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IS YOUTH ENTREPRENEURSHIP THE KEY TO ARCTIC RENEWAL?

Evidence from the Nordic Arctic

ARCTIC BUSINESS INDEX



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Front cover photo:

Finalists of the High North Young Entrepreneur 2026.
Photo: High North Center, Nord University Business School (Norway).

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Executive Summary

Purpose

This report explores the challenges and emerging opportunities shaping the Nordic Arctic, with a particular focus on youth entrepreneurship. To better understand these dynamics, we examined demographic trends, labor market participation, and entrepreneurial activity among young people across the region. By analyzing where young people live and migrate, how they engage with employment, and the extent to which they establish and sustain businesses, the report provides an integrated perspective on regional transformation. This approach helps identify pathways through which younger generations can contribute to a more resilient, innovative, and sustainable Arctic future.

Key Findings

- Demographic change remains the most significant challenge across the Nordic Arctic. While national populations in Norway, Sweden, and Finland have generally remained stable or grown, many northern regions continue to experience the outmigration of young people and highly skilled professionals. This trend places increasing pressure on regional labor markets and weakens long-term development capacity.
- Migration patterns are strongly influenced by external factors and short-term shocks. Although some regions have experienced temporary population gains, these inflows have generally failed to translate into sustained youth retention.
- Analysis of 5,673 active limited liability companies established by entrepreneurs aged 18–35 between 2019 and 2023 demonstrates that entrepreneurial activity remains unevenly distributed across sectors, with the construction industry emerging as the most attractive and dominant sector for young entrepreneurs.
- Only a small share of youth-led businesses achieves substantial growth in turnover or employment. This indicates that although there is a notable level of enthusiasm and initiatives, the entrepreneurial potential of young people remains underutilized, limiting the broader contribution of entrepreneurship to regional economic renewal and diversification.
- Female entrepreneurship remains comparatively low, accounting for only 18–25% of youth-led ventures. This highlights considerable untapped potential and underscores the need for more inclusive policies and support mechanisms that encourage greater participation by women in entrepreneurship.

- Youth entrepreneurship largely mirrors existing regional economic structures. The analysis reveals limited participation in knowledge-intensive sectors such as information and communication technology (ICT) and research and development (R&D), alongside relatively low levels of digitalization.
- Successful entrepreneurial cases demonstrate the innovative capacity of Arctic youth. Young entrepreneurs are increasingly leveraging the region’s unique resources, environmental conditions, and geographic characteristics to develop innovative businesses with local and global market potential.

Future Pathways

Taken together, these findings suggest that employment, entrepreneurship, and social inclusion must be addressed through a coordinated and integrated policy approach. Strengthening resilience and vitality in the Nordic Arctic requires reducing barriers to labor market entry, fostering entrepreneurial ambition among young people, and expanding access to diverse economic opportunities. Attention should be given to supporting high-growth ventures, promoting female entrepreneurship, and encouraging participation in knowledge-intensive and digital industries.

The report provides an evidence-based foundation for policymaking and offers targeted recommendations aimed at strengthening youth entrepreneurship as a key driver of sustainable regional development in the Nordic Arctic.

Data Visualization

To explore the findings in greater detail, readers can use our [interactive online visualization tool](#) which presents data on 5,673 active limited liability companies established by youth entrepreneurs (18–35 years old) between 2019 and 2023 in the northern regions of Norway, Sweden, and Finland. The tool enables users to examine sectoral distributions, gender patterns, job creation, and geographic variations of youth entrepreneurship across the Nordic Arctic.

Data sources

The figures presented in this report are based on statistical data from the following sources: Statistics Sweden, the Swedish Agency for Growth Policy Analysis, Retriever, Statistics Finland, Statistics Norway, the Norwegian Register of Business Enterprises, the Shareholders Register, the Proff Forvalt database, and the Global Entrepreneurship Monitor.

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Geographic Scope

The geographic scope of this report comprises the Nordic Arctic, defined here as Northern Fennoscandia, including the regions of Nordland, Troms, and Finnmark (Norway); Norrbotten and Västerbotten (Sweden); and Lapland, Northern Ostrobothnia, and Kainuu (Finland).

The Nordic Arctic constitutes a substantial territorial component of Finland, Norway, and Sweden, accounting for 38.3% of their combined land area but only 7.7% of their population. The population is concentrated in a limited number of urban and regional centres surrounded by extensive territories with low population density. The resulting geography of long distances between settlements as well as vast natural resources is a key structural feature of the region and shapes transportation systems, economic activity, access to services, labor markets, innovation networks, and regional governance.

Fig. 1. Geographic scope of the report – The Nordic Arctic regions



Who Is a Young Entrepreneur?

A young entrepreneur is someone, typically between their late teens and late thirties, who is starting a business with new ideas but is still working to gain financial independence, real-world experience, and professional networks needed to successfully grow their company. The United Nations generally defines “youth” as individuals between the ages of 15 and 24 for statistical consistency. However, this statistical definition does not capture the needs of entrepreneurship.

Hence, the definition of young entrepreneurs is increasingly expanding to include individuals up to thirty-five or forty years old due to shifted milestones like delayed financial independence and extended education.

In this report, an extended age limit for young entrepreneurs is used when applicable to ensure inclusivity, and age is specified in each analysis section.

Table 1. Definitions of young entrepreneurs

Framework / Organization	Age	Rationale
OECD Inclusive Entrepreneurship ²	18 – 30 years	Measurement of “missing” entrepreneurs and policy gaps.
EU Reinforced Youth Guarantee ³	15 – 29 years	Active labor market integration; expanded to 29 years post-COVID.
EU-backed Entrepreneurship Grants	18 – 35 years	Funding mechanisms require youth-led entities to have structures, 100% controlled by this age bracket, with over 80% of staff within it.
EU Common Agricultural Policy (CAP) ⁴	Up to 40 years	Targets young farmers for subsidies to promote rural renewal. The age limit acknowledges the capital and time needed to acquire land and machinery.
Global Entrepreneurship Monitor (GEM) ⁵	18 – 30 or 18 – 34 years	Surveys of early-stage entrepreneurial activity and intentions.
Erasmus for Young Entrepreneurs ⁶	No chronological age limit	Mentorship for nascent founders, under 3 years of experience.

¹ <https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>

² <https://www.oecd.org/en/topics/sub-issues/inclusive-entrepreneurship.html>

³ https://employment-social-affairs.ec.europa.eu/policies-and-activities/eu-employment-policies/youth-employment-support/reinforced-youth-guarantee_en

⁴ https://commission.europa.eu/funding-and-tenders/how-apply/eligibility-who-can-get-funding/funding-opportunities-young-people_en

⁵ <https://www.gemconsortium.org/>

⁶ <https://www.erasmus-entrepreneurs.eu/>

Why study Youth Entrepreneurship in the Nordic Arctic

Youth entrepreneurship is an important driver of economic and social transformation, particularly in regions experiencing demographic and structural change, such as the Nordic Arctic. It contributes to competitiveness, innovation, and more inclusive forms of growth.⁷ Compared with older founders, young entrepreneurs often approach business creation with a different mindset.⁸ They tend to be more open to experimentation, less constrained by established industry practices, and more willing to engage with uncertainty. These qualities make them especially valuable in contexts where new solutions are needed to address rapid economic, technological, and environmental changes.

Understanding how and why young people engage in entrepreneurship is therefore essential for addressing the challenge of untapping economic potential. When entrepreneurial opportunities remain inaccessible, societies forego the benefits of new businesses, job creation, innovation, and future sources of public revenue.

In the Nordic Arctic, these issues are particularly significant. The continuing outmigration of young adults weakens regional labor markets, reduces the local skills base, and limits innovation capacity⁹. Entrepreneurship offers a potential means of counteracting this trend by enabling young people to remain in, or return to, their regions of origin. The experiences of successful entrepreneurs from the region demonstrate how entrepreneurial activities can generate lasting economic and societal impacts. Curt Bergfors, founder of MAX Burgers, represents a prominent example of how entrepreneurship originated in a peripheral region can evolve into a nationally influential enterprise. Having already demonstrated its long-term viability and impact, MAX illustrates the transformative potential of entrepreneurship in northern regions. By contrast, the contemporary cases presented later in this report, CapiPro in Norway, Mulligans Sweden, and Oulu Fungi in Finland, represent a new generation of entrepreneurs at an earlier stage of

their business development. These examples demonstrate how young entrepreneurs are mobilizing regional resources, climatic conditions, local networks, and emerging market opportunities to create innovative businesses and contribute to regional development.

Under favorable conditions, young people can transition from being individuals who leave in search of opportunities to becoming creators of opportunities within their own communities. This shift has important implications not only for employment and economic development but also for the long-term resilience and sustainability of The Nordic Arctic regions. As young entrepreneurs establish themselves, they gain access to financial resources, business networks, technological capabilities, and entrepreneurial expertise. These assets position them as important intermediaries, strengthening local connections while linking regional actors to external opportunities, markets, and networks.

⁷ EULID (2026), Youth Entrepreneurship as a Solution for Local Economic Renewal. <https://eurolocaldevelopment.org/news/youth-entrepreneurship-as-a-solution-for-local-economic-renewal>

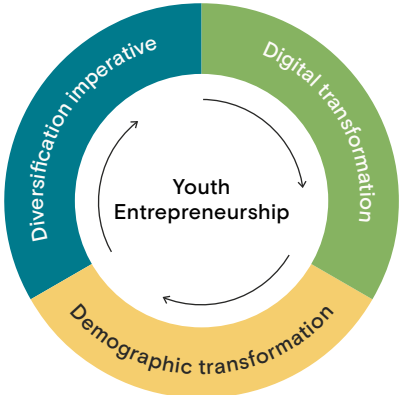
⁸ YEPA Workshop 2 Young women in innovative and high-growth entrepreneurship. https://yepa-hub.org/app/uploads/2023/10/YEPA_Discussion_Note_Workshop2_GroupC.pdf

⁹ Business index north: a periodic report with insights to business activity and opportunities in the Arctic (2019), https://businessindexnorth.com/sites/b/businessindexnorth.com/files/bin2019_29ox22o-spread.pdf

The Three D’s Framework for Arctic Transformation

The Three D’s framework used in this report was developed by synthesizing existing Arctic research, regional development literature, and insights from Arctic business and economic monitoring initiatives, including Arctic Business Index previously known as Business Index North¹⁰ and ECONOR reports.¹¹ These sources consistently identify demographic change, economic diversification, and digitalization¹² as among the most significant long-term processes shaping the future of Arctic regions. Bringing these dimensions together enables a holistic examination of how social, economic, and technological transformations interact to influence regional resilience, competitiveness, and development opportunities in the Arctic. Together, these dimensions shape the capacity of The Nordic Arctic regions to renew their economic structures, attract and retain people, and adapt to changing social and technological conditions. This framework captures both the key challenges and the emerging opportunities in the Arctic region.

Fig. 2. The Three D’s Framework for Arctic Renewal



Demographic transformation reflects the combined effects of population ageing and the outmigration of youth and young adults in the Nordic Arctic, resulting in

labor shortages, reduced human capital, and pressures on regional resilience. Simultaneously, it creates opportunities to rethink talent attraction, retention strategies, and inclusive development models tailored to Arctic conditions.

The *diversification imperative* has become more pronounced in the post-pandemic context, as economic volatility exposes the vulnerability of dependence on traditional sectors such as resource extraction and tourism. This creates both a challenge and an opportunity to foster more diversified, resilient, and innovation-driven economic structures in the Arctic.

Digital transformation is reshaping regional economies through the expansion of knowledge-intensive, service- and experience-based sectors, as well as the growing role of AI¹³ and digital connectivity. While uneven infrastructure and capacity gaps persist, digitalization offers significant potential to overcome geographic constraints and enhance participation in the global value chains.

Therefore, by combining these core elements, within the Three D’s framework, Youth entrepreneurship can be viewed in this report as a cross-cutting driver that brings together demographic transformation, diversification imperative, and digital transformation to capture the interconnected social, economic, and technological processes shaping Arctic development. These dimensions are closely linked. Demographic challenges, including population ageing and youth outmigration, influence the availability of human capital and entrepreneurial activity. At the same time, economic diversification is needed to create attractive employment and business opportunities that can retain and attract younger populations. Digital transformation supports this process by enabling new business models, reducing the constraints of geographic remoteness, and expanding access to regional and global markets. Within this context, youth entrepreneurship acts as a connecting mechanism across all three dimensions.

¹⁰ Arctic Business Index / Business Index North - <https://businessindexnorth.com/reports>

¹¹ The Economy of the North - ECONOR 2025 - <https://oarchive.arctic-council.org/items/d7c37504-e348-4a82-a856-baa6b15a1c15>

¹² Arctic Broadband – Recommendations for an Interconnected Arctic (2017). https://arcticeconomiccouncil.com/reports/https-arcticeconomiccouncil-com-wp-content-uploads-2019-10-aec-report_final-lr-pdf/

¹³ Kim et al. (2022). White Paper “Transforming the Arctic future with Artificial Intelligence: A Norwegian Perspective”.

How does Youth Entrepreneurship drive Arctic Renewal?

Demographic transformation

A young individual employed in a company remains relatively mobile and can relocate to the southern regions. In contrast, a young individual who establishes and operates a business in locations such as Oulu or Tromsø becomes more firmly embedded in the regional context through investments in assets, locally embedded networks, and place-dependent supply chains. In this sense, entrepreneurship functions as an anchoring mechanism that can effectively mitigate youth outmigration by strengthening both economic and social ties to the region. Further, local firms generate employment and, if essential layer of youth-led enterprises is developed, the region becomes attractive for more youth professionals.

Diversification imperative

Young entrepreneurs diversify regional economic structures through small firms and start-ups. Innovation-driven and technology-oriented enterprises are agile, enabling rapid adaptation to shifting market conditions. During shocks, such as the collapse of tourism during the COVID-19 pandemic, digitally oriented businesses can quickly reconfigure their activities and access alternative markets. Thus, youth entrepreneurship strengthens economic resilience by reducing dependence on a narrow set of industries.

At the same time, youth outmigration affects regional attractiveness. The absence of younger populations reduces the demand for services and cultural amenities, reinforcing depopulation. In contrast, young entrepreneurs shape place-based development by creating economic and social value through generating employment opportunities for local communities, which can help mitigate depopulation, even if only incrementally. They also contribute to new services in culture, hospitality, and recreation, enhancing the overall vitality, attractiveness, and livability of Arctic regions.

Digital transformation

Youth entrepreneurship decouples economic opportunities from geographic constraints by shifting from resources to digital services. This transition diminishes the Arctic’s logistical remoteness, enabling local entrepreneurs to remain in their communities while servicing national and global markets. This preserves highly skilled talent and allows for the full economic value to be captured within the region. Additionally, as Artificial Intelligence (AI) continues to advance, digitally enabled enterprises can bolster regional innovation, even in remote Arctic areas, through facilitating knowledge exchange, collaboration, and participation in global value chains. These advancements will also contribute to the development of local innovation ecosystems that are less reliant on traditional resource-based industries. However, realizing these benefits necessitates investments in reliable digital infrastructure, digital skills, entrepreneurial support systems, and appealing living environments that motivate young people to initiate and expand businesses in Arctic regions.

Norway, Sweden and Finland – The Big Picture

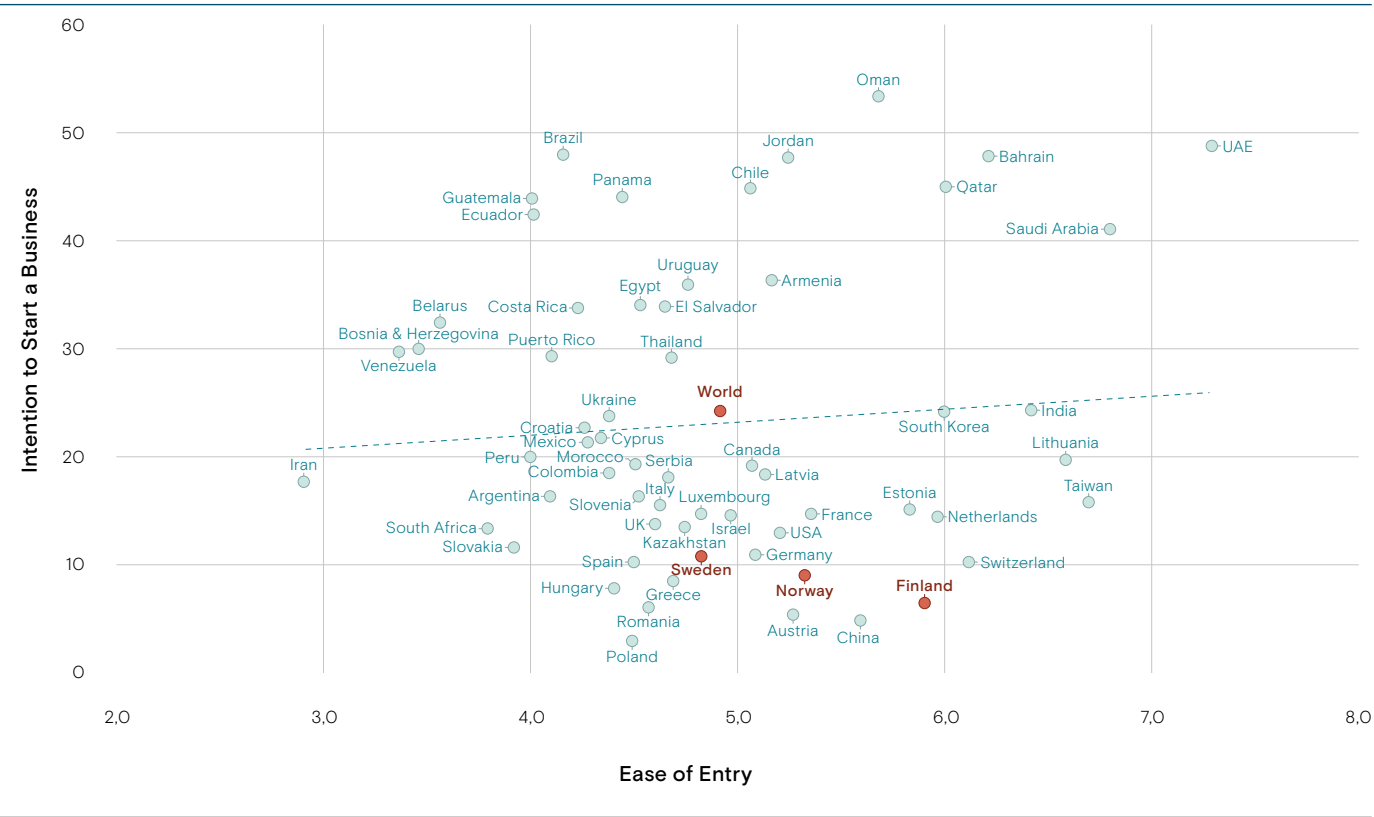
This chapter sets the broader context for youth entrepreneurship in the Nordic Arctic. It highlights key demographic, economic, and institutional trends shaping opportunities for young people in northern Norway, Sweden, and Finland, with particular attention to population change, migration, labour markets, economic diversification, and digital transformation.

Nordic institutional framework

Within the global entrepreneurial context, Sweden, Norway, and Finland present a striking paradox regarding the relationship between the perceived *ease of market entry*¹⁴ and the actual *intention to start a business*¹⁵. We used data from the 2025/2026 Global Entrepreneurship Monitor to demonstrate that administrative barriers are moderate,

with approximately three in five adults in these northern European economies agreeing that it is easy to start a business. However, this does not translate into entrepreneurial action, as only one in ten adults intend to start a business within the next three years.

Fig. 3. Ease of entry with a new business compared to Intention to start a business – global perspective
(Data Source: Global Entrepreneurship Monitor).



¹⁴ Ease of market entry or Ease to start a business is captured by GEM through Entrepreneurial Framework Conditions - expert scores (0–10 scale). Here the measure is calculated as combination of scores on government policies, government programs, commercial & professional infrastructure, internal market openness, physical & services infrastructure, financing for entrepreneurs, cultural & social norms.

¹⁵ Intention to start a business is, according to GEM, a percentage of 18–64 population (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years.

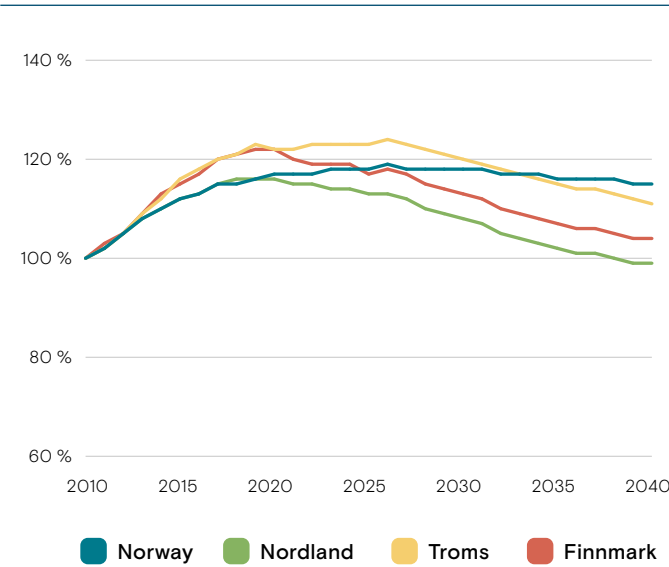
From a scientific and socioeconomic perspective, this divergence can be explained by the structural dynamics of the Nordic welfare model and the resulting opportunity costs of venture creation. Because these nations are characterized by strong social safety nets, high taxation, and extensive active labor market policies. The “push” factors that typically drive necessity-driven entrepreneurship are effectively neutralized in these countries. When mainstream employment and state welfare provide high financial security and comprehensive benefits, the opportunity cost and perceived risk of abandoning the traditional labor market to launch a start-up become prohibitively high for average citizens. Furthermore, these countries have a persistent gender divide, where at least two men start new businesses for every woman does. Ultimately, although the Nordic institutional framework effectively minimizes the bureaucratic friction in starting a firm, its macroeconomic stability and comprehensive social security inadvertently suppress widespread intentions to pursue entrepreneurship.

Importantly, in this institutional framework, those who choose to engage in entrepreneurship rarely do so out of necessity; rather, they are driven by opportunity, whether in identifying market gaps, developing innovative ideas, or pursuing societal impact. This is also reflected in empirical patterns, as only a minority of early-stage entrepreneurs in Sweden and Norway report starting a business due to a lack of employment opportunities, with figures remaining close to one-third, which points to an entrepreneurial landscape shaped predominantly by choice rather than economic pressure. Drawing on evidence from the Global Entrepreneurship Monitor (GEM) report, despite the relatively highly perceived ease of starting a business, entrepreneurial activity in Nordic economies is strongly constrained by a persistent fear of failure. This concern continues to discourage a substantial share of opportunity-recognizing adults in countries such as Sweden, Norway, and Finland from pursuing venture creation. But those who start business in these Nordic countries are highly likely opportunity driven entrepreneurs. Motivation index¹⁶ of entrepreneurs in Finland is 9.7, which is highest in the world, based on the recent GEM report. Sweden is number 2 on this list with motivation index 7.4 (no Norway data available).

Demographic transformation

Projections to 2040¹⁷ connected to the historical demographic trends indicate divergent developments in the

Fig. 4. Population change in Norway, 2010–2040, Age group 20–35

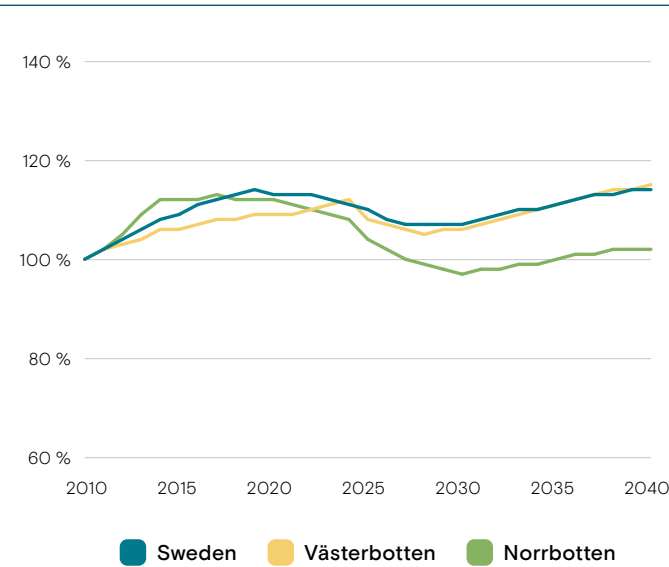


20–35-year-old cohort. Index-based projections for the 20–35-year-old population (base year 2010 = 100) indicate that while Norway overall reaches an index of 114.6 by 2040. The Arctic regions display weaker relative development, with Nordland declining below the baseline (98.67) and Troms (111.19) and Finnmark (103.83) showing only modest index growth, reflecting continued demographic weakening in the Nordic Arctic regions. In absolute terms, the combined 20–35-year-old population of Norway’s three northern regions (Nordland, Troms, and Finnmark) is projected to decline from 55,105 to 51,131 individuals by 2040, despite national growth, indicating a projected net loss of young adults in the Norwegian Arctic (see Fig 4).

In Sweden, by 2040, the overall index reaches 113.9, while the northern regions show more modest relative gains, including stronger index growth in Västerbotten (114.7) and only marginal growth in Norrbotten (102.1). However, in absolute terms, the combined young adult population of Sweden’s two northern regions declines from 66,572 to 65,654 individuals, despite national growth from 1,213,939 to 1,262,263. This highlights that relative index increases do not offset the absolute population loss of young adults in sparsely populated Arctic regions in Sweden (see Fig 5).

In Finland, by 2040, the national index is expected to be 107.45, while the northern regions display substantially weaker trends, including limited relative growth in North Ostrobothnia (105.4) and pronounced index declines in Kainuu (78.3) and Lapland (90.3). In absolute terms, the

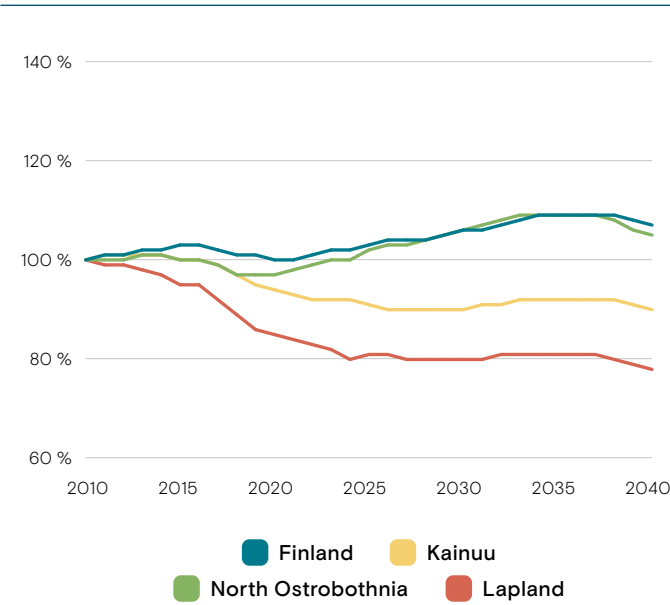
Fig. 5. Population change in Sweden, 2010–2040, Age group 20–35



combined young adult population of Finland’s northern regions declines sharply from 82,782 to 68,743 individuals, alongside a national decrease from 673,843 to 628,843, underscoring the depth of demographic contraction in the Finnish Arctic (see Fig 6).

Taken together, the northern regions of Norway, Sweden, and Finland are projected to lose nearly 19,000 young

Fig. 6. Population change in Finland, 2010–2040, Age group 20–35



adults by 2040, despite continued population growth at the national level. The projected decline underscores a shared and structurally embedded demographic contraction across the Nordic Arctic, with significant implications for labour supply, regional resilience, and security.

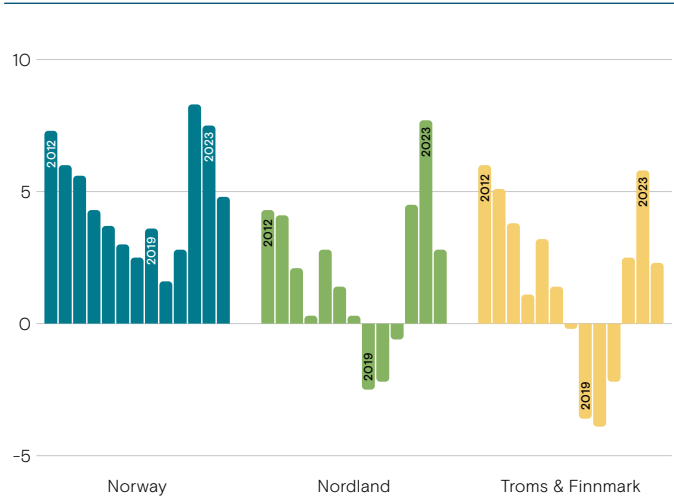
Students at Luleå University of Technology in Luleå, by Petra Älvstrand.



¹⁶ Global Entrepreneurship Monitor defines Motivation index as Percentage of those involved in TEA (Total Early-stage Entrepreneurial Activity) that are improvement-driven opportunity motivated, divided by the percentage of TEA that is necessity-motivated.

¹⁷ In this report, we use the main population projection alternatives published by the national statistical authorities of the three countries.

Fig. 7. Migration in Norway, 2012–2024, age group 20–29

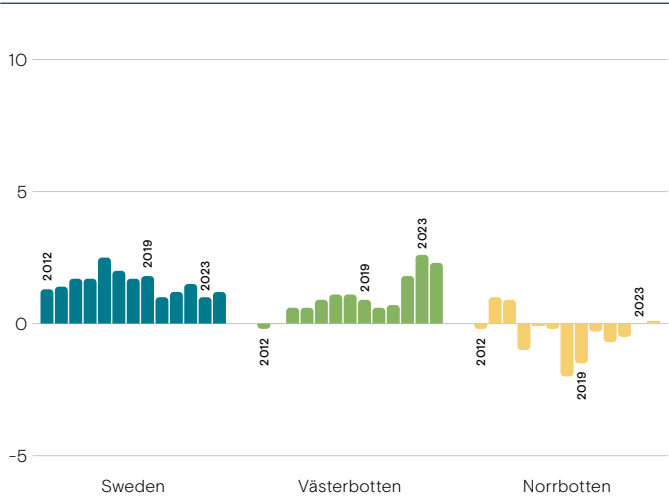


Migratory patterns

The migration rate¹⁸ for the 20–29 age demographic was evaluated for the 2012–2024 period. It captures the critical window when young adults transition from education to the primary workforce, making these relocation patterns an indicator of whether a region is securing its future human capital or suffering from brain drain.

Analysis of migration rate in Northern Norway demonstrates that the regions initially sustained a positive net migration baseline, reaching 6.0 per 1,000 in Troms & Finnmark¹⁹ and 4.3 in Nordland in 2012, which can be explained by growing coastal maritime economies and developing urban areas. Nonetheless, evaluating the 20–29 age demographic reveals structural domestic brain drain as young adults transitioned into the workforce; by 2019–2020, regional rates plummeted into deficits, dropping to lows of –3.9 in Troms and Finnmark and –2.5 in Nordland. This localized out-migration was subsequently masked in 2022–2023 by an international refugee influx caused by the war in Ukraine, which increased national net migration to 8.3 (2022) and 7.5 (2023), while temporarily rebounding regional rates to 7.7 in Nordland and 5.8 in Troms and Finnmark (see Fig 7 above). As of 2026, under the statutory provisions of the Finnmark and North Troms Action Zone, individuals residing and working in the region for at least 12 months qualify for targeted retention incentives, including

Fig. 8. Migration in Sweden, 2012–2024, age group 20–29

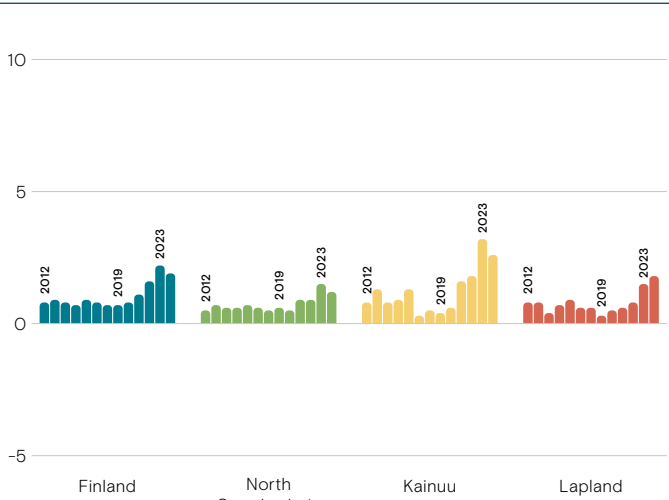


up to NOK 60,000 in annual student loan forgiveness, free childcare, lower personal income tax brackets, and a full exemption from electricity taxes.²⁰ Ultimately, these sharp multi-year fluctuations demonstrate that the region’s demographic trajectory remains volatile, driven more by macro-level external shocks than by stable, organic retention.

The data on migration rate for 20–29-year-olds from 2012 to 2024 shows that Northern Sweden started the decade by losing more residents than it gained. In 2012, both Västerbotten and Norrbotten had negative net migration rates of –0.2 per 1,000, well below the national average of 1.3. This loss was especially visible in the mid-2010s when young adults left for work, creating a local brain drain, pulling Norrbotten down to a low of –1.0 in 2015. However, this trend reversed in the early 2020s due to a major wave of factory job openings driven by the green technology transition.²¹ This industrial boom attracted new workers, pushing Västerbotten’s rate to peaks of 2.6 and 2.3 in 2023 and 2024, while Norrbotten stabilized at 0.0 and 0.1 (see Fig. 8 above). Ultimately, these major swings show that population trends in the north are highly fluid and depend directly on big industrial investments and job demand rather than past historical patterns.

The 2012–2024 period indicates that Finland and its northern regions followed a relatively stable demographic

Fig. 9. Migration in Finland, 2012–2024, age group 20–29



trajectory throughout the 2010s, starting from modest but consistent net migration gains. In 2012, both Kainuu and Lapland aligned with the national baseline of 0.8 per 1,000, while North Ostrobothnia lagged slightly at 0.5. Over the subsequent years, regional dynamics remained subdued, with only minor fluctuations, suggesting the absence of pronounced structural migration pressures during this period.

However, net migration in Finland and its Arctic regions increased moderately in 2022–23, likely reflecting international displacement following the war in Ukraine, although to a lesser extent than in Norway. The resulting inflow of international migrants drove an upward shift in net migration rates, pushing the national figure to 2.2 in 2023 (1.9 in 2024). The northern regions exhibited even more pronounced responses, with Kainuu reaching 3.2 in 2023, with a slight decline to 2.6 in 2024, whereas Lapland and Northern Ostrobothnia experienced more moderate, yet still significant, increases. Overall, the Finnish case demonstrates that population gains remain contingent on external migration dynamics rather than on sustained internal migratory processes.

The presented migration statistics suggest that the impact of Ukrainian displacement was greatest in Norway, moderate in Finland, and less pronounced in Sweden. According to the Norwegian Directorate of Immigration, by

early 2026, more than 106,000 Ukrainians had applied for protection in Norway, while nearly 85,000 remained in the country under temporary collective protection²². According to the Finnish Government, Ukrainians have submitted a total of about 84,000 applications for temporary protection in Finland by mid-2025²³. The Government estimated that there around 46,000 Ukrainian beneficiaries of temporary protection remained in the country. Others are believed to have returned to Ukraine or moved elsewhere in the EU. According to various estimates, by mid-2025, Sweden hosted approximately 35,500 to 40,000 registered Ukrainian refugees under the European Union’s Temporary Protection Directive²⁴, which is much lower share of total population compared to Norway and Finland.

Overall, Norway has both received and retained the largest number of Ukrainian refugees among the Nordic countries. The demographic effects are particularly visible in Northern Norway, where many municipalities have experienced substantial population growth due to the arrival of Ukrainian refugees. Thus, Northern Norway faces a complex demographic challenge: it must simultaneously address two distinct issues – retaining its existing youth population and successfully integrating newcomers.

The presented migration trends should be interpreted with caution, as the period encompasses both the COVID-19 pandemic and the arrival of Ukrainian refugees, which may have influenced migration dynamics in the short-run. Consequently, short-term changes during this period should not automatically be interpreted as evidence of a lasting reversal in regional migration trends.

Diversification imperative – Employment patterns

Employment structures are linked to demographic dynamics, as limited labor market opportunities contribute to out-migration and ageing populations, whereas diversified economies are better positioned to retain and attract skilled workers. We study youth employment as the availability of diverse career pathways is essential for retaining younger populations, supporting human capital development.

The figure 10 demonstrates that youth employment is more volatile than total employment, reacting more strongly to both downturns, such as in 2020, and the subsequent recovery phase (2021–2022), before stabilizing as growth

¹⁸ The net migration rate is defined as the annual difference between the number of persons entering and leaving a territory, expressed per 1,000 inhabitants.

¹⁹ Troms and Finnmark are analyzed jointly here due to their temporary merger into a single administrative county (2020–2023). The counties have since been re-established as separate administrative regions.

²⁰ <https://lanekassen.no/nb-NO/gjeld-og-betaling/finnmark-eller-nord-troms/#samtykke-banner>

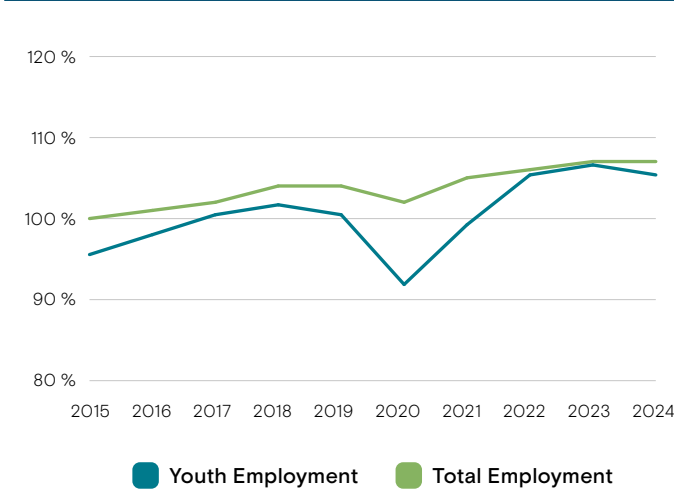
²¹ Nyindustrialiseringen och samhällsomvandlingen i Norrbotten och Västerbotten. <https://tillvaxtverket.se/tillvaxtverket/omtillvaxtverket/varauppdrag/allauppdrag/nyindustrialiseringenochsamhallsomvandlingeninorrbottenochvasterbotten.5594.html>

²² Stor uvisse rundt framtidig innvandring - UDI, <https://www.udi.no/aktuelt/stor-usikkerhet-rundt-fremtidig-innvandring/>

²³ Temporary protection for Ukrainians displaced by war to continue until 4 March 2027 - Finnish Government, <https://valtioneuvosto.fi/en/-/1410869/temporary-protection-for-ukrainians-displaced-by-war-to-continue-until-4-march-2027>

²⁴ Ukrainian refugees in Sweden call for a long-term plan for their future | Sveriges Radio, <https://www.sverigesradio.se/artikel/ukrainian-refugees-in-sweden-call-for-a-long-term-plan-for-their-future>

Fig. 10. Youth Employment index compared to total employment index (The Nordic Arctic in sum), 2015-2024



moderates in 2023-2024. In 2020, during the COVID-19 pandemic, youth were disproportionately affected by job losses, experiencing a 7.2% drop in total regional employment (a net loss of 6,285 youth jobs) compared to a 1.1%

decline in the rest of the working population. This pattern reflects the structural position of young people in Nordic Arctic labor markets, where they are disproportionately concentrated in more flexible and entry-level economic segments. During economic contractions, these groups are more exposed to job losses, while in periods of recovery, they are typically among the first to be re-employed, contributing to short-term employment adjustments. However, this dynamic depends on the availability of a sufficiently large and active youth population. In many Arctic regions, demographic decline, driven by outmigration and aging, reduces the supply of young workers and weakens the responsiveness of the labor market. As a result, even when economic conditions improve, labor shortages may emerge, constraining recovery and limiting sectoral expansion in the future. This highlights the dual role of youth as both a vulnerable group and a critical resource for labor market adjustment, with important implications for long-term regional resilience and economic diversification.

Youth employment in Nordic Arctic regions is highly concentrated in cyclical sectors (approximately 50% of

Table 2. The 4 main industry sectors.

Sector	Youth Employment Share	Total Employment Share	Robustness to shock	Future job creation potential
Cyclical	~45-50%	~25%	Low	Low-Medium
Producing	~20-25%	~25%	Medium	Low-Medium
Knowledge-intensive	~5%	~10-15%	Medium	Medium-High
Welfare	~25%	~35-40%	High	Low-Medium

employed youth), which are characterized by the lowest long-term growth and highest volatility. The fastest job creation occurs in knowledge-intensive services, but this sector only contributes to 5% of youth employment due to higher qualification requirements. In producing sectors, youth participation is fair, totaling about 25% of employed youth. At the same time, due to high entry barriers, youth are underrepresented in welfare sectors, which demonstrate the most stable and sustained growth, accounting

for only about 25% of employed youth compared to above around 40% of total employment, pointing to a structural mismatch between labor market stability and youth employment distribution in the Nordic Arctic.

The findings reinforce the diversification imperative in the Nordic Arctic, as labor market resilience depends on expanding employment opportunities in stable and knowledge-intensive sectors that can better integrate youth into sustainable economic development in the region.

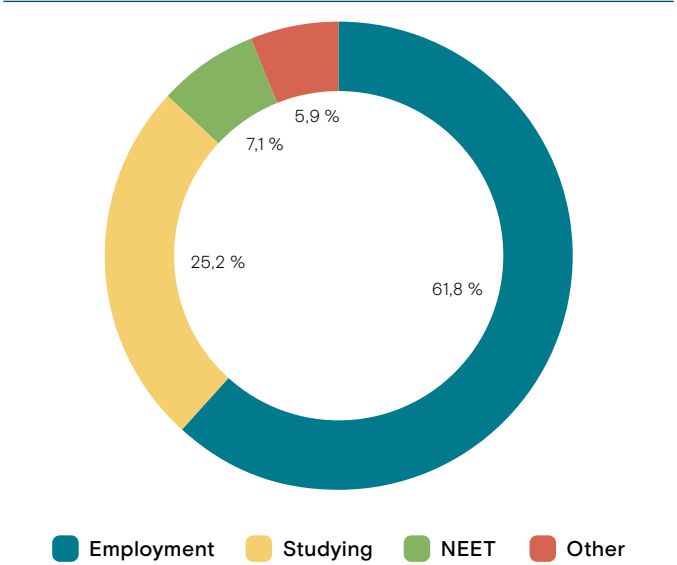
Table 3. The four sectors explained.

Sector	Industries
Cyclical	Accommodation and food services, Administrative and support, and Other services, Trade, Transportation and Storage
Knowledge intensive	Business services (including Professional services, ICT, Finance and insurance, Real estate)
Producing	Construction, Mining, Manufacturing, Agriqulture, Forestry, Fisheries and Aquaculture, Electricity and energy
Welfare	Education, Health, and Public administration

What Do Young People Do?

To fully understand youth in the Nordic Arctic, it is necessary to contextualize them within the broader landscape of youth engagement by tracking how many individuals are employed, studying, or fall into the Not in Employment, Education, or Training (NEET) category or other alternative statuses.

Fig. 11. Distribution of Youth by activity status (The Nordic Arctic in sum).



A comparative analysis of youth activity statuses indicates that Nordic Arctic youth up to 29 years old have higher workforce integration, with 61.8% of youth in employment compared to the 58.9% national country average across Norway, Finland, and Sweden. However, formal educational participation is slightly lower in the Nordic Arctic, where 25.2% of youth are classified as studying, compared to the 27.7% national baseline.

Most importantly, the regional Not-in-Employment, Education, or Training (NEET) rate²⁵ in the Nordic Arctic demonstrates an exceptionally low value of 7.1 %, outperforming the 9.0% average for the three countries. Both the regional and national baselines achieve the overarching European Union target established by the European Pillar of Social Rights Action Plan, which mandates a reduction in the youth NEET rate to below 9% by 2030. Both the country averages and the Nordic Arctic figures for 2022-2024 both are below the broader 2025 EU-27 average of 11.0%. Evidence suggests that most NEET spells are short-term transitions between education and employment. However, a significant subgroup, approximately one-quarter to one-third of NEET individuals, remain outside employment,

What is NEET?

NEET is an acronym that stands for a young person Not in Employment, Education, or Training. It refers to individuals, typically aged 15 to 29, and sometimes up to 34, who are conventionally unemployed or economically inactive. To be classified as NEET, the individual must not be employed and must not have received any formal or non-formal educational instruction in the four weeks preceding the survey. Young people in this category are considered highly vulnerable to economic shocks, long-term disadvantage, and systemic social exclusion.

education, and training for longer periods. This long-term NEET group, comprising about 2-3% of the youth population in this context, is concerning, as prolonged detachment is more strongly associated with persistent labour market exclusion and social vulnerability. Thus, despite low NEET rates, long-term NEET requires targeted policy interventions. Norway and Finland maintain low NEET levels nationally and in their northern regions, whereas Sweden's rate is higher despite favorable northern outcomes.

At the same time, the Nordic Arctic has a higher share of youth in the residual category "Other" (5.9% regional average versus 4.3% national average). This group includes individuals who are neither employed, in formal education, nor classified as NEET, and covers a range of non-standard or transitional situations, such as non-formal training, military or civil service, labour-market programmes, and people between activities. It may also include cases with incomplete classification. While some individuals in this category may be at risk of becoming NEET, "Other" should not be considered a direct precursor group.

Figure 12 above focuses on NEET levels in the Nordic Arctic compared with national averages. While remote Nordic Arctic regions are often assumed to offer fewer opportunities for young people, the Nordic Arctic performs comparatively well in integrating youth into employment and education, with regions such as Västerbotten (7.7%) and Norrbotten (8.6%) remaining well below the national average of 10.9%. This reflects the absence of highly segmented urban labor markets and the concentration of disadvantages typical of larger southern cities. This pattern is further reinforced by proactive municipal tracking systems that identify and re-engage young people at an early stage of disengagement. At the same time, regional variation per-

²⁵ CEDEFOP (2026). Young persons neither in employment nor education or training (NEET). <https://www.cedefop.europa.eu/en/tools/skills-intelligence/young-persons-neither-employment-nor-education-or-training-neet?year=2023&country=EU>

sists, as exemplified by Finnmark, where the share (7.5%) slightly exceeds the national level (7.2%), pointing to the limits of even strong welfare systems in remote contexts, where youth outside employment or education are more likely to face compounded challenges related to mental health, personal crises, and restricted access to specialized services, amplified by geographic isolation.

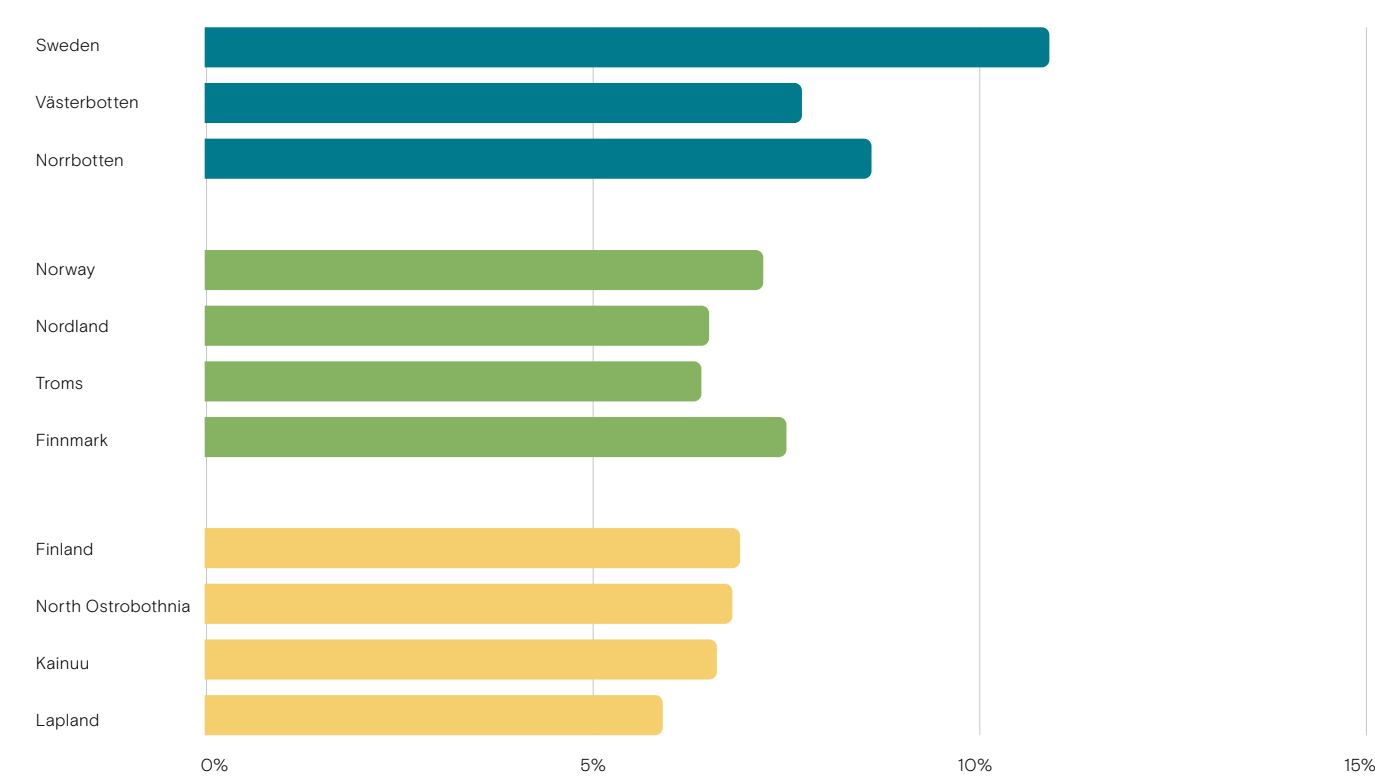
The absence of elevated NEET rates in geographically peripheral areas further suggests that institutional and policy factors, rather than remoteness per se, play a decisive role in shaping youth labor market integration in these areas.

Can Digital Entrepreneurship Help Retain Arctic Youth?

Artificial Intelligence (AI) is rapidly transforming economies, labour markets, and entrepreneurship. In our December 2024 report Arctic Value Creation, Employment, and Investments, we highlighted AI’s potential to increase productivity and economic growth in the Arctic while creating new labour market challenges. We argued that investments in education, digital skills, and innovative learning would be essential to help younger generations adapt to an increasingly AI-driven economy.

Recent developments have reinforced both the opportunities and uncertainties associated with AI. While concerns about job displacement remain, evidence suggests that AI often complements rather than replaces human capabilities. At the same time, AI is lowering barriers to entrepreneurship.

Fig. 12. NEET – Youth not in employment, education, or training



Individuals with limited technical expertise can now use AI-powered tools to develop products, launch businesses, and compete in global markets with fewer resources than previously required.

For the Arctic, this presents a particularly important opportunity. AI-enabled entrepreneurship can reduce some of the disadvantages of geographic remoteness by allowing young people to create globally oriented businesses while remaining in their local communities. To explore this trend, we surveyed 22 young Arctic entrepreneurs about their use of AI. Eighteen respondents (81.8%) reported using AI, primarily for information gathering, idea generation, decision support, and the automation of routine tasks. These findings suggest that AI adoption is being driven mainly by accessible generative AI tools that enhance productivity rather than by the development of specialized AI systems.

The growing use of AI among young entrepreneurs indicates that digital technologies may help reduce some of the traditional constraints associated with remote locations, enabling access to knowledge, markets, and business opportunities beyond local communities. However, the long-term implications remain uncertain. The key question is whether digital entrepreneurship can help retain Arctic youth and strengthen local communities, or whether the digital transition will deepen existing disparities between those who are able to seize new opportunities and those who are not.

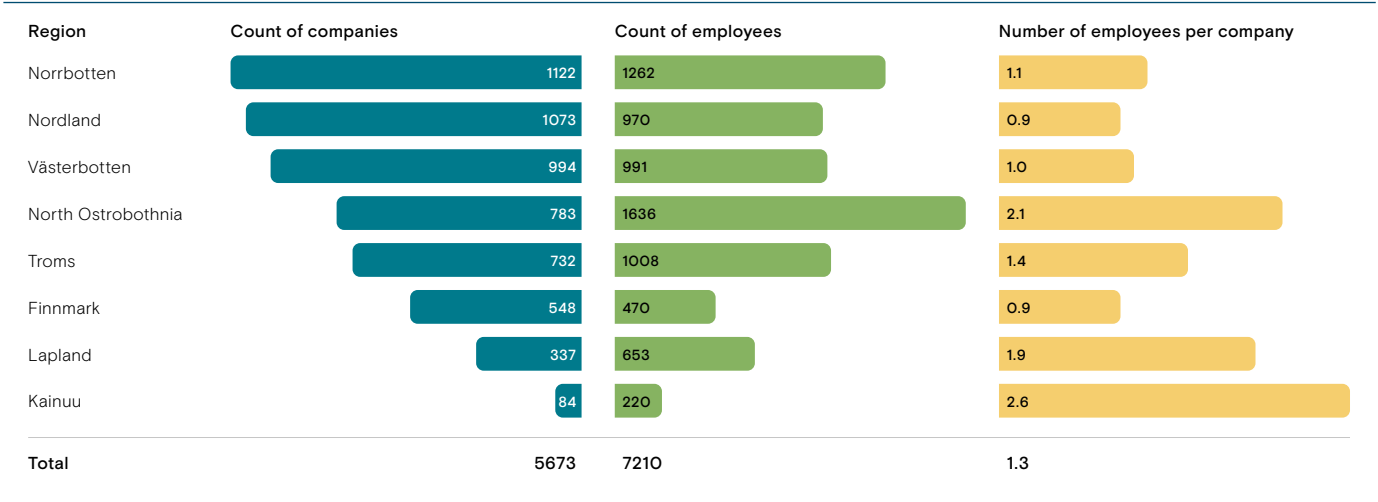
Entrepreneurial Activity

The study sample – 5,673 companies

We study youth entrepreneurship through the lenses of both employment generation and broader economic value creation. The entrepreneurial activity of young people in the Nordic Arctic is studied via tailored data collected from statistical agencies in Norway, Sweden, and Finland. It is important to note that the sample is not exhaustive and only covers entrepreneurship in the form of limited liability

companies (LLC), for which data are available for the years 2019 and 2023, comprising 5,673 active LLC established by entrepreneurs aged 18–35 in the Nordic Arctic area across Norway, Sweden, and Finland. By 2024–26 these companies altogether employed 7,210 people, making average employment 1.3 “employees per company”.

Fig. 13. Study sample of 5,673 companies.



To explore the findings on youth entrepreneurs in greater detail, please use our [interactive online visualization tool](#). The tool enables users to examine sectoral distributions, gender patterns, job creation, and geographic variations, and other indicators of youth entrepreneurship across the Nordic Arctic.

The data show that youth entrepreneurship in the Nordic Arctic is unevenly distributed across regions, with the highest number of active LLC companies located in Swedish regions, particularly Norrbotten (1,122 companies) and Västerbotten (994 companies) (Fig 15.). However, this should be interpreted with caution, as the dataset covers all Nordic Arctic regions included in the analysis and does not directly account for differences in regional business structures or preferred national registration practices.

In total, the dataset includes 5,673 active companies and 7,210 employees, corresponding to an average of 1.3 employees per company. This indicates that most youth-founded companies are very small in terms of employment,

and the figures should therefore be understood primarily as an indicator of entrepreneurial activity rather than large-scale job creation. Employment figures should be interpreted with caution. Since company registers generally count salaried employees, founders and owners who work in the business without drawing a salary may not be included. Consequently, employment statistics may underestimate the labour contribution and economic significance of young firms.

However, regional differences are notable. Northern Ostrobothnia has a relatively high number of companies with the largest employment rate of 2.1 employees per company, while Kainuu has fewer companies but the highest employment intensity of 2.6 employees per company. In contrast, several regions with high company counts, such as Norrbotten, Västerbotten, Nordland, and Finnmark, have around or below one employee per company, suggesting that many youth-founded firms remain micro-enterprises or self-employment-based ventures

Entrepreneurship in form of Limited Liability Company

The key feature of limited liability company is the protection of founders from personal financial losses. It lowers the individual risk associated with entrepreneurship and, therefore, encourages more active business formation. A limited liability company is often used as a proxy for innovative and growth-oriented entrepreneurship. It signals both a commitment to formalization and an intention to scale, making it a useful indicator when analyzing the conditions that support higher-impact forms of enterprise development.

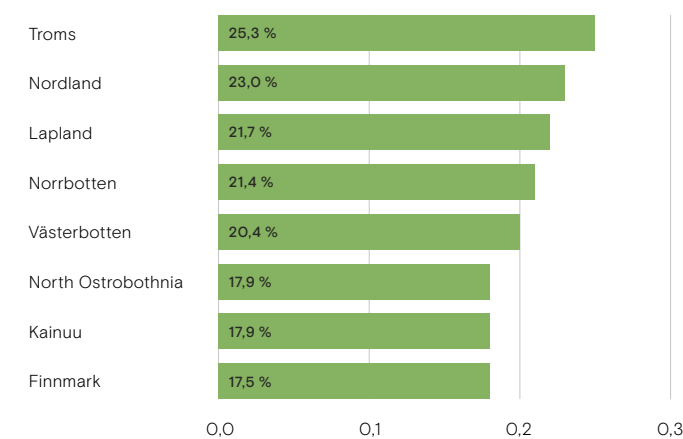
For Small and Medium Enterprises (SME) this leads to international expansion through trade or foreign direct investment. In the Nordics, policymakers have reduced the requirement for minimum capital and designed legal frameworks that enable entrepreneurial activity.

Country	Entity Type	Old Capital Requirement	Current Capital (as of 2026)	Year of Change
Norway	Aksjeselskap (AS)	100,000 NOK	30,000 NOK	2012
Finland	Osakeyhtiö (Oy)	2,500 EUR	0 EUR	2019
Sweden	Aktiebolag (AB)	50,000 SEK	25,000 SEK	2020

Female entrepreneurship

Figure 14 shows that the share of female youth entrepreneurs in the Nordic Arctic remains very low across all regions, ranging from 18% to 25%, with the highest rates in Troms (25%) and Nordland (23%), and the lowest in Northern Ostrobothnia, Kainuu, and Finnmark (18%). This finding is consistent with the GEM 2025/2026 report, which documents that Sweden, Norway, and Finland are among the few economies globally where women represent only a third or less of all start-up founders.

Fig. 14. Female rate among young entrepreneurs



This discrepancy, often termed the “Nordic Gender Equality Paradox,” is largely driven by the region’s expansive welfare states, which heavily concentrate female employment in state-monopolized public sectors, such as health-care and education, thereby restricting private enterprise opportunities in their primary fields of expertise.²⁶ Furthermore, the generous safety nets and parental leave policies associated with standard employment create steep opportunity costs that disproportionately disincentivize women from assuming the financial and temporal risks of self-employment. Despite the region’s generally egalitarian values, systemic obstacles in the private sector, such as male-dominated venture capital networks and unequal funding opportunities, continue to hinder the growth of female-led entrepreneurial ventures in the Nordic Arctic.

The most striking gender difference in entrepreneurship lies in the strong sectoral segmentation, with construction being overwhelmingly male dominated at 96% male and only 4% female, while also representing the largest sector in terms of both companies and employment. In contrast, female entrepreneurship shows clear specialization in human health and social work, where women account for 55%, as well as in other service activities and education, where gender distribution is close to a balanced sector.

Wholesale, retail, and professional activities show a clear predominance of male entrepreneurs, with men accounting for roughly two-thirds or more of the workforce. In manufacturing and information and communication, male dominance is even stronger, with only a small minority of female participants. This indicates that female entrepreneurs are more concentrated in socially oriented and service-based activities, while male entrepreneurs dominate capital-intensive and traditionally male sectors.

Age factor

The proportion of very young entrepreneurs (aged 18-26) remains consistently low across the regions compared to the 27-35 age group, ranging from 22% in Västerbotten and 23% in Kainuu to 34% in Northern Ostrobothnia and Finnmark (Figure 15 below). This pattern suggests that many individuals complete tertiary education before entering entrepreneurship, as reflected in the substantially higher share of entrepreneurs aged 27-35, which ranges from 66% to 78% across all regions. Research has shown a strong relationship between higher education and business creation, indicating that university graduates are more likely than non-graduates to engage in entrepreneurial activities²⁷.

Although young people aged 18–26 may possess a high tolerance for risk and innovative ideas, they often lack the operational experience, sector-specific regulatory knowledge, advanced R&D management skills, and financial

networks required to establish and grow successful businesses²⁸. The construction sector remains the most popular industry for newly established firms among both younger and older entrepreneurs, while agriculture, forestry, and fisheries constitute the second-largest sector among the youngest entrepreneurs. In contrast, among entrepreneurs aged 27-35, the second-largest sector is professional and business services, a field that typically requires higher levels of education and specialized expertise.

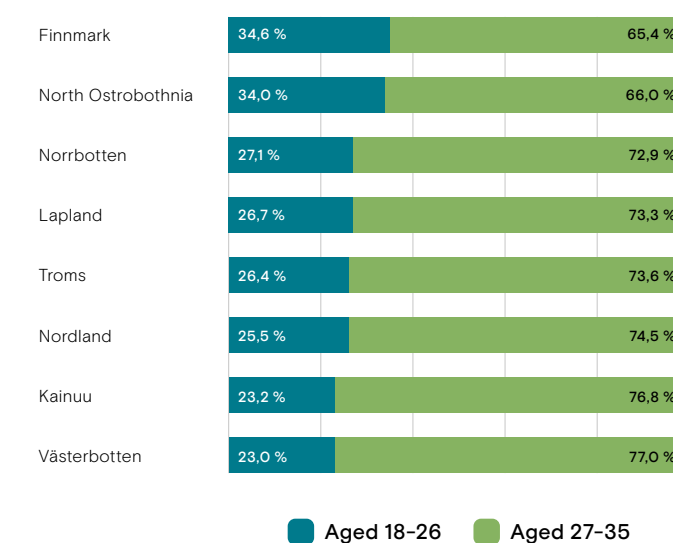
Industrial profile

All regions studied in the Nordic Arctic showed similar patterns in terms of the industries and sectors most attractive for new business formation. Therefore, Figure 16 presents the distribution of companies and employment across all regions combined.

Across all regions, construction is the leading industry for youth entrepreneurship, accounting for around 20% overall and reaching as high as 30% in Kainuu, Lapland, and Northern Ostrobothnia. However, the construction industry's importance is more moderate in Troms at 11%. Simultaneously, clear regional specialization patterns are evident: Finnmark stands out with a strong concentration in agriculture, forestry, and fishing at 22% and a relatively high share in umbrella or unknown activities at 16%, indicating a more resource-based and less formally classified structure. In contrast, Västerbotten and Norrbotten show a more diversified profile with significant shares in professional, scientific, and technical activities at around 11%–14% and finance reaching 9%–10%, while also maintaining solid construction sectors. Nordland and Troms display a more service-oriented mix, including real estate and administrative activities alongside construction, whereas Kainuu combines construction dominance with relatively higher shares in administrative services (10 %) and manufacturing (7 %). Overall, the comparison highlights that while construction provides a common foundation across regions, the secondary specializations differ substantially, reflecting local economic structures ranging from resource-based activities in the Norwegian coastal regions to more diversified and service-intensive economies in parts of Sweden and Finland.

A relatively large share of newly established companies in the Norwegian and Swedish business statistics are holding companies. A holding company is a legal entity that primarily owns shares in other companies rather than

Fig. 15. Youth entrepreneurs by age group

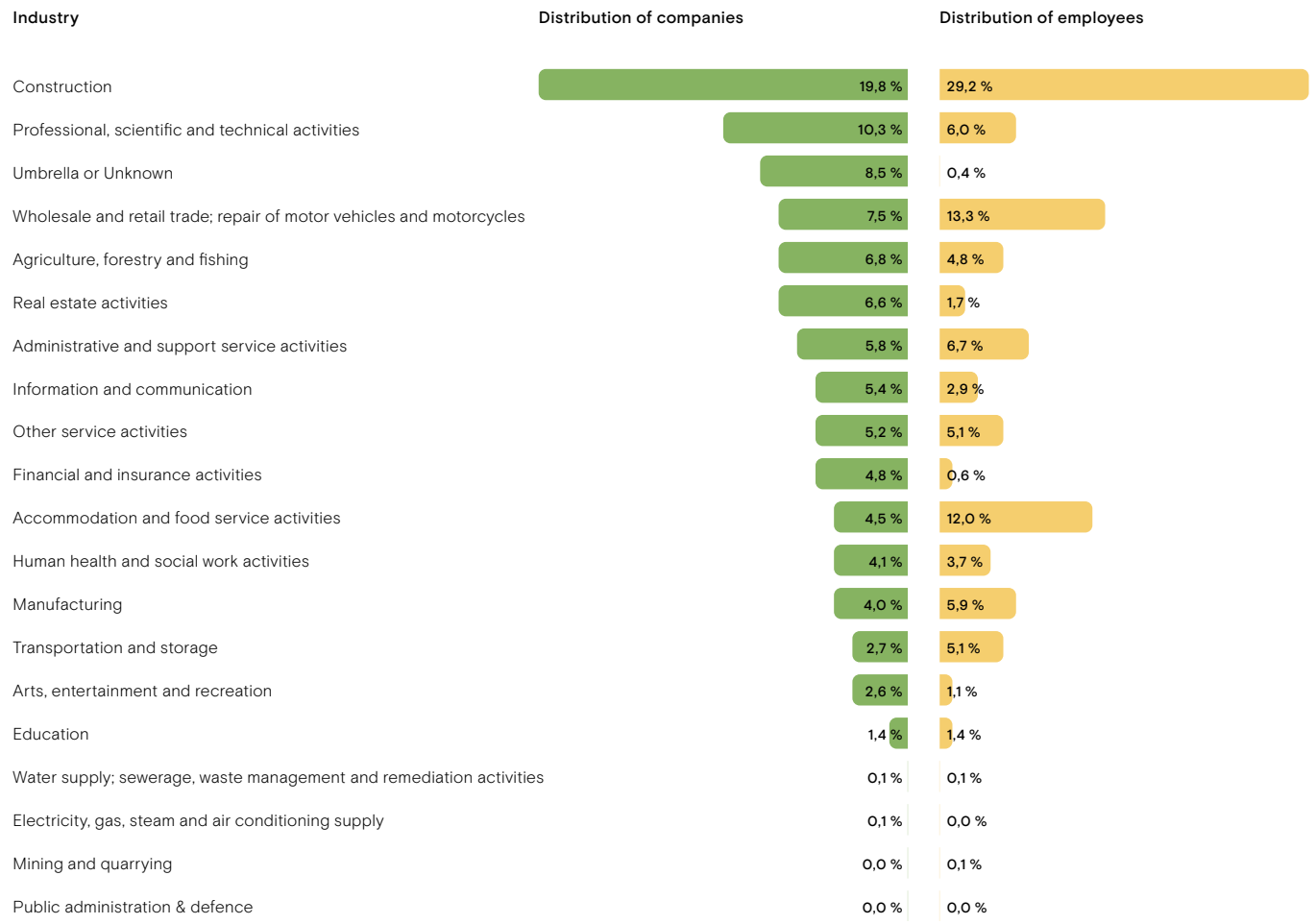


²⁶ Sanandaji, N. (2016). The Nordic gender equality paradox: How Nordic welfare states are not only empowering women, but also (un) intentionally holding them back. Timbro. <https://nordicparadox.se/>

²⁷ Global Entrepreneurship Monitor (GEM) report 2025/2026

²⁸ OECD (2023). Young women in innovative and high-growth entrepreneurship, https://yepa-hub.org/app/uploads/2023/10/YEPA_Discussion_Note_Workshop2_GroupC.pdf

Fig. 16. Distribution of youth-led companies and their employees by industry, all regions together.



engaging in operational business activities. Its main purpose is to manage ownership interests, safeguard assets, and facilitate efficient corporate and tax structures. In this report, Norwegian holding companies are grouped under the industry category “*Umbrella or Unknown*”, while Swedish holding companies are classified under “*Financial and Insurance Activities*”. As holding companies typically do not conduct operational activities, they generally generate little or no employment.

Employment patterns broadly follow the distribution of firms, with construction clearly dominating both the number of companies and employment, accounting for about 29% of total employment and reaching particularly high shares, such as 38.8% in Northern Ostrobothnia and 34.9% in Kainuu. However, some sectors generate disproportionately higher employment relative to firm shares, most notably wholesale and retail trade, which accounts for 13.3% of

employment overall and peaks at 23.6% in Troms and 20.4% in Nordland, and accommodation and food services, which reach 28.5% in Finnmark and 22.0% in Nordland despite a more modest firm presence. In contrast, professional, scientific, and technical activities represent a relatively large share of firms but only about 6.0% of employment overall, indicating smaller firm size. Regional differences are also evident, as Finnmark shows employment concentration in accommodation and food services and trade, while Kainuu has a more balanced distribution, including manufacturing at 11.5% and agriculture at 12.3%. Overall, the comparison suggests that while construction aligns closely with firm structure, service sectors tend to employ more people per firm, whereas knowledge-intensive activities are characterized by smaller-scale employment in firms established by youth entrepreneurs.

Top Performers

Youth entrepreneurship dynamics in Norway and Sweden are characterized by a highly uneven structure, in which only a very small share of firms accounts for the majority of employment and growth in both countries²⁹. In Northern Norway, a group of just 25 firms generates around 30% of all start-up employment, while more than two thousand firms have no employees at all. A similar pattern is observed in northern Sweden, where only a limited subset of firms transitions into employer organizations; however, these firms dominate job creation and are linked to labor expansion or rapid revenue growth. This confirms that entrepreneurship in both contexts is not broadly employment-generating but rather selective, with the impact concentrated in a narrow group of scale-oriented firms.

The concentration of high performers in youth entrepreneurship firms in both Norway and Sweden is linked to the presence of large-scale and continuous projects, particularly in construction, infrastructure, and resource-related activities. In Northern Norway, the fastest-scaling firms are

directly embedded in contracting markets, where access to large projects allows immediate expansion in both turnover and workforce, explaining why construction and technical services dominate employment growth. A similar mechanism is visible in northern Sweden, where firm growth is tied to industrial investments, infrastructure development, and regional supply chains, with firms scaling rapidly once contracts are secured, especially in construction, staffing, and industrial services

Start-up success in both contexts is largely determined by the ability to integrate into existing large-scale project ecosystems and transform contract-based demand into organizational growth rather than by incremental market building. Consequently, industries associated with these projects, such as construction, contracting, and support services, offer the structural conditions necessary for project scaling. In contrast, companies that operate outside these demand systems are more likely to remain small and have limited impact on employment.

Key findings on top performers

- The majority of newly established firms remain micro-scale or without employees
- A very small group of firms generates a disproportionate share of employment
- Growth is therefore highly concentrated rather than based on multi-industrial development

Factor	
Main growth industries	
Norway	Sweden
Construction, contracting, transport, tourism	Construction, staffing, services, retail



Construction site for Arctic Arena in Bodø, by Ny Arena. Construction sector is the most attractive for entrepreneurs

²⁹ This subsection presents detailed findings only for Norway and Sweden. The Finnish dataset is less granular, focusing on aggregated industry categories and comparing the number of firms with employment levels across sectors and regions. In contrast, the datasets for Norway and Sweden contain firm-level information on individual companies. This level of detail enables comparisons between the shares of newly established firms and their corresponding shares of employment and sales turnover.

How to Succeed in the Nordic Arctic?

In this section, we highlight the star stories of young entrepreneurs taking part in the High North Young Entrepreneur contest. The [High North Young Entrepreneur](#) initiative is an international competition launched in 2018 by Nord University’s High North Center to support start-ups with Arctic-related business ideas. The contest idea is to highlight the Arctic’s economic potential and encourage young innovators to develop solutions tailored to northern conditions.

The picture below showcases the famous [Polar Bear Pitching](#), a unique startup event in Oulu, Finland, where entrepreneurs pitch their ideas from an icy swimming hole. Blending innovation with Nordic culture and resilience, the event gives startups a memorable opportunity to gain visibility, connect with investors, and stand out on the global stage.

Polar Bear Pitching 2026, by Kota Collective.



CapiPro team.

CapiPro AS: From a Student Innovation Idea to a Growing Start-up

CapiPro AS was founded as a student start-up at Nord University in Bodø, Norway, in 2024. The company is now relocating to Brønnøysund, a small coastal town in Nordland, where it is establishing its first dedicated production facility. At the heart of the venture is a circular economy solution designed for one of Norway’s most important industries: salmon farming.

The founding idea came directly from practical experience in the field. Co-founder Samson Steindal Vonen, 26, holds a bachelor’s degree in aquaculture management and a master’s degree in entrepreneurship and business development. While working in the salmon industry, he observed a problem that was both costly and environmentally significant: the large volumes of organic sludge produced by fish farms. *“I saw the sludge issue on close hand... it was expensive for the farmers and a big problem, and I thought, well, someone has to do something about it,”* as Vonen describes (Interview with Samson Steindal Vonen, 2025). During his master’s studies, a research organisation introduced polychaetes — specifically Nereis Virens, a marine worm — as a feed ingredient capable of processing this waste. That insight framed the business idea of CapiPro.

The company transforms aquaculture waste into a sustainable marine protein source for use in pet food, feed for

breeding fish in aquaculture, and bait for the fishing industry. What began as a student innovation idea has since developed into a viable start-up with an impressive funding track record and a promising market. CapiPro entered competitions and in 2024 won the High North Young Entrepreneur Award — recognition that brought not only funding but a strengthened sense of confidence and direction within the team. In 2025, the company closed its first major investor round of €760,000. As Vonen reflects, *“Now we actually have the money to start production, which is a big step for us as a company”* (Interview with Samson Steindal Vonen, 2025).

For CapiPro, Northern Norway is a competitive advantage. The region is globally recognized for the quality of its salmon farming industry, giving the company credibility and access to a relevant partner base. As Vonen puts it, *“Northern Norway... for aquaculture in general, it’s the place to be in the world”* (Interview with Samson Steindal Vonen, 2025). Notably, some of CapiPro’s largest investors are themselves salmon farming companies — the very enterprises whose waste problem the start-up is designed to solve.

Ease of approaching the right people and organizations, and a tendency toward collaboration, are traits of a small

Advice from Arctic Entrepreneurs

1. Just try

The benefits often outweigh the risks. As Juuso Puranen of Oulu Fungi says: *“If you fail, there are so many lessons to learn. I am a completely different person now than I was before I started the business.”*

2. Be comfortable with the worst case

Think through what happens if things do not work out. Emil Lindbäck of Mulligans advises: *“Calculate what will happen if it doesn’t work out. When you get comfortable in that situation, you are ready to start.”*

3. Test your idea early and often

Talk to customers and partners from the beginning. Samson Vonen of CapiPro emphasizes: *“Test and test and test and test and test. That’s a good way of doing it.”*

4. Use competitions to validate your concept

Start-up competitions can provide valuable feedback and visibility. According to Vonen, success in competitions was *“not a stamp of approval, but definitely a hint that the world seems to think it’s a good idea.”*

5. Find what keeps you going

Long-term consistency matters as much as motivation. As Emil Lindbäck notes: *“You need something that keeps you consistent.”*



Emil Lindbäck, Founder of Mulligans Sweden AB.



Emil Lindbäck demonstrating indoor Golf simulator.

Mulligans Sweden AB: Turning the Arctic Winter into an Opportunity

Mulligans, now Norrbotten’s largest and most modern indoor golf facility, started as a small side project. In 2024-2025, while still students, Emil Lindbäck and two friends set up their first golf simulator in a modest 50-square-metre space. Their fathers joined the venture to manage the bookkeeping, transforming a shared interest into a family-supported business initiative.

The idea emerged from a simple observation: although northern Sweden’s golf season is relatively short, interest in the sport remains strong throughout the year. As Lindbäck explains, *“Because the golf season is quite short up here, while the interest in golf exists all year round, we realized that there was a gap that could be filled”* (Interview with Emil Lindbäck, 2025).

A visit to an existing indoor golf venue in Luleå reinforced the founders’ belief that they could offer something different. Rather than competing with a single simulator, Mulligans launched with five simulators, supported through a leasing model designed to achieve profitability within the first year. Sustainability was also built into the concept from the beginning. Around 80% of the simulator structures, hitting areas, and player bays were constructed using reused materials in collaboration with local companies (Interview with Emil Lindbäck, 2025).

For the founders, financial gain was never the primary driver. Instead, the venture was motivated by the opportunity to gain hands-on entrepreneurial experience and learn how to operate a business together as friends (Interview with Emil Lindbäck, 2025).

The Arctic climate, often viewed as a challenge for business development, has become one of Mulligans’ greatest

strengths. While outdoor golf is limited to a few months each year, the long, cold winters create demand for indoor activities. As Lindbäck puts it, *“We take the opportunity to use the other nine months of cold and dark periods to our advantage”* (Interview with Emil Lindbäck, 2025).

Building trust within the local community has been one of the company’s biggest challenges. In a region where reputation spreads quickly, maintaining high standards and delivering a positive customer experience are essential. Yet it is also this close-knit community that has produced some of the venture’s most rewarding moments.

Lindbäck recalls one particularly memorable example: a man in his sixties spontaneously began teaching golf to a group of children at the facility. Reflecting on the experience, Emil described how *“the meeting of the person who is very new with someone who has done it a long, long time”* represents the type of interaction he values most (Interview with Emil Lindbäck, 2025). Such moments illustrate how Mulligans has become more than a training venue; it has evolved into a meeting place that brings together people of different generations and experience levels.

Looking ahead, the company’s ambitions are closely linked to the growth of the Luleå region. Lindbäck is optimistic about the future, pointing to major industrial investments and a growing workforce in northern Sweden. New employees, remote workers, and incoming residents are seen as potential customers seeking opportunities for recreation and social connection after work. In this context, Mulligans aims to continue serving not only as a golf facility but also as a welcoming hub for the wider community.



Samson Steindal Vonen, co-founder of CapiPro.

Northern community, which helped to start the project and test with early customers. As Vonen points out, *“Northern Norwegian people are very big fans of collaboration... it comes from historically being in a place where you need to collaborate to survive”* (Interview with Samson Steindal Vonen, 2025), while remaining aware that regulatory instability in the industry and geographic distance from end markets present ongoing challenges.

One of the important moments for northern entrepreneurs is the ability to observe the direct impact of their projects on local communities. While most small northern places experience outmigration of young people, CapiPro brings their young, enthusiastic team to Brønnøysund. As Vonen observes, *“the entire local community is happy about the setup there and bringing in young people who want to work and create something in their community”* (Interview with Samson Steindal Vonen, 2025).

Still, any entrepreneurial venture implies a high degree of risk. Vonen links the risk and potential gain as he says: *“if we statistically are going to fail with CapiPro, we will go and get a normal job... but I think we are going to succeed, and then we have created our own jobs for the rest of our lives.”* (Interview with Samson Steindal Vonen, 2025). With production starting in Brønnøysund and clients among European distributors, CapiPro’s next goal is to scale supply within that international market while deepening its roots in Nordland.

www.capro.no



Juuso Puranen, co-founder of Oulu Fungi Oy.



Oulu Fungi product.

Oulu Fungi OY: Adapting a Global Trend in the North

Juuso Puranen, 34, founded Oulu Fungi Oy after years of wanting his own business. Trained in entrepreneurship at Oulu University of Applied Sciences, he describes the idea arriving gradually: *“first it was something health-related, then healthy food, and then it focused on mushrooms”* (Interview with Juuso Puranen, 2025). A chance conversation introduced him to a business partner, who had a similar idea and joined the venture. Today, the company grows mushrooms in a converted garage and delivers fresh produce directly to homes and restaurants across Northern Ostrobothnia.

Fresh mushrooms have become a massive trend internationally and in Nordic countries. In Northern areas, cultivated mushrooms are a fresh, nutrient-rich product available year-round. As Puranen observed: *“people are increasingly choosing to use local products, and they also like to try, at least on a small scale, to grow their own food to supplement what they buy.”* (Interview with Juuso Puranen, 2025). Oulu Fungi’s product is produced locally and sustainably farmed, which meets the expectations of the new generations. In Puranen’s words, *“it elevates the food culture in some way”* (Interview with Juuso Puranen, 2025). In this sense, the company presents an example of adopting global trends locally while fulfilling a niche that is important for Northern citizens.

Operating in the North brings both opportunities and constraints. Oulu is a relatively large Northern city — as Puranen describes, *“enough to make the business profitable, but it definitely slows growth.”* Distances present a certain constraint: *“logistics can be difficult, especially in our case, for fresh mushrooms, because you need to be careful how you transport them, and the distances here*

up north can be quite long” (Interview with Juuso Puranen, 2025).

At the same time, Puranen sees a cultural asset in operating in the North. People in northern Finland tend to be more open, approachable, and willing to help, which he links to a shared history of surviving in the challenging environment. Without formal grants or institutional funding, Oulu Fungi relied on personal connections and informal networks to start the venture. Networking has proven to be one of the most valuable tools for navigating early-stage challenges for the start-up. *“Whenever there’s some kind of a problem that needs solving, there’s usually somebody who knows better than you, who you can just ask”*, assures Puranen. (Interview with Juuso Puranen, 2025).

Looking ahead, Puranen intends to remain in Oulu for the foreseeable future, driven by a belief that small, locally rooted businesses are what keep places distinctive. His next goal is creating jobs for others beyond himself and his partner, which he expects *“will still probably take a couple of years.”* Growth, for now, means deepening distribution across Northern Ostrobothnia rather than expanding abroad. This is typical for small, community-rooted businesses at the growing stage.

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Conclusions and Policy Implications

Demographic Challenges and Opportunities

Population projections to 2040 point to a common challenge across the Nordic Arctic. Although national populations in some countries are expected to continue growing, northern regions are projected to lose young adults. This trend is particularly evident in the 20–35 age group, with nearly 19,000 fewer young people expected across northern Norway, Sweden, and Finland by 2040. The decline is especially pronounced in Finland, while modest relative gains in some parts of Norway and Sweden mask an overall reduction in absolute numbers. Together, these trends suggest a gradual weakening of the demographic foundation that underpins regional vitality and long-term development.

Migration patterns help explain these dynamics. Population change in the North is closely linked to external events, including global crises and major industrial investments. While such developments can generate temporary inflows of young people, they rarely lead to long-term retention. Employment opportunities remain the key factor shaping settlement decisions. Regions with limited economic diversity struggle to retain young people, whereas regions connected to emerging industries and broader labour markets tend to be more attractive. Importantly, these findings suggest that demographic decline is not inevitable. Strengthening regional economies,³⁰ supporting entrepreneurship, and creating meaningful career opportunities for young people can improve retention and contribute to more sustainable futures for Arctic communities.

The Need for Economic Diversification

The findings reveal a relatively low level of economic diversification across the Nordic Arctic. Entrepreneurial activity and employment remain concentrated in a narrow range of traditional, labour-intensive sectors, particularly construction, services, and trade. In Norway and Sweden, growth-oriented firms are heavily clustered in industries linked to existing demand structures, including construction, contracting, staffing, and hospitality. By contrast, ICT and other knowledge-intensive sectors play only a limited role. This concen-

tration suggests that, despite ongoing business creation, the underlying economic structure remains relatively stable and path-dependent, with limited expansion into new industries and activities.

The challenge becomes even more evident when gender is taken into account. Female entrepreneurship is concentrated in a small number of service-oriented sectors, particularly care services, hospitality, and personal services. While these sectors are important for regional wellbeing, they tend to be less scalable and contribute less to structural economic transformation. As a result, the already narrow sectoral base becomes further constrained, reducing the potential for entrepreneurship to drive diversification. Overall, the findings indicate that although youth entrepreneurship is significant across the Nordic Arctic, it is not yet contributing substantially to a broader or more diversified economic structure.

Realizing the Potential of Digital Transformation

The analysis suggests that digitalization has yet to play a transformative role in Nordic Arctic entrepreneurship. ICT-related activities account for only a small share of firms and employment and do not emerge as major drivers of either business formation or job creation. Instead, entrepreneurial activity and employment growth remain concentrated in traditional sectors such as construction, services, and trade.

This pattern suggests that digital transformation has not yet translated into significant economic restructuring or generated a substantial number of high-growth firms. Unlike construction and service activities, which can expand by increasing contracts and workforce capacity, digital sectors appear more limited in their regional presence and employment impact. Despite strong policy attention to digitalization, digital entrepreneurship remains underdeveloped and currently plays only a modest role in driving regional growth, innovation, and diversification.

³⁰ Harfst, J., Kozina, J., Sandriester, J., Tiran, J., Bole, D., & Pizzera, J. (2025). Problematisation and policy responses to youth (out) migration in small and medium-sized industrial towns. *European Planning Studies*, 33(4), 532-552.

Policy Priorities

1. Build Holistic Entrepreneurial Ecosystems

Addressing low diversification, economic path dependency, the scalability challenges facing many businesses, and the underutilized potential of digitalization requires a shift in policy focus. Rather than concentrating primarily on new business creation, policymakers should strengthen entrepreneurial ecosystems that support:

- Scalability
- Digital adoption
- Inclusion

Support systems should become more coordinated and accessible. Instead of fragmented programmes spread across multiple agencies, entrepreneurs should be able to access integrated support through centralized platforms that combine funding, business development services, and mentoring. Such an approach would improve business survival and growth while encouraging innovation beyond traditional sectors.

2. Unlock Female Entrepreneurial Opportunities

Rather than aiming to increase female entrepreneurship for its own sake, a more relevant objective is to ensure that women who wish to pursue entrepreneurial careers have access to the same opportunities, resources, and support as men.

Female entrepreneurship in the Nordic Arctic may benefit from support programmes that recognize the different educational, professional, and life-course trajectories of women and men. Access to skills development, practical business guidance, entrepreneurial training, and low-risk startup financing can be particularly important during the early stages of business creation and growth.

In addition to technical business support, relational forms of support may also play an important role. Personalized follow-up, mentoring, peer networks, and access to experienced entrepreneurs can help aspiring founders navigate uncertainty, build confidence, and transform business ideas into sustainable enterprises.

Visible role models can likewise contribute to broadening perceptions of entrepreneurship as a viable career path. Showcasing successful female entrepreneurs from both traditional and emerging industries may encourage more women to explore entrepreneurial opportunities and strengthen connections between aspiring and experienced entrepreneurs.

3. Foster Digital Transformation

Supporting the modernization of traditional industries requires practical and accessible approaches to digitalization. Tailored digital toolkits, business diagnostics, and sector-specific AI applications can help firms improve productivity and competitiveness without disrupting existing business practices.

At the same time, regional digital transformation requires investments in enabling infrastructure and skills. High-speed connectivity, secure data environments, shared digital platforms, and training opportunities can strengthen firms’ capacity to adopt new technologies. Regulatory sandboxes and other innovation-friendly mechanisms can further support experimentation by allowing businesses to test new products and services in lower-risk environments. Together, these measures can contribute to a more resilient, productive, and diversified regional economy.

Digital transformation should extend beyond technological adoption and infrastructure development. The long-term competitiveness of Arctic regions will depend not only on access to digital tools and AI but also on the ability of individuals to use them creatively. Policymakers should therefore invest in entrepreneurial and innovation skills from an early age, fostering curiosity, experimentation, adaptability, and both technical and interpersonal competencies.

4. Support Newcomer Entrepreneurship

Recent migration to the Nordic Arctic has brought not only new residents but also new entrepreneurial potential. Many newcomers possess professional experience, vocational skills, and business ideas that may contribute to local economic development, service provision, and labour market renewal. Entrepreneurship can provide an important pathway to both economic participation and community integration.

While the Nordic Arctic offers a broad range of entrepreneurship support programmes, aspiring entrepreneurs with migrant backgrounds may face additional challenges related to language, networks, local regulations, and familiarity with business support systems.

As immigration becomes increasingly important for demographic and economic development, entrepreneurship support organisations may need to adapt their programmes to better reflect the needs and circumstances of a more diverse population. Creating

accessible pathways for newcomers to explore and pursue entrepreneurship could help unlock entrepreneurial potential that might otherwise remain underutilized, while strengthening the long-term social and economic sustainability of Arctic communities

5. Strengthen Arctic Data and Analytical Infrastructure

This report initially aimed to provide a comparable analysis of youth entrepreneurship across the entire Arctic, covering both entrepreneur demographics and business performance. However, major data gaps and limited comparability between Arctic regions made this impossible. Ultimately, a comparable dataset could

only be established for the northern regions of Norway, Sweden, and Finland.

Even compiling and harmonizing data across these three countries required approximately one year of work. This highlights a fundamental challenge: evidence-based policymaking in the Arctic depends on stronger statistical and analytical foundations. Significant limitations remain in the availability, comparability, and timeliness of Arctic socioeconomic data. Strengthening data frameworks, improving statistical coordination across jurisdictions, and investing in analytical data infrastructure should therefore be considered as a strategic priority for Arctic regional development.

ARCTIC BUSINESS INDEX

The main objective of the Arctic Business Index project (previously known as Business Index North) is to increase awareness of opportunities as well as challenges for sustainable economic development in the Arctic. Since 2016, we collect and analyze data, develop analytical reports, online tools, and contribute to informed debate via various dialogue arenas for Arctic stakeholders. The project provides reliable, knowledge-based information about sustainable economic development in the Arctic for decision makers such as international institutional bodies, national and regional authorities, investors, entrepreneurs. This information is also used by educators, media, and students.

In spring 2025, the project was endorsed by the Arctic Council Sustainable Development Working Group with the new project name, Arctic Business Index. Norway and Canada are co-leads of the project.

The Arctic Business Index project is developed through an international network of academic and research institutions, individual experts, organizations, and industry from the Arctic countries.

The project administrator is the [High North Centre for Business and Governance](#) at [Nord University Business School](#) (Norway).



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