

RESEARCH ARTICLE

Trajectory of Socio-economic Development of Ukraine in 1991–2021 from a World-system Perspective

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Abstract

The Ukrainian trajectory of socio-economic development has so far been looked at through different regional lenses. This paper proposes a more global interpretation, from the theoretical perspective of world systems. It will trace the trajectory of the Ukrainian economic position since the fall of the Soviet Union, in particular with regard to industrial position, market integration, and social implications. The decline in technological competitiveness and the social and demographic crisis are highlighted as underlying constraints that Ukraine faces today. It will conclude with some remarks on the relevance of global and historical world-system approach to understand the Ukraine's socio-economic development trajectory.

Keywords: World-system analysis; Global studies; International political economy; Historical sociology

Introduction

This paper advances an analysis of the trajectory of socio-economic development of Ukraine in 1991–2021 within a world-system political economy framework that, by considering the context of the crisis of global capitalism, can overcome the limits of dominant geopolitical, culturalist or institutionalist perspectives. Most studies adopt regional perspective, that may be helpful in describing local processes and border tensions, but neglect the broader picture of the patterns of integration of Ukraine in the global economy. Unlike Central Eastern Europe that – even if with a transition with high social costs (Meardi, 2012) – has followed a path from semi-periphery to (mostly) semi-central region, Ukraine has moved from a more central position to a kind of periphery of periphery. This path, now entrenched over more than three decades, has caused a situation of dependency that has come to constrain its future outlook.

The paper will first describe the approach and its utility for the Ukrainian case. The following sections will, in turn, describe the political economy development of Ukraine; trajectory of its industrial production base; social inequality implications; and two specific factors of dependence: debt and position in the commodity chain. The conclusion will draw the relevance of such a global and historical approach to understand the Ukraine's socio-economic development trajectory in the world-system context.

Post-Soviet Space's Integration into Global Capitalism

According to world-system theory (Wallerstein, 2010), world capitalism entered structural crisis in the 1970s. Post-World War II Industrial growth in the US and recovery in Europe and Asia led to capital overaccumulation, resulting in overproduction and overcapacity relative to demand. This caused intensified competition, declining profits, slowed investments and

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wage growth, and an even further slowdown in demand growth, and thus weaker demand. Capital shifted toward the financial sector in a process of financialization. Industrial capital reacted by relocating lower-level production to the periphery of global capitalism to exploit cheaper labor. This transfer required opening developing economies, liberalizing trade and finance, and creating favorable conditions for transnational corporations and investors.

The collapse of the Soviet Union and socialist regimes was crucial for this restructuring. As Krugman (2008: 78-79) noted, the fall of communism reduced the risk of investing outside the West, enabling transnational capital to globalize. This transformation of Western societies and the demise of socialism formed the conjuncture of neoliberal globalization as a response to capitalism's crisis.

Within this context, post-Soviet countries, including Ukraine, integrated into the global capitalist economy through neoliberal reforms amid the "end of history" euphoria, promising economic growth and democracy. The term "market economy" was mythologized to obscure capitalism's exploitative and unequal nature, focusing instead on developed Western models, ignoring the underdeveloped periphery. This created the illusion that Ukraine would join the capitalist core by abandoning socialism.

Post-socialist transformation studies were dominated by transition approach limited by methodological nationalism and core-centric models. Even alternative approaches, such as varieties of capitalism, fail to fully account for international and transnational influences shaping post-socialist trajectories.

The transition approach is part of the neoliberal modernization paradigm (Gilman, 2007, p.271-272) that came to dominance in the 1990s with the Washington Consensus roadmap for transition economies. This paradigm equated development with market liberalization, privatization, and institutional reforms to integrate into world markets, achieve catch-up modernization and convergence with Western economies (Kolodko, 2001; Acemoglu & Robinson, 2012).

However, Washington Consensus served class interests by favoring emerging capitalist classes and global investors while neglecting fair redistribution. In post-Soviet countries, neoliberal reforms caused massive poverty, inequality, and destruction of the middle class. Privatization and liberalization led to private monopolies, unpalatable levels of inequality, capital flight, and market distrust (Noman, 1999, p. 30).

World-systems analysis critiques the developmentalist thinking embedded in comparative political economy, such as growth models and varieties of capitalism, by conceptualizing capitalism as a historical system based on exploitation and structured around a stable core-periphery hierarchy. While individual countries may experience upward or downward mobility, systemic convergence between center and periphery is impossible, as this would compromise the logic of capital accumulation. Thus, divergence and differentiation between center and periphery is an integral part of capitalism, with the semi-periphery serving as both a stabilizing and transformative element.

World-system empirical researches confirm persistent global inequality and limited mobility between zones of wealth, refuting claims of convergence due to globalization. Studies by Arrighi et al. (1986, 2003), Babones (2005), and Karatasli et al. (2018) demonstrate the long-term stability of core-periphery differentiation.

Despite some upward mobility in the global South, global inequality has increased and no peripheral region has achieved sustained convergence with the core. This challenges neoliberal theories of modernization by highlighting enduring global hierarchies of wealth. Contrary to claims of declining inequality since the Industrial Revolution, long-term trends show persistent polarization between rich and poor countries. While temporary reductions occurred during periods of financial expansion, structural inequality deepened, reinforcing core-periphery differentiation. Internal stratification within both core and periphery further

exacerbates global inequality. World-systems research find no evidence of sustained convergence, as the core has consistently accounted for about 15% of the world's population, and peripheral divergence persists, especially during periods of systemic shifts.

World-systems analysis offers a sophisticated, historically grounded framework understanding of global capitalism, avoiding the methodological nationalism, unilinearity and one-dimensionality of neoliberal modernization. It situates national economies within the capitalist world-system's hierarchies and dynamics, allowing deeper insight into socio-economic processes beyond neoclassical and neoliberal paradigms. It is useful tool to study Ukraine's socio-economic path within global capitalist system.

World-system approach has influenced studies of global commodity chains and core-periphery and dependency relations within Europe (Gereffi, 2018; Madariaga & Palestini, 2021; Weissenbacher, 2022). This article contributes to this perspective by examining Ukraine's socio-economic trajectory within the capitalist world-system.

The Ukrainian Case

Studies of transformations in Central, Eastern and Southern Europe have identified development trajectories through models such as "peripheral growth", "dependent market economy", "dependent industrialization" and "dependent financialization" (Madariaga & Palestini, 2021), revealing their features under neoliberal market reforms.

Bohle and Greskowitz (2012) identify three capitalist models in post-socialist states: neoliberal, embedded neoliberal, and neocorporatist. The Baltic states adopted a neoliberal approach with open markets and minimal welfare, while Central and Eastern European countries combined foreign investment and export-led growth with retained welfare systems and active state industrial policy. Slovenia uniquely achieved a balance between competitive industries and neocorporatist social integration.

Unlike the countries of Southern Europe, which also experienced socio-economic shifts such as deindustrialization and financialization, the post-socialist states undergo a real systemic transformation, profound restructuring of social systems, class relations and production, moving from planned socialist economies to capitalism. This transition entailed industrial decline - even amid partial re-industrialization in cases such as the Visegrad Group countries - and reflected a form of forced peripheralization shaped by neoliberal policies promoted by the major capitalist powers through international financial institutions.

This process was much more strongly influenced and controlled by transnational factors, forces and actors than was the case with the southern European countries (Bohle, 2018; Magnin & Nenovsky, 2022). Post-socialist countries faced the conditionality of financing reforms with commitments to strictly prescribed policies and, with few exceptions, had much less selective neoliberalization and policy autonomy than the states of the southern European (semi-)periphery.

The forced neoliberal peripheralization of post-socialist countries led to severe social and economic crises. All post-Soviet states experienced deep transformational recessions. And economic degradation, industrial decline, and production primitivization. Industrial specialization and cooperation, processing stages number declined, while extractive sectors expanded, reflecting a structural regression (Chasovsky, 2013, pp. 42-45). Neoliberal reforms exacerbated poverty and inequality by reinforcing an export-oriented raw materials model dominated by a comprador oligarchy, while capital outflows depleted investment resources. Ukraine exemplifies this trajectory of forced peripheralization.

This study uses data to track Ukraine's trajectory in the capitalist world-system. Given the correlation between country's global economic position and GDP per capita, Ukraine's GDP dynamics from 1991 to 2021 serve as a preliminary indicator of its movement in the core-

periphery hierarchy. In addition, changes in industrial potential and value flows - trade, investment, and financial transfers - shed light on the restructuring of Ukraine's foreign economic relations, helping assess whether the country is winning or losing in the global distribution of surplus value as it integrates into the world division of labor.

Applying this approach to Ukraine, it is noteworthy that the World Bank classified it as a lower-middle-income economy until recently, but now, based on new estimates, Ukraine has been reclassified as upper-middle-income. In 2021, Ukraine's GDP per capita was well below the world average and lagged far behind that of the European Union. The country lagged not only behind Central European states such as the Czech Republic, Slovakia, Poland and Hungary, but also many non-European and developing economies. Its GDP per capita was comparable to a number of lower-middle-income countries, reflecting a significant development gap (Table 1). Ukraine remains among the poorest countries in Europe and can be seen as increasingly integrated into the periphery of the capitalist world-system, characterized by backwardness, poverty, social polarization, inequality, political instability, weak state institutions, and economic and political dependence.

Table 1. GDP per capita by country in 2021 (USD).

Country	GDP per capita (USD)
World Average	12,353
EU Average	39,180
Ukraine	4,776
Czechia	27,697
Slovakia	22,138
Poland	18,635
Hungary	18,755
Turkmenistan	7,051
Peru	6,827
Colombia	6,222
Paraguay	5,976
Moldova	5,275
Georgia	5,083
Libya	4,935
Guatemala	4,914
Iraq	4,869
El Salvador	4,642
Indonesia	4,287

Source: World Bank.

Since Ukraine's integration into the core-periphery division of labor was shaped by dominant forces within the global capitalist system, it was structurally excluded from joining the core. Its advanced industrial sectors—producing high value-added goods in aerospace, shipbuilding, and precision engineering—would have positioned it as a competitor to Western corporations, disrupting established patterns of capital accumulation. Sustaining such industries would have required access to substantial global markets and resources. Instead, Ukraine's incorporation through neoliberal reforms entailed deindustrialization and the dismantling of high-tech sectors, transforming it into a peripheral economy and source of surplus value for the core. This process resulted in the degradation and primitivization of its productive forces.

And while the Visegrad Group countries, selected for priority inclusion in the Euro-Atlantic structures of the EU and NATO, were offered “development by invitation”, which implied

sub-development and “dependent reindustrialization” under the control of TNCs within the framework of embedded neoliberalism, the result of Ukraine’s artificial peripheralization was involutory model of export-oriented deindustrialization and financial subjugation, with its subordinate position in production chains, strong dependence on imported components and low-wage nature of the labor regime as main comparative competitive advantage.

In the early 1990s, Ukraine was seen as one of the post-Soviet states with the greatest potential for integration into the Western European economy, being among the ten most industrialized countries in Europe (Kravchuk, 2002, p. 46; Amosha et al., 2021, p. 99). However, instead of developing the scientific and industrial base inherited from Soviet times, Ukraine experienced deindustrialization, infrastructure decline and weakened social protection institutions. In 1991, its GDP was comparable to China’s, accounting for 1% of global GDP; by 2021, this had fallen to 0.4% (World Bank Open Data; IMF Datamapper). A soft adaptation approach rejected hard neoliberal reforms such as shock therapy. Simultaneously, Ukraine’s integration into the global economy required economic ties in the post-Soviet space, but neither condition was realized, partly due to political and geopolitical factors.

Ukraine initially pursued a strategy of gradual reform, but under pressure from international financial institutions, it implemented neoliberal policies consistent with the global capitalist agenda. In 1992, Ukraine liberalized trade and prices, approved large-scale privatization, and changed its economic orientation from the CIS to the West. That same year, Ukraine joined the IMF and the World Bank, committing itself to market reforms based on liberalization, monetarism, and cost-cutting. However, liberalization and privatization without strong state regulation or social protection – unlike in Central Europe – exacerbated economic decline, inflation and social hardship.

Following Kuchma’s election, Ukraine initiated radical market IMF-led reforms in 1995–1996 aimed at financial stabilization and liberalization. The National Bank’s tight monetary policy, despite industrial contraction, succeeded in ending hyperinflation and implementing the 1996 currency reform that introduced the hryvnia pegged to the dollar. These reforms triggered a prolonged transformation recession (1991–1999), creating a model of high openness and export orientation toward low-tech, low value-added goods. The model’s vulnerability was revealed by the 1998 Asian financial crisis and Russia’s default, leading to capital outflows, hryvnia devaluation, and severe socio-economic consequences for Ukraine (Melnyk, 2014; Ohinok & Buriak, 2023).

Ukraine’s subsequent socio-economic development was marked by multiple efforts to recover from successive downturns: the transformation recession of 1991–1999, the 2008 global financial crisis, the 2014–2015 crisis following Euromaidan and conflict with Russia, and the 2020 recession triggered by the Covid-19 pandemic.

Throughout each recession and recovery, Ukraine’s economy has demonstrated a strong dependence on global market trends and external financial support. Even during its highest growth period (2000–2007), with annual GDP growth averaging 7%, expansion was driven by favorable international conditions, including rising global demand for metals and chemicals – Ukraine’s main exports – bolstered by cheap Russian gas (Grigoriev et al., 2009). Despite apparent growth in output, investment and productivity, structural distortions deepened. After losing 62% of GDP by 1999, Ukraine never returned to 1990 levels; by 2019, GDP was only 65.5% of that. Once one of the strongest Soviet republics, Ukraine ranks as a lower-middle-income country (Revyakin, 2017, p. 51). This “growth without development” reflects the way the country is integrating into the global economy, mainly through economic openness.

At the onset of neoliberal transformation, Ukraine was a moderately open economy, with exports accounting for 24% of GDP in 1992. As market reforms progressed, the country

became increasingly export-dependent: by 1995, exports of goods and services reached 47.1%, rising to 52–62% between 1999 and 2004 (NISD, 2021, p. 32). Simultaneously, Ukraine's integration into the global economy increasingly reflected patterns of unequal exchange.

Growing economic openness intensified negative structural shifts in Ukraine's commodity exports, especially during the 2008–2009 global financial crisis. Amid deteriorating global conditions and industrial decline, Ukraine's role in the international division of labor consolidated around raw materials and low-tech exports. Metallurgical products of a low degree of processing, agricultural and food industry products took the predominant positions in Ukrainian exports. They accounted for about half of Ukrainian exports in 2013. Before the 2008 crisis, metallurgy and the chemical industry accounted for more than half of export revenues. By 2017, however, food products and related raw materials had become the dominant exports. Low-tech goods, especially ferrous and non-ferrous metals, remained significant while the share of medium- and high-tech products declined (Salivon, 2019). According to the National Bank of Ukraine's research on Ukraine's balance of payments, the share of machinery, equipment, vehicles and devices and appliances in the structure of Ukrainian exports of goods decreased from 16.4% in 2007 and 14.4% in 2013 to 7.2% in 2017 (Ministerstvo rozvitku ekonomiki, 2019). This trend persisted through 2021 (Table 2).

Table 2. Structure of Ukrainian exports by sector and year (% of total exports).

Sector	2007	2013	2016	2018	2021
Agro-industrial complex and food industry	12.7	26.8	42.0	39.3	40.7
Mechanical engineering	17.2	16.8	11.9	11.5	9.0
Metallurgy	42.2	27.8	22.9	24.6	23.5
Chemical industry	10.2	8.0	5.4	5.5	5.8
Mineral products	8.7	11.8	7.5	9.2	12.4

Source: State Statistics Service of Ukraine (www.ukrstat.gov.ua).

Conversely, Ukraine's import structure has changed significantly. Until the early 2000s, imports were dominated by extractive industry goods, with relatively low shares of medium- and high-tech products (NISD, 2021, p. 32). However, during the 2000–2008 growth period, rising demand for capital goods—no longer met by domestic industry—led to increased imports of technologically advanced products. The share of engineering goods rose, as well as chemical products. Meanwhile, raw materials and low-tech goods declined (Table 3). High-tech imports rose to 13.9% in 2020 (from 7.8% in 2011), and medium-tech products reached 36.1% (up from 27.6%) (Statistical collection 2016, 2021; NISD, 2021, p. 34). These shifts underscore Ukraine's deepening integration into the core-periphery global division of labor as an agrarian and raw-material periphery.

Between 2000 and 2004, despite prioritizing European integration, Ukraine participated in the Eurasian Economic Community's Common Economic Space, reflecting the significance of CIS production and trade ties. Russia remained Ukraine's main trade partner, with mutual trade growing between 2000 and 2008 amid economic recovery. Ukraine's growth during this period was largely driven by Russian demand. Trade patterns differed: Ukraine imported mainly machinery from the EU and natural gas from Russia, while exporting raw materials to the EU and more technologically sophisticated industrial goods to Russia. In 2007, Russia accounted for over half of Ukraine's machinery, equipment, and transport exports, which comprised 14% of total exports (Grigor'ev et al., 2009). Overall, Ukraine's 2000s recovery relied on surviving Soviet industry and restored trade with Russia amid global economic growth.

Table 3. Structure of Ukrainian Imports by sector and year (% of total imports).

Sector	2007	2013	2016	2018	2021
Agro-industrial complex and food industry	12.1	6.5	9.9	8.9	10.6
Mechanical engineering	32.6	25.3	29.1	30.5	32.0
Metallurgy	7.8	6,5	5.9	6.3	6.0
Chemical industry	14.4	17.0	21.6	18.6	20.0
Mineral products	28.5	29.1	21.6	24.8	20.5

Source: State Statistics Service of Ukraine (www.ukrstat.gov.ua).

The Orange Revolution brought a pro-Western government that intensified Ukraine's Euro-Atlantic integration, including aspirations for EU and NATO membership, while worsening relations with Russia and refusing participation in the Customs Union and Single Economic Space. European integration was expected to attract investment for economic development. Key milestones included the 2007 launch of Association Agreement negotiations and the Deep and Comprehensive Free Trade Area (DCFTA), as well as Ukraine's 2009 entry into the EU's Eastern Partnership, aimed at aligning Ukraine's economy and legislation with EU standards (Sakwa, 2015, pp. 38-39). Ukraine's neoliberal transformation and Euro-Atlantic orientation were reinforced by its WTO accession on unfavorable terms in 2008 and the 2008 U.S. Strategic Partnership Charter, soon followed by the Russia-Ukraine gas conflict (Pirani et al., 2009). This unequivocal Westward turn heightened Ukraine's political and economic dependence on global powers and constrained its policy autonomy within EU, WTO, U.S., and international financial obligations.

In 2008–2009, the global financial crisis severely impacted Ukraine, causing a 15% GDP contraction and a 21.9% decline in industrial production in 2009. Reduced global demand sharply decreased exports and export revenues, while the national currency experienced significant devaluation (Melnyk, 2014). Ukraine's economy was in the worst position among CIS countries due to excessive openness and lack of protection from adverse global market effects. This increased reliance on external financing heightened the risk of debt dependency. A short-term recovery in 2010–2011 proved unsustainable, as a new recession emerged in 2012 amid the Eurozone crisis.

The crisis underscored the critical role of economic ties in the post-Soviet space for Ukraine, as its recovery depended largely on stabilizing export markets in the CIS, a loss that could not be compensated by a sole focus on European markets. Although the EU's economic potential exceeded that of Russia and the CIS, these countries remained Ukraine's main trading partners. In 2011-2012, CIS countries accounted for about 37-38% of Ukrainian exports, compared to 25-26% for the EU, with Russia alone accounting for 25.6-29%. In imports, CIS countries accounted for 41-45%, while the EU's share was around 31%, with Russia accounting for 32.4-35.3% of total imports (Statistical collection, 2012).

Under these conditions, it became obvious that unilateral European integration at the expense of the "eastern" vector risked deepening Ukraine's peripheralization and damaging its economic development. Without abandoning the EU course, the Ukrainian government sought to balance it by closer cooperation with the Customs Union. This approach was driven by projections showing that a free trade zone with the EU would result in significant losses - worsening trade terms, reduced access to EU markets for agricultural, food and engineering products, and exposure to protective measures and technical regulations. Increased EU imports are unlikely to be offset by increased exports, while Customs Union

membership promised potential economic benefits (Shevchuk & Yakym 2016; Kukharskaya, 2015).

All attempts at two-vector integration, including proposals for trilateral cooperation and a common economic space from the Atlantic to the Pacific, were rejected by the EU, which regarded Ukraine as its periphery—a source of economic advantage amid its own crises. The EU maintained that a free trade area with Ukraine was incompatible with participation in the Customs Union or the Single Economic Space (Sakwa, 2015, pp. 76-78). As the asymmetry of benefits became clear, with the EU gaining significant leverage over Ukraine's economy, the Ukrainian government suspended preparations for the Association Agreement, citing the need to normalize economic relations with Russia.

The suspension of European integration triggered the Euromaidan, which led to national division, the loss of Crimea, and war in eastern Ukraine. The subsequent breakdown of relations with Russia - in trade, investment, transit and credit - alongside the collapse of cooperation and logistics chains with the uncontrolled territories brought Ukraine's economy to the brink in 2014-2015. In two years, Ukraine lost 20% of its economic potential, 10% of its territory, and shrank its GDP by 16.4%. From 2014 to 2017, GDP declined by an average of 2.9% per year. Direct economic losses are estimated at \$100 billion, while Donetsk and Luhansk regions alone lost 1.2 trillion UAH of GRP (10% of national GDP for 2014-2018). The growth of military and debt service costs increased from 8.5% of the budget in 2013 to 15.3% in 2015 (NISD, 2021, p. 94), further hampering socio-economic development.

The loss of Russian and CIS markets dealt a severe blow to Ukraine's economy. Since 2014, trade with Russia has collapsed: its share in Ukraine's foreign trade dropped from 27.4% in 2013 to 7.1% in 2021. Bilateral trade fell 5.2 times—from \$37.9 billion in 2013 to \$7.2 billion in 2020. Ukrainian exports to Russia declined by 81.7% and imports by 80.3% over the same period (Statistical collection, 2014, 2021; NISD, 2021, p. 96). Critically, Russia had been the primary destination for Ukraine's high value-added exports. In 2014, it accounted for 27.8% of high-tech exports and, in some years, up to 50% of medium-tech exports. Final consumer goods exports to Russia comprised 30.3% in 2014 (Torgovyj razryv, 2015). Losing this market led not only to a revenue shortfall, but also to structural degradation of export-oriented industries, including closures of high-tech enterprises, loss of skilled labor and scientific and design potential. Despite the sharp decline, Russia remained Ukraine's fourth-largest trade partner in 2021, with turnover reaching \$9.5 billion, although trade consistently ran at a negative balance (Statistical collection, 2021).

Ukraine's reorientation toward EU trade has failed to compensate for the loss of CIS markets. Trade volume with the EU stood at \$43.7 billion in 2013, modestly rising to \$45.7 billion in 2019 and \$55.7 billion in 2021, with the EU accounting for 39.2% of Ukraine's foreign trade (Statistical collection, 2014, 2019, 2021). Despite the growing role of the EU and the free trade area, trade remains structurally unbalanced, with a persistent negative trade balance. Association and free trade agreements include protective mechanisms that restrict access for most Ukrainian finished goods, while Ukraine fully opens its markets to European imports, undermining domestic producers. As a consequence, Ukrainian goods are substituted by imported ones. Ukrainian products prevail only in low-tech segments of the domestic market. In agriculture, Ukraine cannot export to Russia since 2016, while the EU offers limited access, primarily for raw materials, reinforcing a peripheral role. Minimal duty-free quotas appear to contradict the principles of free trade. Overall, the free trade area has not led to substantial socio-economic improvements in Ukraine.

In a certain sense, the reorientation of agricultural exports to markets in North Africa, the Middle East, and East Asia—particularly China—offered a lifeline for the Ukrainian economy. Amid China's diversification of trade ties during its trade war with the U.S., bilateral trade surged, making China Ukraine's key trade partner, rivaling the entire CIS. In 2021, the CIS

accounted for 14.1% of Ukraine's foreign trade, while China's share was 12.1% (Statistical collection, 2021). However, the trade structure remains unfavorable: Ukraine primarily exports agricultural and metallurgical products, while importing high value-added manufactured goods from China.

Ukraine's trade balance remains negative due to imports consistently exceeding exports. While the country maintained a positive trade balance from 1999 to 2005, this trend reversed after 2006, reaching a deficit of over 9% of GDP by 2013. Between 2006 and 2020, the cumulative trade deficit in goods and services totaled approximately \$125 billion (NISD, 2021, pp. 34-35). This sustained imbalance contributed to a steady outflow of resources, rising debt obligations, and loss of added value and investment potential by the national economy.

Since economic growth is closely linked to the dynamics of gross investment, the sharp decline in investment in Ukraine is particularly important. Total investment declined from 39.05% of GDP in 1992 to 10.3% in 2021, while the savings rate fell from 35.25% to 9.6% over the same period (IMF, World Economic Outlook Database). The decline in domestic savings and investment has weakened productive capacity. Even during the economic recovery of 2006-2008, investments concentrated in export-oriented sectors remained highly dependent on favorable external conditions. The global crisis of 2008-2009 revealed the fragility of this model, as lower demand led to a sharp drop in investment and prolonged stagnation.

Beyond low investment levels, Ukraine's investment structure hinders economic development and technological modernization. Capital remains concentrated in raw materials and low-tech export sectors, while manufacturing continues to decline. Between 2010 and 2020, investment in machinery and equipment fell from 5.2% to 3.8%, while investment in chemical production fell from 8.1% to 3%, leading to a drop in investment in medium-high-tech industries from 19.0% to 12.2%. In 2020, extractive industries and utilities absorbed more than half of all industrial investment, while food and metallurgy, both low-value-added sectors, received just over 10%, reflecting a persistent structural imbalance (NISD, 2021, p. 62).

The main obstacle to establishing of an investment cycle capable of supporting the expanded reproduction of industrial capital is the neoliberal market reforms. These reforms fragmented industrial production through privatization and subordinated it to oligarchic financial and industrial groups driven primarily by short-term profits, with minimal reinvestment in production. The separation of raw material extraction - highly profitable under favorable world market conditions - from domestic processing has led to the decline of the manufacturing industry. Deprived of investment, the manufacturing sector degraded as capital was disproportionately concentrated in raw materials and low-tech industries.

This has caused the inability of Ukrainian industry to organize the production of sufficient capital goods, both in quantity and quality, to modernize its technical base. A large share of investment supports outdated assets, making capital formation heavily reliant on imports. Between 2014 and 2019, imports accounted for 86-88% of machine-building products (NISD 2021, p.64).

Another factor for the low level of investment in Ukraine is the NBU's tight anti-industrial monetary policy, which is in line with the Washington Consensus principles. Prioritizing inflation targeting, the NBU maintains a high discount rate, limiting money supply and credit availability. Consequently, enterprises primarily rely on internal funds concentrated in export-oriented sectors, further reinforcing Ukraine's peripheral export specialization.

Thus, the weakness of the investment process in Ukraine and its deformed structure consolidated the low-tech export orientation of the economy, its technological

backwardness and dependence, and blocked the possibility of progressive changes and structural renewal based on innovative development.

Foreign investment was expected to be a key driver of development - one of the main arguments in favor of signing the Association Agreement with the EU and DCFTA. However, despite measures to protect investors, liberalize capital flows and currency regulation, and maintain an undervalued hryvnia, Ukraine failed to attract significant FDI. This outcome was predictable as trade liberalization and tariff reductions under the WTO weakened domestic producers while removing incentives to invest in Ukrainian industry. It became more profitable to export finished products to Ukraine than to invest in domestic production. Meanwhile, Ukraine's raw materials remained freely exportable, reinforcing its role as a supplier to industrialized economies. The Association Agreement and DCFTA further deepened this economic openness.

Since the early 2000s, investment inflows to Ukraine have generally grown, albeit unevenly, with a marked decline after 2014. Ukraine continues to attract very low levels of foreign capital: from 1991 to 2021, total FDI amounted to just \$49.7 billion. Moreover, the share of new investment declined, while reinvested earnings increased - amounting to 40.4% of FDI in 2017, 58.3% in 2018, and 55.5% in 2019. Since reinvestment does not involve actual inflows, net FDI remained minimal (NISD 2021, p. 64).

Ukraine's investment income balance remains negative with net outflows amounted to \$114.2 billion between 2008 and 2021 (Dynamika platizhnoho balansu Ukrainy). Thus, foreign investment often serves as a channel for capital extraction. Investors' profits are either reinvested, consolidating external control over the economy, or withdrawn, further depriving the country of development resources.

The concept of foreign direct investment in Ukraine is often misleading. Although the EU looks like the largest investor, the leading sources of FDI include offshore jurisdictions such as Cyprus, the UK, the Netherlands, Switzerland, the Virgin Islands and Belize. Most of this capital is of Ukrainian origin and is channeled through offshore structures for tax optimization and legal advantages (Table 4). According to the NBU, Ukrainian residents eventually controlled at least 25.5% of FDI inflows (\$11.1 billion out of \$43.6 billion) between 2010 and 2021, with this share rising to 50.9% in 2020 and 68.5% in 2021 (NBU, 2022).

Table 4. FDI volumes in Ukraine, 2010–2019 (USD billion).

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total FDI in Ukraine	45.4	48.2	51.7	53.7	38.4	43.8	45.2	45.2	44.0	51.4
Including from EU-27 countries	34.7	36.7	38.6	38.3	27.1	31.9	31.7	31.9	31.6	37.6
Of which from EU-25 (excluding Cyprus and the Netherlands)	13.7	14.7	14.0	11.5	8.3	8.5	9.4	8.9	8.6	9.8
Annual change rate of FDI from EU-25 (excluding Cyprus and Netherlands)	7.1	-4.8	-17.6	-28.0	2.0	11.2	-5.1	-3.3	13.7	–
CAGR of EU-25 (excluding	-5.6%			–				+1.4%		

Cyprus and the Netherlands)

Source: Vlasniuk (2021).

Foreign investment has had little tangible impact on economic development and capital formation in Ukraine. From 2010 to 2020, foreign investors accounted for no more than 2-3% of total capital investment, declining to about 1% in 2018-2021. The vast majority of investment funding was carried out at the expense of enterprises' own resources (NISD, 2021, p. 70).

Foreign investors have little interest in high-tech manufacturing and R&D due to long payback periods and elevated risks. Instead, FDI is concentrated in sectors with high returns and short cycles, such as financial services, agriculture, raw materials and low-tech industries. This pattern reinforces the technological backwardness of Ukrainian industry and consolidates its peripheral status within the global capitalist economy.

WTO accession and the establishment of a free trade area with the EU did not improve Ukraine's socio-economic conditions. On the contrary, unilateral trade liberalization and weakened protection of domestic producers have deepened the exogenization of development. Adhering to a neoliberal strategy focused on openness and comparative advantages, effectively positioning Ukraine as a complementary periphery of the Euro-Atlantic core, and at the same time aligned with a pro-Western, anti-Russian geopolitics, the country became increasingly dependent on external political and economic forces.

Ukraine's peripheral socio-economic system lacks capacity to drive scientific and technological progress and support innovation. Over 90% of industrial production remains at a low technological level, only 10-12% of enterprises are engaged in innovation, and innovative products provide no more than 7% of sales. These indicators are 5-7 times lower than in developed economies (Ostapiuk et al., 2018, p. 45).

In 2015, Ukrainian enterprises allocated only 0.56% of total production costs (UAH 13.8 billion out of UAH 2.45 trillion) to innovation, with only 17.3% of firms engaged in innovation activities (Kindzersky, 2017, p. 58). As a result, the knowledge intensity of Ukraine's GDP (expenditures on scientific and technological research in relation to GDP) was one of the lowest in the world and fell from 0.99% in 2005 to 0.62% in 2015. By comparison, the EU average in 2014 was 2.03%, while in South Korea, Japan, Finland, Germany and the US the figure ranged from 2.8% to over 4%. Unsurprisingly, Ukraine's ranking in the Global Innovation Index fell from 43rd place in 2018 to 47th in 2019 and 45th in 2020 (Orlenko & Onishchuk, 2021, p. 140).

Ukraine's incorporation into the capitalist world-system was accompanied by a sharp decline in industrial production. Neoliberal reforms led to a structural shift towards labor-, energy- and resource-intensive industries, while output of high-tech final products declined. As a result, Ukraine's economy steadily lost its scientific and technological potential, increasingly resembling a raw material appendage of the global economic system.

The Trajectory of Industrial Production

The decline of Ukrainian industry, especially machine building, illustrates a broader structural crisis. Driven by neoliberal and comprador forces focused on quick private profit at the expense of favorable world market conditions and high demand for raw materials, Ukraine's economy is increasingly acquiring features typical of peripheral economies. During market reforms, machine building has declined, giving way to the extraction of raw materials and the production of semi-finished products. Entire high-tech sub-branches disappeared - aircraft building, rocket and space technology, shipbuilding, heavy and power

engineering, agricultural equipment, computer production, automation and robotics. As a result, the share of high-tech industries sharply decreased, while the raw materials industries expanded. Industrial production became dominated by low-quality, low-value-added steel products. Overall, the neoliberal transformation significantly reduced the role of industry in the economy: from 54.6% of gross value added in 1991 to only 23.2% in 2021 (World Bank Open Data). In 2020, share of products of high-tech industries accounted for only 4% of manufacturing, medium-high-tech for 13%, and medium-low-tech and low-tech for 37.8% and 45.1%, respectively (NISD, 2021, p. 89).

In 1990, mechanical engineering dominated industrial production, followed by food processing, metallurgy and light industry. By 2010, this structure had changed significantly: metallurgical production became the leading industry due to its export orientation, food industry took the second place, and machine building significantly decreased. Light industry, especially textiles and clothing, had virtually disappeared. Between 2016 and 2020, further structural shifts took place, with food processing becoming the main sector, metallurgy moving to second place, and machinery continuing to decline. These changes reflect a marked deterioration in the structure of industrial production and a further decline in the output of major industrial goods (Kindzerskij, 2017, p. 55; Marchuk, 2020, p. 62; Table 5).

Table 5. Changes in the structure of industrial output by sector (% of total output).

Industry Sector	1990	2010	2016	2019
Mechanical Engineering	30.5	9.3	6.1	7.2
Food Industry	18.6	18.0	21.4	20.4
Metallurgical Production	11.0	18.8	14.8	14.0
Light Industry (Textiles, Clothing)	10.8	0.7	0.9	1.0

Source: State Statistics Service of Ukraine (www.ukrstat.gov.ua).

This was largely a consequence of the fact that, in accordance with the neoliberal doctrine of transformation, from the very beginning Ukraine chose an export-oriented model of development based on the export production of raw materials, low-process and low-value-added products and agriculture, which is characteristic of the countries of the world periphery. The export-raw material orientation of industrial production consolidated its dependence on the world market and its subordinate position relative to the core economies. Ukrainian economists note a trend towards agrarianization between 2010 and 2018, as the share of agriculture in GDP increased from 7.1% to 10.6%, in contrast to the typical 3-5% for developed countries, where it continues to decline. Simultaneously, the shrinking share of industry indicates continuing deindustrialization and primitivization of the economy (Guzhva & Goncharenko, 2020, p. 21).

Ukraine's specialization in raw materials has become so pronounced that the World Bank in its 2019 report recognized the country's low GDP per capita – comparable to Moldova, Armenia, and Georgia, and almost three times lower than in Poland, despite similar income levels in 1990. This overdependence on primary commodity exports hindered economic restructuring and the development of higher value-added exports. Capital-intensive goods accounted for only about 16% of exports in 2017, reflecting chronic underinvestment in fixed assets. Ukraine's participation in global value chains remains limited, and its export structure is heavily concentrated on metallurgical and agricultural products. As a result, the economy is highly vulnerable to external shocks and commodity price cycles, contributing to a volatile and unsustainable growth trajectory (Svitovij bank, 2019).

The decline of machine building, its inability to produce means of production caused the crisis of reproduction and technological degradation of the entire economy. Indeed the Ukrainian economy is in urgent need of modernization. Depreciation of fixed assets in industry, energy, public utilities already in the pre-war period reached 65-90%, that is, it exceeded the threshold indicator of economic security -50%. The high level of depreciation of fixed assets was not compensated by investments in fixed assets. For comparison, in Slovakia the depreciation is 35%, in Belarus - 38%, in Moldova - 42% (Suhorukova et al., 2019, p. 125; Milovanov, 2020). Insufficient production of high value-added products is compensated by increasing imports.

Under conditions of degradation of the economy to the level of transformation into a raw material "great agrarian power" (a euphemism for banana republic"), the competitiveness of export industries can only be maintained due to the low price of labor, which means low wages for workers, and this in turn means massive poverty. About 60% of the country's population is below the poverty level. As a result, labor migration is growing from Ukraine, which is also turning into an exporter of labor.

Social Inequality

Another negative consequence of the neoliberal peripherization of Ukrainian society has been a huge increase in social inequality. The income differentiation of the Ukrainian population is one of the largest among European countries. Although there are no official statistics on property stratification, experts now say that the difference between the incomes of the richest 10% and the poorest 10% in Ukraine was at least 40 times. According to UN methodology, every four out of five Ukrainians are poor, surviving or less than \$14 a day, which is considered the poverty line in developed countries (Lon' & Ol'vins'ka, 2016, p. 201; Libanova, 2012, p. 369).

The growth of poverty and inequality was a direct consequence of the fact that in the process of neoliberal transformation of social economic system and social property relations as its core a new social-class structure was formed. On the one hand, as a result of the merger of local shadow criminal business groups and related bureaucratic groups, the formation of comprador oligarchic capital took place, included in global commodity chains and acting as an intermediary in the exploitation of the country's labor force, material and natural resources by the transnational capitalist class. At the opposite pole, a class of cheap wage labor deprived of real rights emerged, accessible to indirect and direct exploitation by transnational capital.

The Ukrainian oligarchy emerged through a privatization, characterized by the expropriation of state property and dominated by nomenklatura-criminal networks (Baranovsky & Sidenko, 2004; Kindzersky, 2016). International financial institutions that controlled the transition period did not hinder these processes, prioritizing the dismantling of the socialist economy and the incorporation of the new peripheral zones into the capitalist world-system. The corruption of elites in the states not selected for direct from Euro-Atlantic integration further contributed to this result, making them vulnerable to external manipulation.

Between 2002 and 2016, 35 oligarchic groups were identified, concentrated predominantly in profitable, export-oriented sectors (Chernenko, 2019). The 2000–2008 economic boom saw intensified privatization of state enterprises, with the State Property Fund facilitating the transfer of assets to politically connected financial and industrial groups. This led to the oligarchization of key sectors – mining, metallurgy, chemicals and oil and gas – concentrated predominantly in eastern Ukraine, increasing the influence of eastern oligarchs on the country's development. By the time of Euromaidan, large regional factions had formed, including the Donbass and Kharkov factions (e.g., Akhmetov, Taruta, Yaroslavsky etc.), the

Dnepropetrovsk factions (Pinchuk, Kolomoisky, Bogolyubov), the Kiev clans (Medvedchuk, Firtash, Surkis) and the western Ukrainian oligarchs (Poroshenko, Kosyuk etc.).

The Ukrainian oligarchy largely developed on the basis of Russian subsidies. According to Russian Prime Minister Dmitry Medvedev (Interfax, 2014), Russia has provided Ukraine with \$250 billion in support through various preferences, including preferential gas supplies. Much of this benefited oligarchs, especially those in the export-oriented metallurgy and chemical industries, whose fortunes were built on cheap Russian energy. Paradoxically, these oligarchs became competitors to their Russian counterparts in global markets. Their growing power significantly influenced Ukraine's turn toward European integration and rejection of post-Soviet reintegration projects.

The consolidation of Ukraine's comprador-oligarchic system became central factor of its economic peripheralization. Privatization of state-owned industrial assets disrupted production chains and led to a disconnection between raw material extraction and domestic manufacturing. With weak state regulation, profit-driven owners prioritized raw materials export over reinvestment, while economic openness and weak protection of domestic producers undermined competitiveness of finished products. This contributed to deindustrialization as "efficient owners" sought short-term gains, neglected investment commitments, and often liquidated worn-out enterprises. As a result, thousands of processing enterprises were lost and Ukrainian industry became locked into low-tech sectors (Baranovsky & Sidenko, 2004; Kindzersky, 2016).

Post-Soviet Ukraine is characterized by a huge degree of capital concentration. Until 2014, the concentration of capital in Ukraine exceeded that of Russia. According to Korrespondent magazine's calculations, the total assets of the 100 richest Ukrainians in 2011 amounted to 61% of the country's annual GDP, while the richest 100 Russians owned only one-third of Russia's GDP (Zanuda, 2012).

In 2013, the total assets of Ukraine's 100 richest people equaled 40% of GDP, with the top five oligarchs accounting for 15.2% and Rinat Akhmetov 8.1% (Focus, 2013; Babenko, 2018). By 2017, the share of the top five oligarchs fell to 7%, which is comparable to Russia. In 2019, the assets of the 100 richest people fell to 23% of GDP, down from 28% in 2018 (Opublikovan rejting 100, 2019). This decline reflects volatility in global commodity markets, losses of assets in Donbass and Crimea after 2014, the Covid-19 crisis, and partial "de-oligarchization" through asset nationalization. Nevertheless, the oligarchs retained significant control over Ukraine's political and economic systems.

Declining labor incomes and a sharp rise in social inequality have had a devastating impact on the demographic situation in Ukraine. Between 1990 and 2013, the population declined from 51.84 million to 45.55 million, and by 2022 it will fall further to 37.3 million (International Monetary Fund, Population). Ukraine experienced the most severe natural population decline among the former Soviet republics, with the rate accelerating from -3.5 per 1,000 in 2013 to -6.6 in 2019 (Gladun, 2020, p. 12).

Debt and Dependence

Having lost a significant part of the manufacturing industry, Ukraine became dependent on imports of industrial products from industrialized countries. Given the price scissors between imported products with high value added and exported products with low value added there was a chronic problem of trade deficit and balance of payments deficit. Its coverage is possible only through external borrowing. This, in turn, gives rise to the problem of chronic and growing external debt. The volume of gross external debt increased from \$54.5 billion in 2006 to \$129.7 billion in 2021 (65% of GDP). Ukraine's external debt is four times higher than its gold and foreign exchange reserves (\$31 billion in 2021) (gross external debt of Ukraine).

This means that Ukraine cannot service this debt on its own and has to take out new loans to pay off old ones. Thus, as a typical peripheral country, Ukraine is entangled in a network of financial dependence and is in debt bondage, from which it is unlikely to be able to extricate itself.

Unable to pay its debts, Ukraine is forced to sell off national assets. This is served by programs of large-scale privatization of state enterprises and land, the market of which is open to foreign capital, which are imposed by the IMF along with demands for the introduction of strict anti-labor legislation and measures to deregulate private capital (IMF, 2021). According to some reports, foreign capital has been quietly taking over the natural resources of the Ukraine for three decades. By 2016, ten multinational agricultural corporations already controlled 2.8 million hectares of land in Ukraine. By 2022, 3.4 million hectares of land are in the hands of foreign capital (Celada, 2022). But according to the Australian National Review published May 2022, 17 million hectares of Ukrainian agricultural land were owned by three US companies – Cargill, Dupont and Monsanto. This is approximately equal to the area of all agricultural land in Italy. Experts have calculated that this area is approximately half of all agricultural land of Ukraine (Aboli, 2022).

In addition to external debt, another factor in the bleeding of the Ukrainian economy is the large-scale and systematic outflow of capital. Indeed, according to the National economic strategy for the period up to 2030, the annual value of capital withdrawn to offshore zones is estimated at \$11-12 billion, and in total during the years of independence, \$148 billion were withdrawn (Nacional'na ekonomichna strategiia, 2021).

The withdrawal of capital is another channel for the transfer of value produced in Ukraine to the industrialized countries, indicating its peripheral position. At the same time, this figure is most likely an underestimate, since according to the Tax Justice Network for the period 1991-2014, \$167 billion were withdrawn from Ukraine to offshore (Katasonov, 2014), and according to other data presented in the Global Financial Integrity study, in which studied the volume of illegally exported capital from developing countries, in just 10 years from 2004 to 2013, \$116 billion were exported from Ukraine to offshore jurisdictions. With \$11.7 billion flowing out annually, Ukraine was ranked 14th out of 75 in the Country Rankings by Largest Average Illicit Financial Flows. But ten years have passed since then. In any case, the amount of capital exported far exceeds the country's sovereign debt and approaches the value of its annual GDP (Global Financial Integrity 2015; Okunev, 2021).

Ukraine's socio-economic degradation is due to neoliberal market reforms that resulted in a system dominated by personalized oligarchic ownership. Privatization fragmented the unified Soviet economic complex, disrupting the value chains necessary for modern industrial production. As a result, the economy was monopolized by export-oriented oligarchs, primarily in raw materials sector. This consolidated a socio-economic structure that reproduces underdevelopment.

Commodity Chains and Links of Dependence

Modern industrial productive forces are structured as integrated technological chains. Instead of relying on disparate, independent producers linked solely through market mechanisms, production increasingly adopts associated organizational forms - often as networks. This implies a shift from spontaneous market relations and competition to coordinated integration based on a common plan of cooperation.

But under the dominance of oligarchic peripheral capitalism, personalized private owners strive to squeeze the maximum profit from each link in the commodity chain – the extraction of raw materials, intermediate processing, and the production of final products. And even if at some of these stages there was an increase in labor productivity, labor intensity and cost decreased, the resulting beneficial effect is leveled on the scale of society by what is

absorbed by the superprofit of this isolated private capitalist enterprise, which arose as a result of the difference between the social and individual value of the goods. This effect is not passed along the chain and is not reflected in the final product. Desiring to maximize private profits has a negative impact on production, increasing the costs of subsequent links in the chain and the entire society. Peripheral oligarchic capitalism makes no distinction between short-term and long-term profits, between extracting profit from the production of raw materials, intermediate and final production.

On the contrary, core of the world capitalist system in terms of concentration, centralization and integration of property is constantly ahead of the periphery. Core capitalism tends to eliminate the negative consequences of private ownership fragmentation and spontaneity of early capitalism by creating ever larger socialized forms of production and property. It sought to eliminate the spontaneous market and to create a market that is centralized, regulated, predictable, and amenable to planning. It strives to abolish the uncertainty of market relations, chaotic competition with spontaneous price fluctuations, and pushes it to the periphery of capitalism.

Ukraine's fragmented oligarchic property system stands in stark contrast to the integrated corporate ownership typical of industrialized countries. One of the key factors of post-Soviet deindustrialization was the massive disintegration of unified production complexes during market reforms. Privatization aimed at stimulating competition led to the fragmentation of enterprises, including the separation of key units such as R&D into legally independent structures. This restructuring, guided by international agencies and Western experts, reflected a broader strategy of dismantling Soviet-era integrated production in favor of independent, highly specialized firms linked through market relations (Tarash & Golodnyuk, 2017).

A good example is the public joint stock company "Nikopolsky Yuzhnotrubny Zavod" ("Nikopol South Pipe Plant"). Its restructuring was the first large-scale experiment in Ukraine and was considered the most successful. According to the restructuring plan during 2000–2003 16 closed joint stock companies were created, the founder of which was the plant. As a result of the restructuring, the world-famous trademark "Nikopol Yuzhno-Trubny Zavod" was lost, the mechanism of clear inter-shop cooperation was destroyed, the enterprise actually lost control over the newly created business entities, and the process of bankruptcy of the enterprise began. Currently, the plant is not engaged in direct production activities. It only manages corporate rights and leases buildings. According to the former head of the State Property Fund V.Semenyuk-Samsonenko, in Ukraine during the years of reforms, 49% of enterprises stopped working altogether after privatization, and depressed regions appeared. And the separation of R&D departments from production led them to re-profiling or bankruptcy (Tarash & Golodnyuk, 2017, p. 26).

Ukrainian machine-building industry lacks large systemic organizational formations similar to those operating in the developed industrialized countries. Ukrainian government adopted resolutions on the necessity, in order to ensure competitiveness of Ukrainian mechanical engineering, to create powerful national research and production entities capable of integrating into international production system. However, Ukraine still lacks such entities, so it remains on the margins of world scientific and technological progress. It was possible to create such associations painlessly and quickly when all enterprises were state-owned. Russia followed such a path, where the priorities of industrial policy were dictated by the actions to create large state vertically integrated corporations such as Rostech, Rosatom, United Aircraft Corporation and the United Shipbuilding Corporation etc. (Romanenko, 2014, p. 61–62).

In the early 1990s, Ukrainian industrialists and scientists made proposals to create large integrated structures in the electronics industry ("Ukrelekor"), machine tool industry

("Ukrstankoinstrument"), power engineering on the basis of Kharkiv related enterprises, agricultural machine building ("Ukrselkhoz mashservice"). However, these proposals were not supported; in particular, by the Antimonopoly Committee of Ukraine (Romanenko, 2014, p. 64).

Ukraine's economy is dominated by disintegrated oligarchic ownership, exemplified by Rinat Akhmetov's SCM Group, which is wholly privately owned and managed from offshore. Unlike vertically integrated, diversified multi-industry Western corporations producing high-tech final products, SCM is a superstructural holding that mechanically combines disparate assets in the extractive industries, energy, finance, media, telecommunications, agriculture and logistics. Most of its enterprises are engaged in raw material extraction or intermediate production, lacking technological integration and innovation potential. This fragmented ownership model contrasts with core economies, where centralized, integrated corporate structures, despite financialization, retain elements of socialized production and long-term strategic coordination and planning.

Ukraine's socio-economic progress depends on the creation of nationwide research and production complexes united by public ownership and centralized management. As Ukrainian economists note, the key task is to transform oligarchic monopolies into industrial-financial structures that integrate the implementation of not only corporate, but also state policy (Ostapiuk, 2018, p. 50). Modeled after vertically integrated corporations, such complexes should cover the full cycle of high-tech production, reducing transaction costs and shifting the focus from private profit to value added. This approach allows for the development of digital, neo-industrialized productive forces based on automation. The system of such clusters, coordinated by state planning, puts labor productivity and purchasing power above profit maximization (Gubanov, 2012).

Conclusion

The analysis shows that Ukraine's economic trajectory in the post-Soviet period was one of backwardness. In the process of incorporation into the capitalist world-system, a peripheral type of society was formed in Ukraine. During this period, Ukraine underwent a transformation of its production system, accompanied by deindustrialization and the primitivization of its economic structure. This structure was adapted to the needs of the capitalist world-economy as its appendage specializing in labor-intensive production of raw materials and low-processed products for developed countries. This process occurred through neoliberal market reforms under the control of international financial institutions. The oligarchy created by the capitalist transformation played an important role in private-ownership disintegration of industrial production and is the factor of underdevelopment of Ukrainian society. Ukraine's case confirms the observations of world-system analysts regarding the dynamics of core-periphery relations in the contemporary capitalist world-economy.

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Funding

The research received no grants from public, commercial or non-profit funding agency.

Transparency on the use of generative Artificial Intelligence

Generative AI tools (Multitran, Google Translate, DeepL Translate, Yandex Translate, ChatGPT) have been used to enhance the quality and readability of the article.

REFERENCES

- Aboli, L. (2022, May 27). Three large American multinationals bought 17 million hectares of Ukrainian agricultural land. *Australian National Review*. <https://www.australiannationalreview.com/lifestyle/three-large-american-multinationals-bought-17-million-hectares-of-ukrainian-agricultural-land/>
- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity and poverty*. Crown Business.
- Amosha, A. I., Bryuhoveckaya, N. E., & Buleev, I. P. (2021). O vosstanovlenii vedushchej roli mashinostroeniya v postroenii novoj ekonomiki Ukrainy. *Ekonomichnij visnik Donbasu*, 2(64), 94-107. [https://doi.org/10.12958/1817-3772-2021-2\(64\)-94-107](https://doi.org/10.12958/1817-3772-2021-2(64)-94-107)
- Arrighi, G., & Drangel, J. (1986). The stratification of the world-economy: An exploration of the semiperipheral zone. *Review (Fernand Braudel Center)*, 10(1), 9-74.
- Arrighi, G., Silver, B. J., & Brewer, B. D. (2003). Industrial convergence, globalization, and the persistence of the North-South divide. *Studies in Comparative International Development*, 38(1), 3-31.
- Babenko, M. (2018, January 3). Oligarhomika. Pyaterke bogatejshih ukraincev prinaldezhit ekvivalent 7% ot VVP. *Focus*. <https://focus.ua/economics/388361>
- Babones, S. (2005). The country-level income structure of the world-economy. *Journal of World-Systems Research*, 11(1), 29-55.
- Baranovskyi, O., & Sidenko, V. (2004). Problemy vlasnosti ta lehalizatsii kapitaliv i dokhodiv v Ukraini. *Natsionalna bezpeka i oborona*, 2, 2-13.
- Bohle, D. (2018). European integration, capitalist diversity and crises trajectories on Europe's eastern periphery. *New Political Economy*, 23(2), 239-253. <https://doi.org/10.1080/13563467.2017.1370445>
- Bohle, D., & Greskovits, B. (2012). *Capitalist diversity on Europe's periphery*. Cornell University Press.
- Bohle, D., & Greskovits, B. (2018). Politicising embedded neoliberalism: Continuity and change in Hungary's development model. *West European Politics*, 42(5), 1069-1083. <https://doi.org/10.1080/01402382.2018.1511958>
- Celada, L. (2022). The truth about corporations taking over Ukrainian agricultural lands. *Il Manifesto Global Edition*. <https://global.ilmanifesto.it/the-truth-about-corporations-taking-over-ukrainian-agricultural-lands/>
- Chasovskij, V. (2013). Promyshlennost' stran SNG v usloviyah tranzitivnoj ehkonomiki. *Izvestiya RAN*, 5, 41-50.
- Dynamika platizhnoho balansu Ukrainy. (2021). *Minfin Index*. <https://index.minfin.com.ua/ua/economy/balance/2021/>
- Gereffi, G. (2018). *Global value chains and development: Redefining the contours of 21st century capitalism*. Cambridge University Press.
- Gilman, N. (2003). *Mandarins of the future: Modernization theory in Cold War America*. Johns Hopkins University Press.
- Gladun, O. M. (Ed.). (2020). *Naselennya Ukraini. Demografichni tendencii v Ukraïni u 2002–2019 rr.* Kyiv: Institut demografii ta social'nih doslidzhen' imeni M.V. Ptuhii NAN Ukraini.
- Global Financial Integrity. (2015). *Illicit financial flows from developing countries: 2004–2013*. https://gfin integrity.org/wp-content/uploads/2015/12/IFF-Update_2015-Final-1.pdf
- Grigor'ev, L., Agibalov, S., & Salikhov, M. (2009). Ukraina: Razdvoenie transformacii. *Voprosy ehkonomiki*, 3, 125-142.
- Gross external debt of Ukraine. (2021). *Minfin Index*. <https://index.minfin.com.ua/economy/foreigndebt/>

- Gubanov, S. (2012). *Derzhavnyj proryv. Neoindustrializaciya Rossii i vertikal'naya integratsiya*. Moskva: Knizhnyj mir.
- Guzhva, I. Yu., & Goncharenko, K. O. (2020). Promislovist' Ukraïni: Suchasni tendencii ta faktori rozvitku. *Formuvannya Rinkovikh Vidnosin*, 1(224), 18-24.
- Interfax. (2014, January 28). Medvedev ocenil pomoshch' Ukraine v 250 mlrd dollarov. <https://www.interfax.ru/russia/373117>
- International Monetary Fund (IMF). (2021). *Ukraine: First review under the stand-by arrangement...* <https://www.imf.org/en/Publications/CR/Issues/2021/11/23/Ukraine-First-Review-Under-the-Stand-By-Arrangement-Requests-for-Extension-and-Rephasing-of-509855>
- International Monetary Fund Datamapper. (2024). *Population – Ukraine*. <https://www.imf.org/external/datamapper/LP@WEO/UKR/RUS>
- International Monetary Fund. (2023, October). *World Economic Outlook Database*. <https://www.imf.org/en/Publications/WEO/weo-database/2023/October>
- Karatasli, S., & Kumral, S. (2018). Great convergence or the third great divergence? In R. P. Korzeniewicz (Ed.), *The world-systems as unit of analysis: Past contributions and future advances* (pp. 23-50). Routledge.
- Katasonov, V. Yu. (2014). *Ukraina. Ekonomika smuty, ili dengi na krovi*. Knizhnyj mir.
- Kindzerskij, Yu. V. (2016). Ukraina: Oligarkhicheskaya lovushka razvitiya v kontekste institucional'nykh transformacij. *Belorusskij Ekonomicheskij Zhurnal*, 4, 17-36.
- Kindzerskij, Yu. V. (2017). Deindustrializaciya i ee determinanty v mire i Ukraine. *Ekonomika Ukrainy*, 11, 49-72.
- Kolodko, G. W. (2001). Globalization and catching-up: From recession to growth in transition economies. *Communist and Post-Communist Studies*, 34(3), 279-322. [https://doi.org/10.1016/S0967-067X\(01\)00010-1](https://doi.org/10.1016/S0967-067X(01)00010-1)
- Kravchuk, R. S. (2002). *Ukrainian political economy: The first ten years*. Palgrave Macmillan.
- Krugman, P. (2008). *The return of depression economics and the crisis of 2008*. W. W. Norton & Company.
- Libanova, E. M. (Ed.). (2012). *Nerivnist' v Ukraïni: Masshtabi ta mozhlivosti vplivu*. Kyiv: Institut demografii ta social'nikh doslidzhen' imeni M.V. Ptuh, NAN Ukraïni.
- Lon', D. S., & Ol'vins'ka, Yu. O. (2016). Porivnyal'nij analiz dohodiv naselennya Ukraïni ta deyakikh kraïn svitu. *Statistika – instrument social'no-ekonomichnikh doslidzhen'*, 2, 196-204.
- Madariaga, A., & Palestini, S. (Eds.). (2021). *Dependent capitalisms in contemporary Latin America and Europe: Situations and mechanisms of dependency*. Palgrave Macmillan.
- Magnin, E., & Nenovsky, N. (2022). *Diversity of capitalism in Central and Eastern Europe: Dependent economies and monetary regimes*. Palgrave Macmillan.
- Marchuk, L. S. (2020). Doslidzhennya ta analiz svitovikh ta vitchiznyanikh faktoriv rozvitku intelektual'nogo potencialu pidpriemstv mashinobudivnoi galuzi. *Derzhava ta Regioni. Ser.: Ekonomika ta Pidpriemnictvo*, 1(112), 59-66. <https://doi.org/10.32840/1814-1161/2020-1-10>
- Meardi, G. (2012). *Social failures of EU enlargement: A case of workers voting with their feet*. Routledge.
- Melnyk, A. O. (2014). Svitovi ekonomichni kryzy v ekonomitsi Ukrainy ta yikh naslidky. *Visnyk Mykolaivskoho Natsionalnoho Universytetu "Globalni ta Natsionalni Problemy Ekonomiky"*, 2, 108-113.
- Milovanov, T. (2020, February 17). Milovanov pokazal, kak "proeli" ukrainskuyu ekonomiku za 30 let. *Ekonomichna Pravda*. <https://www.epravda.com.ua/rus/news/2020/02/17/657125/>

- Ministerstvo rozvitku ekonomiki, torgivli ta sil's'kogo gospodarstva Ukraïni. (2019). *Eksportna strategiya dlya sektoru mashinobuduvannya 2019–2023 roki*. <https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=a9402926-e5ad-4c8d-9af3-91efaa797ffe>
- Nacional'na ekonomichna strategiya na period do 2030 roku. (2021). *Kabinet Ministriv Ukraïni*. <https://www.kmu.gov.ua/npas/pro-zatverdzhennya-nacionalnoyi-eko-a179>
- NBU. (2022). *Estimation of round tripping transactions for 2010–2021*. https://bank.gov.ua/admin_uploads/article/FDI_round_tripping_pr_eng_2022-03-31.pdf?v=4
- NISD. (2021). *Trydtsiat rokiv nezalezhnosti Ukrainy: Sotsialno-ekonomichni pidsumky ta stratehichni vizii maibutnoho* (Ya. A. Zhalilo, Ya. B. Bazyliuk, O. O. Kolomiiets et al., Eds.). Kyiv: NISD.
- Noman, O. (1999). In the former Eastern Bloc: A hazardous transition. *The UNESCO Courier*, March, 30-31.
- Ohinok, S. V., & Buriak, Yu. O. (2023). Vplyv svitovykh ekonomichnykh kryz na dobrobut Ukrainy. *Ekonomichnyi Prostir*, 185, 11-16.
- Okunev, Yu. (2021). Iz Ukrainy za 10 let vyveli 116 mlrd dollarov. Mozhno li posle etogo ispol'zovat' ofshor na Ukraine? *International Wealth*. <https://internationalwealth.info/offshore-wisdom/in-10-years-from-ukraine-moved-116-b-dollars-is-it-still-possible-to-use-offshores-in-ukraine/>
- Opublikovan rejting 100 bogatejshih ukraincev: lidery poteryali, no ne pomenyalis'. (2019, November 1). *Ekonomichna Pravda*. <https://www.epravda.com.ua/rus/news/2019/11/1/653233/>
- Orlenko, O. M., & Onishchuk, V. S. (2021). Osoblyvosti suchasnogo stanu innovacijnoi diyal'nosti v Ukraïni. *Naukovij Visnik Odes'kogo Natsional'nogo Ekonomichnogo Universitetu*, 9–10, 139-146. <https://doi.org/10.32680/2409-9260-2021-9-10-286-287-139-146>
- Ostapyuk, B. Ya., Grunik, I. S., Legen'kij, M. I., & Legen'kij, Yu. I. (2018). Osoblyvosti rozvitku promislovosti Ukraïni v suchasnikh umovakh. *Visnik Ekonomiki Transportu i Promislovosti*, 62, 45-52. <https://doi.org/10.18664/338.47:338.45.v%vi%i.133529>
- Panchenko, I., & Panchenko, O. (2022). *Makroekonomika*. Kyiv: Znannya.
- Pirani, S., Stern, J., & Yafimava, K. (2009). The Russo-Ukrainian gas dispute of January 2009: A comprehensive assessment. *The Oxford Institute for Energy Studies*. <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG27-TheRussoUkrainianGasDisputeofJanuary2009AComprehensiveAssessment-JonathanSternSimonPiraniKatjaYafimava-2009.pdf>
- Piskun, O. O. (2019). Transformaciyni procesi v mashinobuduvanni Ukraïni. *Naukovij Visnik Nacional'nogo Universitetu Bioresursiv i Prirodokoristuvannya Ukraïni*, 313(5), 177-184. <https://doi.org/10.31548/dop.5.2019.177-184>
- Revyakin, G. V. (2017). Kharakteristika ekonomiki Ukrainy i model' dinamiki eyo razvitiya [Characteristics of Ukraine's economy and its development dynamics model]. *Biznesinform*, 7, 50-57.
- Romanenko, O. (2014). Suchasna promyslova polityka: na prykladi mashynobuduvannya v Ukraïni. *Ekonomika ta Derzhava*, 1, 60-65.
- Sakwa, R. (2015). *Frontline Ukraine: Crisis in the borderlands*. IB Tauris.
- Salivon, S. (2019). Vneshnyaya torgovlya Ukrainy: v 2019 g. eksport vyros za schet khoroshego urozhaya, postavki promptovarov sokratilis' [Ukraine's foreign trade: In 2019 exports increased due to good harvest, industrial goods deliveries decreased]. *Federaciya robotodavciv Ukraïni*. <https://fru.ua/ua/media-center/blog/salivon/vneshnyaya->

torgovlya-ukrainy-v-2019-g-eksport-vyros-za-schet-khoroshego-urozhaya-postavki-promtovarov-sokratilis-infografika

SCM media portal. (n.d.). <https://www.scm.com.ua/en/about>

Shevchuk, V. O., & Yakym, O. B. (2016). Ukrainsko-rosiiska torhivlia: Empirychni otsinky [Ukrainian-Russian trade: Empirical estimates]. *Rehionalna Ekonomika*, 4, 137-144.

State Statistics Service of Ukraine. (n.d.). Statistical collection "Foreign trade of Ukraine in goods and services" for the year. www.ukrstat.gov.ua

Suhorukova, T. G., Doroshenko, D. A., & Litvin, S. V. (2019). Analiz problem i perspektivy razvitiya mashinostroitel'nyh predpriyatij Ukroboronproma [Analysis of problems and development prospects of machine-building enterprises of Ukroboronprom]. *Visnik ekonomiki transportu ta promislovosti*, 66, 118-130. <http://lib.kart.edu.ua/handle/123456789/2282>

Suwandi, I. (2019). *Value chains: The new economic imperialism*. Monthly Review Press.

Svitovij bank. (2019). Special'na dopovid': Realizaciya potencialu ekonomichnogo rostu Ukraïni [Special report: Realizing Ukraine's economic growth potential]. <https://thedocs.worldbank.org/en/doc/233891558601579588-0080022019/original/UkraineSpecialFocusNoteSpring2019uk.pdf>

Tarash, L. I., & Golodnyuk, R. A. (2017). Reindustrializaciya ekonomiki kak napravlenie promyshlennogo razvitiya [Reindustrialization of the economy as an industrial development direction]. *Vestnik Instituta Ekonomicheskikh Issledovanij*, 4(8), 24-33.

Torgovyj razryv s Rossiej lishil Ukrainu \$17 mlrd (Oficial'nyj doklad). (2014). https://ukr-today.com/business/55277-torgovyy-razryv-s-rossiey-lishil-ukrainu-17-mlrd-oficialnyy-doklad.html#google_vignette

Vlasiuk, V. (2021). Shcho ne tak z kapitalnymy investytsiiamy v Ukraini [What is wrong with capital investments in Ukraine]. <https://epravda.com.ua/columns/2021/05/06/673627/>

Wallerstein, I. (2010). Structural crises. *New Left Review*, 62, 133-142.

Weissenbacher, R. (2022). *The core-periphery divide in the European Union: A dependency perspective*. Palgrave.

World Bank. (2021). *World Bank data: Ukraine*. <https://data.worldbank.org/country/ukraine>

Zanuda, A. (2012, February 17). God dohodnyj: Ukraina na puti k "oligarkhicheskoy revolyucii". *BBC News Ukrayina*. https://www.bbc.com/ukrainian/business/2012/02/120217_oligarchs_az.shtml