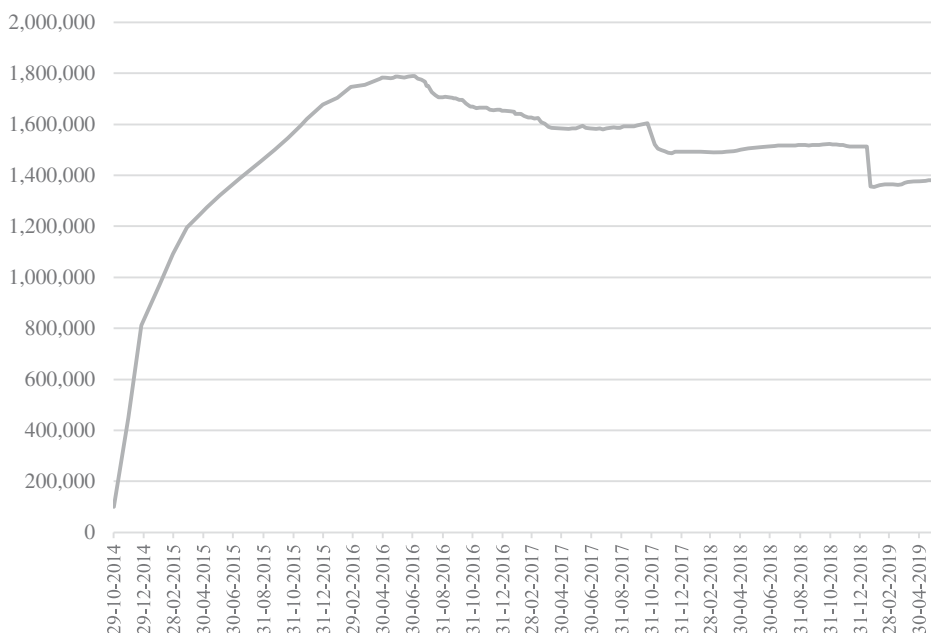


FIGURE 4. UKRAINE'S INTERNALLY DISPLACED POPULATION REGISTERED WITH THE MINISTRY OF SOCIAL POLICY, 29 OCTOBER 2014–3 JUNE 2019

Source: Calculated from 'Oblikovano 1,382,449 vnutrishnio peremishchenykh osib', Ukraine Ministry of Social Policy, IDP Information Database (various years), available at: <https://www.msp.gov.ua/news/17193.html>, accessed 10 June 2019.

9,500 combatants killed, and 27,500–30,000 people injured, including 7,000–9,000 civilians and 21,000–24,000 combatants. Around 3.3 million people have fled their homes, with forced displacement emptying cities, towns and villages of Donbas. According to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA 2015), as of 2015 only 180,000 people remained in the occupied city of Horlivka, compared to 276,000 before the war. Only 8,000 people remained in Dokuchaievsk, compared to 30,000 residing in the town before the outbreak of hostilities. In Debaltseve, the resident population declined from over 25,000 to fewer than 7,000 inhabitants. The frontline town of Krasnohorivka was estimated to have a population of under 5,000 people from 16,000 residents before the war.

On 4 July 2016, the number of officially registered internally displaced people in Ukraine topped 1,790,267 (see Figure 4); the number of Ukrainian refugees in Russia and Belarus had reached more than 1.5 million earlier that year.¹⁵ As a result, the situation in Ukraine has turned into Europe's largest humanitarian catastrophe since the Yugoslav wars of the 1990s, with Ukrainians accounting for 85% of all internally displaced people in Europe in

¹⁵'Russia, Belarus Undertake Exhaustive Measures to Host Ukrainian Refugees—CSTO Official', TASS, 5 February 2016, available at: <http://tass.com/world/854794>, accessed 21 May 2018.

2018 (UNHCR 2018). Of the remaining Donbas inhabitants, in 2017 between two and three million remained in the non-government-controlled areas, officially known as the ‘separate districts of Donetsk and Luhansk provinces’ (*okremi raiony Donetskoi i Luhanskoi oblasti*—ORDLO); around 600,000 were caught in the so-called grey zone, a five kilometre strip on each side of the 457-kilometre frontline, living mostly underground in basements and improvised bunkers, with no water, heating or electricity, and no access to healthcare, shops, jobs or social services. There were constant reports of severe malnutrition and lack of basic foodstuffs (UNOCHA 2017).

The Russo–Ukrainian war has been particularly lethal on account of the range of weapons used, including old Soviet (T-64s) and new Russian (modernised T-72s and T-90s) models of main battle tanks, mechanised infantry, self-propelled and towed artillery, multiple-launch rocket systems, mortars, and an array of anti-aircraft and electronic warfare weapons (Echevarria 2016). The Ukrainian Air Force also deployed attack aircraft and fighter jets, whilst their opponents used very sophisticated anti-aircraft weaponry.¹⁶ Ground combat formations on both sides have been vulnerable to surveillance conducted by remotely piloted aerial vehicles (drones), helping direct devastating artillery and rocket fire onto them within a few minutes. Reportedly, artillery has accounted for 85% of all casualties in this conflict, well above the World War II record (Echevarria 2016, p. 28). As most Russian and Ukrainian artillery systems deliver area-fires rather than precision-fires, with many engagements occurring at long ranges (10–15 kilometres), in densely populated urban areas, the damage caused by indiscriminate shelling has been immense (Case & Anders 2016; Echevarria 2016).

Since the outbreak of hostilities, a number of research centres and think-tanks have been keeping track of the physical and material damage and economic losses (Horbulin 2015; Libanova 2015; Maiorova 2017; Åslund 2018). According to these accounts, in addition to tens of thousands of deaths and injuries, and millions of people seeking refuge away from the theatre of war, the impact of the armed conflict on Donbas has been truly devastating (Buckley *et al.* 2018). Tens of thousands of enterprises have been closed, looted, dismantled and smuggled to Russia for scrap; countless homes, hospitals, roads, bridges, railways and pipelines have been destroyed; coalmines have been flooded; farmland has been littered with unexploded ordnance and land mines.¹⁷ The Ukrainian Donbas has become the third most mine-contaminated stretch of land in the world, covering around 16,000 square kilometres (UNOCHA 2017).

During the first four years of the conflict, Donbas’s total GDP dropped by 61.1% in constant local currency prices to just 38.9% of the 2013 level. In current foreign exchange terms, the Donbas economy declined by 73.1%, from US\$27.53 billion in 2013 to US\$6.37 billion in

¹⁶On 17 July 2014, a scheduled passenger flight from Amsterdam to Kuala Lumpur (Malaysia Airlines MH17) was shot down by a Russian Buk surface-to-air missile launched from deep inside non-government-controlled territory, 76 kilometres east of Donetsk. For further details, see *Buk Surface-to-Air Missile System Caused MH17 Crash*, Dutch Safety Board (The Hague, Onderzoeksraad, 2019), available at: <https://www.onderzoeksraad.nl/en/page/3546/crash-mh17-17-july-2014>, accessed 27 September 2019.

¹⁷Calculated using official foreign exchange rates on the basis of data extracted from the Ukraine State Statistical Service (various years). See also ‘Occupied Donbas: Economics, Demography, Groups of Influence. Strategies for Ukraine’, *Delovaya Stolitsa*, October 2017, available at: <http://www.dsnews.ua/static/longread/donbas/page1822805.html>, accessed 1 December 2017.

2015, before gradually recovering to US\$7.39 billion in 2017.¹⁸ (For the provincial breakdown, see Figures 5–8.) The war has resulted in rapid and severe deindustrialisation in the region, with the industrial output in Luhansk province dropping by 84.3% from its 2013 level and halving in Donetsk province. The previously lucrative foreign trade has collapsed, with Donetsk province's exports declining by 61.7% and Luhansk's exports virtually disappearing. Using Åslund's (2018) suggested formula for evaluating permanent economic losses suffered by Ukraine as the result of the war, the total permanent physical asset value loss in Donbas approximates US\$84.649 billion (in 2013 prices), calculated as US\$21.16 billion of lost gross domestic product multiplied by four (for details, see Åslund 2018).

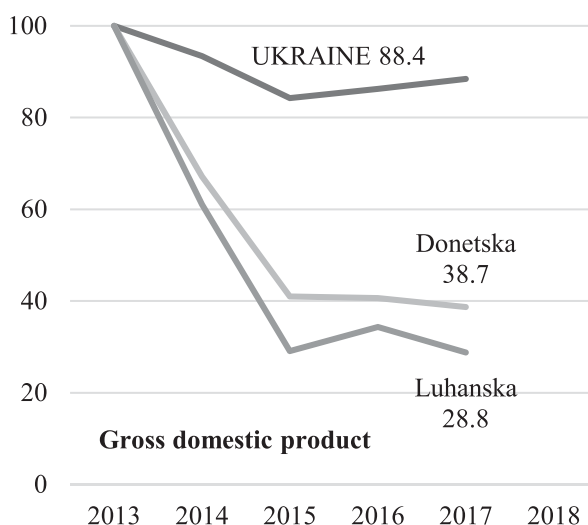


FIGURE 5. THE WAR IMPACT ON UKRAINE AND DONBAS: GDP (VOLUME INDEX, 2013 = 100)

Source: Calculated from Ukraine State Statistical Service (various years), 'Statystychna informatsiia', available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.

The Ukrainian Donbas: de facto partitioning

Nominally, Donbas's non-government-controlled areas (ORDLO) cover around 38% of the region's total territory and up to 45% of its prewar population, including four out of the region's five largest cities: Donetsk, Luhansk, Makiivka and Horlivka. Hence, it is vital to assess the level of economic activity that has been maintained or restored there. Until March 2017, Ukrainian official statistics had partially registered the economic activity taking place in ORDLO, as dozens of commercial establishments located there re-registered on Ukraine government-controlled territory. Some of those continued operations, paying taxes, custom and excise duties to the Ukrainian government, in addition to bribery and extortion money

¹⁸ 'Average Weighted Interbank Rates', National Bank of Ukraine, 2019, available at: https://bank.gov.ua/control/en/publish/category?cat_id=74705314, accessed 10 June 2019.

demanding by ORDLO militants.¹⁹ A significant blow to the intra-regional economic ties was dealt on 1 March 2017, when ORDLO militants began illegally seizing the remaining functioning economic assets owned by non-Russian firms and interests, including 43 large industrial enterprises, steelworks and collieries mostly belonging to Donetsk billionaire Rinat Akhmetov: SCM,²⁰ MetInvest,²¹ Ukrtelecom²² and DTEK.²³ In the meantime, a group of aggrieved Ukrainian Donbas war veterans imposed a full blockade on trade between the government- and non-government-controlled areas, an action formally legalised by the Ukrainian National Security and Defence Council resolution enacted by Presidential Decree No. 62/2017 on 15 March 2017.²⁴ The eventual confiscation of Ukrainian industrial assets has accelerated deindustrialisation in the region: industrial output in Luhansk province fell further by 31% in 2017, followed by a 17pp decline in 2018 (see Figure 6). After a sharp decline in 2014–2016, foreign trade exports from Luhansk province declined further in 2017 by 44.4%, followed by another 11.5pp drop in 2018. In Donetsk province, industrial output declined in 2017 by 10.9%, recovering by a modest 2.6% in 2018 and reaching 43.6% of the 2013 level (see Figure 6). During the period 2014–2018, aggregate exports from the region as a whole had declined by 68.8% (see Figure 7). Even if the external trade figures publicised by the self-proclaimed authorities in ORDLO are taken at face value, the aggregate Donbas total exports in 2018 still amount to just one-third of the 2013 level (see Figure 7).

Unemployment in Donbas has reached unprecedented levels: 15.6% of the labour force (working age) in the government-controlled areas of Donetsk province and 18.3% in Luhansk province were seeking employment in early 2017.²⁵ Although in 2018 the unemployment rates in the two Donbas provinces declined to 14.4% and 16.0% respectively, labour-force surveys in the region have been consistently recording Ukraine's

¹⁹'SCM Group Statement About Developments in the Non-government Controlled Areas in Donetsk and Luhansk Oblasts (NGCA)', System Capital Management, 2 March 2017, available at: <https://www.scm.com.ua/en/news/scm-group-statement-about-developments-in-the-non-government-controlled-areas-in-donetsk-and-luhansk-oblasts-ngca>, accessed 14 June 2019.

²⁰'SCM Group Reports About Losing Control Over its Assets Based in the Non-government Controlled Areas of Donetsk and Luhansk Oblasts', System Capital Management, 15 March 2017, available at: <https://www.scm.com.ua/en/news/scm-group-reports-about-losing-control-over-its-assets-based-in-the-non-government-controlled-areas-of-donetsk-and-luhansk-oblasts>, accessed 14 June 2019.

²¹'Metinvest Announces Loss of Control over Operations in Temporarily Non-controlled Territory', System Capital Management, 15 March 2017, available at: <https://www.scm.com.ua/en/news/metinvest-announces-loss-of-control-over-operations-in-temporarily-non-controlled-territory>, accessed 14 June 2019.

²²'Ukrtelecom is Forced to Cut Services to its Subscribers in the Non-government Controlled Areas of Donetsk Oblast due to Illegal Actions Undertaken at its Facilities in the Area', System Capital Management, 1 March 2017, available at: <https://www.scm.com.ua/en/news/ukrtelecom-is-forced-to-cut-services-to-its-subscribers-in-the-non-government-controlled-areas-of-donetsk-oblast-due-to-illegal-actions-undertaken-at-its-facilities-in-the-area>, accessed 14 June 2019.

²³'DTEK Reports About Losing Control over its Businesses Located in the Non-government Controlled Areas of Donetsk and Luhansk Oblasts', System Capital Management, 15 March 2017, available at: <https://www.scm.com.ua/en/news/dtek-reports-about-losing-control-over-its-businesses-located-in-the-non-government-controlled-areas-of-donetsk-and-luhansk-oblasts>, accessed 14 June 2019.

²⁴'Ukaz Prezidenta Ukrainy. Pro rishennia Rady natsionalnoi bezpeky i oborony Ukrainy vid 15 bereznia 2017 roky "Pro nevidkladni dodatkovy zakhody iz protyidii hibrnym zahrozam natsionalnoi bezpeky Ukrainy"', President of Ukraine, 15 March 2017, available at: <https://zakon.rada.gov.ua/laws/show/62/2017>, accessed 27 September 2019.

²⁵'Riven bezrobittia naseleennia (za metodolohiieiu MOP) za rehionamy u 2017 rotsi', Ukraine State Statistical Service, 2018, available at: http://www.ukrstat.gov.ua/operativ/operativ2017/rp/rp_reg/XLS/rbn_2017xls_u.zip, accessed 10 June 2019.

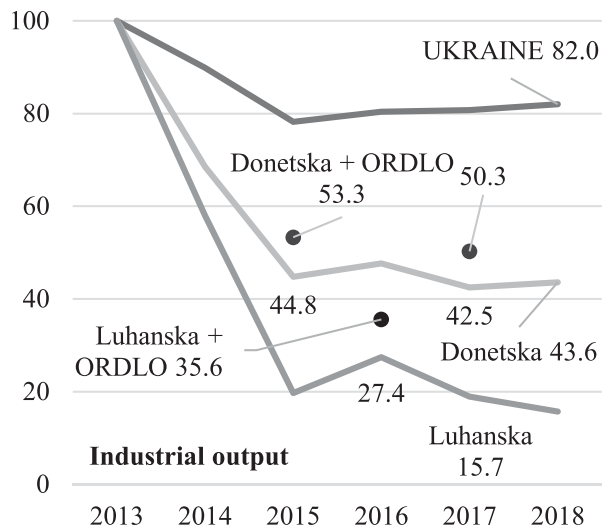


FIGURE 6. THE WAR IMPACT ON UKRAINE AND DONBAS: INDUSTRIAL OUTPUT (VOLUME INDEX, 2013 = 100)

Sources: Calculated from Ukraine State Statistical Service (various years), ‘Statystychna informatsiia’, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019; Polovyan and Lepa (2018); using official foreign exchange rates: ‘Average Weighted Interbank Rates’, National Bank of Ukraine, 2019, available at: https://bank.gov.ua/control/en/publish/category?cat_id=74705314, accessed 10 June 2019.

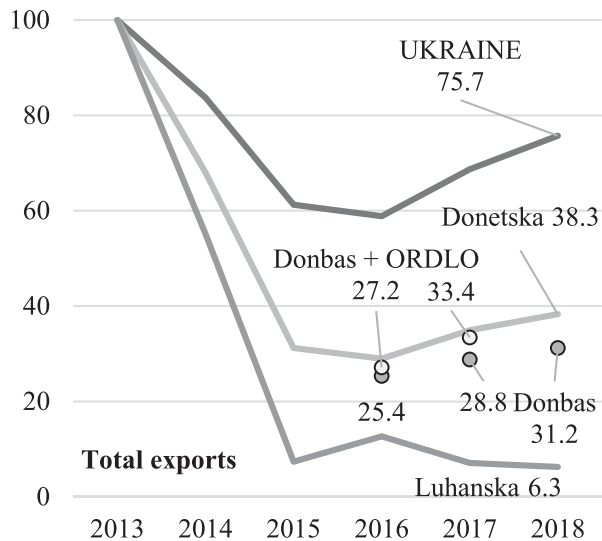


FIGURE 7. THE WAR IMPACT ON UKRAINE AND DONBAS: TOTAL EXPORTS (VOLUME INDEX, 2013 = 100)

Sources: Calculated from Ukraine State Statistical Service (various years), ‘Statystychna informatsiia’, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019; Polovyan and Lepa (2018); using official foreign exchange rates: ‘Average Weighted Interbank Rates’, National Bank of Ukraine, 2019, available at: https://bank.gov.ua/control/en/publish/category?cat_id=74705314, accessed 10 June 2019.

highest levels of unemployment since 2014.²⁶ Massive unemployment has become prevalent in ORDLO, though no estimates have ever been generated by the *de facto* authorities in the non-government-controlled areas. What is known is that in 2017 there were 351,500 people formally employed in various enterprises, institutions and organisations across Donetsk's section of ORDLO,²⁷ with 49,600 people officially registered there as unemployed,²⁸ thus, comprising a formal labour force of 401,100 people. These figures suggest that the official registered unemployment rate in ORDLO in 2017 stood at 12.4%, as a share of jobseekers amongst the economically active. For comparison, in 2017, there were 13,500 formally registered jobseekers in the government-controlled areas of Donetsk province,²⁹ with 466,200 people officially employed there in enterprises, institutions and organisations, thus, comprising a formal labour force of 480,700. Therefore, the official registered rate of unemployment in Donetsk province that year amounted to 2.8%—a figure 4.4 times lower than ORDLO's. Extrapolating the ratio between the labour-force survey-based and formally registered unemployment rates in Donetsk province in 2017 (15.6% compared to 2.8% respectively) onto ORDLO, the level of real unemployment in non-government-controlled areas can be estimated to be as high as 69.1% of the working-age workforce.

The economic situation in the non-government-controlled areas of Donbas, thus, appears especially dire. Reportedly, the disruption of business in ORDLO has had the most severe impact on the local economy, with senior management fleeing, capital and trade flows abruptly halted, and all existing production and supply chain logistics dismantled.³⁰ The majority of the companies seized by the militants in 2017 stopped production, putting workers on indefinite 'unpaid leave'. With the loss of the lucrative Ukrainian market, the ORDLO-controlled coal mines have faced closures, followed by abandonment of flooded underground excavations, worsening the humanitarian and environmental situation even further (Sokolova 2019). Food insecurity has doubled in ORDLO between 2016 and 2017, with 1.2 million people seeking food aid from charitable organisations (UNOCHA 2017). Unsurprisingly, ORDLO authorities do not openly publish any consistent or reliable statistical data, which would allow some monitoring of their performance.³¹ In attempting

²⁶'Riven bezrobittia naseleennia (za metodolohiieiu MOP) za rehionamy u 2018 rotsi', Ukraine State Statistical Service, 2019, available at: http://www.ukrstat.gov.ua/operativ/operativ2018/rp/rp_reg/XLS/rbn_2018_u.xls, accessed 10 June 2019.

²⁷'V DNR rastet kolichestvo shtatnykh rabotnikov, no zarplaty i pensii—mizerny', *IA REGNUM*, 11 August 2017, available at: <https://regnum.ru/news/2309296.html>, accessed 10 June 2019.

²⁸'Lo. ministra truda i sotsial'noi politiki Larisa Tolstykina podvela itogi raboty za 2017 god', Narodnyi Sovet DNR, available at: <https://dnrsamet.ru/i-o-ministra-truda-i-sotsialnoj-politiki-larisa-tolstykina-podvela-itogi-raboty-za-2017-god/>, accessed 10 June 2019.

²⁹'Zareiestrovane bezrobittia naseleennia za rehionamy u 2017 rotsi', Ukraine State Statistical Service, 2018, available at: http://www.ukrstat.gov.ua/operativ/operativ2017/rp/rp_reg/reg_u/zbn_2017_u.htm, accessed 10 June 2019.

³⁰'Yenakiieve Steel and Krasnodon Coal Halted Operations', System Capital Management, 20 February 2017, available at: <https://www.scm.com.ua/en/news/yenakiieve-steel-and-krasnodon-coal-halted-operations>, accessed 14 June 2019.

³¹'Itogi za 9 mesyatshev 2017 goda v sfere promyshlennosti', Ministerstvo ekonomicheskogo razvitiya Donetskoi Narodnoi Respubliki, 24 October 2017, available at: http://mer.govdnr.ru/index.php?option=com_content&view=article&id=3835:itogi-za-8-mesyatsev-2017-goda-v-sfere-promyshlennosti-2&catid=8&Itemid=141&test=1, accessed 14 June 2019; 'Infografika—Analiticheskie materialy', Ministerstvo ekonomicheskogo razvitiya Donetskoi Narodnoi Respubliki, 2015–2019, available at: http://mer.govdnr.ru/index.php?option=com_phocagallery&view=category&id=427:analiticheskie-materialy&Itemid=693, accessed 14 June 2019.

to assess wartime economic circumstances in Donbas objectively, Coupé (2016) and Coupé and Obrizan (2016) used changes in night-time light intensity, measured by satellites. On the basis of the data for half a dozen cities in the region, they estimated the extent to which the war had destroyed the economy in Donbas, and whether there had been any recovery after the Minsk II truce agreement, reached in February 2015. Consequently, they observed a decline in economic activity in Donbas from March 2014 to March 2016 of 50–70% of the prewar level across the larger cities (Donetsk and Luhansk), with an even more staggering 90% fall across some smaller cities (Debaltseve, Ilovaisk).

The data gathered during this research, including *ad hoc* press releases by ORDLO militants,³² provide a more comprehensive and up-to-date account: the aggregate industrial output of Donetsk province, including both government-controlled and occupied areas, in 2017 stood at 50.3% of the prewar level. In Luhansk province, in 2016, the last year for which the ORDLO data are available, the aggregate industrial output was no higher than 35.6% of the prewar level (see Figure 6). In 2017, even after the confiscation of all productive and commercial assets by the ORDLO militants, industrial output in the non-government-controlled areas of Donetsk province reportedly reached R146.4 billion (UAH66.81 billion/US\$2.51 billion), whilst in the government-controlled areas of the province, industrial production stood at UAH258.65 billion (US \$9.72 billion). Thus, in relative terms, 79.5% of the aggregate industrial output of Donetsk province (US\$12.23 billion in total, within the prewar borders) was generated on government-controlled territory, and only 20.5% was produced outwith. Notably, before the war, the currently occupied area of Donetsk province accounted for around 47% of total production. In Luhansk province, before the war, the currently occupied territory accounted for around about 60% of the total provincial industrial output. By contrast, in 2016, ORDLO territory accounted for only 29.8% of the aggregate provincial industrial output (R40.984 billion in absolute terms, or UAH15.74 billion/US \$615 million), compared with 70.2% produced in the government-controlled area (UAH37.09 billion/US\$1.45 billion); the total industrial output for both parts of the province amounted to UAH52.84 billion (US\$2.06 billion).

The collapse in living standards in Donbas is best seen through a comparison of average wages before and after the war, on both sides of the frontline. Just before the outbreak of hostilities, in January 2014, the average wages in Donetsk and Luhansk provinces were UAH3,674 (US\$460) and UAH3,295 (US\$412), respectively. In 2017, the average wage in the government-controlled areas of Donetsk province was UAH7,764 per month (US\$292, or 63% of the prewar level). At the same time, in non-government-controlled areas of the province, the average monthly wage was just over half (59.5%); this figure reportedly amounting to R10,130 (UAH4,619/US\$174), and being 38% of the prewar level. In Luhansk province, the average monthly wage in ORDLO in December 2016 was R8,704 (UAH3,676/\$140, and 34% of the prewar level), or 61.2% of the average wage across the frontline

³²‘Infografika—Infografika’, Ministerstvo ekonomicheskogo razvitiya Donetskoi Narodnoi Respubliki, 2015–2019, available at: http://mer.govdnr.ru/index.php?option=com_phocagallery&view=category&id=103:infografika&Itemid=693, accessed 14 June 2019.

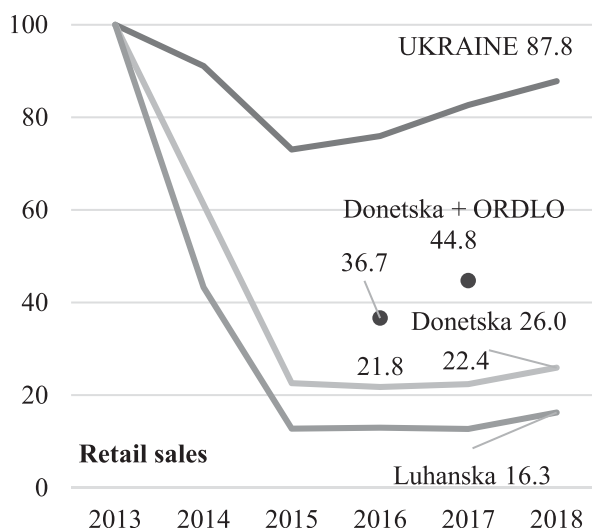


FIGURE 8. THE WAR IMPACT ON UKRAINE AND DONBAS: RETAIL SALES (VOLUME INDEX, 2013 = 100)

Sources: Calculated from Ukraine State Statistical Service (various years), 'Statystychna informatsiia', available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019; Polovyan and Lepa (2018); using official foreign exchange rates: 'Average Weighted Interbank Rates', National Bank of Ukraine, 2019, available at: https://bank.gov.ua/control/en/publish/category?cat_id=74705314, accessed 10 June 2019.

(UAH6,009/US\$229, and 56% of the prewar level).³³ Widespread impoverishment across the war-ravaged Donbas has also been reflected in a dramatic decline in consumer demand, with registered retail sales in the government-controlled areas slumping by 74% in Donetsk province and 83.7% in Luhansk province since 2013. On the basis of retail sales figures published by ORDLO (Polovyan & Lepa 2018, pp. 68–73, 117–20), aggregate retail sales across the entire region in 2017 ranged between 38.6% and 44.8% of the 2013 level.

The declared remuneration levels in ORDLO do not include the wages paid to the militias and Russian military personnel operating there (Polovyan & Lepa 2018, pp. 93–6). As numerous accounts testify, life in the non-government-controlled Donbas has been subordinated to the needs of the militants running the territory, which includes maintaining battle-readiness (Piechal 2015; Kudelia 2016; Malyarenko & Galbreath 2016). One of the two largest armed separatist formations in ORDLO, known as 'Donetsk People's Republic' (*Donetskaya narodnaya respublika*) has reached 20,000 members, including 5,000 top self-proclaimed 'officials' and 15,000 armed militants.³⁴ One observer has summed up the situation as follows:

³³For the government-controlled areas, see 'Serednia zarobitna plata za rehionamy za misiats', Ukraine State Statistical Service, 2019, available at: http://www.ukrstat.gov.ua/operativ/operativ2005/gdn/reg_zp_m/reg_zpm_u/arh_zpm_u.htm, accessed 27 September 2019. For the ORDLO areas, see 'Infografika—Itogi raboty Ministerstva za 2018 god. Rezul'taty ekonomiki', Ministerstvo ekonomicheskogo razvitiya Donetskoi Narodnoi Respubliki, available at: http://mer.govdnr.ru/images/phocagallery/infographics/itogi/thumbs/phoca_thumb_m_1097.jpg, accessed 27 September 2019.

³⁴'Politsiya: V strukturu "DNR" segodnya vkhodyat 20 tysyach chelovek', *Novosti Donbassa*, 13 March 2018, available at: <http://novosti.dn.ua/news/280009-polycyya-v-strukturu-dnr-segodnya-vkhodyat-20-tysyach-h-chelovek>, accessed 13 March 2018.

In reality, the ‘republics’ are beginning to acquire the features of a military-bureaucratic regime in which military personnel and officials dominate society through coercion and the monopolization of the distribution of wealth. Meanwhile, the impoverished and intimidated population has no means of societal control and is in complete economic dependence on the authorities. (Kudelia 2016, p. 231)

In turn, the separatist authorities are completely subordinate to Moscow. Officially, the Moscow-run civilian ORDLO governance structure was set up on 15 December 2014 *via* the Government of Russia’s *rasporyazhenie* [Instruction] No. 2537-p,³⁵ amended on 8 October 2015 (Instruction No. 2008-pc)³⁶ and further on 12 October 2016 (Instruction No. 2149-p),³⁷ and signed by Prime Minister Medvedev. The 15 December 2014 decision created an ‘Inter-ministerial Commission for the Provision of Humanitarian Assistance to the Affected Territories in South-eastern Districts of Ukraine’s Donetsk and Lugansk Provinces’, currently comprised of 20 representatives of the Government of the Russian Federation, including the Deputy Minister of Economic Development (chairman), the deputy ministers of finance, the interior, foreign affairs, healthcare, industry and trade, energy, transport, justice and civil defence, and the Deputy Director of the Federal Security Service (FSB). The Inter-Ministerial Commission is located in Rostov-on-Don, Rostov province, bordering Donbas. Noticeably, the Russian Ministry of Defence is the only core federal ministry not taking part in the work of the civilian commission. According to the Ukraine military intelligence, a parallel quasi-governance structure has been set up to command and control the armed formations operating in ORDLO. The military command is also run from Rostov-on-Don, from the headquarters of the Southern Military District, one of the four operational strategic commands of the Russian Armed Forces.³⁸

All the evidence suggests that ORDLO is entirely dependent on Russia for its survival, not just militarily but economically (Rácz & Moshes 2014). Well over 90% of all public spending administered by the two ORDLO administrations, including wages and salaries paid to teachers, nurses, doctors and municipal services personnel, and social assistance payments and payments to the elderly, regularly arrive from Moscow in cash by armoured trains (Röpcke 2016a, 2016b). Russia has also financed gas, fuel and oil, and distributed food and humanitarian assistance, on top of war-related spending. The ORDLO budget information published by the self-proclaimed ‘Council of Ministers’ only contains percentage growth figures against the previous year or percentage shares of various expenditures in the total budget (Polovyan & Lepa 2018, pp. 76–87); this does not enable an assessment of the actual amount of public expenditure in total or per head, or an evaluation of the share of internally generated revenue *vis-à-vis* total spending.

³⁵ ‘O mezhvedomstvennoi komissii po okazaniyu gumanitarnoi podderzhki postradavshim territoriyam yugo-vostochnykh rayonov Donetskoi i Luganskoi oblastei Ukrainy. Rasporyazhenie ot 15 dekabria 2014 goda No. 2537-r’, Pravitel’sтво Rossii, 2014, available at: <http://government.ru/docs/16219/>, accessed 12 June 2019.

³⁶ ‘Rasporyazhenie Pravitel’sтва Rossiiskoi Federatsii ot 08.10.2015 g. No. 2008-rs’, Pravitel’sтво Rossii, 2015, available at: <http://government.ru/docs/all/103752/>, accessed 12 June 2019.

³⁷ ‘Rasporyazhenie Pravitel’sтва Rossiiskoi Federatsii ot 12.10.2016 g. No. 2149-r’, Pravitel’sтво Rossii, 2016, available at: <http://government.ru/docs/all/108614/>, accessed 12 June 2019.

³⁸ ‘Southern District’, Ministry of Defence of the Russian Federation, 2019, available at: <http://eng.mil.ru/en/structure/okruga/south/news.htm>, accessed 12 June 2019.

Nevertheless, it is possible to estimate that in 2017, approximately 1,038,020 pensioners living in ORDLO were in receipt of a monthly ‘local pension’ payment, with the total annual bill running to approximately R52.6 billion (US\$902.17 billion) (Polovyan & Lepa 2018, pp. 111–17). These pension outlays alone represent twice as heavy a burden on the local economy in comparison to 2013, when they already accounted for the unsustainable externally subsidised 20% share of the aggregate Donbas GDP (see Appendix Table A1).

The work of the ORDLO civilian shadow government is supplemented by final executive decisions made by Russia’s deputy prime minister, Dmitrii Kozak and, ultimately, by Prime Minister Medvedev himself. For example, after the seizure of Ukrainian industrial enterprises in the spring of 2017, the confiscated assets were assembled by the Moscow-controlled militants into ZAO VneshTorgServis, a ‘closed joint stock company’ registered in the Russia-occupied South Ossetia and reportedly controlled by fugitive Ukrainian billionaire Serhii Kurchenko, who was closely linked to ex-president Yanukovich (Goncharova 2017; Dikhtiarenko 2018). Due to the shortage of raw materials (iron ore and coke), previously supplied from the government-controlled territories, the newly expropriated steel works in Yenakiieve, Alchevsk and Donetsk halted production immediately (Kushch 2018). On 4 May 2017, Medvedev instructed the Federal Agency for State Reserves to be provided with R10 billion from the National Reserve Fund for ‘replenishing raw materials necessary for the ferrous metals industry’ (Burmistrova & Tkachev 2017). According to Russian Business Consulting, this confidential Government of Russia Instruction No. 559-p of 28 March 2017 provided ORDLO with enough funds to purchase about two million tonnes of iron ore and coke, sufficient for the production of 1.5 million tonnes of steel (Burmistrova & Tkachev 2017). Notably, by the end of 2017, annual steel production in the non-government-controlled areas of Donetsk province reached 1.1 million tonnes (Polovyan & Lepa 2018, p. 14). The Russian government’s hands-on management of the ORDLO economy is set to continue, accompanied by further deindustrialisation and de-development. In May 2017, Aleksandr Khodakovskiy, a deposed Donetsk warlord, accused the ORDLO militants of running the region down and turning it into another ‘Abkhazia, herding goats and sheep’.³⁹ Indeed, 19 months later, *Komsomol’skaya Pravda*, a Russian tabloid daily, published a curious journalistic investigation into ‘guest workers’ from Donetsk and Luhansk, reduced to harvesting mandarin oranges in backbreaking conditions in Abkhazia. Numerous *gastarbaitery* from the occupied Donbas captured on tape and video-filmed by the Moscow-based journalist complained that life back home was even less rewarding than ‘a night’s stay and a bottle of lager a day’ they were earning on the mandarin plantations (Tikhomirov 2018).

Donbas’s forcibly displaced people

The postwar reconstruction of Donbas and the economic growth prospects for the rest of Ukraine are closely intertwined with the fortunes of millions of the forcibly displaced

³⁹“‘Budem pasti koz i ovets’”. Khodakovskiy zayavil, chto DNR gotovitsya povtorit’ sud’bu Abkhazii i Osetii’, *Chevertaya Vlast*, 5 May 2017, available at: <https://vlada.io/slider/budem-pasti-koz-i-ovets-hodakovskij-zayavil-cto-dnr-gotovitsya-povtorit-sudbu-abhazii-i-osetii/>, accessed 13 June 2019.

(see Figure 4). Around 88% of Ukraine's IDPs have found temporary residence in five neighbouring east Ukrainian provinces, including the government-controlled areas of Donetsk (42%) and Luhansk (13%), Kharkiv (10.9%), Zaporizhzhia (7.4%) and Dnipropetrovsk (4.3%), and in the capital city region (the city of Kyiv, hosting 8%, and Kyiv province, with 2.9%). Overall, the impact of Donbas's IDPs on the national economy has been fairly neutral, with the occasional success story of an IDP-run business start-up in Kyiv or Lviv running alongside news reports of pension payment offices, hospitals, shops and ATMs in Donetsk and Luhansk provinces being overrun by an influx of new arrivals from ORDLO. With a few notable exceptions, this study has not found enough convincing evidence to indicate a measurably positive economic effect of IDPs on their host communities, either in terms of an increase in consumer demand and retail turnover, or an accelerated rate of growth. If the war-damaged Donetsk and Luhansk provinces are included in the statistical analysis, the relationship between IDP inflows and regional economic growth is negative and statistically significant (see Figure 9). The main reason may lie in the demographic composition of Ukraine IDPs themselves, which is heavily skewed towards old-age pensioners (52%) and economically-inactive people with disabilities (4%). Working-age people account for just 29% of Ukraine's officially

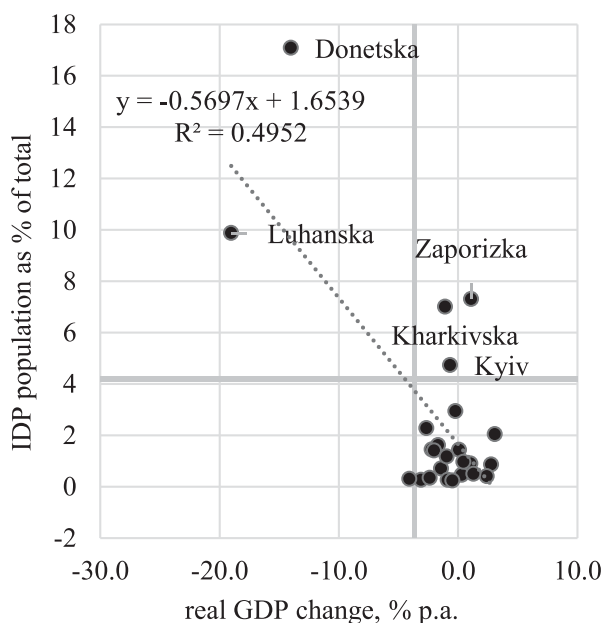


FIGURE 9. PROVINCIAL REAL ANNUAL GDP CHANGE RATES IN 2014–2017 (%) AND IDP INFLOWS (PEAK SHARE OF TOTAL POPULATION, %)

Notes: Grid lines represent the Ukraine average figures for real GDP change in 2014–2017 (–3.7% per annum) IDP population (4.2% of total).

Sources: Calculated from Ukraine State Statistical Service (various years), 'Statystychna informatsiia', available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019; 'The World Economic Outlook Database', *International Monetary Fund April 2018 Edition*, available at: <http://www.imf.org/external/pubs/ft/weo/2018/01/weodata/index.aspx>, accessed on 21 May 2018; Ukraine's Ministry of Social Policy Single IDP Information Database (various years).

registered IDP headcount. Although some IDP pensioners may have continued working full-time, the absolute number of working-age IDPs has not risen beyond 500,000 (approximately 2% of Ukraine's labour force).⁴⁰

Faced with the challenge of postwar reconstruction, Ukraine IDPs would not be able to regenerate Donbas without a comprehensive large-scale public and international donor-funded reconstruction programme. The magnitude of this task looks particularly daunting, for the war, economic depression and chronic unemployment on the indistinct frontline zone and ORDLO areas have led to the deskilling of the remaining workforce. One remarkable exception, which needs further research, relates to the potentially transformational role played by IDPs in the local host economies of Kharkiv, Zaporizhzhia, Poltava and Odesa provinces, as well as in the Kyiv capital city region and Dnipropetrovsk province (see [Figure 10](#), which excludes Donetsk and Luhansk). In particular, Kharkiv, Zaporizhzhia, Poltava and Odesa regions have been able to radically shift their economic gears, from being amongst Ukraine's growth laggards in the period 2011–2013 to becoming regional growth leaders, outperforming the national GDP growth rate in 2014–2017 (see [Figures 2 and 10](#)). The massive IDP influx has stimulated these regional economies and propelled further the urban and regional economies around Kyiv and Dnipropetrovsk (see [Figure 10](#)). More research is needed to investigate the relationship between high concentrations of IDPs, the local business environment, and the potential for entrepreneurship and business development in communities of protracted displacement.

Conclusion

This essay has shown the Ukrainian Donbas to be a typical shrinking old industrial region, suffering in the post-Soviet period from rapid deindustrialisation and persistent population loss. The Russo–Ukrainian war caused tremendous damage to the region in the period 2014–2018, with the total amount of permanent asset loss amounting to over US\$84.6 billion in 2013 prices. The human cost of 13,000 lives lost and of many millions permanently scarred by the war has also been significant. The economic standing of Donbas as a whole within the Ukrainian spatial economy has more than halved, even considering the remaining economic activity in non-government-controlled territories. During the first four years of conflict, the officially recorded aggregate regional GDP plunged by 61.1% in constant local prices and by US\$20.1 billion, or 73.1%, in foreign exchange terms. In terms of industrial output, the weight of the occupied territories of Donetsk province shrank to just 20.5% of the aggregate provincial production in 2017. In Luhansk province, ORDLO militants control 29.8% of aggregate provincial production. After the first four years of war, workers in ORDLO were being paid about 60% of their counterparts' earnings in the government-controlled areas, just over a third of the prewar wage, a loss of 62–66% in purchasing power terms. As the economic situation in ORDLO continues to deteriorate, the population outflow from the region has inevitably increased.

⁴⁰ 'Informatsiia shchodo vnutrishno peremishchennykh osib, shcho mistytsia v Yedynii informatsiinii bazi danykh pro vziatykh na oblik peremishchennykh osib stanom na 15/03/2017 roku', Ministerstvo sotsialnoi polityky Ukrainy (Kyiv, Ministry of Social Policy, 2017).

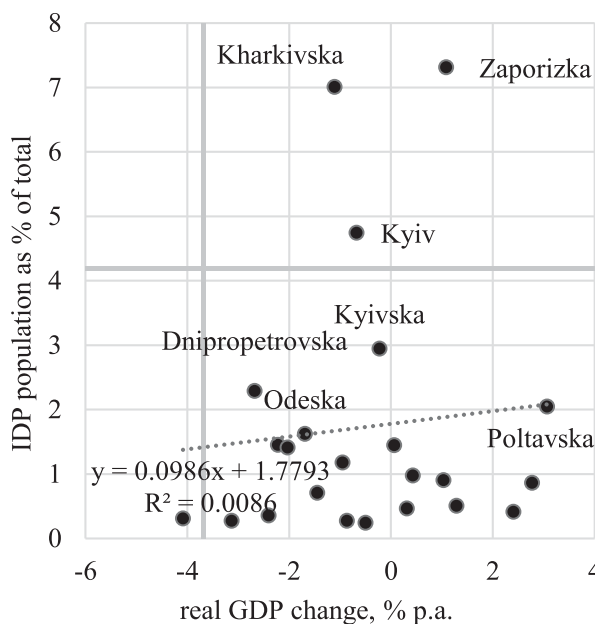


FIGURE 10. PROVINCIAL REAL ANNUAL GDP CHANGE RATES IN 2014–2017 (%) AND IDP INFLOWS (PEAK SHARE OF TOTAL POPULATION, %), EXCLUDING DONETSK AND LUHANSK PROVINCES

Notes: Grid lines represent the Ukraine average figures for real GDP change in 2014–2017 (–3.7% per annum) IDP population (4.2% of total).


Sources: Calculated from Ukraine State Statistical Service (various years), ‘Statystychna informatsiia’, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019; ‘The World Economic Outlook Database’, *International Monetary Fund April 2018 Edition*, available at: <http://www.imf.org/external/pubs/ft/weo/2018/01/weodata/index.aspx>, accessed on 21 May 2018; Ukraine’s Ministry of Social Policy Single IDP Information Database (various years).

The evidence presented in this essay shows clearly that ORDLO as a whole, let alone its two separate Donetsk and Luhansk sections, has an insufficient economic and demographic basis for anything resembling a financially and materially sustainable future as an independent statelet. The occupied Donbas is heavily dependent on Russia and formally governed by Moscow’s Inter-Ministerial Commission for the Affected Districts, which acts as a shadow civilian government. The annual cost to Russia of sustaining ORDLO and maintaining and resupplying the armed formations operating there is in the region of US\$5 billion (Goujon 2015). It is a costly but entirely affordable affair in the medium term, given that the total stock of financial assets controlled by the Russian state amounts to R30.7 trillion (US\$507 billion).⁴¹ The growing international pressure on Moscow, including further escalation of the Western economic sanctions regime against the Kremlin, its administrative apparatus and

⁴¹ ‘Government Finance Statistics (GFS)’, International Monetary Fund, 2019, available at: <http://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405>, accessed 13 June 2019.

associated business interests, may provide an incentive to resolve the current Russian–Ukrainian stalemate in Donbas.⁴² Nevertheless, Moscow’s prolonged involvement in other frozen conflicts across the post-Soviet space, including its extraordinarily deep patronage of Transnistria, Abkhazia and South Ossetia, does not bode well for a peaceful settlement in the Ukrainian Donbas (Gerrits & Bader 2016). Indeed, President Putin’s Executive Order No. 183 of 24 April 2019,⁴³ providing ORDLO residents with a fast-track procedure for obtaining Russian citizenship, has followed similar moves towards ‘passportisation’ in Russian protectorates, and is clearly aimed at deterring Ukraine from regaining its control over these territories in the future (Artman 2013; Nagashima 2019).

This essay has demonstrated that the ongoing armed conflict in the Ukrainian Donbas was not economically determined and cannot be explained in terms of economic rationality. Despite the existence of some long-term baseline separatism, Donbas was neither outstandingly prosperous nor excessively economically depressed—relative to the rest of Ukraine—to warrant an armed uprising of its own volition. Even if one assents to the historical materialist perspective that the social structures of production condition social relations in the final reading, the evidence presented here points to the paramount role of exogenous political agency and of endogenous military geography in explaining the outbreak of the armed conflict in eastern Ukraine in April 2014. Furthermore, the rationality postulate of neo-classical economic theory fundamentally depends on a set of working assumptions, which were clearly absent in Donetsk and Luhansk in the early 2014. For those interested in investigating further the local auxiliary causes of protracted geopolitical conflicts, this essay’s recommendation is to employ the theoretical framework of social constructionism to uncover causal drivers at work.

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 <http://orcid.org/0000-0001-8944-0608>

⁴²‘Gryzlov prizval Kiev polnost’yu sniat’ ekonomicheskuyu blokadu Donbassa’, *RIA Novosti*, 31 January 2018, available at: <https://ria.ru/world/20180131/1513715716.html>, accessed 22 March 2018; ‘Problemy Donbassa upirayutsya v blokadu so storony Kiev, zayavil Gryzlov’, *RIA Novosti*, 14 February 2018, available at: <https://ria.ru/world/20180214/1514639912.html>, accessed 22 March 2018; ‘Alternativy Minskim soglasheniyam ne sushchestvuet, zayavil Gryzlov’, *RIA Novosti*, 21 February 2018, available at: <https://ria.ru/world/20180221/1515083178.html>, accessed 22 March 2018; ‘Gryzlov: dlya Rossii glavnoe—vypolnenie “Minska-2”’, *RIA Novosti*, 22 March 2018, available at: <https://ria.ru/world/20180322/1517063837.html>, accessed 22 March 2018.

⁴³‘Executive Order Identifying Groups of Persons Entitled to a Fast-Track Procedure When Applying for Russian Citizenship on Humanitarian Grounds’, President of Russia, 24 April 2019, available at: <http://en.kremlin.ru/acts/news/60358>, accessed 14 June 2019. See also ‘Ukaz Prezidenta Rossiiskoi Federatsii ot 24 aprelya 2019 g. No. 183 “Ob opredelenii v humanitarnykh tselyakh kategorii lits, imeyushchikh pravo obratit’sya s zayavleniem o prieme v grazhdanstvo Rossiiskoi Federatsii v uproshtennom poryadke”’, *Rossiiskaya Gazeta*, 26 April 2019, Issue No. 93 (7851), available at: <https://rg.ru/2019/04/26/ukaz-dok.html>, accessed 14 June 2019.

References

- Allison, R. (2014) 'Russian "Deniable" Intervention in Ukraine: How and Why Russia Broke the Rules', *International Affairs*, 90, 6.
- Antoniuk, V. P. & Prohnyimak, O. D. (2015) 'Doslidzhennia osoblyvosti sotsiokulturnoho ta liudskoho rozvytku Donbasu v konteksti nahromadzhennia ryzyk-potentsialu', *Ekonomichnyi Visnyk Donbasu*, 2.
- Arrow, K. J. (1986) 'Rationality of Self and Others in an Economic System', *The Journal of Business*, 59, 4, Part 2.
- Artman, V. M. (2013) 'Documenting Territory: Passportisation, Territory, and Exception in Abkhazia and South Ossetia', *Geopolitics*, 18, 3.
- Ash, T., Gunn, J., Lough, J., Lutsevych, O., Nixey, J., Sherr, J. & Wolczuk, K. (2018) *The Struggle for Ukraine* (London, Royal Institute of International Affairs).
- Åslund, A. (2018) *Kremlin Aggression in Ukraine: The Price Tag* (Washington, DC, Atlantic Council).
- Berger, P. & Luckmann, T. (1967) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (Garden City, NY, Anchor Books).
- Biersack, J. & O'Lear, S. (2014) 'The Geopolitics of Russia's Annexation of Crimea: Narratives, Identity, Silences, and Energy', *Eurasian Geography and Economics*, 55, 3.
- Blaug, M. (1992) *The Methodology of Economics Or, How Economists Explain* (2nd edn) (Cambridge, Cambridge University Press).
- Brown, G. W., McLean, I. & McMillan, A. (2018) 'Economic Man (Rational Economic Man)', in Brown, G. W., McLean, I. & McMillan, A. (eds) *A Concise Oxford Dictionary of Politics and International Relations* (4th edn) (Oxford, Oxford University Press).
- Buckholz, Q. (2019) 'The Dogs That Didn't Bark', *Problems of Post-Communism*, 66, 3.
- Buckley, C., Clem, R., Fox, J. & Herron, E. (2018) 'The War in Ukraine Is More Devastating than You Know', *The Washington Post*, 9 April, available at: https://www.washingtonpost.com/news/monkey-cage/wp/2018/04/09/the-war-in-ukraine-is-more-devastating-than-you-know/?noredirect=on&utm_term=.a400c2854499, accessed 15 June 2019.
- Bukkvoll, T. (2016) 'Russian Special Operations Forces in Crimea and Donbas', *Parameters*, 46, 2.
- Burmistrova, S. & Tkachev, I. (2017) 'Medvedev vydělil 10 mlrd rublei Gosrezerva na zakupku rudy', *Russian Business Consulting*, 11 May, available at: <http://www.rbc.ru/business/11/05/2017/591337289a7947ca93f4e60a>, accessed 21 May 2018.
- Case, S. & Anders, K. (2016) 'Putin's Undeclared War: Summer 2014—Russian Artillery Strikes Against Ukraine', *Bellingcat*, 21 December, available at: <https://www.bellingcat.com/news/uk-and-europe/2016/12/21/russian-artillery-strikes-against-ukraine>, accessed 21 May 2018.
- Cornforth, M. C. (1968) *Dialectical Materialism: An Introduction* (4th edn) (London, Lawrence & Wishart).
- Coupé, T. (2016) 'And the Lights Went Out—Measuring the Economic Situation in Eastern Ukraine', *Vox Ukraine*, 18 July, available at: <https://voxukraine.org/en/and-the-lights-went-out-measuring-the-economic-situation-in-eastern-ukraine-en>, accessed 18 July 2016.
- Coupé, T. & Obrizan, M. (2016) 'Violence and Political Outcomes in Ukraine—Evidence from Sloviansk and Kramatorsk', *Journal of Comparative Economics*, 44, 1.
- Dikhtiarenko, A. (2018) 'Hra v monopoliiu. Yak oliharkh Kurchenko poviazanyi z promyslovistiu okupovanoho Donbasu?', *Radio Svoboda: Donbas. Realii*, 18 November, available at: <https://www.radiosvoboda.org/a/donbas-realii-kurchenko-i-promyslovist-donbasu/29607145.html>, accessed 15 June 2019.
- Echevarria, A. J. I. (2016) *Operating in the Gray Zone: An Alternative Paradigm for U.S. Military Strategy* (Carlisle, PA, Strategic Studies Institute and U.S. Army War College Press).
- Gentile, M. & Marcińczak, S. (2012) 'No More Work for Stakhanov: Migrants and Stayers in the Depopulating Donbas, Ukraine', *Urban Geography*, 33, 3.
- Gergen, K. J. & Gergen, M. M. (2008) 'Social Constructionism', in Given, L. M. (ed.) *The SAGE Encyclopedia of Qualitative Research Methods* (Thousand Oaks, CA, Sage).
- Gerrits, A. W. M. & Bader, M. (2016) 'Russian Patronage Over Abkhazia and South Ossetia: Implications for Conflict Resolution', *East European Politics*, 32, 3.
- Giuliano, E. (2015) 'The Social Bases of Support for Self-Determination in East Ukraine', *Ethnopolitics*, 14, 5.
- Goncharova, O. (2017) 'Ukrainian Court Rules to Arrest Fugitive Businessman Kurchenko in Absentia', *Kyiv Post*, 4 January, available at: <https://www.kyivpost.com/ukraine-politics/ukrainian-court-rules-arrest-fugitive-businessman-kurchenko-absentia.html>, accessed 12 June 2019.
- Goujon, R. (2015) 'The Logic and Risks Behind Russia's Statelet Sponsorship', *Stratfor*, 15 September, available at: <https://worldview.stratfor.com/article/logic-and-risks-behind-russias-statelet-sponsorship>, accessed 27 September 2019.

- Hargreaves-Heap S. & Clark C. G. (2008) 'Economic Man', in Durlauf, S. N. & Blume, L. E. (eds) *The New Palgrave Dictionary of Economics* (2nd edn) (London, Palgrave Macmillan), available at: https://link.springer.com/content/pdf/10.1057%2F978-1-349-95121-5_446-2.pdf, accessed 1 October 2019.
- Horbulin, V. P. (ed.) (2015) *Donbas i Krym: tsina povernennia* (Kyiv, National Institute for Strategic Studies).
- Iwański, T. (2015) 'Still Together, but Apart? Kyiv's Policy Towards the Donbas', *OSW Commentary*, 160.
- Kotkin, S. (2016) 'Russia's Perpetual Geopolitics', *Foreign Affairs*, 95, 3.
- Kudelia, S. (2014) 'The House That Yanukovich Built', *Journal of Democracy*, 25, 3.
- Kudelia, S. (2016) 'The Donbas Rift', *Russian Politics & Law*, 54, 1.
- Kulyk, V. (2019) 'Identity in Transformation: Russian-Speakers in Post-Soviet Ukraine', *Europe-Asia Studies*, 71, 1.
- Kushch, L. (2018) 'God posle "natsionalizatsii" v "DNR": chot tam proiskhodit', *BBC NEWS Ukraina*, 19 March, available at: <https://www.bbc.com/ukrainian/features-russian-43450664>, accessed 13 June 2019.
- Kuzio, T. (2015) 'Competing Nationalisms, Euromaidan, and the Russian-Ukrainian Conflict', *Studies in Ethnicity and Nationalism*, 15, 1.
- Kuzio, T. (2019) 'Book review: Gordon M. Hahn, *Ukraine Over the Edge. Russia, the West and the New "Cold War"*; Kees Van der Pijl, *Flight MH17, Ukraine and the New Cold War. Prism of Disaster*', *Europe-Asia Studies*, 71, 7.
- Laruelle, M. (2016) 'The Three Colors of Novorossiia, or the Russian Nationalist Mythmaking of the Ukrainian Crisis', *Post-Soviet Affairs*, 32, 1.
- Libanov, E. M. (ed.) (2015) *Vidrodzhennia Donbasu: otsinka sotsialno-ekonomichnykh vtrat i priorityetnyi napriamy derzhavnoi polityky* (Kyiv, Ukraine National Academy of Sciences).
- Loshkariov, I. D. & Sushentsov, A. A. (2016) 'Radicalization of Russians in Ukraine: From "Accidental" Diaspora to Rebel Movement', *Southeast European and Black Sea Studies*, 16, 1.
- Lutsevych, O. (2016) *Agents of the Russian World: Proxy Groups in the Contested Neighbourhood* (London, Royal Institute of International Affairs).
- Maiorova, A. (ed.) (2017) *Donbas in Flames: Guide to the Conflict Zone* (Lviv, Prometheus).
- Malyarenko, T. & Galbreath, D. J. (2016) 'Paramilitary Motivation in Ukraine: Beyond Integration and Abolition', *Southeast European and Black Sea Studies*, 16, 1.
- Malyarenko, T. & Wolff, S. (2018) 'The Logic of Competitive Influence-Seeking: Russia, Ukraine, and the Conflict in Donbas', *Post-Soviet Affairs*, 34, 4.
- Marx, K. (1971) *A Contribution to the Critique of Political Economy. With an Introduction by Maurice Dobb* (London, Lawrence & Wishart).
- Matsuzato, K. (2018) 'Dissimilar Politics in Mariupol and Kramatorsk: Two Ukrainian Cities on the Eastern Front', *PONARS Eurasia Policy Memo*, 532, available at: <http://www.ponarseurasia.org/memo/dissimilar-politics-mariupol-kramatorsk-two-ukrainian-cities-eastern-front>, accessed 15 June 2019.
- Matveeva, A. (2016) 'No Moscow Stooges: Identity Polarization and Guerrilla Movements in Donbass', *Southeast European and Black Sea Studies*, 16, 1.
- Merz, M. (2005) 'Knowledge Construction', in Restivo, S. (ed.) *Science, Technology, and Society: An Encyclopedia* (Oxford, Oxford University Press).
- Mitrokhin, N. (2015) 'Infiltration, Instruction, Invasion: Russia's War in the Donbass', *Journal of Soviet and Post-Soviet Politics and Society*, 1, 1.
- Molchanov, M. A. (2016) 'Russia as Ukraine's "Other": Identity and Geopolitics', in Pikulicka-Wilczewska, A. & Sakwa, R. (eds) *Ukraine and Russia: People, Politics, Propaganda and Perspectives* (Bristol, E-International Relations).
- Moravcsik, A. (2016) *Lessons From Ukraine: Why a Europe-Led Geo-Economic Strategy is Succeeding*, 2015–16 Policy Paper Series 10 (Washington, DC, Transatlantic Academy).
- Mykhnenko, V. (2009) 'Class Voting and the Orange Revolution: A Cultural Political Economy Perspective on Ukraine's Electoral Geography', *Journal of Communist Studies and Transition Politics*, 25, 2–3.
- Mykhnenko, V. (2011) *The Political Economy of Post-Communism: The Donbas and Upper Silesia in Transition* (Saarbrücken, LAP Lambert Academic Publishing).
- Mykhnenko, V., Padvalkava, K., Kuzmenko, L., Soldak, M. & Myedvyedyev, D. (2012a) *The Governance of Shrinkage in Donetsk and Makiivka (Ukraine): The Case of Local Government Finance*, Work Package 5 Research Paper (Birmingham, University of Birmingham School of Geography, Earth and Environmental Sciences).
- Mykhnenko, V., Soldak, M., Kuzmenko, L. & Haase, A. (2012b) 'Schrumpfende Ukraine: Bevölkerungsentwicklung und Dilemmata der Politik', *UKRAINE-ANALYSEN*, 105.
- Mykhnenko, V. & Swain, A. (2010) 'Ukraine's Diverging Space-Economy: The Orange Revolution, Post-Soviet Development Models and Regional Trajectories', *European Urban and Regional Studies*, 17, 2.
- Nagashima, T. (2019) 'Russia's Passportization Policy Toward Unrecognized Republics', *Problems of Post-Communism*, 66, 3.

- Novikova, O. F. (ed.) (2016) *Vnutrishnio peremishcheni osoby: vid podolannia pereshkod do stratehii uspihu* (Kyiv, Ukraine National Academy of Sciences Institute of Industrial Economics).
- OHCHR (2017) *Report on the Human Rights Situation in Ukraine (16 May to 15 August 2017)* (Geneva, United Nations Office of the High Commissioner for Human Rights).
- OHCHR (2018) *Report on the Human Rights Situation in Ukraine (16 November 2017 to 15 February 2018)* (Geneva, United Nations Office of the High Commissioner for Human Rights).
- OHCHR (2019) *Report on the Human Rights Situation in Ukraine (16 November 2018 to 15 February 2019)* (Geneva, United Nations Office of the High Commissioner for Human Rights).
- Osipian, A. (2015) 'Historical Myths, Enemy Images, and Regional Identity in the Donbas Insurgency (Spring 2014)', *Journal of Soviet and Post-Soviet Politics and Society*, 1, 1.
- Petro, N. N. (2016) 'Understanding the Other Ukraine: Identity and Allegiance in Russophone Ukraine', in Pikulicka-Wilczewska, A. & Sakwa, R. (eds) *Ukraine and Russia: People, Politics, Propaganda and Perspectives* (Bristol, E-International Relations).
- Piechal, T. (2015) 'The War Republics in the Donbas One Year after the Outbreak of the Conflict', *OSW Commentary*, 174.
- Polovyan, A. V. & Lepa, R. N. (eds) (2018) *Ekonomika Donetskoi Narodnoi Respubliki: sostoyanie, problem, puti resheniya* (Donetsk, Economic Research Institute).
- Portnov, A. (2015) 'Post-Maidan Europe and the New Ukrainian Studies', *Slavic Review*, 74, 4.
- Rácz, A. & Moshes, A. (2014) *Not Another Transnistria: How Sustainable is Separatism in Eastern Ukraine?* (Helsinki, Finnish Institute of International Affairs).
- Raik, K. (2019) 'The Ukraine Crisis as a Conflict Over Europe's Political, Economic and Security Order', *Geopolitics*, 24, 1.
- Richey, M. (2018) 'Contemporary Russian Revisionism: Understanding the Kremlin's Hybrid Warfare and the Strategic and Tactical Deployment of Disinformation', *Asia Europe Journal*, 16, 1.
- Röppeke, J. (2016a) 'How Russia Finances the Ukrainian Rebel Territories', *Bild*, 16 January, available at: <https://www.bild.de/politik/ausland/ukraine-konflikt/russia-finances-donbass-44151166.bild.html>, accessed 12 July 2018.
- Röppeke, J. (2016b) 'Putin's Shadow Government for Donbass Exposed', *Bild*, 29 March, available at: <https://www.bild.de/politik/ausland/ukraine-konflikt/donbass-shadow-government-45102202.bild.html>, accessed 12 July 2018.
- Ruben, D.-H. (1979) *Marxism and Materialism: A Study in Marxist Theory of Knowledge* (2nd edn) (Hassocks, Harvester).
- Sasse, G. (2007) *The Crimea Question: Identity, Transition, and Conflict* (Cambridge, MA, Harvard University Press).
- Shulman, S. (1999) 'Asymmetrical International Integration and Ukrainian National Disunity', *Political Geography*, 18, 8.
- Sokolova, H. (2019) '"Posledstviya budut ili plokhie, ili ochen' plokhie". K chemu mozhet privesti zatoplenie shakht na vostoke Ukrainy', *Open Democracy Russia*, 5 February, available at: <https://www.opendemocracy.net/ru/k-chemu-mozhet-privesti-zatoplenie-schakht-na-vostoke-ukrainy/>, accessed 27 September 2019.
- Sotiriou, S. A. (2016) 'The Irreversibility of History: The Case of the Ukrainian Crisis (2013–2015)', *Southeast European and Black Sea Studies*, 16, 1.
- Stalin, J. (1951) *Dialectical and Historical Materialism (September 1938)* (Moscow, Foreign Languages Publishing House).
- Stebelsky, I. (2018) 'A Tale of Two Regions: Geopolitics, Identities, Narratives, and Conflict in Kharkiv and the Donbas', *Eurasian Geography and Economics*, 59, 1.
- Sutyagin, I. (2015) *Russian Forces in Ukraine*, Briefing Papers 9 March (London, Royal United Services Institute for Defence and Security Studies).
- Swain, A. (ed.) (2007) *Re-Constructing the Post-Soviet Industrial Region: The Donbas in Transition* (London, Routledge).
- Tikhomirov, D. (2018) 'Sborshchik mandarinov v Abkhazii: "Pyat" yashchikov mandarinov v den' sobral— oplatil nochleg i butylku piva', *Komsomol'skaya Pravda*, 3 December, available at: <https://www.kp.ru/daily/26915/3962045/>, accessed 13 June 2019.
- Todorov, I. (2015) 'Sources of Modern Russian–Ukraine War: Donetsk Dimension', *Zeszyty Naukowe AON*, 3, 100.
- Toler, A. & Haring, M. (2017) 'Russia Funds and Manages Conflict in Ukraine, Leaks Show', *Atlantic Council*, 24 April, available at: <http://www.atlanticcouncil.org/blogs/ukrainealert/russia-funds-and-manages-conflict-in-ukraine-leaks-show>, accessed 16 July 2018.
- Treisman, D. (2016) 'Why Putin Took Crimea: The Gambler in the Kremlin Putin's Russia', *Foreign Affairs*, 95, May/June.
- UNHCR (2018) *Global Trends: Forced Displacement in 2017* (Geneva, United Nations High Commissioner for Refugees).

- UNOCHA (2015) *Ukraine: Situation Report No. 28 as of 20 February 2015* (New York, NY, United Nations Office for the Coordination of Humanitarian Affairs).
- UNOCHA (2017) *Ukraine 2018 Humanitarian Needs Overview* (New York, NY, United Nations Office for the Coordination of Humanitarian Affairs).
- van Zon, H. (2007) 'The Reform of Ukraine's Energy Complex and its Consequences for Donetsk', in Swain, A. (ed.).
- Walker, S. (2013) 'Ukraine's EU Trade Deal will be Catastrophic, says Russia', *The Guardian*, 22 September.
- Wilson, A. (2016) 'The Donbas in 2014: Explaining Civil Conflict Perhaps, but not Civil War', *Europe-Asia Studies*, 68, 4.
- Wood, A. (2005) 'Historical Materialism', in Honderich, T. (ed.) *The Oxford Companion To Philosophy* (2nd edn) (Oxford, Oxford University Press).
- Zhukov, Y. M. (2016) 'Trading Hard Hats for Combat Helmets: The Economics of Rebellion in Eastern Ukraine', *Journal of Comparative Economics*, 44, 1.
- Zimmer, K. (2004) 'The Captured Region: Actors and Institutions in the Ukrainian Donbass', in Tatur, M. (ed.) *The Making of Regions in Post-Socialist Europe: The Impact of Culture, Economic Structure and Institutions. Case Studies from Poland, Hungary, Romania and Ukraine*, Vol. 2 (Wiesbaden, VS Verlag für Sozialwissenschaften).
- Zimmer, K. (2007) 'Trapped in Past Glory: Self-Identification and Self-Symbolisation in the Donbass', in Swain, A. (ed.).

Appendix 1

TABLE A1

ABSOLUTE AND RELATIVE CHARACTERISTICS OF DONBAS REGION AND ITS CONSTITUENT PROVINCES, 2013 (END OF YEAR)

	<i>Donbas</i>	<i>Of which:</i>	
		<i>Donetsk province</i>	<i>Luhansk province</i>
Territory (square kilometres)	53,200	26,517	26,683
Population (1 January 2014)	6,583,400	4,343,900	2,239,500
Workforce (economically active)	3,211,700	2,133,700	1,078,000
Pensioners and retirees (1 January 2014)	2,122,694	1,392,403	730,291
Average monthly pension payments (UAH million)	3,660	2,425	1,235
Annual pension outlays (current US\$ million)	5,495	3,641	1,854
Annual pension outlays (as % of regional GDP)	20.0	17.6	26.9
Regional gross domestic product (current US\$ million)	27,528	20,634	6,895
Regional GDP <i>per capita</i> (current US\$)	4,181	4,750	3,079
Disposable income <i>per capita</i> (current US\$)	3,652	3,884	3,202
Current domestic research and development expenditure (as % of regional GDP)	0.32	0.33	0.29
Researchers (per thousand employment)	2.0	2.7	0.7
<i>As percentage of Ukraine's total:</i>			
Territory	8.8	4.4	4.4
Population	14.5	9.6	4.9
Workforce	14.6	9.7	4.9
Pensioners and retirees	15.7	10.3	5.4
Pension outlays	18.2	12.1	6.2
Current domestic research and development expenditure	5.96	4.62	1.34
Researchers	7.7	6.7	0.9
Regional GDP	14.5	10.8	3.6
<i>Of which (NACE Codes*):</i>			
Agriculture, forestry and fishing (A)	7.3	4.8	2.5
Mining and quarrying (B)	29.4	21.7	7.7

(Continued)

TABLE A1 (*Continued*)

	<i>Donbas</i>	<i>Of which:</i>	
		<i>Donetsk province</i>	<i>Luhansk province</i>
Manufacturing (C)	21.0	15.2	5.8
Electricity, gas, steam (Standard NACE code) and air conditioning supply (D)	20.3	15.7	4.6
Water supply, sewerage, waste and remediation (Standard NACE code) activities (E)	18.6	10.1	8.5
Construction (F)	12.9	10.8	2.1
Wholesale and retail trade; repair of motor vehicles and motor cycles (G)	12.5	10.3	2.2
Transporting and storage (H)	16.2	12.9	3.3
Accommodation and food services activities (I)	9.9	6.9	3.0
Information and communication (J)	3.9	2.9	1.0
Financial and insurance activities (K)	8.7	6.9	1.8
Real estate activities (L)	13.2	9.7	3.5
Professional scientific and technical activities (M)	6.1	4.6	1.5
Administrative and support services activities (N)	11.9	9.6	2.3
Public administration and defence; compulsory social security (O)	10.2	6.4	3.8
Education (P)	11.2	7.3	3.9
Human health and social work activities (Q)	12.9	8.9	4.0
Arts, entertainment and recreation (R)	11.2	8.7	2.5
Other services activities. Activities of households as employers; activities of households for own use. Activities of extraterritorial organisations and bodies (S–U)	12.4	8.7	3.7
Imports, total (current US\$, million)	6,693	4,676	2,017
Exports, total (current US\$, million)	16,592	13,048	3,544
Exports, merchandise (percentage by major sections)			
<i>Of which:</i>			
Base metals and articles of base metal	60.6	64.2	47.9
Mineral products	13.1	14.0	9.9
Vehicles, aircraft, vessels and associated transport equipment	8.9	6.0	19.1
Products of the chemical or allied industries	5.9	4.5	10.8
Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	4.3	4.5	3.2
Merchandise export by destination to the:			
European Union: 28 members (as % of total)	28.2	25.7	36.9
Eurasian Economic Union: 5 members (as % of total)	32.0	29.5	41.1
Rest of the world (as % of total)	39.8	44.8	22.0
Inward foreign direct investment (equity capital stock, current US\$, million)	4,394.3	3,510.5	883.8
Outward foreign direct investment (equity capital stock, current US\$, million)	5,443.8	5,432.2	11.6
	<i>As percentage of Ukraine's total:</i>		
Imports, total	7.9	5.5	2.4
Exports, total	21.4	16.7	4.7
Inward foreign direct investment	7.3	5.8	1.5
Outward foreign direct investment	82.8	82.6	0.2

Note: * NACE (Nomenclature des Activités Économiques dans la Communauté Européenne) Codes is the European statistical classification of economic activities used by national statistical agencies for data collection purposes. For details, see https://ec.europa.eu/competition/mergers/cases/index/nace_all.html, accessed 1 October 2019.

Source: Calculated from 'Statystychna informatsiia', Ukraine State Statistical Service, various years, available at: <http://www.ukrstat.gov.ua/>, accessed 13 June 2019.