

# **The Northwestern Federal District of Russia: Economic Dynamics and Regional Asymmetries after 2022**

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## Abstract

The article examines the socio-economic dynamics of the Northwestern Federal District of Russia after 2022 under sanctions pressure, ongoing restructuring, and changes in the spatial priorities of national planning. The study focuses on the reconfiguration of the NWFD's industrial framework under sanctions and the growing role of state defense orders as a substitute for private investment. Based on data from Rosstat, the Bank of Russia, and regional statistical offices, the research analyzes trends in industrial production, investment activity, and inflation, identifying key determinants of territorial asymmetry. Special emphasis is placed on institutional and spatial constraints that shape the region's vulnerability to external shocks and the limited capacity of its internal growth mechanisms. The findings show that the district's economic trajectory remains largely path-dependent and relies primarily on federal support mechanisms, further entrenching divergent patterns of adaptation — accelerated in economically stronger areas and slower in peripheral ones.

**Key words:** Northwestern Federal District of Russia; regional development; industrial and investment dynamics; inflation; spatial structure.

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## 1. Introduction

The Northwestern Federal District (NWFD) is located in the northern and northwestern part of European Russia and has access to four seas—the Baltic, White, Barents, and Kara Seas—which gives it strategic importance for the country’s economy, transport, and defense. It comprises 11 constituent entities: Arkhangelsk, Vologda, Kaliningrad, Leningrad, Murmansk, Novgorod, and Pskov Oblasts; the Republic of Karelia and the Republic of Komi; Nenets Autonomous Okrug (NAO); and the federal city of St. Petersburg. The district’s population is about 13.9 million (9.5% of the national total); the urbanization rate is 85%, making it one of Russia’s most densely populated macroregions. By area, the district ranks fourth in the country (1.69 million km<sup>2</sup>; 9.85% of the territory) (Delovaya Rossiya, 2025).

Beyond its demographic and geographic characteristics, the NWFD is a major economic macroregion, ranking fourth by gross regional product (GRP) per capita. Its socioeconomic landscape is characterized by marked structural heterogeneity and territorial disparities. Border areas—the Republic of Karelia, Leningrad Oblast, and Murmansk Oblast—play a key role in international linkages, whereas the Arctic territories (the Republic of Komi, Arkhangelsk Oblast, NAO, and Murmansk Oblast) operate under specific climatic and infrastructural conditions. The study emphasizes the growing dual-speed pattern of regional development, where industrial and investment growth concentrates in St. Petersburg and Leningrad Oblast, while Arctic and northern areas lag behind.

In particular, heterogeneity is evident in the scale and composition of territorial output: indicators for NAO exceed those of Pskov Oblast by almost 26 times, while average wages differ by more than a factor of three. These gaps reflect uneven resource endowments, investment activity, and living standards. These structural contrasts are increasingly reflected in academic debates.

The Northwestern macroregion itself has been analyzed primarily in sectoral or case-based terms — for instance, Korennikova and Gubanova (2024) assessed the unevenness of socio-economic development among the NWFD’s regions, and Okrepilov and Korshunov (2024) discussed the technological limitations of its industrial base. Broader conceptual work on spatial inequality and regional resilience under external shocks is represented in Lazhentsev (2024) and Batievskaya & Sokolovskiy (2025), who emphasize institutional fragmentation and weak coordination between federal and regional priorities. Recent analyses have begun to trace how these structural divides evolved after 2022. Zubarevich (2025b) shows that the NWFD combines stagnating resource and export-oriented territories with a defense-driven recovery in St. Petersburg, while Zemtsov (2024), using an exposure-based approach, classifies the district among the most vulnerable to external shocks but notes gradual adaptation across its regions. However, despite this expanding body of research, macroregional analyses that integrate industrial, investment, and inflation dynamics across the NWFD remain scarce.

Against this backdrop, the NWFD represents a critical case for examining regional resilience under external pressure. This study seeks to address this gap by offering an evaluation of industrial, investment, and inflation dynamics.

To capture and compare these disparities, the analysis draws on official statistics from the Federal State Statistics Service (Rosstat)—aggregate indicators of Russia’s socioeconomic development (Rosstat, 2025d), datasets on the constituent entities of the Federation (Rosstat, 2025b), and issues of the series Socio-Economic Situation of Russia’s Federal Districts (Rosstat, 2025a), together with materials covering the subjects of the NWFD (Rosstat, 2025c). The period of 2019–the first half of 2025 makes it possible to compare pre-COVID-19 baselines, pre-war values (before the onset of the war in Ukraine), and current observations. The empirical base includes figures for all federal districts and all subjects of the NWFD, notably data for January–July 2025 (for industry and inflation) and the first half of 2025 (for investment).

Three core indicators are applied: the Industrial Production Index (IPI), the Fixed Capital Investment Index (FCII), and the Consumer Price Index (CPI). Taken together, these indices describe production, investment, and price dynamics, providing a holistic view of the real sector, investment potential, and domestic market resilience. They also serve as a foundation for the subsequent examination of the district’s socioeconomic trajectory. Finally, the study compares the NWFD’s performance with that of other federal districts to contextualize territorial variation within national trends.

The analytical framework rests on Russia's core strategic documents: the National Security Strategy (Ukaz Prezidenta Rossiyskoy Federatsii, 2021), the Economic Security Strategy to 2030 (Ukaz Prezidenta Rossiyskoy Federatsii, 2017), and the Spatial Development Strategy adopted in 2019 and updated in 2024 (Russian Government, 2019; Russian Government, 2024).

Their provisions define principles for systematic assessment and spatial evaluation, while the applied component relies on the approaches of the Ministry of Economic Development and official Rosstat datasets (Ministry of Economic Development of the Russian Federation, 2020). This regulatory-methodological framework establishes the parameters of the research and ensures consistency with the national strategic-planning system.

At the same time, however, despite this alignment, the practical system for monitoring socioeconomic progress in Russia faces structural constraints. Approaches used by state institutions remain fragmented and fail to provide an integrated perspective on territorial dynamics, often overlooking subnational differences and the structural features of regional economies (Sidorov, 2024). Monitoring is further complicated by the absence of unified methodologies, weak integration between statistical and sociological sources, and limited attention to qualitative dimensions of development such as innovation, sustainability, and quality of life. Additional difficulties stem from the reduction of publicly available official statistics: the removal of certain demographic indicators from open access, the lack of updates on vital statistics, and the publication of data without regional disaggregation restrict the scope for comprehensive evaluation.

Despite these limitations, the study applies a consistent comparative procedure. The methodological component compares key macroeconomic parameters that track trends in the production, investment, and price sectors. Indicators are calculated under Rosstat's methodology as percentages relative to the same period of the previous year; dynamics are evaluated using annual-average and chain indices (2019 = 100). Inter-district comparisons (across federal districts) are based on relative values and rank positions, while territorial disparities are measured using the standard deviation and the coefficient of variation.

The inflation methodology follows Russian and international standards—United Nations (UN), International Labour Organization (ILO), Eurostat, and the International Monetary Fund (IMF)—using year-over-year (YoY) rates and cumulative indices (2019 = 100); for 2025, the comparison is "January–July 2025 to January–July 2024." Consequently, this approach yields comparable assessments of short- and long-term price patterns and reveals territorial variation in responses to macroeconomic shocks and adaptation to a changing environment.

Taken together, these metrics enable a transition from quantitative description to an interpretation of sectoral and spatial transformations in the district's economy. This provides a basis for identifying regional disparities, resilience factors, and structural divergence, as well as for evaluating the effects of sanctions pressure and the transformation of the investment model in 2020–2025 (Zvereva, 2024).

The study draws conceptually on theories of regional development and spatial asymmetry, focusing on path dependence, institutional constraints, and adaptive capacity under external shocks. Guided by this conceptual framework, it aims to analyze the evolution of socioeconomic processes in the NWFD during 2019–2025 and to identify key challenges emerging after 2022, including issues of strategic planning and the growing territorial unevenness in the development trajectories of the district's constituent entities. Preliminary results indicate that, while the NWFD has shown certain signs of adaptation since 2023, its recovery remains uneven and largely dependent on federal transfers, state programs, and defense-related demand—underscoring the persistence of structural imbalances and the limited diversification of regional growth drivers.

## **2. Specific features of the NWFD's socio-economic development after 2022**

The Northwestern Federal District (NWFD), whose development imbalances were initially driven by geography, an export-oriented economic structure, and a heterogeneous socioeconomic profile, came under strain during the COVID-19 pandemic, like other federal districts.

If the pandemic revealed internal structural weaknesses, the sanctions introduced after the onset of the full-scale war in Ukraine in 2022 further exacerbated these problems. The country's regions faced systemic constraints that deepened the imbalance of socioeconomic development. Tighter financial conditions—above all, higher interest rates—reduced enterprises' investment activity and expanded the role of state and quasi-state entities substituting private capital. As Shirokova and Lukin (2024) observe, labor and financial resources have increasingly been reallocated toward the defense-industrial complex (DIC).

In this context, these dynamics directly affect economic performance across Russia's regions. Territorial differentiation is intensifying: the greatest gains accrue to export-resource areas and those dependent on state orders, while northern, eastern, and peripheral territories remain largely stagnant. According to Golovanov et al. (2025), institutionally entrenched interregional inequality is evidenced by the coefficient of variation of GRP per capita exceeding 60%: the ten leading constituent entities generate more than half of the country's aggregate GRP and about 70% of investment, whereas depressed regions account for less than 1%.

Alongside these external and internal constraints, infrastructure, technological, and human-capital limitations further reinforce regional disparities. The rupture of ties with the European Union (EU) has lengthened supply chains and increased transport costs. At the same time, import substitution in complex product groups faces a shortage of critical technologies (Kovalin et al., 2024), and as noted by Shirokova and Lukin (2024), the labor market remains unbalanced: hidden unemployment persists in civilian industries and in single-industry towns, whereas construction, logistics, and the DIC report shortages of qualified personnel.

## 2.1. Institutional constraints in spatial planning

Russia's system of strategic spatial planning rests on federal documents, most importantly the Spatial Development Strategy of the Russian Federation, updated in 2024 (Russian Government, 2024), together with its implementation plan approved in August 2025 (Russian Government, 2025). These documents designate the Arctic and the Far East as priority areas for territorial development, while federal districts are not treated as autonomous strategic-planning units. The development of the NWFD's subjects is framed primarily through their interaction with the Arctic zone, maritime logistics, and export infrastructure. Priorities include port and coastal-area development, the establishment of transport corridors, and the strengthening of export–logistics linkages. Within the NWFD, the regions identified for priority state support are Kaliningrad Oblast, Pskov Oblast, and the Republic of Komi.

At the subfederal level of strategic governance—i.e., below the federal Spatial Development Strategy—the NWFD exhibits a persistent gap between the architecture of programmatic–strategic documents and implementation practice. There is evidence of non-comparable metrics and outdated statistics, alongside the absence of unified standards for monitoring and performance evaluation (Lazhentsev, 2024; Gichiev and Guseynova, 2025). According to Karanatova et al. (2025), this misalignment between federal and regional priorities reinforces agglomeration bias and worsens peripheral imbalances.

After 2022, new managerial challenges further compounded these issues. Shirokova (2022) notes that the strategies currently in force at the NWFD level do not reflect tasks aimed at reducing import dependence in industrial equipment and technology or accounting for regional resource specialization. In addition, as emphasized by Batienskaya and Sokolovskiy (2025), the socioeconomic development strategies of the district's constituent entities remain largely declarative and under-resourced for implementation. Timelines for executing these regional strategies are not aligned across the NWFD's subjects.

The logic of spatial planning in Russia has been shifting away from the federal-district level toward new territorial priorities—the Arctic, the Far East, and major logistics routes (including the Northern Sea Route (NSR), the Trans-Arctic Transport Corridor (TATC), and other transport corridors). In this context, the NWFD will be increasingly involved in federal programs through the participation of selected constituent entities in Arctic and NSR projects, while the remaining regions of the district risk gradually falling outside the country's national spatial-planning focus.

## 2.2. Sectoral dependence and export exposure

The economy of the NWFD was characterized even before 2022 by persistent structural imbalances: low technological sophistication, high depreciation of fixed production assets, and insufficient investment in core sectors—oil and gas, chemicals, the forest industry (pulp and paper), and power generation (Zimin, 2019). Weak mechanical-engineering development and institutional barriers—shortages of capital and skilled labor, combined with inadequate transport connectivity—further deepened the macroregion’s exposure to imported technologies and an export-resource model.

In the post-sanctions period, the NWFD’s dependence on major sectors—manufacturing, transport, telecommunications, and mining—has intensified: together they now account for approximately 73% of total output and 46% of fixed capital investment. According to Okrepilov and Korshunov (2024), manufacturing, which generates nearly half of the district’s economy (around 48%), remains low-tech and poorly diversified. The region’s external orientation and its strong ties to European markets and technologies have made it highly vulnerable to outside shocks.

At the same time, economic activity has become more spatially concentrated, further raising the district’s sensitivity to global fluctuations. Sidorov (2024) estimates that St. Petersburg produces almost 60% of the NWFD’s gross regional product, and Leningrad Oblast adds roughly 9%, while the share of other territories has dropped to marginal levels (Korennikova and Gubanova, 2024). These trends have intensified intra-district inequality, as reflected in widening gaps in GRP per capita, average wages, and unemployment rates—ranging from 20% to 40% (Moroshkina, 2024). The AKRA (2025) report indicates that peripheral northern and Arctic areas with limited resources face declining output and continuing population outflow because of unequal access to funding and infrastructure.

Thus, the divide between export-oriented and domestically oriented parts of the NWFD has widened, consolidating a pattern of growing spatial polarization. This persistent asymmetry not only reflects structural distortions inherited from the pre-sanctions period but also signals a deeper transformation of the regional economy, in which resilience increasingly depends on state intervention and selective modernization rather than organic market adaptation.

## 2.3. Scale of sanctions impact in NWFD

Sanctions pressure intensified after 2022, becoming a key constraint on the economic development of the NWFD. By 2023, sanctions had affected 82% of enterprises in the district, 89% of which reoriented toward domestic raw materials and markets (Lukin and Shirokova, 2023). According to Kuvalin et al. (2025), nationwide surveys conducted in 2025 show that the share of companies that considered themselves affected by sanctions declined to 69%. Although separate statistics for the NWFD are unavailable, given the district’s high export orientation, it is reasonable to assume that the share of affected firms remains above the national average. At the same time, only about one-third of enterprises receive government support, substantially limiting their capacity to offset sanctions-related losses.

In this context, regional variation in consequences has been particularly evident in the Arctic and western parts of the district. Markelov (2025) reports that in the Arctic regions—Murmansk and Arkhangelsk Oblasts—sanctions triggered severe logistical disruptions and price shocks, leading to a reorientation of export flows eastward, higher transport costs, and extended supply chains. By contrast, according to Uskova et al. (2025), the most significant losses by sector were sustained by the automotive industry in Kaliningrad Oblast, where output fell by over 80%, whereas wood processing, mechanical engineering, and manufacturing in other NWFD regions largely maintained their positions.

Sanctions have exacerbated the NWFD’s structural weaknesses—investment shortfalls, technological dependence, logistical vulnerability, and limited access to finance. This makes the district’s long-term resilience highly sensitive to external constraints and increasingly dependent on the effectiveness of state anti-crisis and industrial policy.

## 2.4. NWFD’s fiscal strain

Chronic fiscal deficits remain one of the NWFD’s key financial challenges, especially acute in the northern and Arctic regions, where the costs of maintaining social infrastructure and utility systems are exceptionally

high. By the end of 2024, the problem was most pronounced: the largest deficit was recorded in Murmansk Oblast—about 21% of expenditures—and in Vologda Oblast—17.7%. In Arkhangelsk Oblast, it amounted to 11.5%. According to the Barents Observer (2025), Murmansk Oblast is expected to remain in the most difficult position in 2025. As noted by Zubarevich (2025a), St. Petersburg, despite its status as the district’s economic center, does not maintain a stable surplus; its budget remains close to balance.

Fiscal pressures are strongest in the northern and Arctic territories, where infrastructure costs exceed national averages and budgetary resources are absorbed by socially significant but low-return sectors—education, healthcare, housing, and utilities. Limited fiscal space leaves few opportunities for capital investment or modernization. The investment share in regional budgets rarely exceeds 8–10%, and in several Arctic areas it is below 5%, restricting adaptation to changing macroeconomic conditions and discouraging private capital. This structural rigidity reinforces dependence on federal transfers and slows local development.

The NWFD’s fiscal shortfalls stem largely from declining corporate profit tax revenues due to reduced industrial output under sanctions and shrinking export markets. The loss of external demand has weakened the tax base in manufacturing and resource industries, while higher costs have eroded enterprise profitability. Inchikova and Yalaeva (2025) point out that the district’s financial system also faces institutional constraints: from 2019 to 2024, the number of operating credit institutions fell by 24.4%, and most regional banks function with a limited funding base and chronically low capitalization.

The contraction of banking infrastructure reduces credit availability for small and medium-sized enterprises, worsening liquidity shortages and limiting tax revenue growth. Consequently, fiscal stability weakens, and regional governments struggle to finance development priorities or sustain long-term investment programs.

## **2.5. Infrastructure constraints in the NWFD**

Infrastructure constraints remain among the key challenges of the NWFD. Although the central and coastal areas possess a relatively developed network of motor roads and transport hubs, the northern and Arctic territories continue to face an acute shortage of connectivity, which directly affects regional mobility and investment attractiveness. In Arkhangelsk Oblast and Nenets Autonomous Okrug, the density of paved roads reaches only about half of the national average (Golovanov et al., 2025). As Lazhentsev (2024) notes, the cancellation in 2023 of the Arkhangelsk–Syktyvkar–Solikamsk railway line (Belkomur) due to insufficient funding further deepened the macroregion’s transport isolation and reduced its access to eastern markets. The lack of integrated overland and maritime routes limits the potential for cargo diversification and complicates the logistics of resource exports.

Following 2022, a roughly 20 percent increase in the share of intra-Russian supplies placed additional strain on the logistics network and drove up costs in the NWFD’s extractive sector, particularly in coal mining and related industries. Markelov (2025) highlights that this shift intensified the load on regional ports, railways, and motorways, revealing the limited capacity of the existing infrastructure to absorb new transport flows. According to Lukin and Shirokova (2023), the need for rerouted logistics has further aggravated cost pressures on producers. In these circumstances, the transport system—including seaports—requires accelerated modernization and technological renewal, most urgently in Ust-Luga, Primorsk, Murmansk, and Kaliningrad (Zakirova, 2025).

However, the heavy dependence on public funding hinders timely implementation and limits the scale of these projects, even within officially designated priority programs. Zvereva (2024) emphasizes that private investment participation remains minimal due to long payback periods and regulatory uncertainty. As a result, infrastructure modernization proceeds unevenly across the district: coastal regions demonstrate some progress, whereas inland and Arctic areas continue to lag behind. If these disparities persist, the NWFD’s transport network will remain fragmented, reinforcing spatial inequality and constraining the region’s capacity to integrate into national and Eurasian logistics corridors.

## 2.6. Arctic development challenges in the NWFD

The Arctic and near-Arctic territories of the Northwestern Federal District (NWFD) remain the most vulnerable in economic, demographic, and infrastructural terms. This fragility results from harsh climatic conditions, remoteness, and the high cost of doing business. As stated in the Spatial Development Strategy of the Russian Federation (Russian Government, 2024), these challenges are explicitly recognized, with particular attention to the persistent difficulties of integrating the Arctic zone into the national economic space; similar concerns are also raised by the Federation Council of Russia (2024) at the legislative level.

High capital expenditures on energy, transport, and social infrastructure significantly increase dependence on federal transfers. According to the Accounts Chamber of the Russian Federation (2025), of the district's Arctic regions, only the Nenets Autonomous Okrug (NAO) maintains a budget surplus, sustained by oil and gas revenues. In 2022–2024, Kulikov and Panicheva (2025) report declines in GRP, investment, and budget revenues across most Arctic subjects, along with contractions in industrial output and employment. Limited diversification and logistical isolation have further constrained economic recovery and investment inflows.

Demographic pressures are also intensifying. Gichiev and Guseynova (2025) note that the Arctic subjects of the NWFD face pronounced population decline, aging, low settlement density, and out-migration of skilled workers. These issues are compounded by technological and export dependencies, most clearly manifested in the economy of the NAO, which remains heavily resource-based and oriented toward oil and gas exports. The combination of structural, demographic, and infrastructural weaknesses thus reinforces the district's overall economic asymmetry and underlines the long-term challenges of sustainable development in the Arctic zone.

## 2.7. Migration and demographic constraints in the NWFD

Migration and demographic challenges remain among the key constraints on the socioeconomic development of the NWFD. The district is marked by a persistent decline in population not compensated by net migration inflows, as well as by a growing territorial asymmetry in the distribution of human capital between economic centers and the periphery. These demographic shifts directly influence labor market dynamics, social infrastructure demand, and the long-term sustainability of regional development.

All subjects of the district exhibit a long-term decrease in population, driven by natural decline and aging: the average natural increase rate stands at about  $-4.5\%$ , substantially below the national level. Net migration compensates for this decline only in Leningrad and Kaliningrad Oblasts and in St. Petersburg. According to Solovjeva (2025), the share of people above working age in the NWFD exceeds the national average and is approaching one-quarter of the population.

As noted by Gichiev and Guseynova (2025), St. Petersburg and Leningrad Oblast absorb the main migration flows, whereas peripheral territories—the Komi Republic and Arkhangelsk, Pskov, and Murmansk Oblasts—continue to lose working-age population and their tax base (Zotikov, 2025). Moreover, Akhapiin (2023) observes that overall migration inflows to the NWFD from outside Russia are decreasing, indicating a loss of attractiveness and aggravating labor shortages. This shortage is further intensified by population aging, the low migration appeal of northern territories, and limited opportunities for professional mobility. Shirokova (2025) reports that about one-third of enterprises in the district face a lack of qualified personnel, especially in high-technology industries. Consequently, the cumulative demographic and labor-market constraints further amplify structural limitations on the district's economic growth potential.

**Table 1. Structural problems in the socio-economic development of the NWFD**

Problem group	Key manifestations	Main consequences
Economic	Resource-based specialization, sanctions pressure, technological vulnerability	Industrial stagnation, reduced investment activity
Financial	Budget deficit, reliance on intergovernmental transfers, weakness of the regional banking system	Constrained fiscal capacity, growing debt burden
Institutional	Capital and innovation shortages, administrative barriers	Lower institutional efficiency and private-sector engagement
Infrastructure	Deterioration of networks, transport isolation, dependence on public investment	Rising operational costs, fragmented economic linkages
Demographic and labor	Population aging, out-migration, scarcity of qualified personnel	Shrinking labor potential, widening staffing gaps
Spatial	Agglomeration bias, underdevelopment of peripheral territories	Intensification of territorial disparities
Governance	Misaligned priorities, declarative strategies, weak monitoring and evaluation	Reduced policy coherence, regions falling out of strategic focus

Sources: compiled by the author based on regional data and analytical reports (2022–2025).

The problems of socioeconomic progress in the NWFD are systemic and interlinked. Taken together, they reflect not only structural and sectoral imbalances but also institutional constraints — manifested in uneven resource allocation, weak coordination of managerial decisions, and a high degree of reliance on national centers. The district’s economic structure remains vulnerable to external shocks, a vulnerability further amplified by sanctions pressure and the technology gap. Fiscal imbalances, a shortage of endogenous growth drivers, and a high share of state investment collectively limit the scope for long-term growth. These interdependencies point to the persistence of a model driven primarily by external demand and state intervention, leaving little room for self-sustaining mechanisms of expansion.

Spatial and demographic disparities are deepening, reinforcing peripheralization processes and further concentrating human and economic potential in the agglomerations of St. Petersburg and Leningrad Oblast. In the Arctic and northern territories of the district, reliance on resource-based industries and federal transfers persists, entrenching their peripheral status. In governance terms, contradictions between strategic objectives and practical implementation continue to intensify, reducing the adaptability of the regional management system. As a result, the region’s growth trajectory remains fragmented and path-dependent, with the effectiveness of federal policy becoming the decisive factor for future stabilization. In the short term, a further widening of spatial asymmetry is likely, along with continued reliance on the external economic environment and the scale of public support.

### 3. Industrial production dynamics in the NWFD

The development of industry in the NWFD after 2022 has been characterized by a persistent set of structural, institutional, and technological problems, among which territorial unevenness and technological fragmentation are key. The NWFD’s position within Russia’s national manufacturing system has weakened noticeably: over 2021–2024 its share in the country’s gross regional product declined by 1.9 percentage points (Kulikov and Panicheva, 2025).

Deepening industrial concentration and spatial unevenness reduce the district’s sensitivity to macroeconomic stimulus measures, including changes in the exchange rate and the interest rate (Zvereva, 2024). According to the Bank of Russia (2025), the NWFD’s peripheral territories demonstrate low investment activity and slow renewal of manufacturing capacities. The northern subjects of the district remain predominantly resource-based areas oriented toward the export of mineral resources, chemical products, and metals, with limited development of knowledge-intensive processing sectors (Gichiev and Guseynova, 2025; Rosstat, 2024). This structural configuration maintains the traditional dependence on raw materials and weakens the district’s integration into high-value production chains.

A serious problem remains the high level of physical depreciation of the manufacturing base: more than 60% of equipment in mechanical engineering and about 70% in the wood-processing industry has been in operation for over 15 years (Shirokova, 2025). As Shirokova (2022) earlier pointed out, the reliance of NWFD enterprises on external technologies was estimated at 60–80%, and in certain high-technology segments above 80%; since then, this indicator has shown no significant decrease. The limited availability of imported components has constrained technological modernization and increased production costs, forcing many enterprises to postpone equipment renewal. As a result, industrial modernization in the NWFD has largely assumed an adaptive rather than proactive character.

Financial dependence on the federal center and the shortage of regional development instruments continue to drive the outflow of capital and managerial functions from the NWFD to the central regions (Zotikov, 2025; Accounts Chamber of the Russian Federation, 2025), accompanied by a steady loss of qualified personnel, particularly engineering and technical specialists (Melnikov, 2025). This combination of financial centralization and human capital depletion significantly reduces the district’s potential for endogenous growth. The erosion of regional competencies in industrial management reinforces reliance on federal support mechanisms and diminishes local initiative in innovation and investment policy.

In aggregate, these structural constraints shape a continuing inertial trajectory of industrial progress in the NWFD, determining the district’s current position within the national economy. The resulting pattern of slow adaptation, technological vulnerability, and uneven spatial development restricts the district’s ability to respond effectively to external shocks or capitalize on emerging opportunities in new industrial sectors. An analysis of the NWFD’s industrial output dynamics in 2019–2025 reveals several key trends formed under the influence of both internal imbalances and large-scale external shocks—the pandemic, the full-scale war in Ukraine, and sanctions pressure, which have radically reshaped the district’s production landscape.

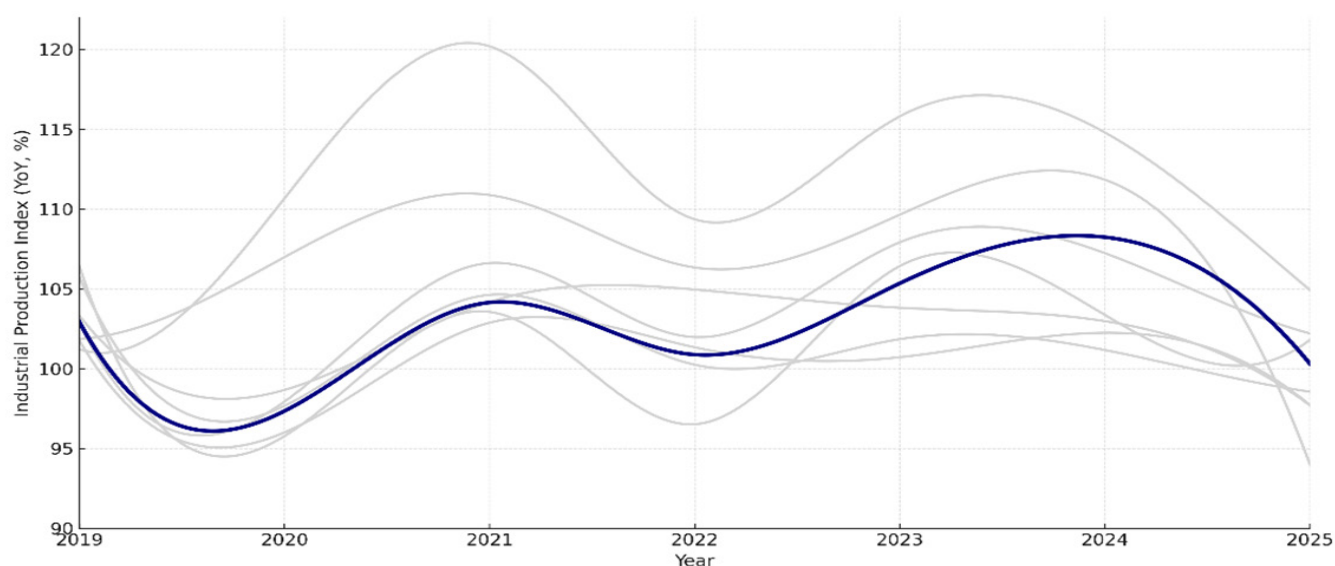
**Table 2. Annual-average Industrial Production Index (IPI) by federal district, as a percentage of the corresponding period of the previous year**

Year	Central Federal District	Volga Federal District	Southern Federal District	North Caucasian Federal District	Ural Federal District	Siberian Federal District	Far Eastern Federal District	NWFD	Rank of NWFD
2019	101.22	102.84	103.32	101.88	105.72	101.77	106.42	102.93	4
2020	110.67	97.94	98.67	106.99	97.67	96.01	95.78	97.35	6
2021	120.20	106.62	104.18	110.88	104.63	102.88	103.56	104.15	6
2022	109.36	101.98	104.96	106.34	100.25	101.34	96.52	100.88	6
2023	115.81	107.92	103.82	109.65	101.85	100.72	106.43	105.35	5
2024	114.80	107.24	102.98	111.84	101.17	102.25	103.37	108.24	3
2025	104.93	102.21	97.70	94.00	98.56	97.71	101.81	100.31	4

Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

**Figure 1. Annual-average Industrial Production Index (IPI) by federal district, % of the corresponding period of the previous year**



Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

In 2019–2022, the NWFD belonged to the middle group of Russia’s federal districts, ranking 5th–6th by industrial growth rates. During this period, dynamics were marked by high volatility and sensitivity to external shocks stemming from the economic downturn caused by the COVID-19 pandemic (–5.42%) and by sanctions pressure in the first year after the onset of the war in Ukraine (–3.14%).

Under the influence of these factors, production in the NWFD’s key sectors declined sharply: in 2022, mechanical engineering fell by 15–20%, shipbuilding by about 12%, and instrument engineering by nearly 18%. The main causes were disrupted logistics chains, the need for technological adjustment, plant closures, loss of markets, and an 8–12% drop in output in border regions. These developments were accompanied by rising logistics expenses: delivery times for components lengthened by 1.5–2 times, and transport costs rose by 25–40%, which increased production costs and weakened competitiveness, particularly in export-oriented sectors (Shirokova, 2025). At the same time, import dependence deepened significantly: in several product groups it reached 50–75%, and in 30.8% of cases exceeded 75%, while about 45% of enterprises reported supply chain disruptions (Shirokova, 2022).

Since 2023, the NWFD’s industry has shown gradual adaptation to the new conditions. The district rose to 5th place, and in 2024 it entered the top three (3rd place). This reflects an acceleration of industrial production in key industrial centers, primarily driven by growth in the output of defense-related goods. Nevertheless, in the first half of 2025 industrial dynamics slowed, linked to the exhaustion of the defense-production effect and a growing interregional gap.

The data indicate a continuing polarization of industrial growth within the NWFD. The key drivers remain St. Petersburg and Leningrad Oblast, while sanctions-related constraints have further tightened regional dependence on these industrial centers.

The leading regions have been able to partially offset the consequences of logistics disruptions through structural adjustments and a pivot toward the domestic market, whereas resource-based and peripheral territories—Murmansk Oblast, the Republic of Karelia, and Arkhangelsk Oblast—have proved more vulnerable to falling demand, rising costs, and limited access to investment resources.

As a result, a persistent long-term territorial asymmetry is taking shape, in which industrial growth is concentrated around a limited number of major centers, while the economic role of peripheral regions continues to weaken. The ranking of the NWFD’s constituent entities for 2025 confirms this divergence: the gap between leaders and laggards remains significant and continues to widen.

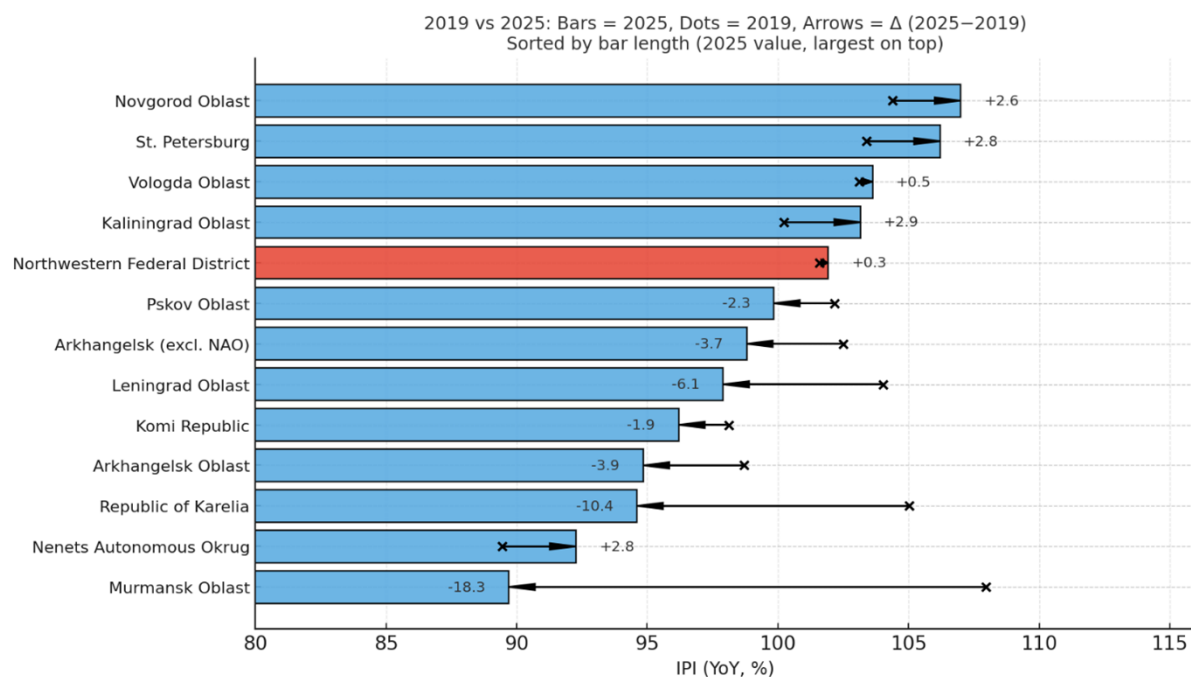
**Table 3. Annual-average IPI values for the constituent entities of the NWF, % compared with the previous year**

Region / Year	2019	2020	2021	2022	2023	2024	2025
<b>NWFD</b>	<b>101.59</b>	<b>97.88</b>	<b>103.73</b>	<b>98.69</b>	<b>102.31</b>	<b>104.49</b>	<b>101.93</b>
Republic of Karelia	105.02	105.75	101.11	93.30	100.15	99.00	94.60
Komi Republic	98.13	91.58	102.18	104.76	100.36	99.99	96.20
Nenets Autonomous Okrug (NAO)	89.43	89.11	103.75	112.54	93.70	97.38	92.27
Arkhangelsk Oblast	98.71	93.75	101.68	105.96	95.93	101.93	94.84
Arkhangelsk (excl. NAO)	102.51	100.57	100.11	98.52	99.53	109.49	98.80
Vologda Oblast	103.10	102.32	101.14	96.81	106.22	101.38	103.63
Kaliningrad Oblast	100.22	93.93	104.98	77.54	97.41	102.19	103.16
Leningrad Oblast	104.03	99.26	107.08	97.72	108.35	111.37	97.90
Murmansk Oblast	107.97	101.62	105.18	97.62	97.08	100.29	89.70
Novgorod Oblast	104.38	102.40	106.68	92.94	102.80	103.01	107.00
Pskov Oblast	102.17	96.75	105.48	99.91	112.31	109.75	99.84
St. Petersburg	103.39	97.56	105.39	106.65	113.86	118.08	106.21

Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

**Figure 2. Ranking of the NWF’s constituent entities by annual-average IPI in 2025, showing the change relative to 2019**



Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

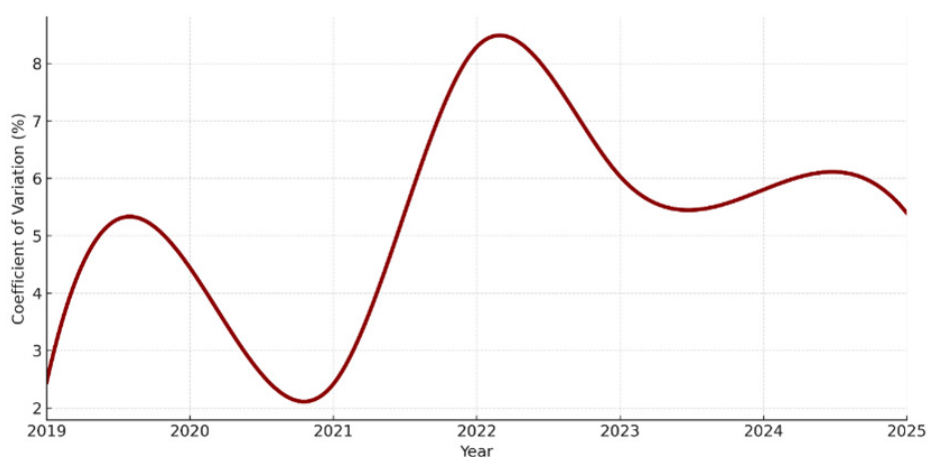
**Table 4. Russia’s Outward Foreign Direct Investment and Cross-Border M&A Activity, 2020–2024**

Year	Mean IPI (YoY, %)	Standard Deviation	Coefficient of Variation (%)
2019	102.36	2.51	2.45
2020	99.77	4.41	4.42
2021	103.29	2.38	2.30
2022	100.36	8.32	8.29
2023	102.30	6.08	5.95
2024	105.06	5.85	5.57
2025	99.68	5.27	5.29

Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

**Figure 3. Industrial-development unevenness across the NWF’s constituent entities (variance of annual IPI)**



Source: Rosstat data

**Note:** 2025 figures for industry and CPI cover January–July.

The analysis of the dynamics of the coefficient of variation and the standard deviation shows that, over 2019–2025, the spatial heterogeneity of industrial development in the NWF underwent notable transformations. Periods of relative alignment (2019 and 2021, CV ≈ 2.3–2.5%) were followed by a phase of sharp divergence, peaking in 2022 (CV = 8.29%), when differences among regions rose markedly under the impact of external economic shocks, logistics disruptions, and deep sectoral restructuring.

During this period, sanctions pressure and the breakdown of production–distribution chains intensified interregional differentiation, most clearly manifested in the widening gap between export-oriented and domestically oriented regions.

After 2022, a process of partial convergence began to take shape; however, it did not restore conditions to their pre-pandemic level: in 2025 the coefficient of variation remained around 5%, significantly higher than in the phase of relative stability, though below the peak values of the shock period.

Thus, one can speak of the consolidation of structural asymmetries in the NWF’s industrial space and of the entrenchment of enduring disparities in the development trajectories of its constituent entities. Taken together, these processes point to a continuing structural vulnerability of the district’s industrial complex: strong exposure to external market conditions, limited internal resources, and ineffective institutional mechanisms continue to constrain the efficiency of the industrial sector and hinder its full integration into the national production and technological system.

Industrial development in the NWF during 2019–2025 reflects a persistent combination of structural and spatial imbalances, exacerbated by external economic shocks and sanctions constraints. Technological

dependence has become entrenched, and industrial growth has become concentrated in a limited number of centers—primarily St. Petersburg and Leningrad Oblast—further widening the gap between the district’s core and periphery. Resource-based and Arctic regions remain reliant on export-oriented sectors and federal transfers, while low diversification and the aging of fixed production assets limit their adaptive capacity.

As a result, these trends shape an inertial model of industrial development in the NWFD, characterized by high sensitivity to changes in external market conditions and by weak endogenous growth drivers. In the medium term, territorial polarization is likely to persist, with the district’s dynamics increasingly determined by the volume of defense procurement, the extent of state support, and the capacity of regional economies for technological renewal.

#### **4. Investment Activity in the NWFD Economy**

Investment processes in the NWFD after 2022 reflect both nationwide trends and region-specific features shaped by structural and geographic imbalances, as well as by institutional constraints that impede the formation of sustainable investment cycles. As the Bank of Russia (2025) notes, despite the district’s still considerable economic potential, its investment system remains dependent on the federal redistribution of resources and has limited capacity for self-generation of capital.

Most investment is concentrated in St. Petersburg, Leningrad Oblast, and the industrial centers of Vologda and Cherepovets, while the northern and Arctic territories face an acute shortage of private investment (Melnikov, 2025) and remain dependent on budgetary financing. At the same time, public resources are directed primarily toward maintaining basic infrastructure rather than developing new sectoral trajectories (Vagin, 2025). Among the key structural problems is the reallocation of capital from industry and construction into services and logistics, which weakens the production base (Baginova et al., 2025).

According to Zvereva (2024), the investment activity of NWFD regions responds only weakly to monetary policy measures, indicating their dependence on non-financial sources—budget transfers and centralized investment. Sectoral distortions are most apparent in agriculture: in 2011–2021 the share of Leningrad Oblast in agro-investment fell from 37% to 18%, while the share of Murmansk Oblast rose from 1% to 26%; at the same time, low investment in high-technology areas constrains productivity growth (Medvedeva and Shikhova, 2023).

High climatic costs, transport isolation, and low levels of gasification increase project implementation costs and reduce profitability (Karyshev, 2025). Zotikov (2025) emphasizes that the centralization of financial decision-making in Moscow—where corporate headquarters and investment funds are concentrated—leads to a leakage of the tax base and limits the regions’ participation in project co-financing.

As a result, investment flows are predominantly compensatory in nature, merely supporting the existing production structure rather than developing it (Russian Government, 2024; Zakirova, 2025).

An analysis of investment dynamics in the NWFD in 2019–2025 makes it possible to identify a number of key trends: against the backdrop of other federal districts, the NWFD has occupied one of the leading positions in terms of investment activity, despite persistent structural and institutional constraints.

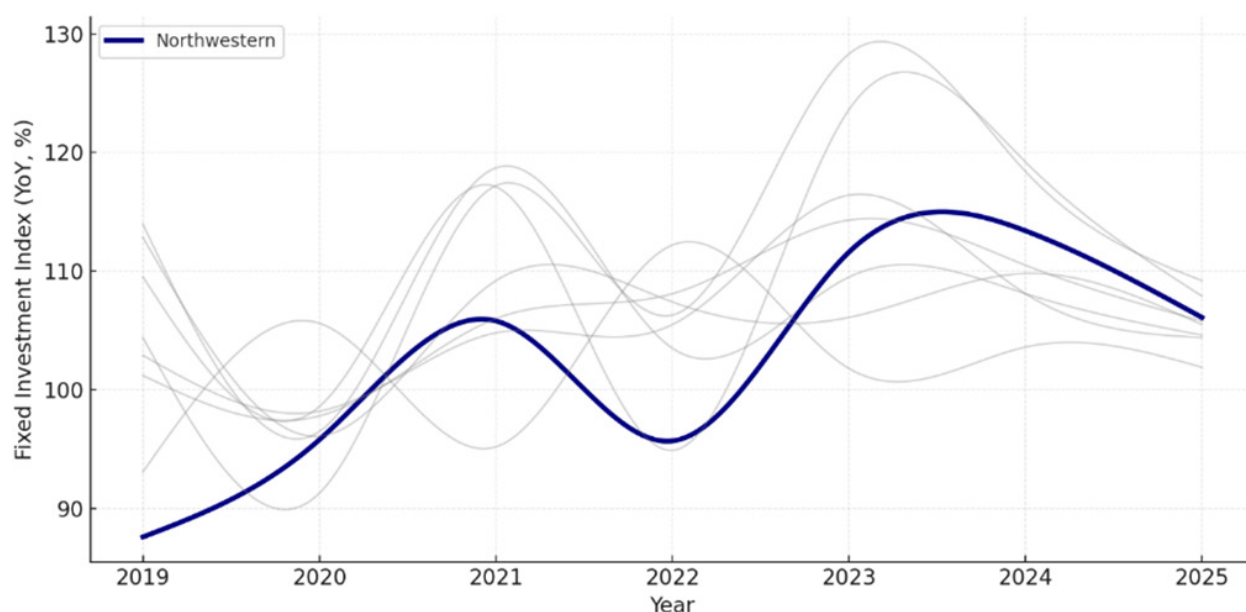
**Table 5. Fixed capital investment growth rates by federal district**

Year to year, %	Central Federal District	Volga Federal District	Southern Federal District	North Caucasian Federal District	Ural Federal District	Siberian Federal District	Far Eastern Federal District	NWFD	Rank of NWFD
2019	113.95	102.90	101.20	109.51	93.09	112.84	104.39	87.60	6
2020	96.50	98.20	97.80	98.60	105.60	96.10	91.30	95.80	5
2021	118.70	104.80	106.00	117.10	95.20	109.20	117.20	105.80	5
2022	103.50	105.50	108.10	94.90	112.20	107.40	106.30	95.70	5
2023	109.50	116.40	114.30	123.60	101.80	106.10	128.30	111.60	3
2024	108.10	108.10	110.50	119.20	103.60	109.80	118.40	113.40	3
2025	104.60	104.40	105.80	107.90	101.90	105.50	109.20	106.10	4

Source: Rosstat data

**Note:** 2025 figures for investment cover January–June.

**Figure 4. Fixed capital investment growth rates by federal district (% compared with the previous year; 2025 = first half-year)**



Source: Rosstat data

**Note:** 2025 figures for investment cover January–June.

The NWFD’s investment trajectory in 2019–2022 unfolded under conditions of high volatility. The COVID-19 pandemic led to a contraction of investment and a decline in the index to 87.6% in 2019 and 95.8% in 2020. The recovery of 2021–2022 proved limited: investment dynamics remained below the national average, while external shocks and structural constraints hindered the formation of sustained growth. Sanctions had a significant impact, leading to the destabilization of logistics chains and a reorientation of capital flows.

In 2023–2024, the situation changed: the NWFD joined the group of leading districts, ranking third in investment growth rates (111.6% and 113.4%). This reflected large-scale investment in the region’s key defense industries and the active implementation of import-substitution projects. However, in the first half of 2025 a slowdown is observed: the index declines to 106.1%, and the district’s rank falls to fourth place. These shifts point to a weakening of post-crisis recovery and to rising structural risks associated with increased dependence of investment dynamics on a limited number of large projects. As noted by Lola et al. (2024), more than 80% of enterprises in the NWFD are compelled to finance projects from their own funds.

In 2025, the NWFD exhibits a decline in investment activity driven by the high cost of credit resources and tight monetary policy. A similar reduction is characteristic of all of Russia's federal districts; however, a more pronounced decline is expected by year-end only in the Far Eastern Federal District.

The data indicate a persistent and intensifying imbalance in investment activity within the NWFD. Investment in the district is closely tied to the industrial sector, so the pattern of its distribution largely mirrors the region's industrial configuration. The key centers of capital concentration remain St. Petersburg and Leningrad and Vologda oblasts, whereas the northern and Arctic territories—Arkhangelsk Oblast, the Komi Republic, and Nenets Autonomous Okrug—exhibit persistently low investment rates and dependence on budgetary sources.

The asymmetry of the investment space continues to increase, most clearly manifested in 2025. A stable "two-speed" model of investment development is taking shape, in which the district's dynamics are determined by the trajectory of a few industrial centers, while peripheral territories are losing their capacity for modernization and autonomous growth. The ranking of the NWFD's constituent entities for 2025 confirms this trend: the gap between leaders and laggards remains significant and shows a tendency to deepen.

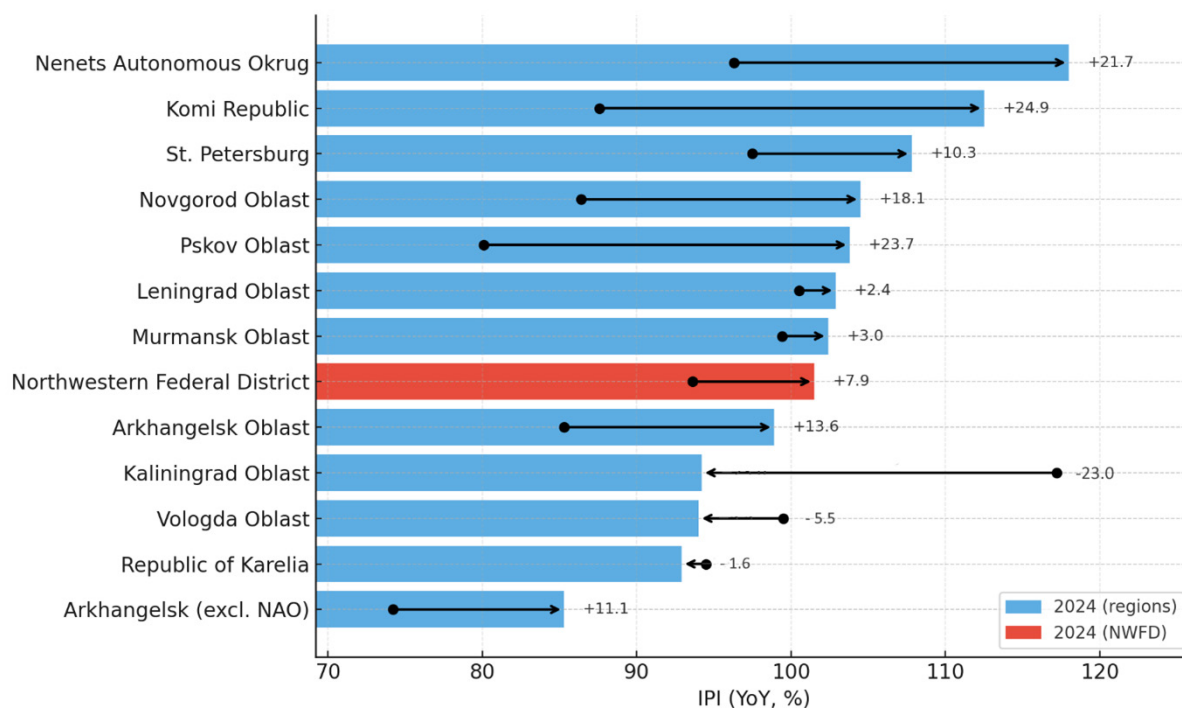
**Table 6. Investment index for the NWFD's constituent entities (% compared with the corresponding period of the previous year), 2019–2025**

Region	2019	2020	2021	2022	2023	2024	2025
<b>NWFD</b>	<b>93.6</b>	<b>97.2</b>	<b>109.6</b>	<b>102.0</b>	<b>101.3</b>	<b>101.5</b>	<b>117.0</b>
Republic of Karelia	94.5	96.2	136.0	106.7	89.7	92.9	120.5
Komi Republic	87.6	97.3	92.6	85.2	98.4	112.5	90.3
Nenets Autonomous Okrug (NAO)	96.3	93.6	85.5	95.8	96.1	118.0	99.1
Arkhangelsk Oblast	85.3	104.5	92.6	90.9	99.4	98.9	98.7
Arkhangelsk (excl. NAO)	74.2	119.1	101.6	87.4	100.7	85.3	96.3
Vologda Oblast	99.5	88.1	121.7	88.3	101.3	94.0	145.9
Kaliningrad Oblast	117.2	89.2	112.1	102.2	103.0	94.2	92.7
Leningrad Oblast	100.5	99.7	105.1	112.0	108.8	102.9	156.5
Murmansk Oblast	99.4	104.4	111.8	113.6	112.8	102.4	101.8
Novgorod Oblast	86.4	107.2	99.4	97.4	91.3	104.5	82.4
Pskov Oblast	80.1	98.2	100.9	106.5	106.8	103.8	106.3
St. Petersburg	97.5	97.1	99.5	101.2	99.9	107.8	99.2

Source: Rosstat data

**Note:** 2025 figures for investment cover January–June. The NWFD indicator (117.0%) is calculated by Rosstat as a weighted investment index for the district's aggregate volume. Its value may differ from inter-district indicators (e.g., 106.1%) due to differences in aggregation methodology and the comparison period.

**Figure 5. Ranking of the NWFД’s constituent entities by annual-average fixed capital investment index in 2024, showing the change relative to 2019**



Source: Rosstat data

**Note:** 2025 figures for investment cover January–June.

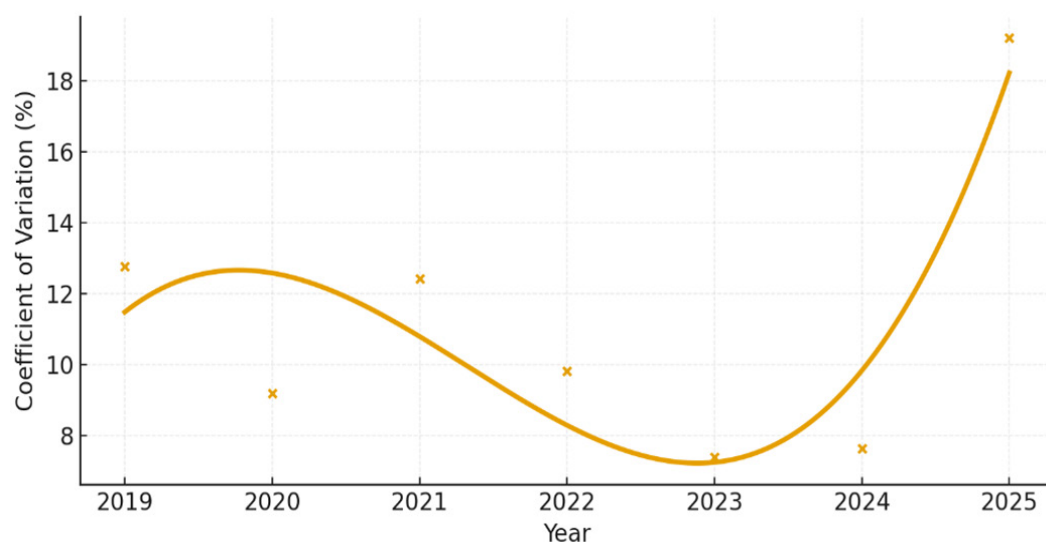
**Table 7. Investment-development unevenness across the NWFД’s constituent entities (variance of annual investment indices)**

Year	Mean Investment Index (YoY, %)	Standard Deviation	Coefficient of Variation (%)
2019	93.62	11.95	12.77
2020	97.24	8.94	9.19
2021	105.61	13.11	12.42
2022	99.95	9.82	9.82
2023	103.87	7.68	7.39
2024	101.49	7.74	7.63
2025	108.25	20.79	19.21

Source: Rosstat data

**Note:** 2025 figures for investment cover January–June.

**Figure 6. Investment-development unevenness across the NWFD's constituent entities (variance of annual fixed capital investment indices)**



Source: Rosstat data

**Note:** 2025 figures for investment cover January–June.

The analysis of the dynamics of variation metrics of investment activity in the NWFD for 2019–2025 shows pronounced fluctuations in spatial heterogeneity. In 2019–2021, the coefficient of variation (CV) remained at 12–13%, indicating a high unevenness in the distribution of capital among the district's regions. In 2022–2024, partial convergence was observed ( $CV \approx 7\text{--}8\%$ ), driven by the reallocation of federal resources in favor of major centers and infrastructure projects. However, in 2025 the indicator rose sharply to 19.2%—the maximum for the entire period—reflecting a deepening of polarization and a concentration of investment in a limited number of constituent entities.

The regional structure of investment confirms this trend. Leningrad and Vologda oblasts have consolidated their status as leading centers of capital attraction, while the Komi Republic and Arkhangelsk and Novgorod oblasts show persistently low growth rates. St. Petersburg retains substantial investment volumes but is gradually losing its role as the primary driver, and Kaliningrad Oblast is characterized by volatile dynamics that reflect instability in the external economic environment.

By mid-2025, the gap between leading regions and peripheral territories had reached its highest level for the entire period of observation. This points to the formation of a "two-speed" model of investment development, in which the district's aggregate dynamics are determined by a limited number of industrial centers, while the northern and Arctic regions are losing their capacity for structural modernization and long-term growth.

Investment processes in the NWFD in 2019–2025 exhibit a combination of persistent structural and spatial imbalances that determine the district's high dependence on federal resources. The concentration of capital investment in St. Petersburg and in Leningrad and Vologda oblasts persists. The northern and Arctic regions of the district remain dependent on budgetary financing and do not form their own investment centers of growth.

Institutional fragmentation of the investment system and low sensitivity to monetary policy reinforce structural inertia, under which investment flows are predominantly compensatory in nature. The growth of 2023–2024 was driven mainly by defense-industrial and infrastructure projects, which makes investment dynamics dependent on the foreign-policy environment and the scale of government orders.

In the medium term, a high level of spatial asymmetry is expected to persist, along with a strengthening dependence of investment activity on federal support and on institutional decisions taken at the center.

## 5. Inflationary Processes in the NWFD

Inflationary patterns in the NWFD after 2022 were shaped by a complex set of macroeconomic, structural, and spatial drivers. The district is highly sensitive to changes in the external economic environment—through the channels of imports, logistics, and commodity prices. At the same time, the importance of domestic conditions has increased: the structure of consumer demand, tariff policy, and the share of services in the consumer basket. Taken as a whole, these forces have intensified the territorial unevenness of inflation within the district.

The start of Russia’s full-scale war against Ukraine in 2022 and the subsequent imposition of wide-ranging sanctions led to the breakdown of earlier trade and logistics chains. This lengthened production processes, deepened reliance on imported components, and heightened the sensitivity of price dynamics to external shocks (Zakirova, 2025).

As noted by the Bank of Russia (2025), intensified territorial disparities in the NWFD’s socio-economic development have added to cost pressures, accelerating CPI growth in large agglomerations due to rising housing, transport, and market-service expenses. Peripheral territories of the district, by contrast, face additional outlays associated with logistics and infrastructure constraints.

On the supply side, higher prices for raw materials, energy, and transport services had a significant impact, driving up production expenses and restraining investment activity (Lukin and Shirokova, 2023). According to Vagin (2025), institutional divergences also strengthened during this period: better-off subjects saw greater spending on utilities and social services, while northern regions compensated for budget deficits by raising tariffs. This added to price strain and widened territorial disparities (Accounts Chamber of the Russian Federation, 2025).

Taken together, these developments produced spatially differentiated price dynamics that impeded the application of uniform regulatory measures (Rosstat, 2024).

In 2025, CPI trends in the NWFD diverged from those observed across Russia as a whole. The key determinant was the imbalance between household earnings and the economy’s supply capacity: real wages grew by 6.9% year-on-year, while productivity rose by less than 2% (Markelov, 2025).

An analysis of price movements in the NWFD over 2019–2025 identifies several key trends driven by a combination of external shocks and internal structural conditions. The pandemic, sanctions, and logistics breakdowns heightened cost volatility, while contrasts in living standards, tariff policy, and demand structure reinforced the spatial divergence of inflation across the district.

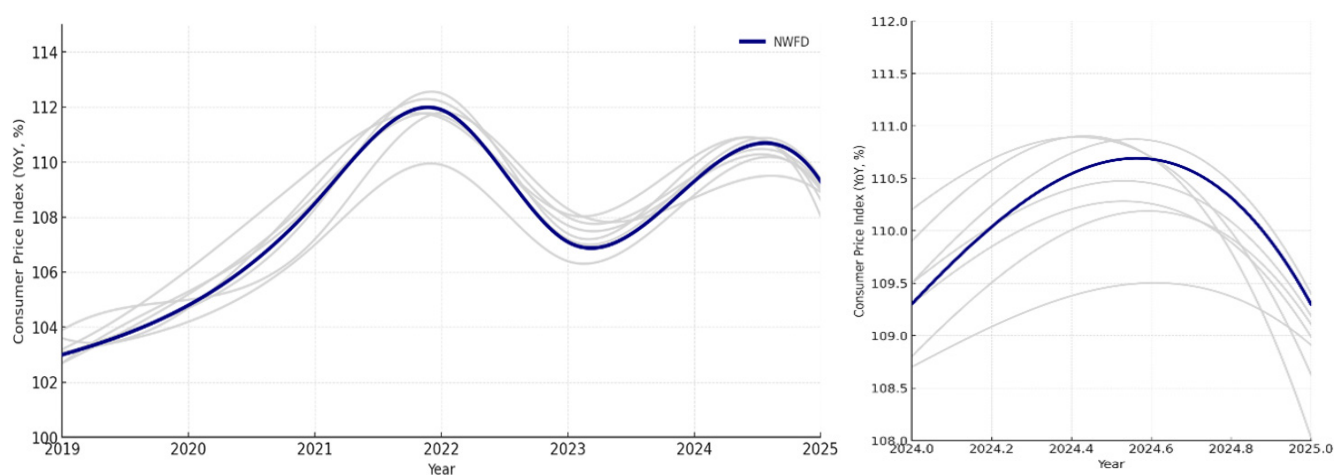
**Table 8. Consumer Price Index (CPI) by federal district, % compared with the corresponding period of the previous year**

Year	Central Federal District	Volga Federal District	Southern Federal District	North Caucasian Federal District	Ural Federal District	Siberian Federal District	Far Eastern Federal District	NWFD	Rank of NWFD
2019	103.00	102.70	102.70	103.20	103.10	103.60	103.90	103.00	5
2020	104.70	105.30	105.20	106.10	104.20	104.70	105.00	104.80	5
2021	108.30	108.60	108.80	109.80	107.00	109.10	107.20	108.50	5
2022	112.50	111.90	111.70	111.60	109.90	112.20	111.80	111.90	3
2023	107.40	107.20	107.70	108.10	106.40	108.00	108.30	107.10	7
2024	109.90	109.50	109.30	110.20	108.80	109.50	108.70	109.30	5
2025	108.03	109.40	108.99	108.63	109.11	109.19	108.91	109.30	2

Source: Rosstat data

**Note:** 2025 figures for CPI cover January–June.

**Figure 7. Consumer price growth by federal district, % compared with the previous year**



Source: Rosstat data

**Note:** 2025 figures for CPI cover January–July.

The chronology of price developments in the NWFD reflects a gradual transition from moderate CPI growth to persistent structural strain.

In 2019–2020, inflationary trends remained moderate (103.0% and 104.8%, respectively), preserving price stability and low territorial variation.

In 2021, consumer prices accelerated markedly amid the recovery of demand and rising production costs, marking a transition to a phase of intensified cost momentum.

The peak of CPI growth in the NWFD (111.9%), as in other Russian regions, occurred in 2022. During this period, the main drivers of price increases were the breakdown of import chains, higher logistics expenses, and elevated production spending. Despite the overall rise in costs, the NWFD ranked among the districts with relatively moderate price levels (third place).

After the start of hostilities in Ukraine, external factors remained the main source of price strain, but since 2023 domestic influences have become more significant.

In the largest urban agglomerations, sustained consumer demand and higher household earnings have kept CPI rates elevated in the services, housing and utilities, and transport sectors. In the northern and peripheral areas, cost pressures have intensified due to expensive deliveries, limited transport accessibility, and weak competition. Fiscal and tariff differences further widen territorial disparities in price patterns (Accounts Chamber of the Russian Federation, 2025).

In 2023, inflation declined to 107.1% under the influence of tight monetary policy and the stabilization of logistics channels. Already in 2024, CPI growth accelerated again to 109.3%, mainly due to higher consumer demand and expanded budget expenditures.

In the first half of 2025, price levels held at the previous year's mark, bringing the district's dynamics close to the national average (around 109%), which indicated stabilization of cost movements while inflation remained high relative to other federal districts.

The intra-district structure of price dynamics in the NWFD is marked by persistent unevenness and spatial polarization. In 2019–2021, territorial disparities widened under the influence of rising production expenses and a reconfiguration of demand. The 2022 peak entrenched this variation; however, by 2023 the dispersion began to narrow as overall price movements slowed, and this trend persisted in 2024, when the coefficient of variation reached its lowest value for the entire observation period. Nevertheless, by mid-2025 the situation had changed again: the indicator rose sharply, reflecting a new round of divergence and the entrenchment of regional contrasts in CPI trends.

Murmansk, Kaliningrad, and Vologda oblasts have traditionally posted higher consumer price rates (above 110%), whereas Arkhangelsk Oblast, Nenets Autonomous Okrug, and St. Petersburg have recorded relatively contained readings (around 107%). This pattern is explained by contrasts in consumption structures, logistics burdens, tariff policy, and the role of services in local economies.

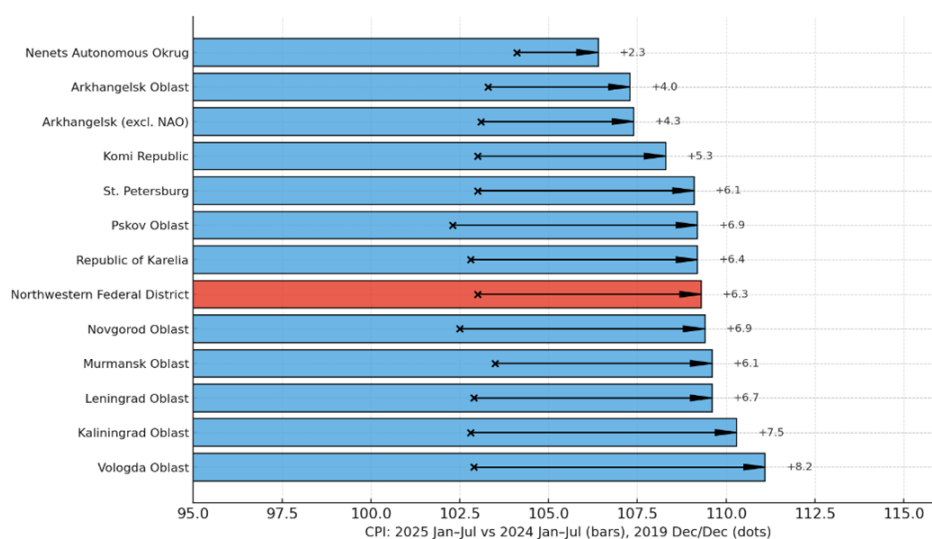
**Table 9. Consumer Price Index (CPI) for the NWF’s constituent entities: annual values for 2019–2024 (December to December) and the 2025 figure (January–July 2025 vs. January–July 2024), %**

Region	2019	2020	2021	2022	2023	2024	2025*
<b>NWFD</b>	<b>103.0</b>	<b>104.8</b>	<b>108.5</b>	<b>111.9</b>	<b>107.1</b>	<b>109.3</b>	<b>109.3</b>
Republic of Karelia	102.8	106.1	109.4	111.8	107.7	108.6	109.2
Komi Republic	103.0	106.6	107.5	111.4	107.3	109.3	108.2
Nenets Autonomous Okrug (NAO)	104.1	103.4	103.7	115.6	104.6	106.3	106.4
Arkhangelsk Oblast	103.3	104.6	109.3	112.0	108.8	108.0	107.2
Arkhangelsk (excl. NAO)	103.1	104.7	109.6	111.9	109.0	108.1	107.2
Vologda Oblast	102.9	105.3	109.3	112.6	107.8	110.0	111.0
Kaliningrad Oblast	102.8	105.1	109.5	112.9	108.2	110.3	110.2
Leningrad Oblast	102.9	104.1	108.0	110.8	106.0	109.3	109.6
Murmansk Oblast	103.5	104.1	107.2	115.3	107.9	108.2	110.8
Novgorod Oblast	102.5	105.6	107.4	111.1	106.9	109.2	110.1
Pskov Oblast	102.3	104.9	108.1	112.0	106.0	108.5	109.2
St. Petersburg	103.0	104.7	108.7	111.5	106.8	109.5	108.9

Source: Rosstat data

**Note:** 2025 figures for CPI cover January–July.

**Figure 8. Ranking of the NWF’s constituent entities by CPI for 2025 (January–July vs. the corresponding period of 2024), showing the change relative to 2019**



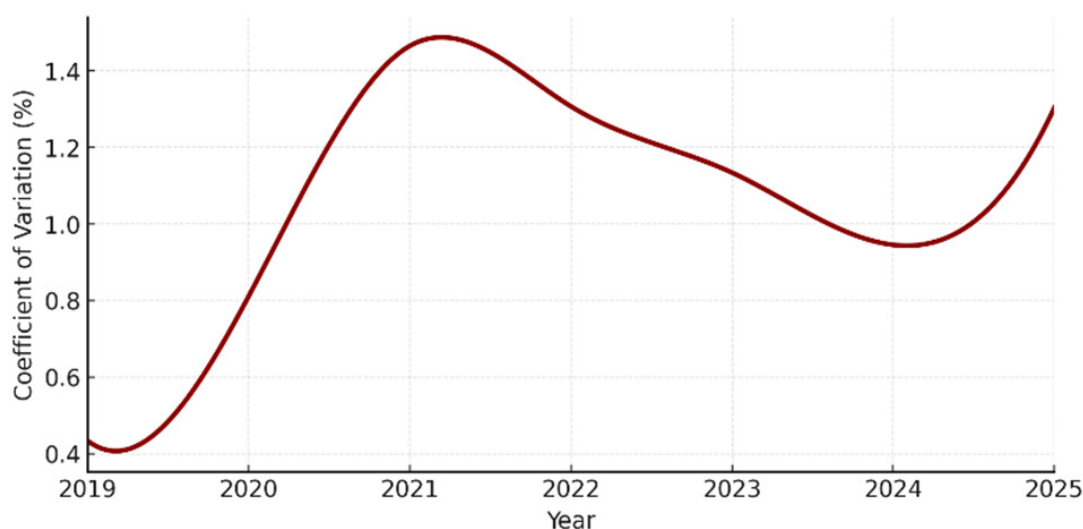
**Table 10. Inflation unevenness across the NWF’s constituent entities (variance of annual CPI)**

Year	Mean CPI (YoY, %)	Standard Deviation	Coefficient of Variation (%)
2019	103.02	0.45	0.43
2020	104.93	0.85	0.81
2021	108.14	1.59	1.47
2022	112.41	1.47	1.31
2023	107.25	1.22	1.13
2024	108.78	1.03	0.95
2025	109.00	1.42	1.30

Source: Rosstat data

**Note:** 2025 figures for CPI cover January–July.

**Figure 9. Inflation unevenness across the NWFД’s constituent entities (variance of annual CPI)**



Source: Rosstat data

**Note:** 2025 figures for CPI cover January–July.

The analysis of the dynamics of the coefficient of variation and the standard deviation shows that, in 2019–2025, the spatial unevenness of price dynamics across the subjects of the NWFД remained relatively low, although its intensity underwent certain fluctuations. The period 2019–2020 was characterized by a gradual trend upward in inter-district disparities (CV = 0.43–0.81%), reflecting an uneven response of territorial markets to changes in price conditions.

The most notable intensification of price pressures was observed in 2021, when the average CPI exceeded 108% and the variation reached its maximum for the period under review (CV = 1.47%). This points to a divergence of regional trajectories associated with supply disruptions, differences in consumption structure, and uneven rates of post-pandemic recovery.

In 2022, territorial differentiation began to decline (CV = 1.31%), which can be interpreted as an effect of regional economies adapting to the new price environment and of logistics flows stabilizing. In subsequent years (2023–2024), the convergence trend continued: the coefficient of variation fell to 0.95%, indicating a relative synchronization of price movements. Nevertheless, in 2025 a moderate increase in disparities is again recorded (CV = 1.30%), which may reflect a renewal of cost imbalances under the influence of differences in demand structure, tariff policy, and budgetary support.

Thus, despite the overall trend toward stabilization, the NWFД’s price landscape retains signs of moderate divergence. These fluctuations point to the persistent influence of territorial factors on cost dynamics and to the limited capacity of uniform macroeconomic instruments to equalize price behavior across the district’s entities.

CPI trends in the NWFД over 2019–2025 reflect a persistent combination of external and internal drivers that manifested differently depending on the structure of regional economies. External economic shocks, sanctions pressure, and the disruption of logistics chains influenced price volatility and the district’s dependence on imported components, whereas internal conditions—the structure of demand, tariff policy, and the share of services—contributed to the persistence of interregional disparities. As a result, a price environment with enduring asymmetry has taken shape in the NWFД: large agglomerations display sustained cost pressures, while peripheral territories exhibit heightened vulnerability to expenses and weak adaptation to nationwide regulatory measures.

These trends point to the institutionalization of territorial disparities in price dynamics and to the limitations of standard anti-inflation policy tools. In the medium term, spatial polarization is likely to persist, with the district’s price level increasingly dependent on the state of consumer demand in major hubs, the effectiveness of tariff regulation, and the capacity of regional economies to reduce production and distribution costs.

## 6. Conclusions

Long-term structural gaps have become entrenched in the NWFD's production and investment spheres, manifested in a high degree of depreciation of fixed assets, technological vulnerability, and persistent import dependence. These factors are accompanied by rising logistics costs and more expensive production chains, which widen regional disparities and are reflected in greater spatial unevenness. The accumulation of capital in the district's most advanced manufacturing centers contrasts with a chronic shortage of private financing in the northern and Arctic territories. The region's economy relies to a significant extent on national budget resources, and, should financing mechanisms be disrupted, the scale of potential economic difficulties could be considerable.

The brief recovery of 2023–2024 was driven primarily by budgetary injections and defense orders; by 2025 this effect had largely been exhausted.

Price dynamics in the NWFD as a whole correspond to nationwide trends. In 2025, relative stabilization is observed, linked to tight fiscal decisions following the inflationary surge of the previous year. Inter-district differences within the area are gradually narrowing; however, the impact of anti-inflation measures remains limited due to the strong concentration of economic activity in the largest hubs.

In Russia's strategic economic planning, national macroregions are increasingly receding into the background; they are being supplanted by new priority growth zones, the Arctic area, and major transport projects. In the NWFD, these priorities affect only part of the constituent entities, which further reinforces spatial fragmentation and limits the integrity of the district's economic landscape.

In the coming years, the NWFD's high sensitivity to external shocks and its persistent internal divergence are likely to sustain instability in the region's cost and output patterns. Inflation differences among its constituent entities may intensify again amid a limited supply potential and rising costs in transport-dependent and peripheral territories. The trend toward deepening inequality is highly likely to persist, with the resilience of large centers coexisting with a gradual weakening of economic activity and growing price pressures on the periphery. Greater dependence on central regulatory instruments and the focus of modernization in selected industrial hubs—while the periphery remains stagnant—will broaden geographic gaps, producing divergent paths of development among the district's regions. In the medium term, the contours of regional development will be determined not by a restoration of balance but by the consolidation of the existing uneven structure.

## References

- Accounts Chamber of the Russian Federation (2025) '*Operativnyi doklad o khode ispolneniya konsolidirovannykh byudzhetrov sub"ektov Rossiiskoi Federatsii yanvar'–dekabr' 2024 goda*' [Operational report on the execution of consolidated budgets of the constituent entities of the Russian Federation, January–December 2024]. Available at: <https://ach.gov.ru/upload/iblock/1da/jyb8h6wl8r2ycmnepry019p0mlssa6q7.pdf> (Accessed: 5 November 2025).
- Akhapkin, N.Yu. (2023) '*Russian economy under sanctions: dynamics and structural changes*'. Vestnik Instituta ekonomiki Rossiiskoi akademii nauk [The Bulletin of the Institute of Economics of the Russian Academy of Sciences], 6, pp. 7–25. [https://doi.org/10.52180/2073-6487\\_2023\\_6\\_7\\_25](https://doi.org/10.52180/2073-6487_2023_6_7_25)
- AKRA (2025) '*Strukturnye izmeneniya v ekonomike Rossii v 2022–2024 godakh*' [Structural changes in the Russian economy in 2022–2024]. 14 March. Available at: <https://www.acra-ratings.ru/research/2812/> (Accessed: 5 November 2025).
- Baginova, V.M., Muradov, M.I., Danilov, L.I. and Vanchikova, E.N. (2025) 'Structural changes and dynamics of economic development of the federal districts of Russia: analysis of gross regional product and employment (2016–2022)', *Vestnik Akademii Znaniy* [Bulletin of the Academy of Knowledge], 3(68), pp. 38–43. Available at: <https://cyberleninka.ru/article/n/strukturnye-izmeneniya-i-dinamika-ekonomicheskogo-razvitiya-federalnyh-okrugov-rossii-analiz-valovogo-regionalnogo-produkta-i> (Accessed: 5 November 2025).
- Bank of Russia (2025) '*Osnovnye napravleniya edinoi gosudarstvennoi denezhno-kreditnoi politiki na 2026 god i period 2027 i 2028 godov*' [The main directions of the unified state monetary policy for 2026 and the period 2027–2028]. 26 September. Available at: [https://www.cbr.ru/about\\_br/publ/ondkp/on\\_2026\\_2028/](https://www.cbr.ru/about_br/publ/ondkp/on_2026_2028/) (Accessed: 5 November 2025).
- Barents Observer (2025) '*Defitsit byudzheta Murmanska za devyat' mesyatsev 2025 goda prevysil 913 mln rublei*' [Murmansk budget deficit exceeded 913 million rubles in the first nine months of 2025]. 27 October. Available at: <https://murmansk.bezformata.com/listnews/previsil-913-mln-rublej/152501614/> (Accessed: 5 November 2025).
- Batievskaya, V.B. and Sokolovskiy, M.V. (2025) '*Strategicheskoe planirovanie razvitiya rossiiskikh regionov: tekhnologiya, etapy, problemy*' [Strategic planning for the development of Russian regions: technology, stages, problems]. Regional'nye problemy preobrazovaniya ekonomiki [Regional Problems of Economic Transformation], 3, pp. 72–83. <https://doi.org/10.26726/rppe2025v3spotd>
- Delovaya Rossia (2025) '*Severo-Zapadnyi FO*' [North-Western Federal District]. All-Russian Public Organization "Delovaya Rossia". Available at: [https://deloros.ru/regiony/severo-zapadnyy/?sphrase\\_id=74699](https://deloros.ru/regiony/severo-zapadnyy/?sphrase_id=74699) (Accessed: 5 November 2025).
- Federation Council of Russia (2024) '*Parlamentskie slushaniya na temu "Ob osnovnykh polozheniyakh proektiruemoi strategii prostranstvennogo razvitiya Rossiiskoi Federatsii na period do 2030 goda"*' [Parliamentary hearings on "The main provisions of the draft spatial development strategy of the Russian Federation for the period up to 2030"]. Sovet Federatsii Federal'nogo Sobraniya Rossiiskoi Federatsii [Federation Council of the Federal Assembly of the Russian Federation]. 23 October. Available at: <http://council.gov.ru/events/multimedia/photo/315142/> (Accessed: 5 November 2025).
- Gichiev, N.S. and Guseynova, N.O. (2025) '*Environmental aspects of the economic growth of Russian administrative regions*'. Yug Rossii: ekologiya, razvitie [South of Russia: Ecology, Development], 20(1), pp. 160–178. <https://doi.org/10.18470/1992-1098-2025-1-14>
- Golovanov, O.A., Tyrsin, A.N. and Vasilyeva, E.V. (2025) 'Federal districts and macroregions: risks of spatial development heterogeneity'. *Journal of Applied Economic Research*, 24(1), pp. 152–187. <https://doi.org/10.15826/vestnik.2025.24.1.006>
- Inchikova, A.S. and Yalaeva, D.D. (2025) '*Problemy regional'nykh bankov v kreditnoi sisteme Rossiiskoi Federatsii i mery, sposobstvuyushchie ikh razvitiyu*' [Problems of regional banks in the credit system of the Russian Federation and measures contributing to their development]. *Nauchnye zapiski molodykh issledovatelei* [Scientific Notes of Young Researchers], 13(1), pp. 24–32.

- Karanatova, L.G., Elsukov, M.Yu. and Shalimov, M.B. (2025) 'Strategy of spatial development of Russia: goals, trends and contradictions'. *Administrative Consulting*, 0(3), pp. 59–71. Available at: <https://www.acjournal.ru/jour/article/view/2727> (Accessed: 5 November 2025).
- Karyshev, M.Yu. (2025) 'Comparative socio-economic analysis of the Far North and equated areas and the rest of the Russian Federation'. *Uchet i statistika* [Accounting and Statistics], 22(1), pp. 20–28. <https://doi.org/10.54220/1994-0874.2025.71.46.001>
- Korennikova, V.S. and Gubanova, E.S. (2024) 'Neravnomernost' sotsial'no-ekonomicheskogo razvitiya regionov Severo-Zapadnogo federal'nogo okruga: metodika otsenki i rekomendatsii po ee snizheniyu' [Uneven socio-economic development of the regions of the North-Western Federal District: assessment methodology and recommendations for its reduction]. *Journal of Economics, Entrepreneurship and Law*, 14(5), pp. 1893–1914. <https://doi.org/10.18334/epp.14.5.120812>
- Kulikov, D. and Panicheva, S. (2025) 'Strukturnye izmeneniya v ekonomike Rossii v 2022–2024 godakh' [Structural changes in the Russian economy in 2022–2024]. 14 March. Available at: <https://www.acra-ratings.ru/research/2812/> (Accessed: 5 November 2025).
- Kuvalin, D.B., Zinchenko, Y.V., Lavrinenko, P.A., Ibragimov, S.Sh. and Zaitseva, A.A. (2024) 'Rossiiskie predpriyatiya vesnoi 2023 g.: preodolenie sanktsionnogo krizisa i usilenie investitsionnoi aktivnosti' [Russian enterprises in spring 2023: overcoming the sanctions crisis and strengthening investment activity]. INP RAN [Institute of Economic Forecasting of the Russian Academy of Sciences]. Available at: <https://ecfor.ru/publication/rossijskie-predpriyatiya-vesnoj-2023-posledstviya-sanktsij/> (Accessed: 5 November 2025).
- Kuvalin, D.B., Zinchenko, Yu.V., Ibragimov, Sh.Sh. and Zaitseva, A.A. (2025) 'Rossiiskie predpriyatiya vesnoi 2025 goda: padenie investitsionnoi aktivnosti iz-za vysokoi stoimosti kreditov' [Russian enterprises in spring 2025: decline in investment activity due to high credit costs]. Institute of Economic Forecasting of the Russian Academy of Sciences (INP RAS). Available at: <https://ecfor.ru/publication/rossijskie-predpriyatiya-vesnoj-2025/> (Accessed: 5 November 2025).
- Lazhentsev, V. (2024) 'Regional experience of studying and developing productive forces (case study of the Republic of Komi)'. *Economic and Social Changes: Facts, Trends, Forecast* / *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz*, 1(91). <https://doi.org/10.15838/esc.2024.1.91.4>
- Lola, I.S., Bakeev, M.B. and Manukov, A.B. (2024) 'Novye izmeriteli neopredelennosti delovoi sredy v rossiiskoi ekonomike' [New indicators of business environment uncertainty in the Russian economy]. *Voprosy statistiki* [Questions of Statistics], 31(1), pp. 5–21. <https://doi.org/10.34023/2313-6383-2024-31-1-5-21>
- Lukin, E.V. and Shirokova, E.Yu. (2023) 'Manufacturing sector of the economy of North-West Russia: a year of functioning under the conditions of strengthening sanctions'. *Economics and Management*, 29(8), pp. 927–937. <https://doi.org/10.35854/1998-1627-2023-8-927-937>
- Markelov, R. (2025) 'Kak razvivalas' ekonomika rossiiskikh regionov v pervom polugodii' [How the economy of Russian regions developed in the first half of the year]. *OodRussia.ru*. 10 September. Available at: <https://www.oodrussia.ru/glavnoe/kak-razvivalas-ekonomika-rossijskih-regionov-v-pervom-polugodii> (Accessed: 5 November 2025).
- Medvedeva, N.A. and Shikhova, O.A. (2023) 'Multidimensional comparative analysis of the development of agriculture in the regions of the Northwestern Federal District'. *Statistics and Economics*, 20(6), pp. 48–58. <https://doi.org/10.21686/2500-3925-2023-6-48-58>
- Melnikov, V.V. (2025) 'Current trends and factors of socio-economic inequality in Russian regions'. *Economic Analysis: Theory and Practice*, 24(2), pp. 49–72. <https://doi.org/10.24891/ea.24.2.49>

- Ministry of Economic Development of the Russian Federation. (2020) '*Prikaz Minekonomrazvitiya Rossii ot 11 marta 2020 g. No 130 "Ob utverzhdenii edinoi metodiki monitoringa sostoyaniya i razvitiya konkurentsii na tovarnykh rynkakh sub"ekta Rossiiskoi Federatsii"*' [Order of the Ministry of Economic Development of Russia No. 130 of 11 March 2020 "On approval of the unified methodology for monitoring the state and development of competition in the commodity markets of a constituent entity of the Russian Federation"]. *Ministerstvo ekonomicheskogo razvitiya Rossiiskoi Federatsii* [Ministry of Economic Development of the Russian Federation]. Available at: [https://economy.gov.ru/material/dokumenty/prikaz\\_minekonomrazvitiya\\_rossii\\_ot\\_11\\_marta\\_2020\\_g\\_130.html](https://economy.gov.ru/material/dokumenty/prikaz_minekonomrazvitiya_rossii_ot_11_marta_2020_g_130.html) (Accessed: 5 November 2025).
- Moroshkina, M. (2024) '*Disproportions in the economic development of the regions of the Northwestern Federal District*'. *Drukerovskii Vestnik*, 1, pp. 170–177. <https://doi.org/10.17213/2312-6469-2024-1-170-177>
- Okrepilov, V.V. and Korshunov, V.V. (2024) '*Dostizhenie strategicheskikh tselei sotsial'no-ekonomicheskogo razvitiya regionov SZFO v kontekste problemy kachestva strategicheskogo planirovaniya*' [Achieving the strategic goals of the socio-economic development of the NWFD regions in the context of the problem of the quality of strategic planning]. *Problemy prognozirovaniya* [Problems of Forecasting], (6), pp. 128–138. <https://doi.org/10.47711/0868-6351-207-128-138>
- Rosstat (2024) '*Ekonomicheskie i sotsial'nye pokazateli raionov Krainego Severa i priravnennykh k nim mestnostei v 2000–2023 godakh*' [Economic and social indicators of the Far North regions and equivalent areas in 2000–2023]. Available at: [https://rosstat.gov.ru/storage/mediabank/Pokaz\\_KS\\_2000-2021.pdf](https://rosstat.gov.ru/storage/mediabank/Pokaz_KS_2000-2021.pdf) (Accessed: 5 November 2025).
- Rosstat (2025a) '*Publikatsii, kharakterizuyushchie sotsial'no-ekonomicheskoe polozhenie sub"ektov Rossiiskoi Federatsii*' [Publications characterizing the socio-economic situation of the constituent entities of the Russian Federation]. Available at: <https://rosstat.gov.ru/folder/11109/document/13260> (Accessed: 5 November 2025).
- Rosstat (2025b) '*Regional'naya statistika*' [Regional statistics]. Available at: [https://rosstat.gov.ru/regional\\_statistics](https://rosstat.gov.ru/regional_statistics) (Accessed: 5 November 2025).
- Rosstat (2025c) '*Rosstat—Severo-Zapadnyi federal'nyi okrug*' [Rosstat—Northwestern Federal District]. Available at: <https://rosstat.gov.ru/folder/506> (Accessed: 5 November 2025).
- Rosstat (2025d) '*Sotsial'no-ekonomicheskoe polozhenie Rossii za yanvar'-iyun' 2025 goda*' [Socio-economic situation of Russia for January–June 2025]. 30 July. Available at: <https://rosstat.gov.ru/compendium/document/50801> (Accessed: 5 November 2025).
- Russian Government (2019) '*Strategiya prostranstvennogo razvitiya RF na period do 2025 g.*' [Spatial development strategy of the Russian Federation for the period up to 2025]. 31 August. Available at: <https://base.garant.ru/72174066/> (Accessed: 5 November 2025).
- Russian Government (2024) '*Strategiya prostranstvennogo razvitiya Rossiiskoi Federatsii na period do 2030 goda s prognozom do 2036 goda*' [Spatial development strategy of the Russian Federation for the period up to 2030 with a forecast up to 2036]. 28 December. Available at: [https://www.economy.gov.ru/material/directions/regionalnoe\\_razvitie/strategicheskoe\\_planirovanie\\_prostranstvennogo\\_razvitiya/strategiya\\_prostranstvennogo\\_razvitiya\\_rossii\\_do\\_2030\\_goda\\_s\\_prognozom\\_do\\_2036\\_goda/strategiya\\_prostranstvennogo\\_razvitiya\\_rossiyskoy\\_federatsii\\_na\\_period\\_do\\_2030\\_goda\\_s\\_prognozom\\_do\\_2036\\_goda.html](https://www.economy.gov.ru/material/directions/regionalnoe_razvitie/strategicheskoe_planirovanie_prostranstvennogo_razvitiya/strategiya_prostranstvennogo_razvitiya_rossii_do_2030_goda_s_prognozom_do_2036_goda/strategiya_prostranstvennogo_razvitiya_rossiyskoy_federatsii_na_period_do_2030_goda_s_prognozom_do_2036_goda.html) (Accessed: 5 November 2025).
- Russian Government (2025) '*Plan realizatsii Strategii prostranstvennogo razvitiya do 2030 goda*' [Action plan for the implementation of the Spatial Development Strategy up to 2030]. 31 October. Available at: <http://government.ru/docs/55890/> (Accessed: 5 November 2025).
- Shirokova, E. and Lukin, E. (2023) '*Functioning of manufacturing sector of the North-West Russian economy in 2022–2023: expectations and reality*'. *Problems of Territory's Development / Problemy razvitiya territorii*, 6(128). <https://doi.org/10.15838/ptd.2023.6.128.4>

- Shirokova, E. and Lukin, E. (2024) 'Manufacturing sector of the economy of North-West Russia: is it continuing transformation?'. *Problems of Territory's Development / Problemy razvitiya territorii*, 4(132). <https://doi.org/10.15838/ptd.2024.4.132.2>
- Shirokova, E.Y. (2022) 'Vneshnetorgovaya zavisimost' ekonomiki regionov SZFO: problemy i vozmozhnosti' [Foreign trade dependence of the economy of the NWFD regions: problems and opportunities]. *Voprosy territorial'nogo razvitiya* [Territorial Development Issues], 10(1). Available at: <https://cyberleninka.ru/article/n/vneshnetorgovaya-zavisimost-ekonomiki-regionov-szfo-problemy-i-vozmozhnosti> (Accessed: 5 November 2025).
- Shirokova, E.Y. (2025) 'A retrospective assessment of the effectiveness of import substitution of the manufacturing industries' products of the Russian North-West'. *Economics of Contemporary Russia*, 28(2), pp. 59–69. [https://doi.org/10.33293/1609-1442-2025-28\(2\)-59-69](https://doi.org/10.33293/1609-1442-2025-28(2)-59-69)
- Sidorov, M.A. (2024) 'Monitoring kachestva ekonomicheskogo rosta regionov: metodicheskie aspekty i realizatsiya' [Monitoring the quality of economic growth of regions: methodological aspects and implementation]. *Economics and Environmental Management*, 17(1), pp. 3–21. <https://doi.org/10.17586/2310-1172-2024-17-1-3-21>
- Solovjeva, T.S. (2025) 'Demograficheskii landshaft formirovaniya trudovykh resursov Severo-Zapada Rossii' [The demographic landscape of labor resource formation in the North-West of Russia]. *Vestnik Tverskogo gosudarstvennogo universiteta* [Herald of Tver State University], 69(1), pp. 133–145. <https://doi.org/10.26456/2219-1453/2025.1.133-145>
- Ukaz Prezidenta Rossiyskoy Federatsii (2017) 'Ukaz Prezidenta Rossiiskoi Federatsii ot 13.05.2017 No 208 "O Strategii ekonomicheskoi bezopasnosti Rossiiskoi Federatsii na period do 2030 goda"' [Decree of the President of the Russian Federation No. 208 of 13 May 2017 "On the Economic Security Strategy of the Russian Federation for the period up to 2030"]. Available at: <http://www.kremlin.ru/acts/bank/41921> (Accessed: 5 November 2025).
- Ukaz Prezidenta Rossiyskoy Federatsii (2021) 'Ukaz Prezidenta RF ot 02.07.2021 No 400 "O Strategii natsional'noi bezopasnosti Rossiiskoi Federatsii"' [Decree of the President of the Russian Federation No. 400 of 2 July 2021 "On the National Security Strategy of the Russian Federation"]. Available at: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_389271/](https://www.consultant.ru/document/cons_doc_LAW_389271/) (Accessed: 5 November 2025).
- Uskova, T.V., Lukin, E.V., Rumyantsev, N.M. and Shirokova, E.Yu. (2025) 'Ekonomika Severo-Zapada Rossii v usloviyakh sanktsii: problemy transformatsii' [The economy of the North-West of Russia under sanctions: problems of transformation]. *INP RAS website*. 28 January. LXVIII Session of the Russian-French Seminar on Monetary and Financial Problems of the Modern Russian Economy. Available at: <https://ecfor.ru/publication/analiz-ekonomiki-severo-zapadnyh-regionov-rossii/> (Accessed: 5 November 2025).
- Vagin, S.G. (2025) 'Strategic management of the Russian industry in the context of socio-economic transformation of regions'. *E-Management*, 8(2), pp. 16–31. <https://doi.org/10.26425/2658-3445-2025-8-2-16-31>
- Zakirova, M.I. (2025) 'Social and economic components of national security: federal districts monitoring'. *Vestnik Universiteta*, 2, pp. 5–14. <https://doi.org/10.26425/1816-4277-2025-2-5-14>
- Zemtsov, S. P. (2024). Sanctions risks and regional development: Russian case. *Baltic Region*, 16(1), 23–45. <https://doi.org/10.5922/2079-8555-2024-1-2>
- Zimin, S.M. (2019) 'Industriya Severo-Zapada: sostoyanie, problemy, resheniya' [Industry of the North-West: state, problems, solutions]. *Ekspertnyi Soyuz* [Expert Union]. 19 May. Available at: <http://unionexpert.ru/industriya-severo-zapada-sostoyanie-problemy-resheniya/> (Accessed: 5 November 2025).
- Zotikov, N.Z. (2025) 'Resource centralization in the Central Federal District and consequences for other Russian regions'. *Vestnik Universiteta*, 2, pp. 173–187. <https://doi.org/10.26425/1816-4277-2025-2-173-187>

- Zubarevich, N.V. (2025a) *'Natal'ya Zubarevich pro byudzhety regionov, dokhody naseleniya, zarplatnuyu gonku i podorozhanie obrazovaniya'* [Natalya Zubarevich on regional budgets, household incomes, the wage race, and rising education costs] [YouTube video]. Available at: <https://www.youtube.com/watch?v=BurfWcBYOD4> (Accessed: 5 November 2025).
- Zubarevich, N.V. (2025b) *'Vliyanie sanktsii na razvitie regionov Rossii v 2022–2024 godakh: The impact of sanctions on the development of Russian regions in 2022–2024'* [The impact of sanctions on the development of Russian regions in 2022–2024]. *Journal of the New Economic Association*, 1(66), pp. 274–281. [https://doi.org/10.31737/22212264\\_2025\\_1\\_274-281](https://doi.org/10.31737/22212264_2025_1_274-281)
- Zvereva, V. (2024) *'Regional'naya neodnorodnost' ekonomiki Rossii i rabota transmissionnogo mekhanizma denezhno-kreditnoi politiki'* [Regional heterogeneity of the Russian economy and the operation of the monetary policy transmission mechanism]. *Bank Rossii* [Bank of Russia]. December. Available at: <https://library.cbr.ru/catalog/lib/books/972871/> (Accessed: 5 November 2025).

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