

# Technical Assistance – Market Studies of Pipeline and Stakeholders

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Finland

October 2024



## Disclaimer

This project benefits from support from the European Union under the InvestEU Advisory Hub. Its production was commissioned by the Council of Europe Development Bank (CEB) from Price Waterhouse Coopers (PwC).

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# A comprehensive analysis of social infrastructure investment in nine EU countries is a key objective of the project

## Introduction – Project in focus

The project is initiated by the **Council of Europe Development Bank** who has hired **PricewaterhouseCoopers**, through the support of InvestEU Advisory hub, to identify market gaps and potential investment opportunities, with stakeholder engagement playing a crucial role in enriching the study's findings.



### Project overview and goals

- The project, led by the **Council of Europe Development Bank (CEB)** and executed by **PricewaterhouseCoopers (PwC)**, is financed by the **European Commission under the InvestEU Advisory Hub**. This signifies a strong commitment from the EU to enhance social infrastructure.
- The aim is to **map the current state of social infrastructure investments** in nine EU countries, notably including Belgium and Finland. This involves a comprehensive assessment of market conditions, funding availability, and potential investment opportunities.
- **The study aligns with InvestEU's broader goals to stimulate investment across the EU**, specifically targeting the development and enhancement of social infrastructure.



### Methodology and phased approach

1. **Phase One - Desk Research:** In the initial phase, PwC conducts extensive desk research to collate and analyse existing market data and studies. This phase establishes a foundational understanding of the investment landscape in the targeted countries and identifies key stakeholders.
2. **Phase Two - Direct Market Interviews:** Following the desk research, the second phase involves conducting interviews to gather firsthand market insights from identified stakeholders. This step is crucial to enrich the analysis with real-world perspectives and data.
3. **Comprehensive Evaluation:** The combination of desk research and direct interviews ensures a thorough and multi-dimensional analysis, providing a detailed picture of the current market and identifying key areas for potential investment.



### Stakeholder engagement

- **The CEB and PwC are actively engaging with principal stakeholders to gather insights and respond to specific inquiries.** This collaborative approach is essential for validating the study's initial findings and enriching the overall analysis with diverse perspectives.
- Through this engagement, the **CEB seeks to build a network of informed and interested parties**, fostering a collaborative environment for future projects and investments.
- Post-study, stakeholders will have opportunities to remain involved in ongoing dialogues and initiatives led by the CEB. This continued involvement is aimed at translating the study's findings into tangible investment actions and partnerships.



### Limitations

The main project limitations consisted of reduced data availability, which was mitigated through involvement of local experts who provided estimates, and in some cases, additional data access. As well as, access to stakeholders for the phase 2 interviews, which resulted in some segments being covered by only one interview.



# 1



# Introduction



# Despite the current economic downturn in Finland's economy, targeted sectors are expected to rebound back to prior levels

## Introduction – Overview of Finland's Economy

### Finland's economic forecast

Due to several recent disruptions, including the COVID-19 pandemic, supply and demand mismatches, Finland's economy is reported to be in a state of recession. Weaknesses in the economy are widespread, with notable declines in private consumption, private investment, and exports. Factors restraining economic recovery include higher interest rates, elevated prices (7,2% in 2022 compared to 2,1% in 2021), and a notable reduction in investments, particularly in residential construction. The economy is expected to remain weak in 2024, with signs of recovery anticipated towards the end of the year. According to economic forecasts from the Bank of Finland, GDP declined by around 0,5% in 2023 and is projected to decrease by 0,2% in 2024. Growth projections for 2025 and 2026 stand at 1,5% and 1,3%, respectively.

Finland's general government deficit, which stood at 73,3% of GDP and grew by 1,6% in 2023, continues to increase despite fiscal adjustment efforts. This has led to a rise in the debt-to-GDP ratio, which is expected to exceed 80% of GDP by 2026.

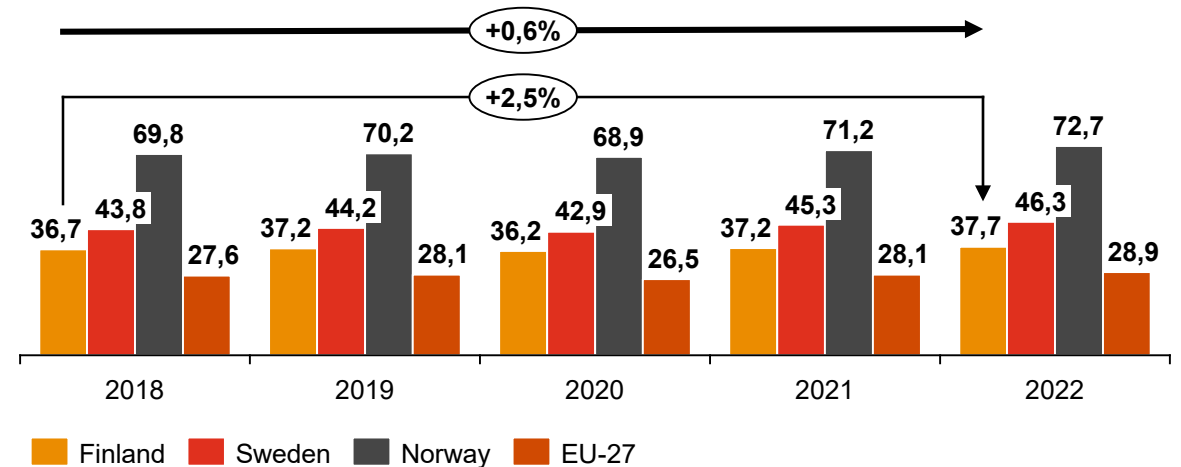
Finland	2018	2019	2020	2021	2022	CAGR
Population (mil.):	5.513	5.518	5.525	5.534	5.548	0,16%
GDP bn (current EUR)	233.462	239.858	238.038	250.664	268.411	3,55%
GDP growth	1,1	1,2	-2,4	2,8	1,6	n/a
GDP per capita (EUR)	36.740	37.150	36.220	37.170	37.670	0,63%
Unemployment	7,5	6,8	7,7	7,7	6,8	n/a
HICP (annual % change)	1,2	1,1	0,4	2,1	7,2	n/a

### GDP per capita and inflation

While the compound annual growth rate (CAGR) of 0,63% indicates relatively slow GDP per capita growth in Finland, there have been significant fluctuations over the past five years. In 2020, there was a notable decline to €36.220 compared to €37.150 in 2019. The period of significant inflation rates in Finland appears to be over, with inflation remaining at a modest level of 6,3% in 2023. Due to tightening monetary policy and the weak economy, price pressures are expected to remain minor, especially in 2024. Despite the current downturn, Finland is projected to achieve growth rates of 1,5% in the medium term. Expectations from the Bank of Finland suggest declining interest rates, along with a gradual recovery of export markets and investments, leading Finland's GDP to approach its long-term average by 2026.

Notably, certain sectors such as residential and housing construction are experiencing declines, presenting investment opportunities as these industries are likely to rebound once economic conditions stabilize.

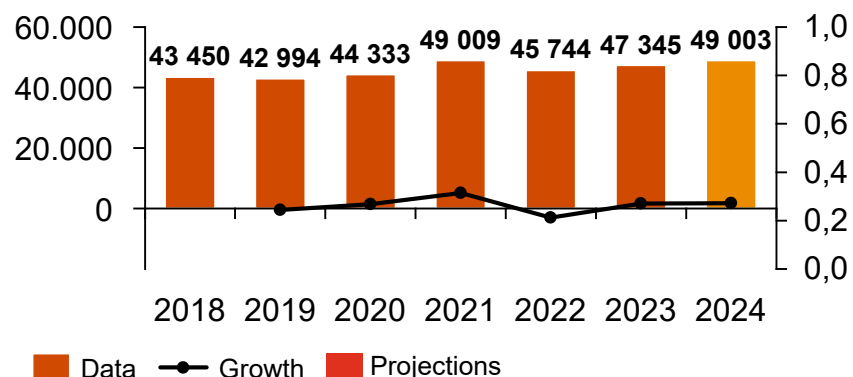
### GDP per capita of Finland and a basket of countries (EUR ths.) 2018–2022



# From 2021 to 2022 the non-residential, as the largest segment of the construction industry in Finland, recorded 7,31% decline

## Introduction – Overview of the Construction Sector

Construction industry value, in EUR bn, year over year



Construction works value share, by subsector, 2022



2017	2022	CAGR (17/22)	CAGR (21/22)
26,3B EUR	30,9B EUR	3,3%	-7,31%
14,3B EUR	17,2B EUR	3,7%	-5,48%

Sources: Eurostat, EMIS, MarketLine, PwC analysis  
PwC

The Finnish construction industry is reported to experience a decline of 6,7% in 2022 to reach a value of around 45,7B EUR. This represents approximately 1,6% of the European construction industry value. Furthermore, forecasts indicate the performance industry to follow a similar pattern, of moderate growth, similar to recent years, with an anticipated CAGR of 3,5% between 2022 and 2027, totalling 54,4B EUR in market value in 2027. Amid the current economic downturn, the Finnish construction industry faces several challenges with numerous companies closing their operations and filing for bankruptcy. This is mostly due to unexpected rising interest rates, significant energy price increases and inflation, cutting demand, severely impacting the housing market. According to the Labour Force Survey 2022, the average unemployment rate in construction fell by 5,8%. However, on a more positive note, the Finnish construction industry witnessed overall moderate growth. The industry has also expanded in the past few years, due to a growing economy and an increase in urbanization. The construction industry has reported a substantial increase in market value between 2017 and 2022 by a CAGR of 3,4%, compared to say German and UK industries which grew by 6,5% and 3%, respectively. The market is relatively concentrated with four leading players such as YIT, Skanska, SRV and NCC.

Importantly, the Finnish government is considering support measures (modified Recovery and Resilience Plan - RRP) for the struggling construction industry, focusing on subsidized housing production, renovation projects, and infrastructure-related projects to boost production value and employment in the sector.



### Residential construction

Residential construction accounts for approximately 35,7% of the total construction market in Finland. This accumulates to around 17,2B EUR in market value. Due to various uncertainties, in the first two quarters of 2022, the number of building permits for residential development fell by roughly 20%. The subsector experienced a substantial decrease of 5,48% from 2021 to 2022.



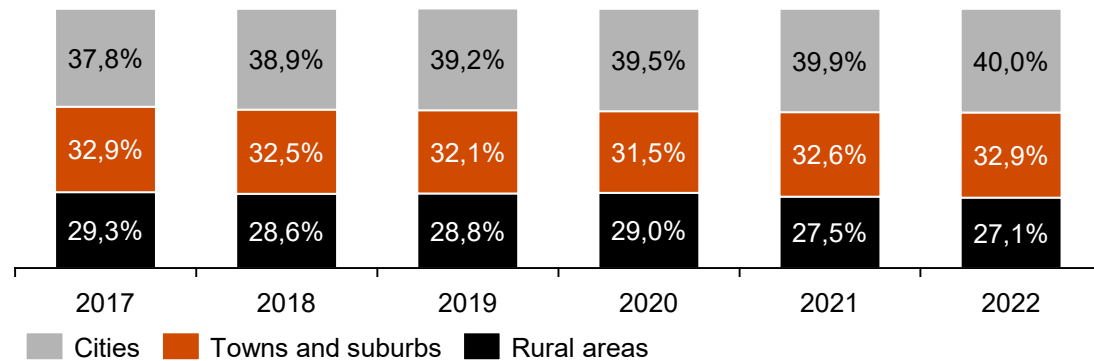
### Non-residential construction

Non-residential construction is the largest segment of the construction industry in Finland, accounting for around 64,3% of the industry value, totalling around 30,92B EUR. Importantly, it recorded a sharp decline of 7,31% from 2021 to 2022. The number of permits for commercial construction fell by 30%.

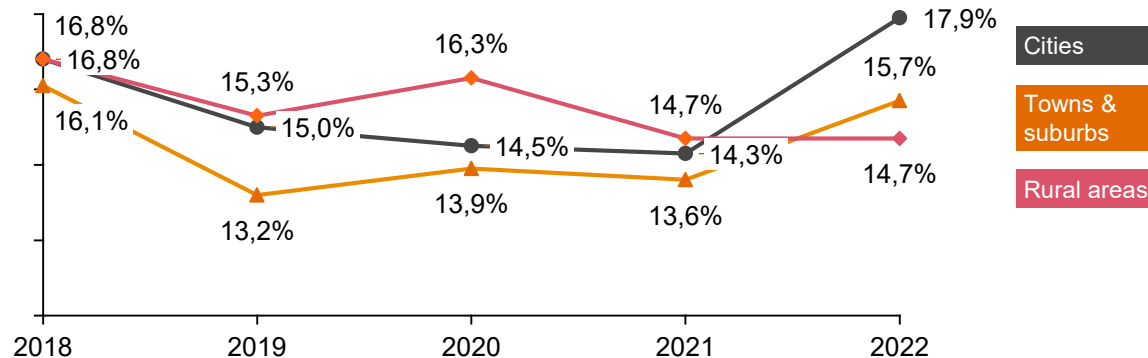
# Significant urbanization rate undergoing with already 85,68% of the population residing in or around major cities

## Introduction – Overview of Finland population

### Share of population, by degree of urbanisation, in %

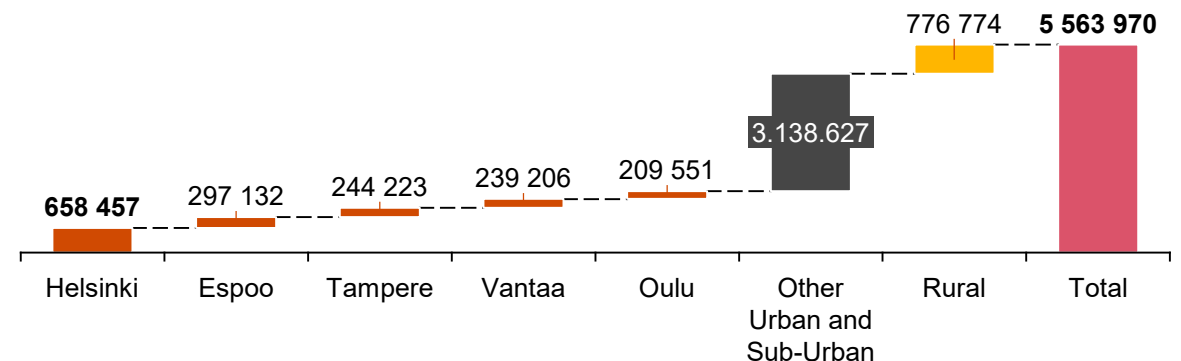


### People at risk of poverty or social exclusion by degree of urbanisation, in %



The population of Finland in 2022 amounted to roughly 5,54M. Projections indicate that the population will slightly decline to approximately 5,45M. In Finland, 85,68% of the population, totalling 4,75 million people, resides in or around major cities. In 2017, the majority of the population (around 37,8%) lived in cities. However, it's noteworthy that the share of the population in towns and suburbs (around 32,9%), along with rural areas (around 29,3%), recorded higher proportions compared to the EU averages. By 2022, Finland's urban population slowly approached the EU average of 40%. While the population in towns and suburbs remained relatively stagnant, the share of the population in rural areas reported a decline of 2,2 percentage points. Helsinki, the capital of Finland, is the largest city in the country with around 658,5k inhabitants, followed by the second and third largest cities in Finland, Espoo and Tampere, respectively. Helsinki has a metropolitan population of more than 1,4M, being the 4th largest metropolitan area in Nordics, just after Copenhagen, Stockholm and Oslo in the neighbouring countries. Finland has a high percentage of people aged over 65 (23,3%), indicating an ageing population trend that may impact various sectors, including healthcare, retirement homes, long-term care, and social services.

### Population split by largest 5 cities





# 2



## Affordable social housing





# Despite the oversupply in social housing, **there is still a need for diverse funding sources** in order to mitigate risk

## Social and affordable housing

### Key conclusions – Phase 1

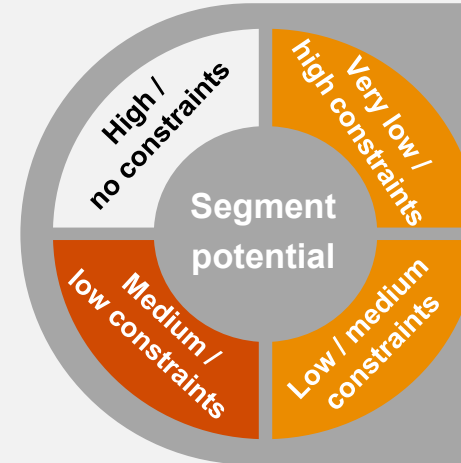
- Finland's social housing approach includes government-supported affordable housing programs..
- Approximately 40% of all rental properties are owned by the state (municipalities), and benefit from subsidies, impacting around 12% of households.
- The rental market is vibrant, especially in urban areas like Helsinki, with 46% of dwellings being rented.
- Around 8.000-9.000 subsidised dwellings are added annually, constituting about 20% of new housing.

### Key conclusions – Phase 2

- Stakeholders have highlighted the need for additional financiers to diversify funding sources and mitigate risks. There is a strong interest in exploring funding opportunities through CEB and other financial institutions.
- The low-income housing sector in Finland heavily relies on Municipality Finance for funding. This dependence limits competition and creates potential risks if regulatory changes occur.
- Each major city exhibits its own set of priorities and characteristics in addressing social housing needs



### PwC Assessment



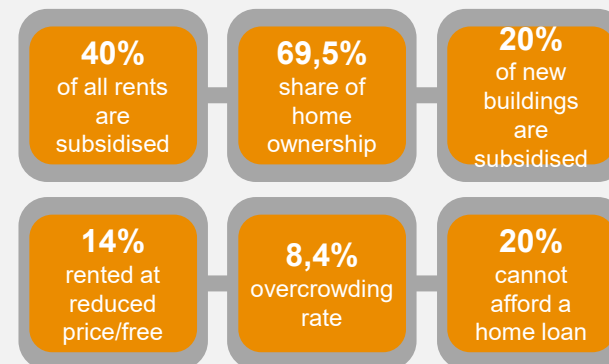
There is a notable need for affordable housing in Finland, due to rising demand and the need for diverse financing options.



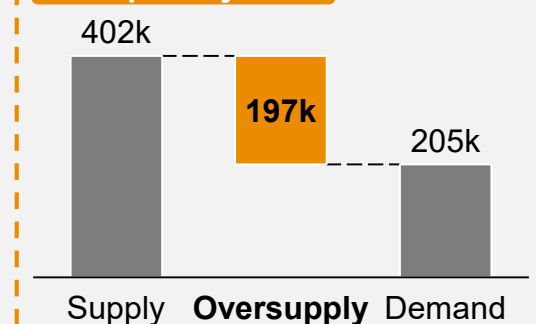
The reliance on Municipality Finance poses a risk, highlighting the need for diverse funding sources to ensure sustainability.



### Key Segment Data



### Gap analysis



# In Finland, 40% of rental homes are subsidised, targeting low-income households, funded by state-supported mechanisms

## Social Housing – General Overview (1/2)

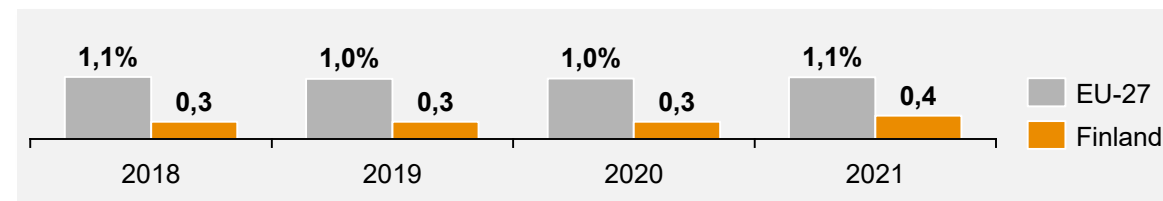
### Social Housing definition

In Finland, "government-subsidized housing" refers to a range of government-supported affordable housing programs, rather than the direct allocation of social housing units. The Finnish approach emphasizes housing allowances to aid individuals and families, promoting access to affordable accommodations. Social housing assistance includes:

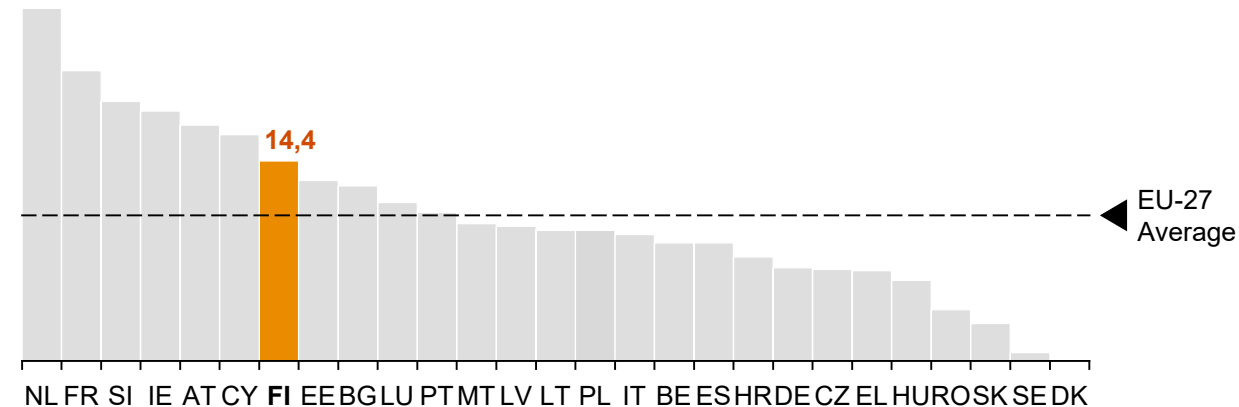
- Assistance for both owner-occupants and tenants
- Support for individual households and construction projects
- State-subsidized housing development
- Housing allowances for low-income families

Significantly, 40% of rental properties in Finland benefit from state subsidies, impacting around 12% of households. These initiatives primarily target growth centres, with provisions for special groups in additional areas. Affordable housing is mainly offered through municipal entities and select non-profit organizations, financed predominantly by the municipal finance institution MuniFin and commercial banks. The Finnish state, through The Housing Finance and Development Centre of Finland (ARA) under the Ministry of the Environment, backs these loans, providing interest subsidies, loan guarantees, non-profit status to eligible organizations, and approving loans, thereby ensuring the smooth execution of these housing programs.

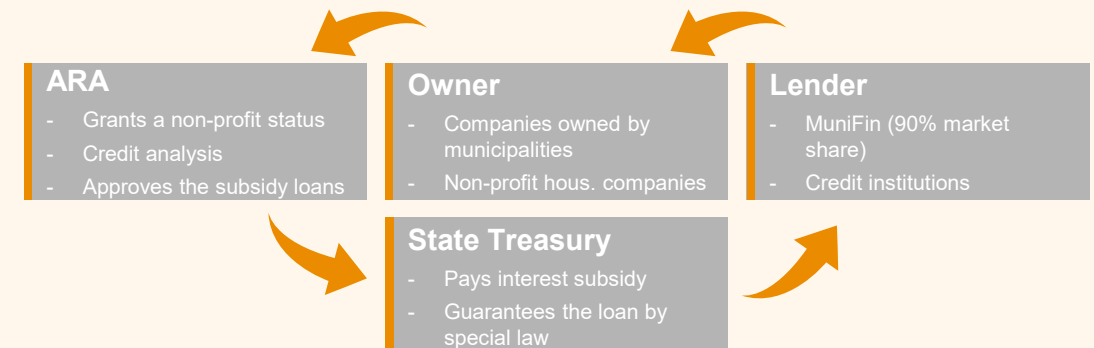
### Government spending on social housing (housing development and housing social protection), in % of GDP



### Tenants, rent with reduced prices or for free in Europe (2022, %)



### Interest payment subsidy system



# Finland's rental market thrives on subsidies and investment, offering flexible terms with cost-of-living-adjusted rents

## Social Housing – General Overview (2/2)

### Tenure Breakdown

Finland's homeownership rate stands at approximately 69,5%, surpassing the EU-27 average of about 69,1%. This figure surpasses those observed in certain other Nordic nations, such as Denmark, which reports a rate of 59,7%, yet remains below the figure reported by Sweden at 79,4%.

Approximately 39% of owned homes are not burdened with mortgage or loan, meaning, there is around 1,2M homes owned with no outstanding liabilities to the asset, as opposed to 0,96M homes with mortgage or housing loan (or around 30% of total dwellings).

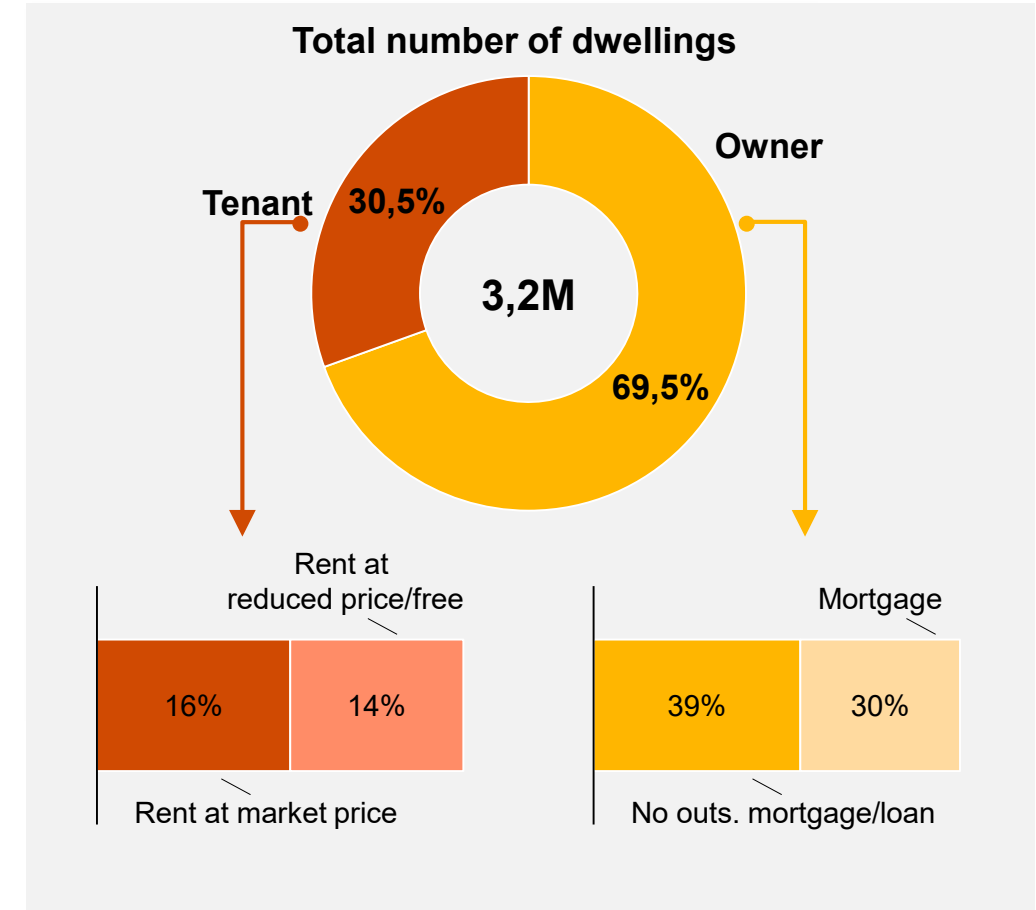
### Rental market

The rental market is particularly vibrant in Finland's major urban areas, with the Helsinki metropolitan area showcasing a significant 46% of dwellings as rented. This trend extends to other major cities like Turku and Tampere, highlighting a preference for rented housing in urban centres. The sector is bolstered by 37% of rentals receiving public subsidies, predominantly through mechanisms like state-guaranteed loans or interest subsidies, managed primarily by municipal entities and non-profit organizations dedicated to specific groups.

The non-subsidized rental sector has shown robust growth, with over 600.000 dwellings in 2020, a notable increase from the previous year. Professional investors, including institutions, property companies, and foreign entities, have significantly contributed to this expansion, signalling strong investor confidence in Finland's rental market.

Finland's rental practices are designed to balance flexibility and security, ensuring that lease agreements, which are typically open-ended, foster a stable living environment for tenants while safeguarding landlords' interests. The framework for terminating leases includes clearly defined notice periods and conditions, providing clarity and fairness to both parties involved. Moreover, rent adjustments are frequently pegged to the cost-of-living index, facilitating adjustments that are both predictable and equitable, reflecting broader economic trends. This system of rent indexation is particularly advantageous in maintaining rental rates that are attuned to current market conditions, thereby ensuring that increases are justifiable and aligned with inflationary pressures or changes in living costs.

PwC



Sources: Eurostat, Statistics Finland, MuniFin, PwC analysis

# Finland's housing shifts towards rentals with stable quality, maintaining low deprivation rates and surpassing EU standards

## Social Housing – Key Drivers & Issues

### Substantial new housing developments and superior housing standards

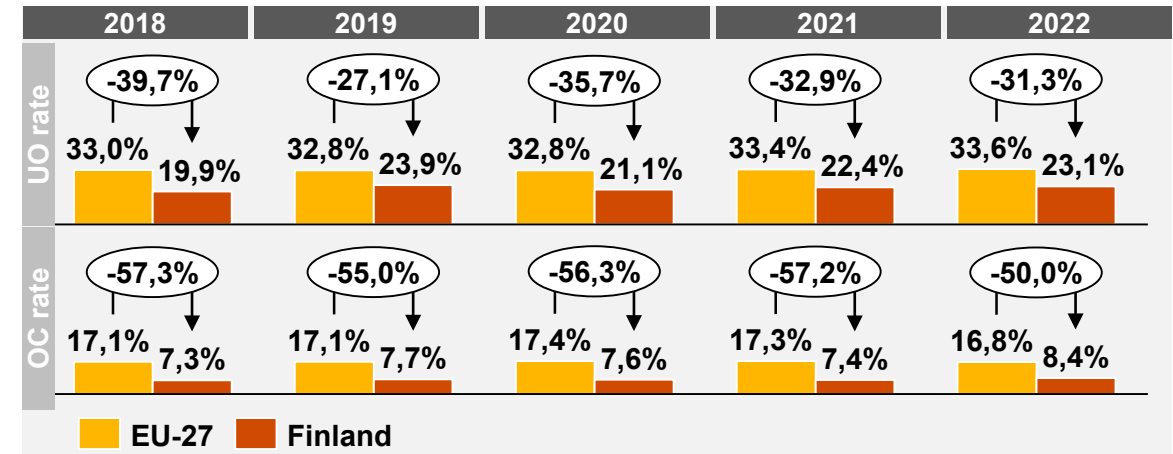
In Finland, with its 3,2 million occupied housing units as of 2022, including a significant portion in apartment buildings catering to around 40% of the population, the residential construction sector is showing signs of moderation. The country, where over 69,5% of households own their homes, is increasingly embracing rental accommodations, now representing 30,5% of the housing stock. This shift aligns with the trend towards smaller household sizes, notably in urban areas where single and two-person households are becoming more common.

The pace of new housing developments is slowing, particularly in urban regions, coinciding with renewed population growth. This suggests a gradual move towards a balanced housing market, especially in the Greater Helsinki Area where the ample housing stock presents an opportunity for strategic market adjustment. Other major cities may find a quicker equilibrium, reflecting a housing sector that's adapting to Finland's demographic changes.

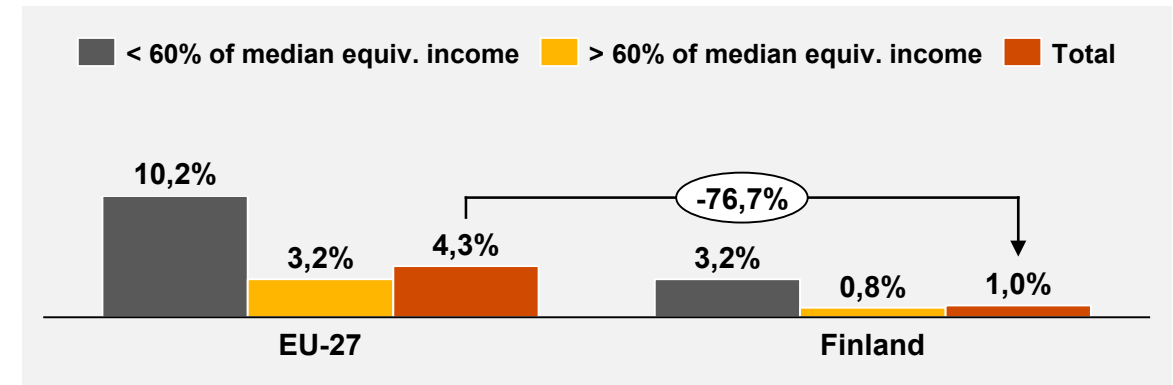
Throughout the period 2018–2022, Finland's overcrowding rate has consistently been lower than the EU-27 average. Despite fluctuations, there is a general trend of increase in overcrowding in Finland, especially notable in 2022 (+13,5%), which is indicative of potentially worsening housing conditions.

In 2021, Finland reported that a mere 1% of its households were subject to severe housing deprivation, a condition defined by not just overcrowding but also compounded by critical issues such as leaking roofs or the absence of essential bathroom amenities. This rate slightly escalates among the low-income demographics, reaching 3,2%, yet it remains significantly lower when compared to the broader European context. Within the EU-27, the average rates of severe housing deprivation stand at 4,3% across the general populace, with a notably higher prevalence of 10,2% among those in lower income brackets, highlighting Finland's relatively better housing conditions even among its most financially constrained groups.

### Under-occupancy/overcrowding rate (2018–2022, in %)



### Severe housing deprivation rate (%)





# In recent years, the growth rate of housing loans has experienced a deceleration, attributed to the escalation of interest rates

## Social Housing – Market Demand

### High-interest rate environment

In Finland, the interplay between population growth and a slowdown in construction activities is poised to significantly influence the occupancy rates of rental apartments. As the population expands, driven by factors such as urban migration, natural growth, and international immigration, the demand for housing, particularly rental accommodations, is set to rise. This increased demand, accompanied with a decelerating pace of new construction developments, is expected to lead to higher occupancy rates within the existing rental housing stock. This scenario suggests a tightening rental market where fewer vacant units are available, potentially leading to a more competitive environment for prospective renters. Such market conditions could also prompt adjustments in rental prices, reflecting the increased demand against a backdrop of constrained supply.

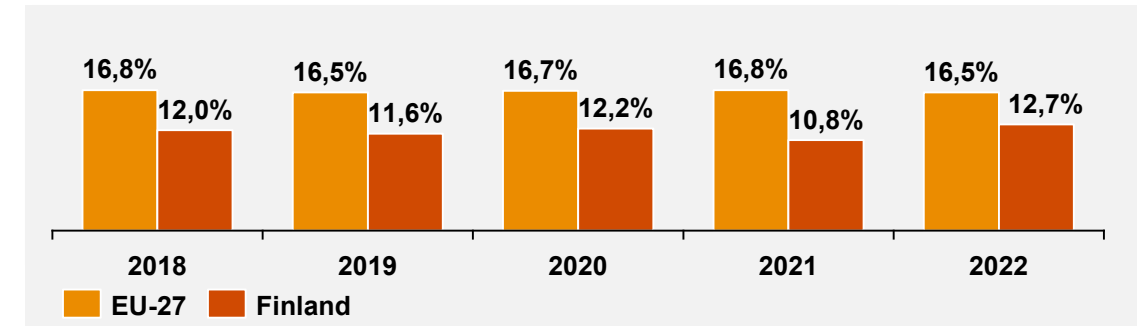
Calculation on the right considers the ability to purchase a home with mortgage loan for a first home, at a commercial bank (Nordea), for a 50m<sup>2</sup> dwelling. It is assumed 40% of the household income is spent on repayment. The calculation for terms of the loan is done for a person aged 35, with repayment period of 25 years, and 10% down-payment (commercial terms of the bank).

According to the national statistics office, the average price for a dwelling in a multi-dwelling building in 2022 in Finland, was EUR 3.000 per m<sup>2</sup>, therefore a 50m<sup>2</sup> dwelling costs around EUR 150k. After 10% down-payment, required by bank's commercial terms, the loan repayment amounts to a monthly instalment of EUR 756.

From the limited available official statistical data, on average rent for a 50m<sup>2</sup> dwelling was in 2022 estimated to be EUR 650 per month. However, discrepancies among regions are high, ranging from EUR 550 per month. Therefore, at set conditions, bottom 2 deciles are candidates for social housing, as the cost of housing is higher than 40% of their HH income.

Sources: EUROMOD 2023, Eurostat, Statistics Finland, PwC analysis

### Population at risk of poverty (% of population)



### Average total income per household (2022, deciles)

Decile	EUR	40% HH income, EUR
D 1	1.320	528
D 2	1.807	723
D 3	2.087	835
D 4	2.626	1050
D 5	3.058	1223
D 6	3.509	1404
D 7	3.899	1560
D 8	4.513	1805
D 9	5.282	2113
D 10	8.133	3253

# Annually, Finland adds about 9k subsidised units, with the highest concentration in Uusimaa and Keski-Suomi

## Social Housing – Market Supply

### Significant construction efforts and investors demand

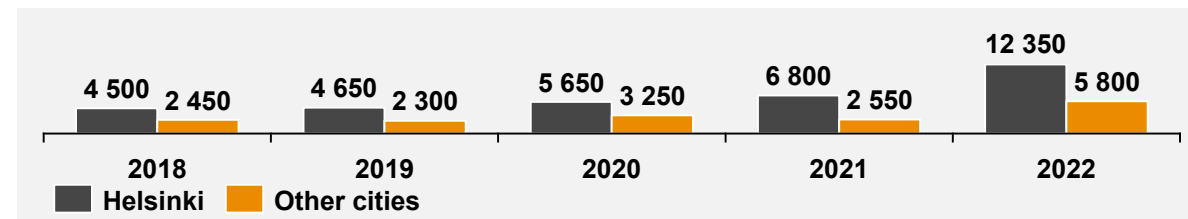
Finland's residential construction sector is vibrant, with around 8.000–9.000 subsidised apartments added annually, making up about 20% of the total new housing capacity in 2021. Public housing support extends to low-income tenants in various housing types, reflecting the state's effort to maintain affordability. Over 391.000 households benefited from such support in December 2021, despite a slight decline from the peak levels of previous years.

The non-subsidised rental market has grown, with over 600.000 dwellings reported, attracting significant investment from both domestic and international investors. The resurgence in construction in 2021, with 48.000 new units added, particularly in rental housing, highlights the continuous demand, especially in urban areas like Helsinki.

Key players in Finland's housing market include municipal-owned subsidised housing and professional investors in the non-subsidised segment, with companies such as Kojamo and SATO leading. The sector's growth is bolstered by foreign investment, indicating its attractiveness and potential for further development, supported by a solid foundation of government support and investment diversity.

As of 2022, Finland had approximately 402.000 units of subsidized housing, with the highest regional concentration observed in the Uusimaa region at 1,9%. This was followed by Keski-Suomi, Etelä-Karjala, and Pohjois-Savo, with concentrations of 13,3%, 12,9%, and 12,1%, respectively.

### Rental residential dwellings completed / under construction



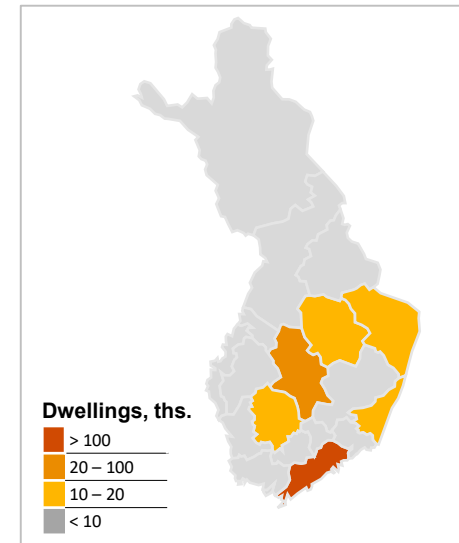
PwC

Sources: Eurostat, Statistics Finland, KTI, PwC analysis

### Ownership structure of rental apartments in Finland

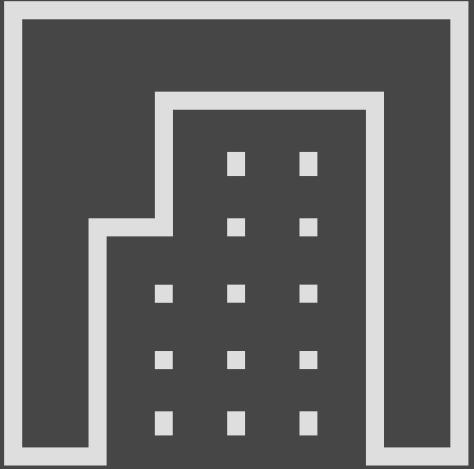


### Share split of subsidised housing stock, by region (2022)



Region	Total subsidised	% of total
<strong>Finland</strong>	<strong>402k</strong>	<strong>100%</strong>
Uusimaa	162.592	16,9%
Keski-Suomi	22.895	13,3%
Etelä-Karjala	10.489	12,9%
Pohjois-Savo	18.950	12,1%
Päijät-Häme	15.090	11,8%
Pohjois-Karjala	12.649	11,7%
Etelä-Savo	9.904	10,8%
Pirkanmaa	32.807	10,7%
Varsinais-Suomi	31.254	10,6%
Kainuu	4.753	10,2%

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# Student housing





# Past projects were **focused on upgrading student facilities**, **a reduction in government grants** was also identified

## Student housing

### Key conclusions – Phase 1

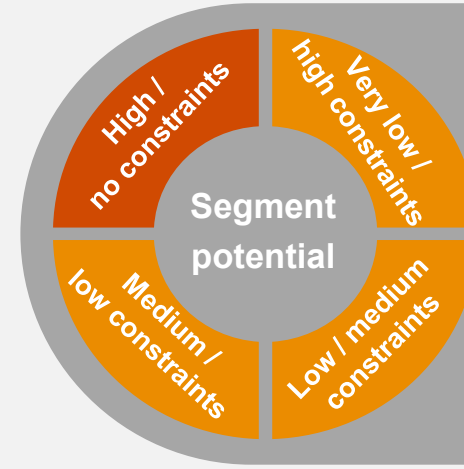
- Finland has one of the EU's lowest rates of young adults living with parents (4%), indicating effective social policies supporting independent living.
- Student housing preferences lean towards apartment living, with studios being the most popular choice at 41%, followed by two-room apartments at 30%.
- The Finnish Associations of Student Housing Organisations (SOA) manages nearly 45.000 rental apartments across 24 cities, providing about 75.000 beds for students.
- ARA is seen as a bottleneck in the approval process for student housing projects, causing delays and project cancellations.

### Key conclusions – Phase 2 (Student housing & universities)

- The notable reduction in government grants for student housing is making it challenging to finance new projects and renovations.
- Municipality Finance is practically the only source of long-term financing for student housing, as commercial financial institutions show limited interest due to long repayment periods and back-loaded repayments.
- There is a strong focus on upgrading student housing facilities with an emphasis on sustainability and modernization to meet contemporary standards and demands.



### PwC Assessment

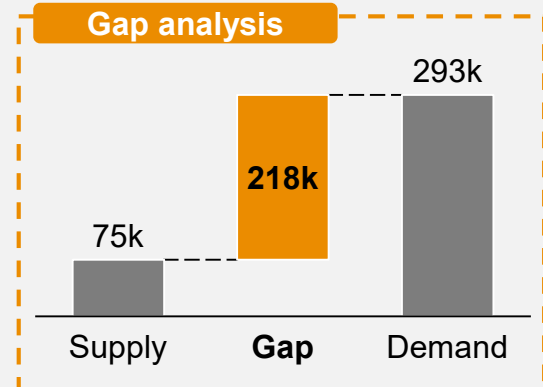
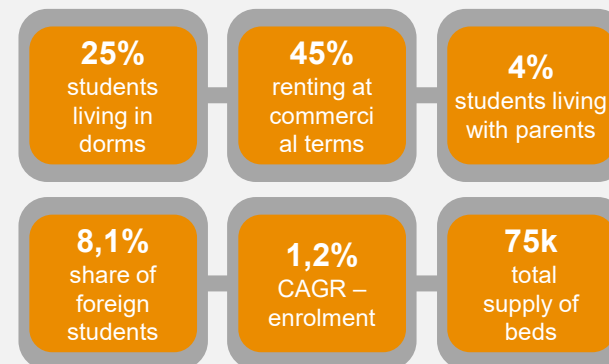


! There is significant investment potential due to the high demand for affordable housing driven by increasing university admissions and international students.

! The reduction in government grants for student housing projects has created a significant funding gap.



### Key Segment Data





# Designated student accommodation can accommodate only fourth of the student body

## Student Housing – General Overview

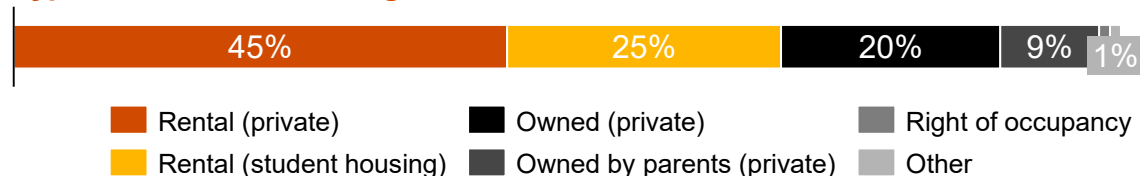
### Student housing landscape

In Finland, the student housing system offers a variety of accommodation options for both domestic and international students, governed by comprehensive regulations and supported by dedicated organizations. Our research indicates that students' accommodation choices are diverse, with around 25% (approximately 76.342 students) residing in specialized student housing and the remaining 75% (about 229.027 students) opting for different forms of private market housing. This includes 40% living with partners or children, 25% in private flats alone, 5% in shared accommodations, and another 5% residing with parents or guardians, highlighting a trend towards early independence from family homes.

The Finnish student housing model is distinct from other European systems, as universities in Finland do not offer dormitories or on-campus housing. Instead, student accommodation is managed by various student housing organizations united under the Finnish Association of Student Housing Organisations (SOA). Its roles encompass overseeing the collective interests of these organizations, fostering cooperation, enhancing operational conditions, and advocating for the sector's political objectives.

Furthermore, Kela, the Social Insurance Institution of Finland, extends additional support through housing benefits and allowances, complementing other student aids like study grants and loan guarantees. Student accommodations are categorized into shared apartments, studio apartments, group apartments, and family apartments, catering to different needs and preferences.

### Types of student housing tenure

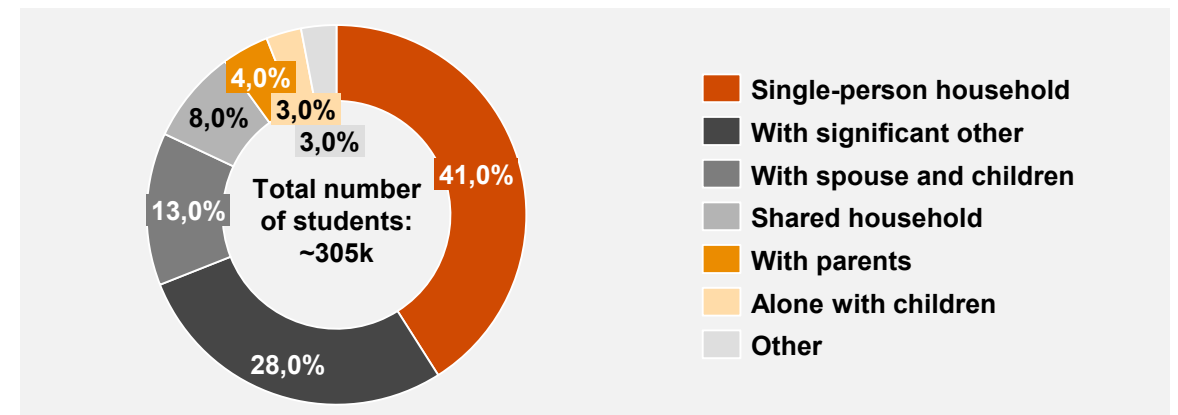


### Admission to the student dorms provided by public universities

In Finland, student housing applications are managed online by various housing organizations, tailored to meet diverse needs. The application process and competition for housing may vary by region, with urban areas often having higher demand. Applicants need to provide personal and academic information, with selections based on criteria like proximity to the university, financial need, and specific accommodations. Responses to applications, detailing options or waitlist status, are typically received within weeks.

The system, including entities like the Foundation for Student Housing in the Helsinki Region (HOAS), operates under the Act on Residential Leases, ensuring equitable rental conditions. Kela (Social Insurance Institution of Finland) offers additional financial support through housing benefits for qualifying students, aiding in affordability.

### Split of students per type of household, %



Sources: Eurostat, Statistics Finland, Eurostudent database, PwC analysis

# Finland's international student appeal may be affected by the potential introduction of full tuition fees for non-EU students

## Student Housing – Key Drivers

### One of the lowest % of individuals aged 18–34 living with parents

Finland is witnessing an unprecedented demand for student housing as the new academic year approaches, primarily driven by rising living costs and an influx of international students. This surge is evident from the over 61.000 applications received for the 2023 higher education application round, nearly doubling the figures from 2022 and with a significant contribution from international students, indicating Finland's increasing attractiveness as a study destination.

Recent changes in legislation aimed at enhancing Finland's appeal to international students, such as longer residence permits and easier post-graduation employment opportunities, have contributed to the demand surge. However, some stakeholders in the higher education sector are concerned that international student recruitment may slow significantly following an announcement by the Finnish government in June of this year that it will move towards full coverage of tuition fees for non-EU students. This means that international student tuition costs will no longer be offset by government funding.

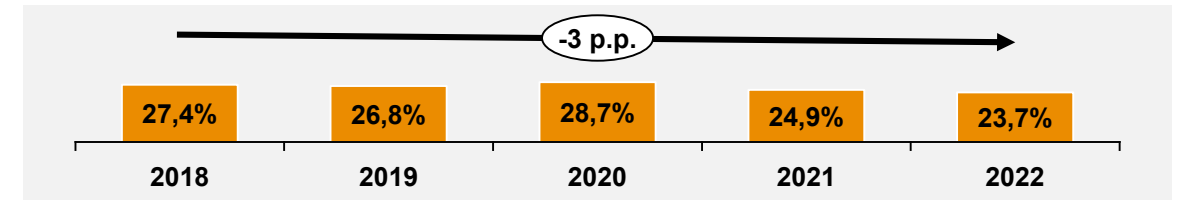
Finland has one of the lowest proportions within the EU of individuals aged 18–34 living with their parents, with a notable decrease in recent years. In 2022, only 23,9% of young adults in this age group resided with their parents. This trend contrasts significantly with the EU average, which stood at 79,9% in 2022, and is particularly distinct from countries like Italy and Spain, where the figures exceed 90%. The observed decline in the percentage of young adults living with their parents in Finland indicates a facilitated transition towards independent living, which reflects the effectiveness of social policies in place that support young adults in obtaining their own accommodation.

In Finland, student distribution shows the highest concentration in Helsinki-Uusimaa with 94.135 students, followed by Länsi-Suomi, Pohjois- ja Itä-Suomi, and Etelä-Suomi.

Sources: Eurostat, Statistics Finland, PwC analysis

PwC

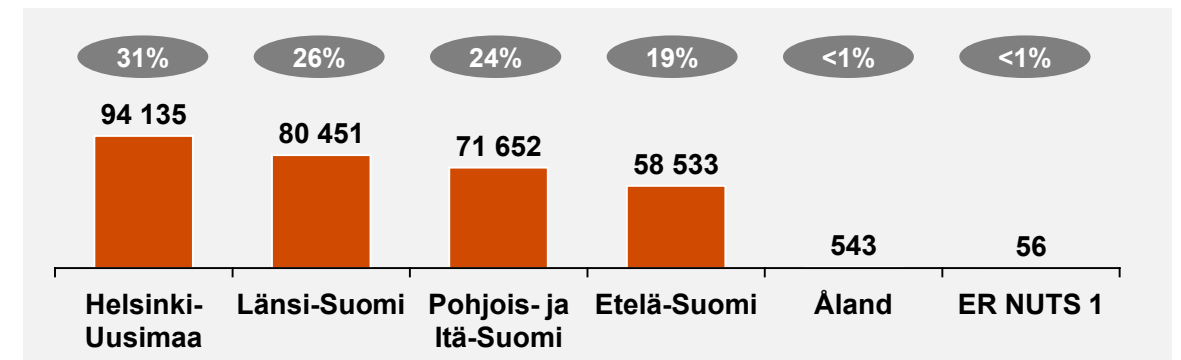
### Share of people aged 18–34 living with their parents (%)



### Student income by form of housing



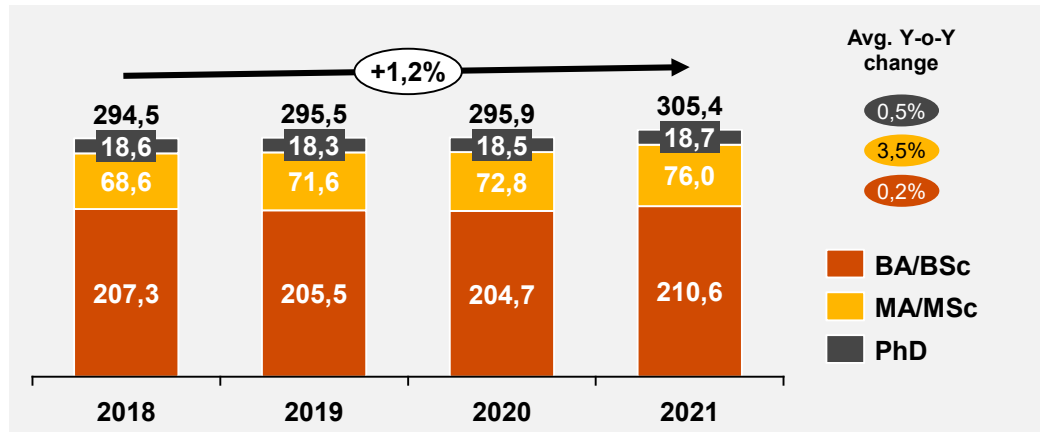
### Distribution of students by regions, 2021, in %



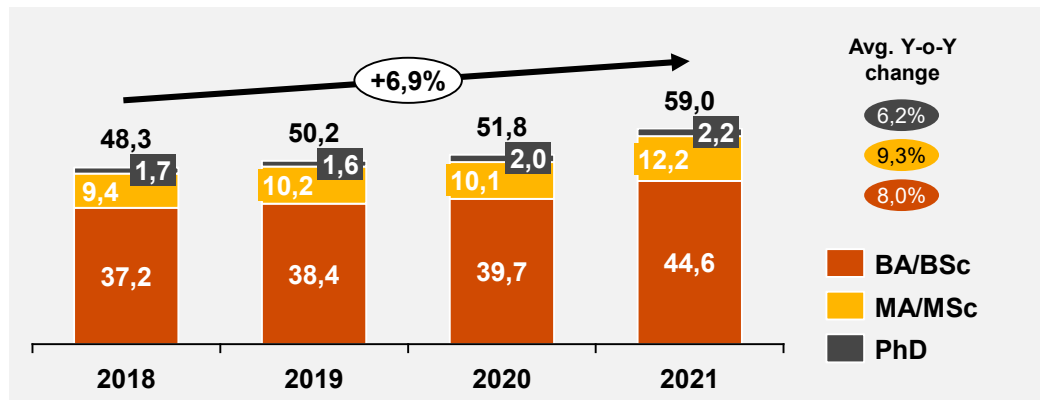
# Student enrolment is on an upward trajectory, with a stable share of international students

## Student Housing – Market Demand

### Number of tertiary education students, in ths.



### Number of newly enrolled student per year, in ths.



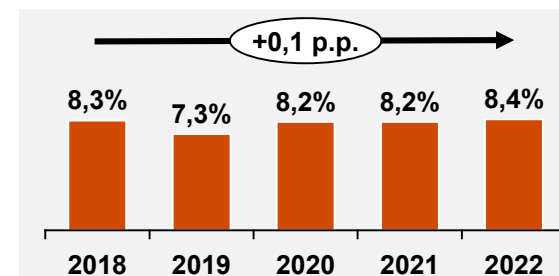
### Increasing total and newly enrolled students

Over the last four years, starting from 2017, there has been a steady annual increase of 1,2% in the total number of students enrolled in higher education institutions across Finland. This growth is largely attributed to the significant rise in Master's program enrolments, which saw an increase of 3,5% year over year, resulting in approximately 7.000 more students in 2021 when compared to the figures from 2018. This trend of increasing student numbers is expected to continue into the foreseeable future, fuelled by the ongoing increase in the rate of new student enrolments.

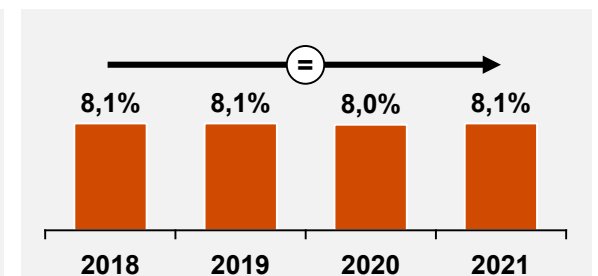
Furthermore, the rate of early leavers, or those who exit the education system before completing their program of study, has remained stable at an average of around 8,3% during this period. This rate is significantly lower than the European Union average, which exceeds 10%, showcasing Finland's ability to retain its students within the educational system. Notably, the global pandemic in 2020 led to an increase in early leavers in many countries, attributed to the disruptions caused by COVID-19 and the subsequent lockdowns. However, Finland's education system proved resilient, with no marked increase in early leavers during this tumultuous period.

In addition to the trends in domestic student enrolment and retention, the number of international students choosing Finland as their study destination has remained consistent, with a steady rate of around 8%.

### Number of early leavers (%)



### Share of foreign students



# In Finland, student housing is in high demand, with SOA managing preferred options like studio and 2-room apartments

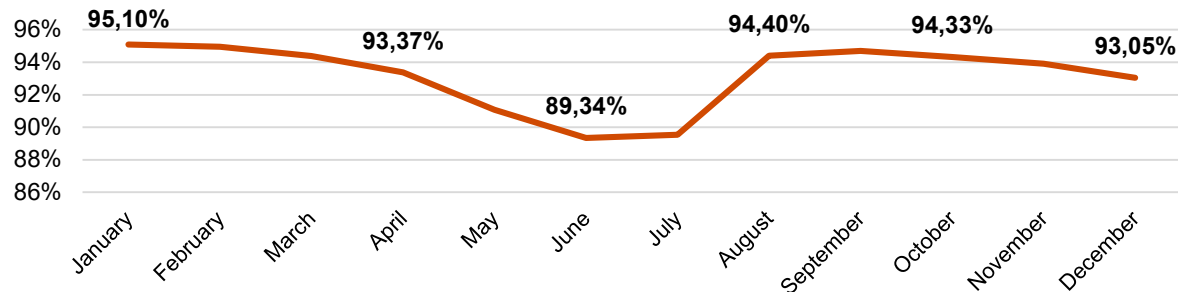
## Student Housing – Market Supply

### Majority of student housing is concentrated in the capital region

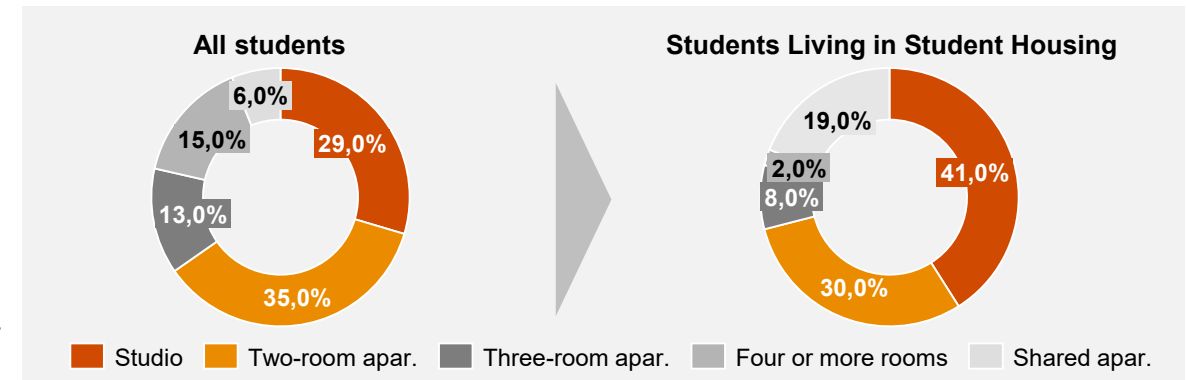
In Finland, student housing is predominantly affiliated with The Finnish Associations of Student Housing Organisations (SOA), which encompasses a network of 32 student housing providers across 24 cities, including major university locations. These organizations collectively manage nearly 45,000 rental apartments, translating to approximately 75,000 beds, a substantial portion of which are state-subsidized. Notably, around 10,000 of these apartments are situated within the Helsinki capital region. Additionally, national student organizations such as SYL and SAMOK are integral members of SOA ry, further solidifying the network's extensive reach and impact on student accommodation throughout Finland.

In the landscape of student accommodation, the preference leans towards apartment living, with studios being the predominant choice among students. Analysing the distribution of students by accommodation type reveals that studios account for 41% of the choices. This is followed by two-room apartments, which constitute 30% of the housing preferences. Less common are three-room apartments and accommodations with four or more rooms, making up 8% and 2% respectively. Shared apartments, offering a communal living experience, are chosen by 19% of students, indicating a significant yet smaller segment of the housing market.

### Occupancy rates in student housing, by month



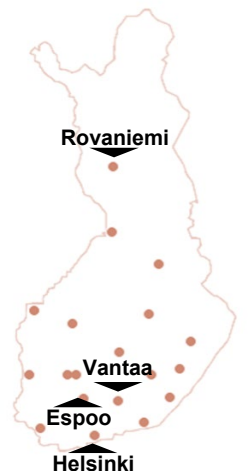
### Split of students per type of apartment, %



### SOA ry organisations across Finland

Due to a recent increase in students at Finnish universities, many students find it difficult to find an SOA accommodation. Notably, around 8,000 students are already queuing for student accommodation in Helsinki for fall 2024.

Student housing institutions in Finland are notably concentrated in major educational centres, with organizations like AYY in the Helsinki region, DAS in Rovaniemi, and HOAS serving Helsinki, Espoo, Vantaa, and Kauniainen, highlighting a distribution that aligns closely with university locations. This geographical spread ensures that student housing support is accessible across key academic cities, from Jyväskylä with JYY and KOAS, to Tampere with POAS and TOAS, ensuring a wide range of options for students in various regions.





# 4



# Universities



# In Finland there are 37 tertiary education institutions, with the **majority of students attending public institutions**

## Universities

### Key conclusions – Phase 1

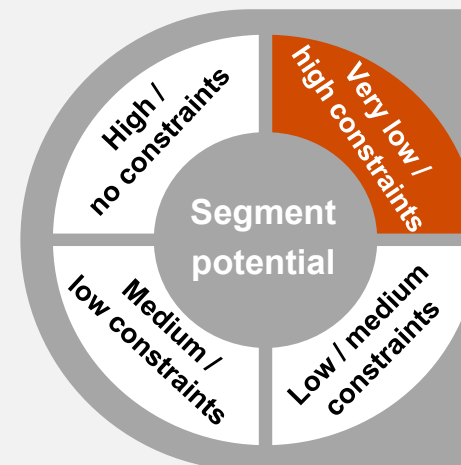
- Finland has 37 tertiary education institutions, including 13 universities and 24 Universities of Applied Sciences (UAS), with a majority (51,8%) of the 305.000 students attending public institutions.
- Finland's student population has increased by 1,2% annually since 2018, reaching approximately 305.000 across BA, MA, and PhD programs in 2021.
- Despite the growing student population, at the moment, Finland's higher education institutions (HEIs) face an oversupply of places.

### Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



### PwC Assessment



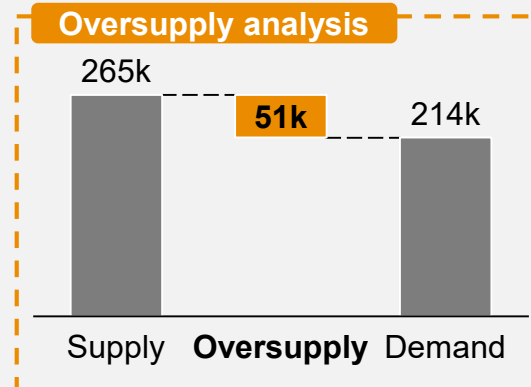
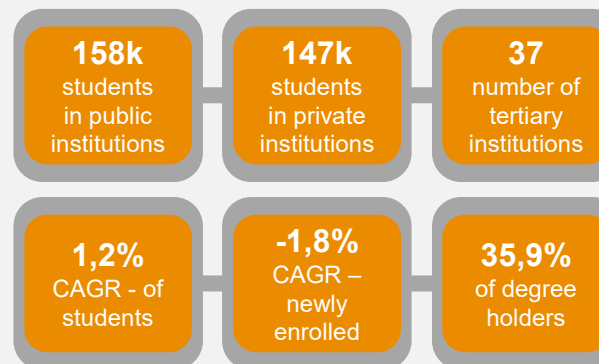
Universities have seen significant improvement in student to teacher ratio, primarily driven by influx of teachers.



Relatively limited growth of overall enrolled students, however in recent years there is a growth in newly enrolled students.



### Key Segment Data



# Finland has a high proportion of university-educated individuals with balanced public and private enrolment

## Universities – General Overview

### Organisation of tertiary education in Finland

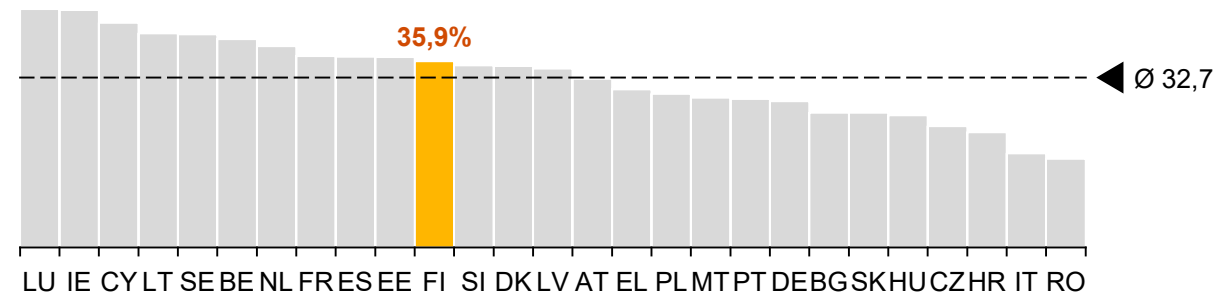
The Finnish higher education landscape is structured into two main sectors; universities and universities of applied sciences (UAS). The universities are focused on scientific research and education based on it, aiming to provide high-level academic education and promote lifelong learning. They offer a range of degree programs including Bachelor's, Master's, and Doctoral levels. On the other hand, UASs are more oriented towards providing education that meets the needs of the working world, with a strong emphasis on practical skills and applied research. These institutions offer professionally oriented Bachelor's and Master's programs.

The Finnish higher education system is known for its module-based program organization and uses the European Credit Transfer and Accumulation System (ECTS) for course assessments. A notable aspect of higher education in Finland is the emphasis on student independence; even at the Bachelor's level, students have a significant amount of autonomy in planning their studies. Admission to universities is competitive, but there are no tuition fees for degree students from EU/EEA countries, with some exceptions for Master's programs for non-EU/EEA students. Students are expected to pay a small membership fee to their institution's student union, which in turn provides them with various benefits like reduced-price meals and healthcare services.

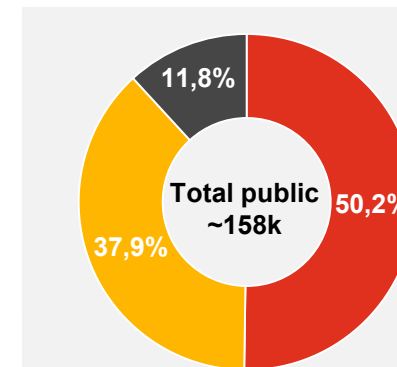
Higher education system, characterized by its quality and inclusivity, aims to offer equal educational opportunities to all, from early childhood education to higher education. Education at all levels is predominantly free of charge, and the system is designed without dead ends, allowing learners to always continue their studies at a higher level. Adult education is also available, offering a range of options from comprehensive to higher education.

The share of the population holding a university degree is 35,9%, which is higher than the EU average of 32,7%, while there is an equitable distribution of enrolments between public and private institutions.

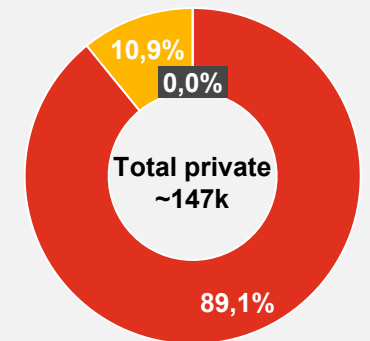
### Share of population with university degree, 2022, in %



### Split of students by public institutions, 2022



### Split of students by private institutions, 2022



Sources: Eurostat, Finnish National Agency for Education, European Commission, PwC analysis



# Universities, known for quality, focus on internationalisation, STEM strength, and aligning education with job needs

## Universities – Key Drivers

### Above average proportion of young adults with a tertiary educational qualification

Population growth for the segment of the population aged 18–24, as a key driver of potential demand for university students in Finland, is predicted to increase by 2030, followed by a sharp drop in population. This will result in CAGR of ~-1,3% over a 20-year period, which is in line with CAGR of ~-1,2% within the last 5 years.

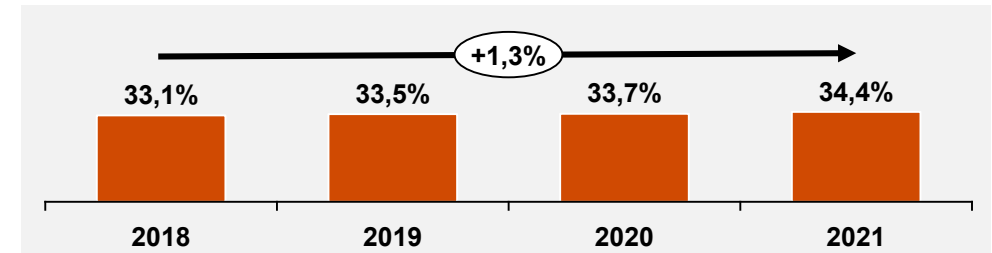
According to the Eurostat data, the number of foreign students in Finland has been flat, with a CAGR of around 0,1% until the year 2021. This has resulted in a total amount of foreign students being 24,6k in the same year.

Finnish universities are noted for their independent approach to evaluating their operations and outcomes, often with the support of the Finnish Education Evaluation Centre (FINEEC). This structure has led to Finnish institutions being recognized in global rankings, such as the World University Rankings and QS World University Rankings, where many Finnish universities consistently perform well. The Finnish government is committed to increasing the international student population and improving their integration and employment opportunities post-graduation, reflecting a broader strategy to enhance the global orientation of Finnish higher education.

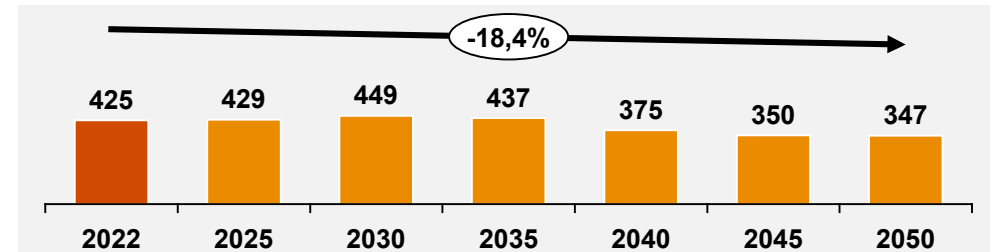
The share of STEM graduates remains comparatively high and well above the EU-27 average with 34,4% of all graduates having a STEM qualification in 2021. In Finland, the employment rate for recent graduates is notably high, with specific sectors like Masters from Universities of Applied Sciences reaching an employment rate of 94% between 2009 and 2021, indicative of the strong alignment between higher education and labour market needs. Comparatively, the employment rate for recent graduates in the EU varies significantly among member states, from as low as 65,2% in Italy to as high as 93,4% in Luxembourg in 2022, with Finland's performance being robust within this spectrum.

The Finnish education system's emphasis on vocational and applied sciences education appears to contribute positively to graduate employability, especially in fields like healthcare and welfare, which exhibit high employment rates. In contrast, areas such as humanities or the arts have lower employment rates, yet they still fare better than technical fields vocational school graduates.

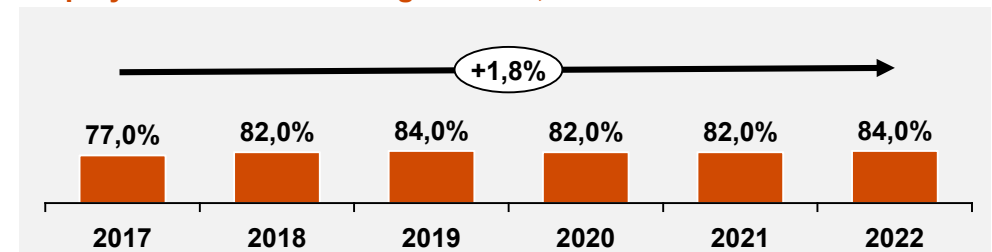
### Share of STEM graduates, %



### Projected population, 18–24 year old, in ths.



### Employment rate of recent graduates, %





# The number of total and newly enrolled students has been steadily increasing, diverging from demographic trends

## Universities – Demand

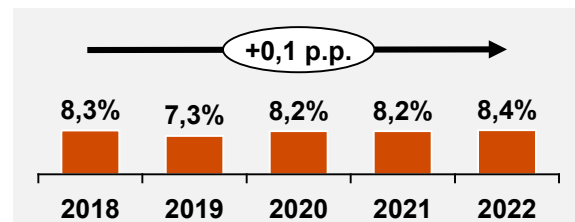
### Increasing number of students

The total number of students in Finland has been increasing by 1,2% on a yearly basis since 2018. In 2021, it has reached ~305k students enrolled in BAs, MAs and PhD programmes, representing an increase of 10,9k students from 2018.

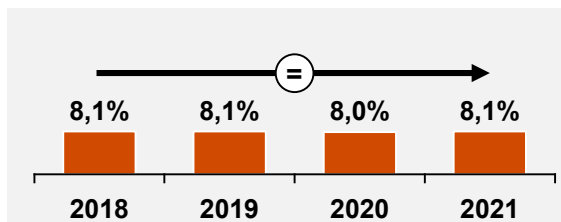
The majority of students are enrolled into Bachelor programmes (69%), followed by students enrolled into Masters studies (25%), and PhD students (6%). All three cycles are experiencing an increase in the number of students, where BA students are increasing with 0,2%, MA with 3,5%, and PhD with 0,5%. The number of newly enrolled students has been increasing at the rate of 6,9% on a yearly basis, since 2018. The largest increase happened from 2020 to 2021, when it increased for ~14%, or for about 7,3k students and reached ~59k newly enrolled students.

Although the percentage of international students in Finland has remained relatively stable in recent years, a significant uptick is anticipated due to recent reforms and strategic initiatives. Notably, a legislative reform implemented in April 2022 has streamlined the residence permit process for the full duration of study programs, markedly enhancing Finland's attractiveness to non-EU students. Furthermore, Finland's proactive recruitment of international students and the development of a cohesive national branding strategy has already yielded promising signs, with applications to English-taught programs doubling, predominantly from students outside the EU/EEA region.

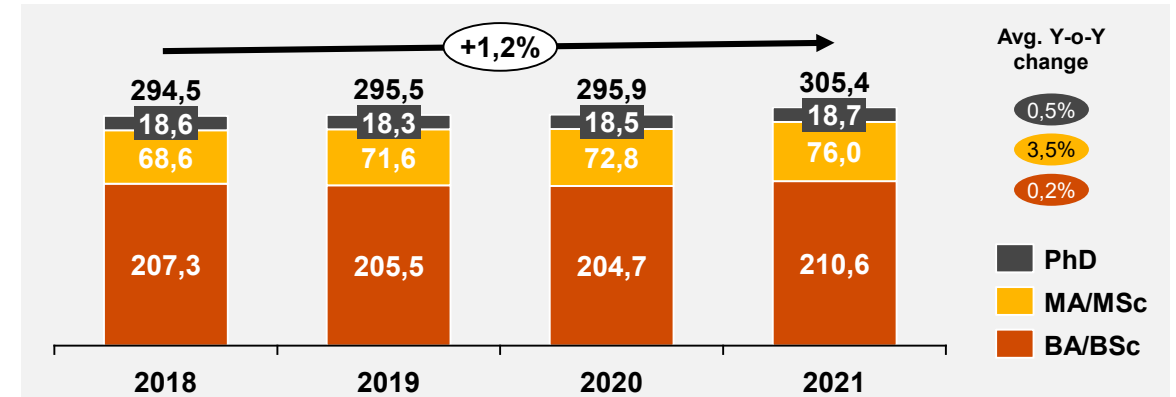
### Share of early leavers from education



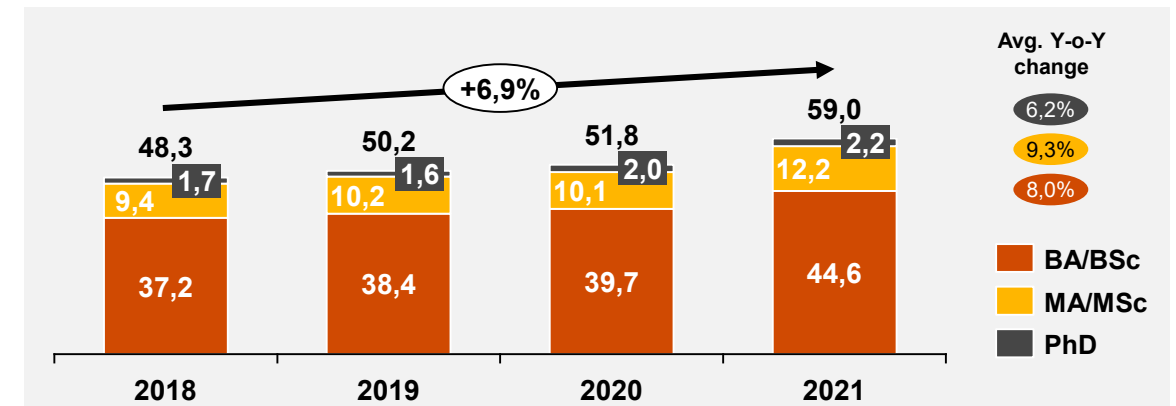
### Share of foreign students



### Number of tertiary education students, in ths.



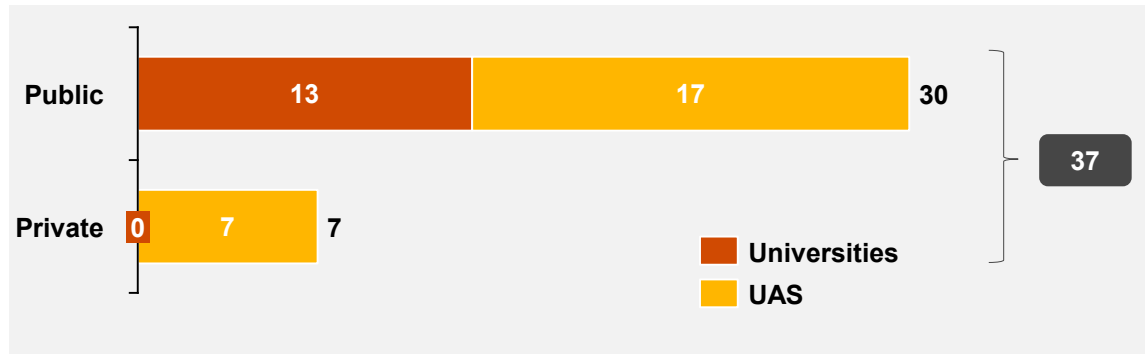
### Number of newly enrolled student per year, in ths.



# The growth in student enrolment has been commensurate with the expansion in academic staff,...

## Universities – Supply

### Number of tertiary education institutions

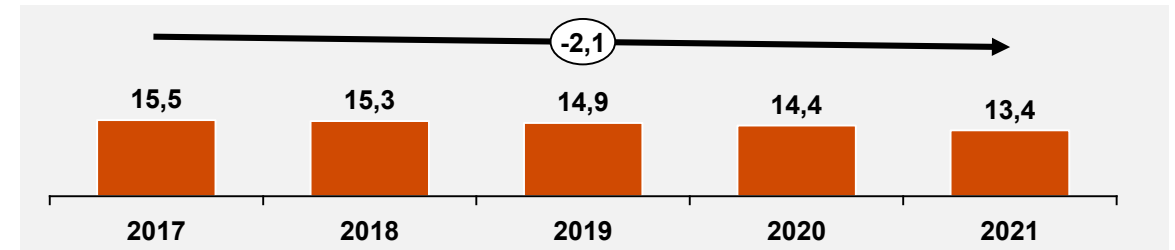


In Finland, there are 37 tertiary education institutions, out of those 30 are public, while 7 are private. Latest data available shows that there were about 305k tertiary education students. Majority or ~51,8% (about 158k students) of those are attending public institutions, while the rest or ~48,2% (about 147k students) are attending private.

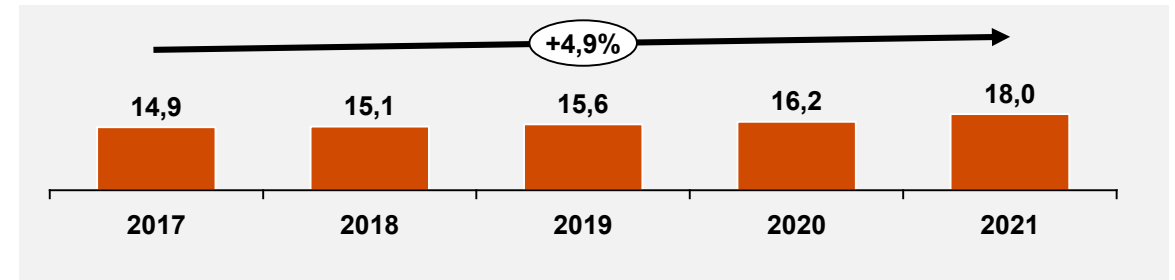
In total, there are 13 universities, which are all publicly owned. On top of that there are 24 Universities of applied sciences (UAS), 17 public and 7 private. The most universities are located in the region of Uusimaa where also the most students are concentrated.

In Finland, the student-teacher ratio has seen a significant improvement, which is indicative of the country's commitment to enhancing educational quality. This positive trend is evidenced by the student-to-teacher ratio, which has steadily decreased from 15,5 in 2017 to 13,4 in 2021. This improvement aligns with the growth in academic staffing, which has shown a notable increase from 14.893 staff members in 2017 to 18.012 in 2021. This increase in staff not only supports a more personalized and effective teaching environment but also reflects Finland's strategic investment in education, ensuring that the rise in student numbers is well-matched with the availability of qualified teaching personnel.

### Student-teacher ratio



### Number of academic staff in tertiary education, in ths.



### University students by region in which their university is located (Top 8)

1.	Uusimaa	55.468	5.	North Ostrobothnia	13.873
2.	Pirkanmaa	21.706	6.	North Karelia	9.343
3.	Southwest Finland	20.233	7.	Ostrobothnia	7.539
4.	Central Finland	13.969	8.	North Savo	6.895

# 5

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## Pre-school facilities



# Early childhood education institutions in Finland **are predominantly public**



## Pre-school facilities

### Key conclusions – Phase 1

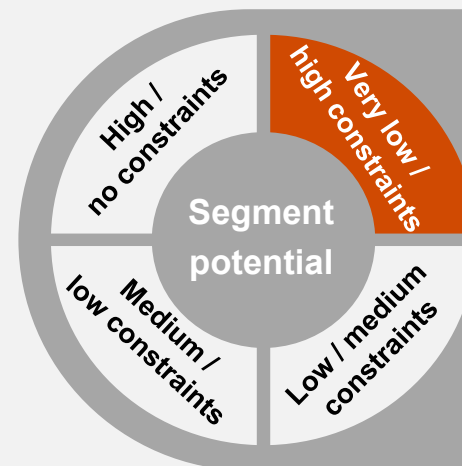
- Finland's early childhood education is divided into non-compulsory early education and mandatory pre-primary education, with the latter serving as a prerequisite before starting basic education at six.
- Governed by the Early Childhood Education and Care Act, Finland's system ensures universal access to pre-school education.
- There are 556 early childhood education institutions in Finland, predominantly public (84%).

### Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



### PwC Assessment



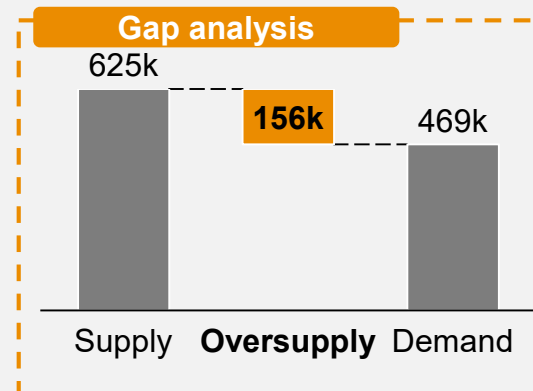
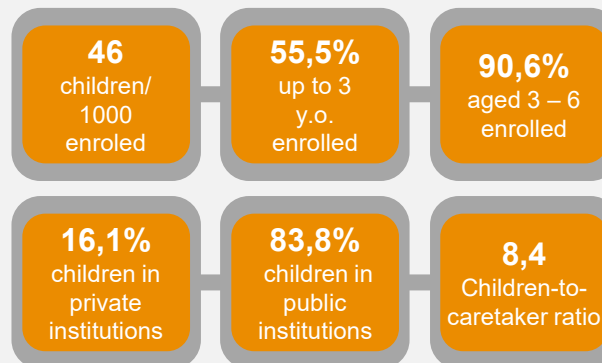
Segment is jurisdictionally and operationally fragmented, with a oversupply in the 0-3 sub-segment.



High fragmentation of stakeholders limit the investment opportunities in the segment.



### Key Segment Data





# The number of children enrolled in pre-schools in Finland is among the highest in the European Union

## Pre-Schools – General Overview

### Two types of pre-school education

In Finland, early childhood education is structured into two distinct phases: voluntary early childhood education and mandatory pre-primary education.

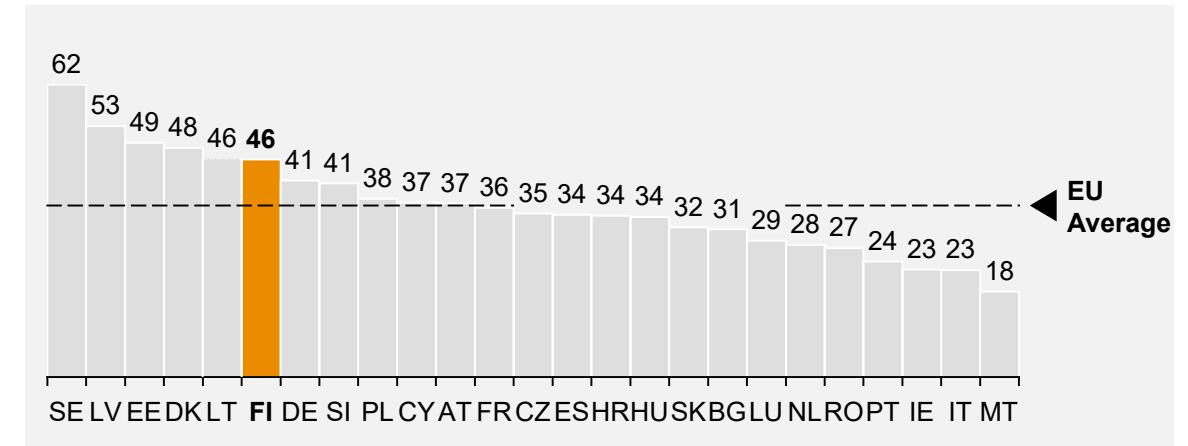
Mandatory pre-primary education (esiopetus) in Finland is an essential prerequisite, obliging children to partake in this educational phase for one year prior to commencing basic education at the age of six. It is incumbent upon municipalities to offer a minimum of 700 hours of pre-primary education annually, typically distributed over four hours daily throughout the school weeks. Municipalities are also tasked with ensuring the availability of supplementary Early Childhood Education and Care (ECEC) services for children enrolled in pre-primary education. While pre-primary education is provided at no cost to families, there exists the provision for parents to opt for early enrolment in pre-primary education before the child reaches the age of five. The primary objective of pre-primary education is to equip children with the necessary readiness for primary education over the course of a year.

It is mandatory for municipalities to furnish every child in Finland with access to ECEC, thereby ensuring a sufficient number of ECEC placements to accommodate local needs. The framework for the provision of ECEC is adaptable, with options including placement in early education centres or family daycare settings. Additionally, municipalities are afforded the discretion to either directly administer these services or to engage external public or private entities for their provision. In contrast to pre-primary education, early childhood education (varhaiskasvatus) is not compulsory, resulting in the absence of statutory assurances for placement within such programs. This accounts for the comparatively lower enrolment rates of children up to the age of three in Finland, relative to other European Union member states. Conversely, enrolment in pre-primary education is compulsory, with a guaranteed placement in a pre-primary education institution.

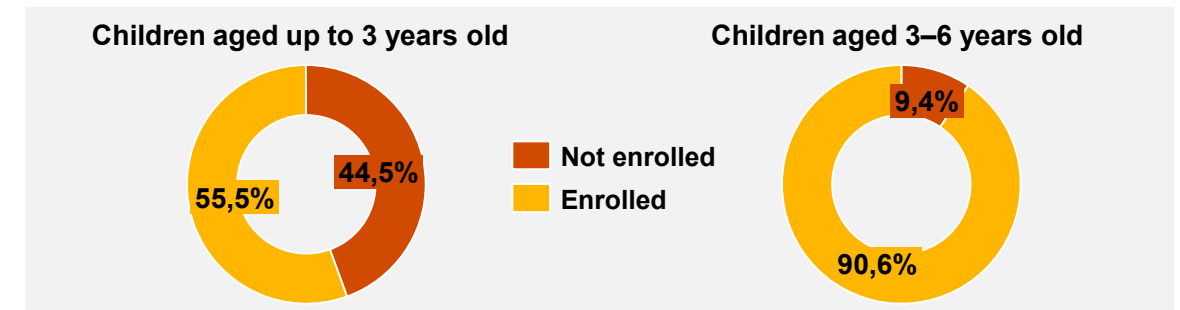
The Ministry of Education and Culture holds the responsibility for establishing the foundational principles and guidelines governing both early childhood education and care, including pre-primary education, in Finland.

PwC

### Number of children enrolled to pre-school facilities, per 1000 citizens, 2021



### Share of children enrolled in pre-schools, 2022



Sources: Eurostat, OECD, European Commission, Statistics Finland, PwC analysis

# In Finland, the assessment of early childhood education staff performance underscores the inherent quality of the system

## Pre-Schools – Key Issues

### Decreasing number of pre-school demographics

The number of children aged 0–6 has been declining with a CAGR of ~2,9% in a five-year period since 2017, when it was ~412k, reaching ~355k in 2022. In the same period, the number of children in the group aged up to 3 years old was decreasing with a CAGR of ~3,3%, while the number of children in the group aged 4 to 6 was decreasing by a CAGR of ~2,4%.

The number of new-born children has been almost flat, resulting in a negative CAGR of ~0,4% for a five-year period since 2017, or around 700 less children being born in 2021 as compared to 2017.

The trend of new-born children in Finland from 2017 to 2021, which saw a decline followed by a rise to 49.594 in 2021, alongside a similar pattern in fertility rates, directly affects the pre-school education system. Decreases in birth rates may reduce the need for early childhood education services, impacting resource allocation.

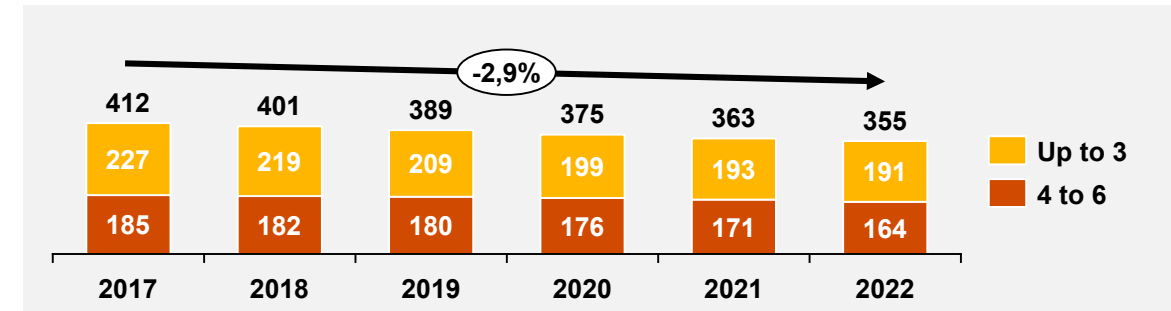
In Finland, the quality of early childhood and preschool education, along with staff performance and children's developmental levels, is monitored by local and regional authorities. This decentralised approach results in diverse monitoring practices across different municipalities. Staff members frequently engage in self-assessment, although the lack of standardised tools means these assessments can vary between different institutions.

The evaluation of staff performance through these inspections is intended to provide management and authorities with a clear understanding of systemic needs, focusing on areas for professional growth without linking the process to penalties or rewards. Inspections may employ a variety of assessment tools, such as ratings, checklists, observations, and feedback from parents and staff surveys, to gain a comprehensive view of performance.

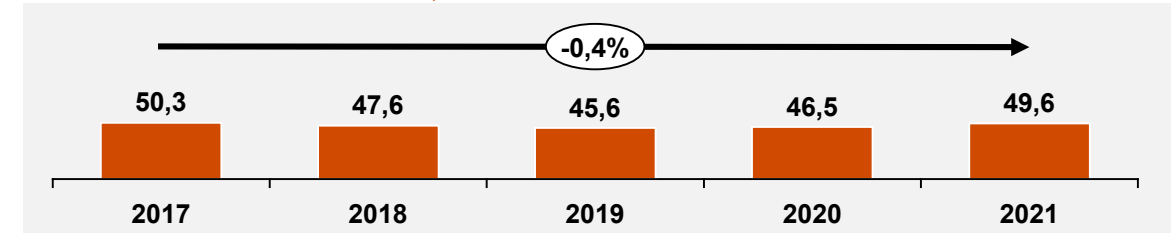
The frequency of these inspections is not centrally regulated but is left to the discretion of individual institutions, with the findings made available through municipal publications.

Sources: Eurostat, Statistics Finland, European Commission, PwC analysis  
PwC

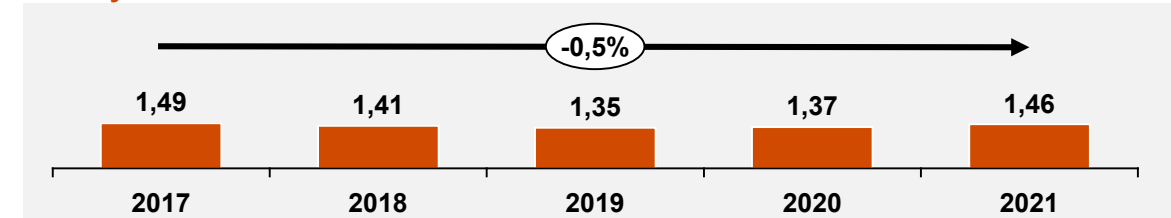
Number of children aged 0–6, in ths.



Number of new-born children, in ths.



Fertility rate



# With Finland's child population expected to decrease to 293k by 2060, strategic adjustments in pre-school services are essential

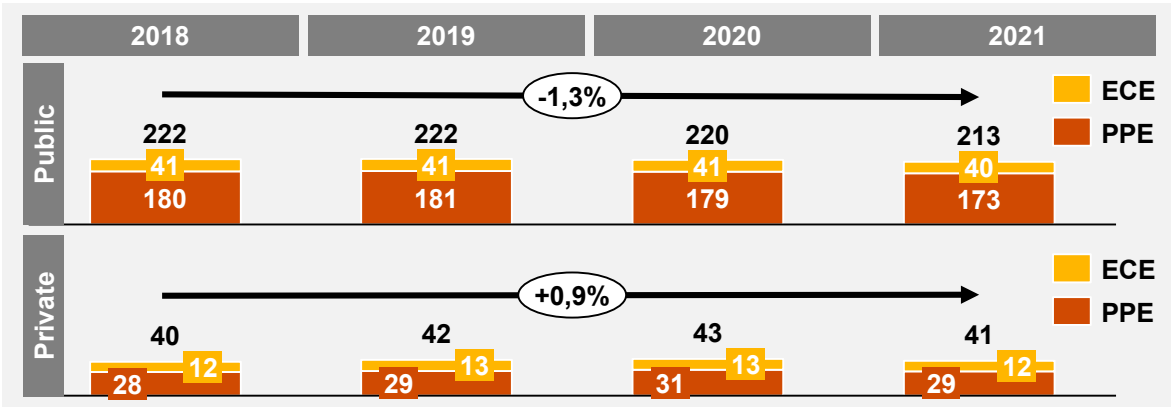
## Pre-Schools – Demand

### High pre-school education enrolment rates

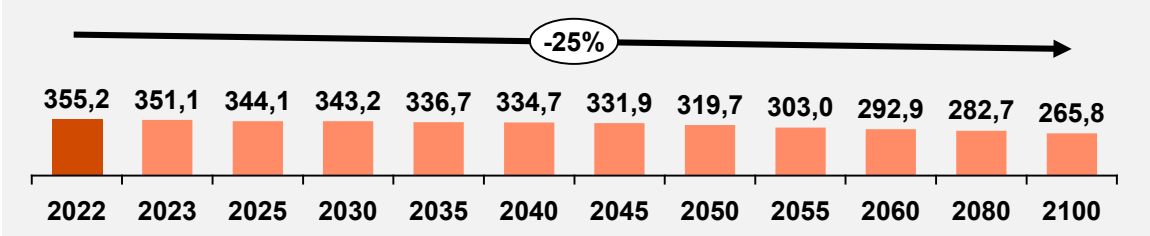
The demand for pre-school education in Finland is projected to evolve in response to demographic shifts among children aged up to 6 years. According to projections, the population in this age group is expected to decrease from 355.169 in 2022 to 292.865 by 2060, indicating a gradual but consistent decline over the coming decades. In 2021, regional enrolment rates in early childhood education varied, with the highest engagement seen in Uusimaa where 92,4% of children aged 3–6 were enrolled, followed closely by Southwest Finland at 90,5%. For the younger age group of 0–3 years, the highest enrolment was in Pirkanmaa at 52,9%, suggesting a robust participation in early childhood programs, particularly among older pre-school children.

These figures highlight a strong regional demand for early childhood education, especially in Finland's more populous areas. However, the projected decrease in the child population suggests potential long-term shifts in demand, underscoring the importance of strategic planning in the provision of pre-school education services.

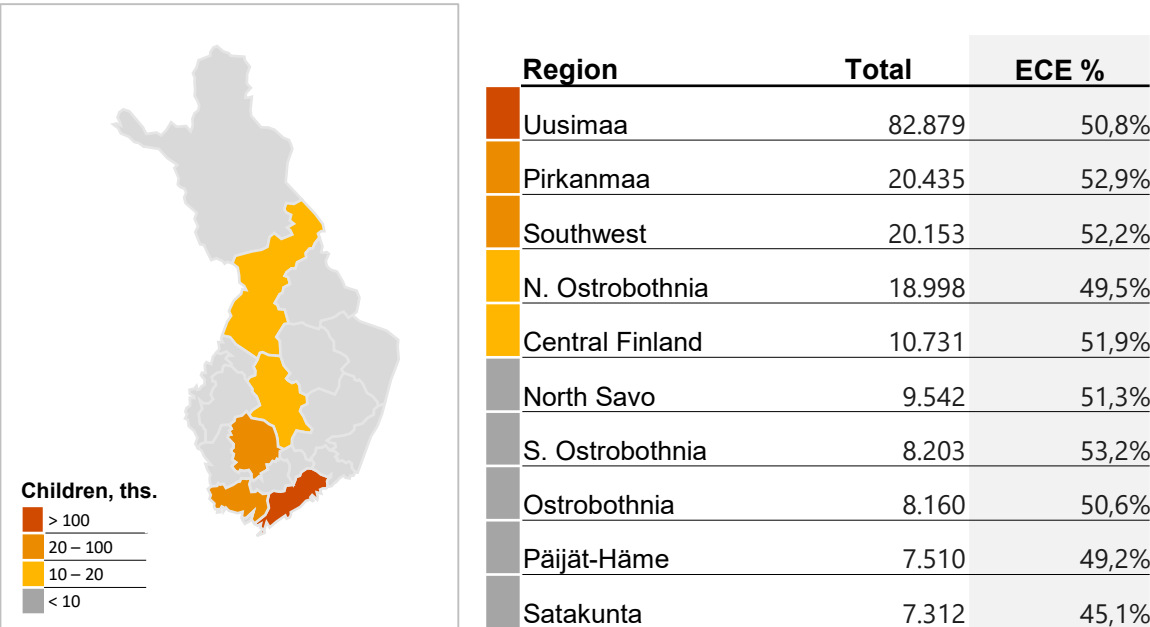
### Children enrolled in pre-school education type of institution, in ths.



### Projected number of population of children aged up to 6, in ths.



### Enrolment rate in early childhood education by region (2021, top 10)



# Finland is characterised by predominantly public ECE centres, with a drop in child-to-caretaker ratios from 2018–2021

## Pre-Schools – Supply

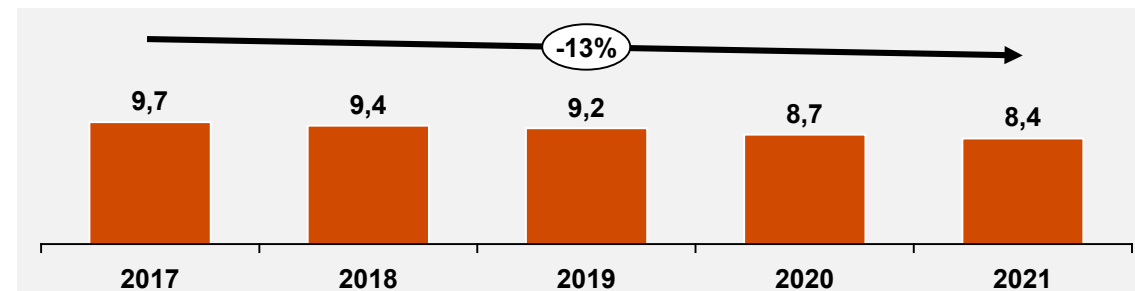
### Supply of early childhood education in Finland

In 2022, there were 556 institutions offering early childhood education in Finland. Approximately 6% (or 33) of all early childhood education institutions were privately owned, while the majority of institutions, or 523, were publicly owned. The most places are available in the Pirkanmaa region, where 92 institutions are located, while the least places are located in South Karelia, where 4 institutions are offering early childhood education.

The analysis of data spanning from 2018 to 2021 reveals a notable downward trend in the children-to-caretaker ratio within early childhood education settings, decreasing from 9,7 to 8,4. This shift is attributed to a reduction in the overall number of children enrolled in these programs. Consequently, this trend suggests an enhancement in the quality of care, as evidenced by the increased level of individualized attention afforded to each child. The decline in this ratio is a positive indicator of improvements in early childhood educational environments, allowing for more tailored and responsive interactions between caretakers and children, which is fundamental to the developmental needs of children.

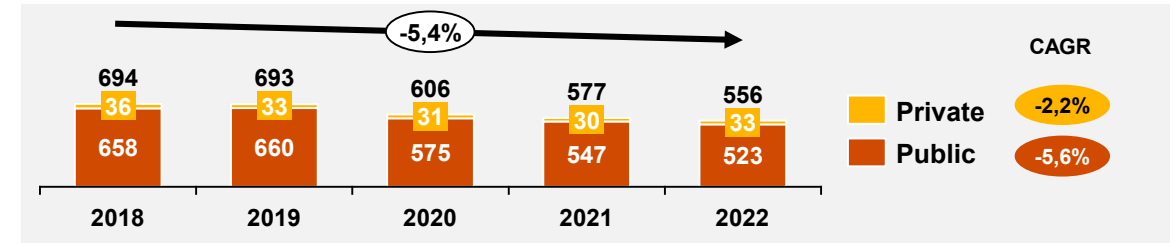
Finland's education system is celebrated for its high quality and commitment to equality, offering equal educational opportunities to all, underpinned by tax-funded early childhood education that enhances accessibility and participation.

### Number of caretakers in pre-primary facilities (children-to-caretaker ratio)

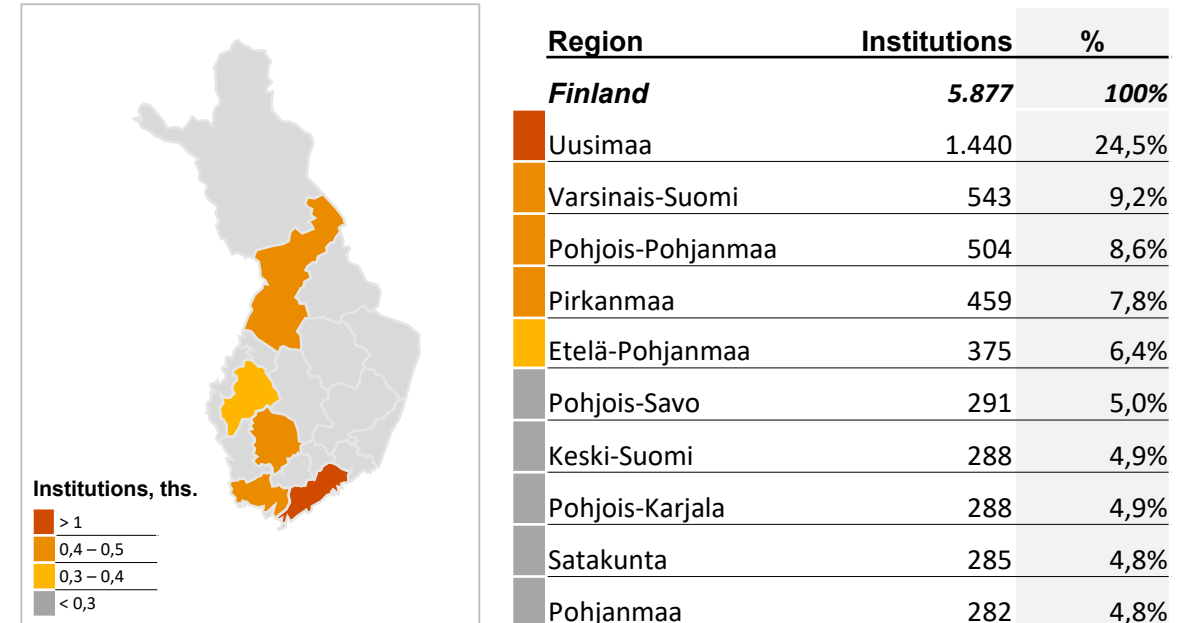


PwC

### Number of early childhood education institutions



### Supply institutions in Finland by region (2022, top 10)



Sources: Vipunen, Statistics Finland, PwC analysis



# 6



# Hospitals



PISO 1  
← ASCENSOR  
← SANITARIO  
↑ BANCO DE SANGRE  
↑ TERAPIA NEONATAL  
↑ TERAPIA ADULTOS

# There is evidence of **challenges in obtaining long term financing**, as well as a backlog in maintenance & repairs

## Hospitals

### Key conclusions – Phase 1

- Finland's healthcare system is structured in a decentralized three-tier system, with the Ministry of Social Affairs and Health overseeing policy and the newly formed Wellbeing Services Counties (WBSs) organizing most healthcare services.
- Private healthcare, accounting for over a quarter of all services, complements the public system, offering options like primary care and specialist services, often preferred by expatriates for efficiency and shorter wait times.
- Finland faces challenges in healthcare innovation and quality, with public hospital budgets reduced and an emphasis on replacing older equipment.

### Key conclusions – Phase 2

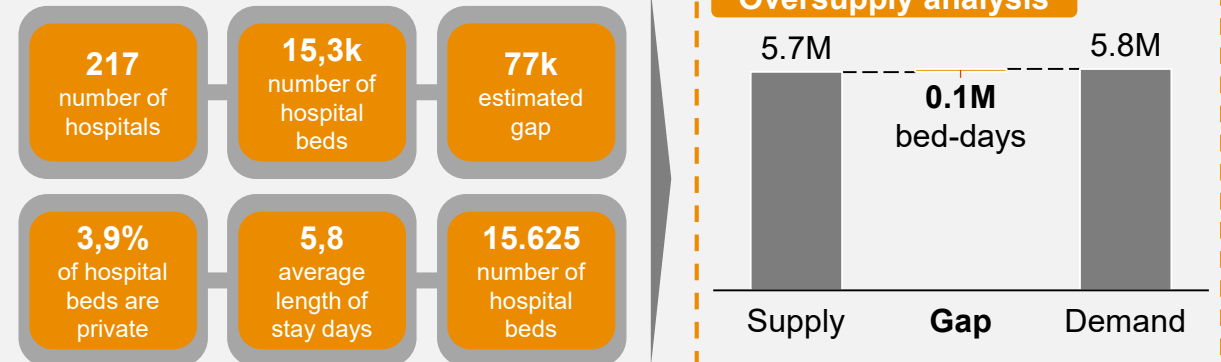
- Hospitals face significant challenges in obtaining long-term financing, which is essential for large-scale construction and equipment investments.
- There is a substantial backlog in maintenance and repairs across hospital infrastructures. There is a strong emphasis on investing in digital infrastructure, including AI tools and digital service platforms.
- Rapid population growth, particularly in Uusimaa and Turku, coupled with an aging population, is driving increased demand for healthcare services.



### PwC Assessment



### Key Segment Data



# The health system has undergone a reform, emphasizing the centralization of coordination and the increase in efficiency

## Hospitals – General overview

### Definition of the segment and ownership

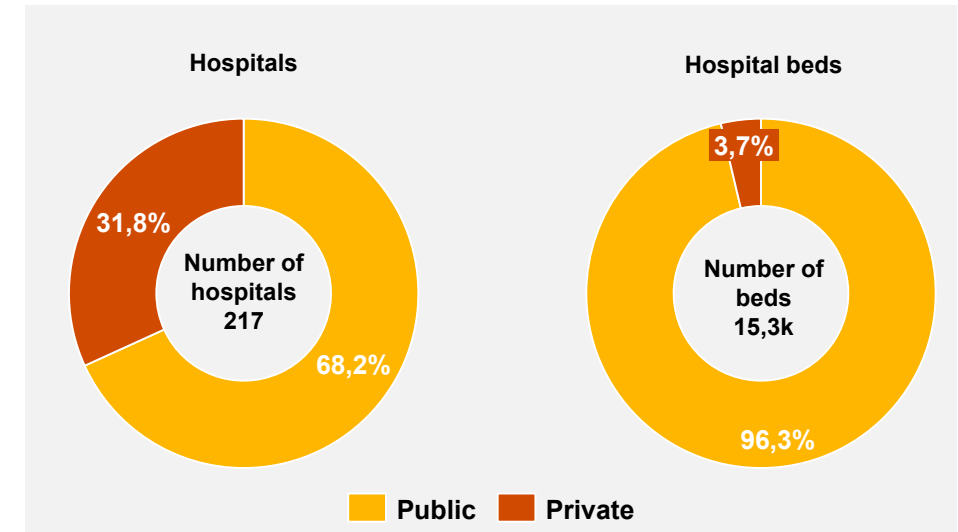
In Finland, the healthcare system provides services to all residents of the country, known as universal healthcare. According to the Constitution of Finland, public authorities are mandated to ensure adequate social, health, and medical services for everyone. This highly decentralized system is financed through taxes and social security payments.

The healthcare system in Finland operates on a three-tier system. At the national level, the Ministry of Social Affairs and Health (MSAH) is responsible for drafting legislation and implementing overall healthcare policies, with a strong emphasis on disease prevention and health promotion. Working in conjunction with the Ministry of Finance, the MSAH oversees the planning and management of the health system at the national level. National governance involves annual negotiations with the Wellbeing Services Counties (WBSs) regarding their investment plans and service delivery strategies. Additionally, the Finnish Institute for Health and Welfare (THL) supports planning and governance at national, regional, and local levels through data collection, guideline production, and research and development projects.

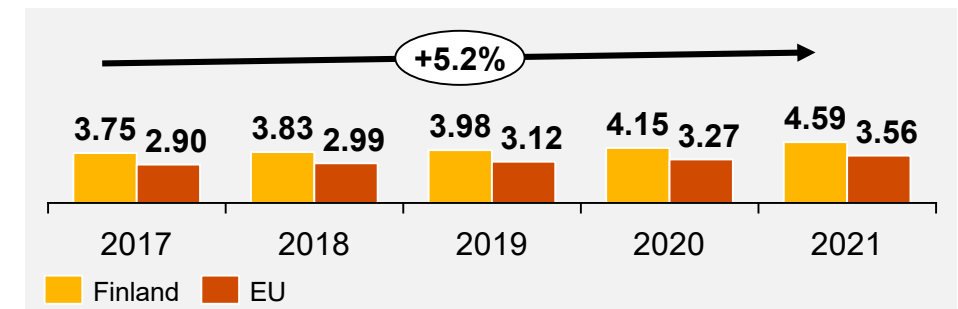
As of January 2023, the health system in Finland underwent restructuring. The Wellbeing Services Counties (WBSs) are now responsible for organizing health, social, and emergency services, particularly primary and secondary healthcare. There are 21 WBSs, financed from the state budget. Municipalities, which previously organized healthcare and social services, remain responsible for public health functions such as environmental health and health protection. Municipalities collaborate with WBSs for health promotion and wellbeing programs, with WBSs grouped into five collaborative areas centred around university hospitals. These collaborative areas centralize tertiary-level services provided by university hospitals and allocate responsibilities for highly specialized care among them.

Private health services complement municipal services, providing over a quarter of all social and health services in Finland. Notably, private health services receive partial subsidies from public funds and include primary care centres, dental offices, and specialist care. Data shows that most people utilize a combination of public, private, and employee healthcare services. Expatriates living in Finland often prefer private healthcare facilities due to their efficient value proposition, including shorter waiting times, especially for secondary or specialist care.

### Healthcare ownership, 2021

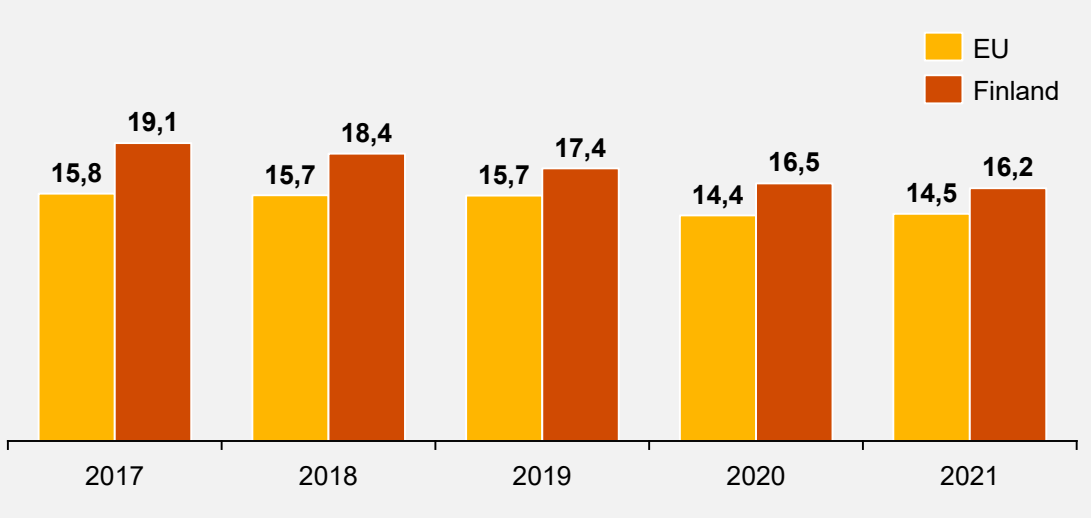


### Expenditure on healthcare, EUR per capita



# Despite lower healthcare spending than the EU average, Finland leads as the EU's top digital economy, notably impacting healthcare

Out-of-pocket expenditure on healthcare in Finland (% of total CHE)

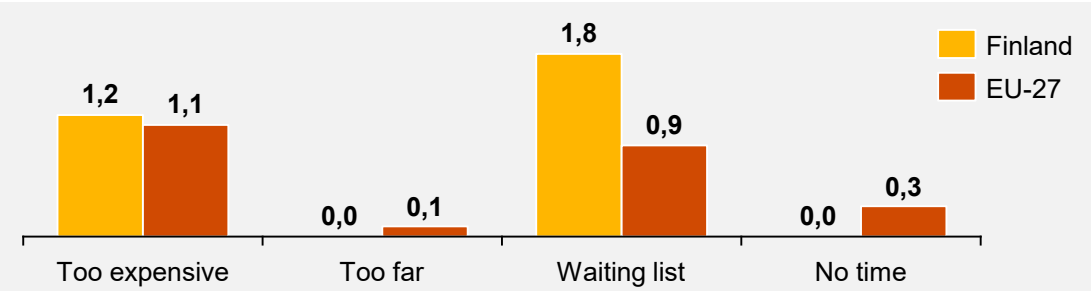


According to OECD data on risk factors, approximately one-third of deaths can be attributed to behavioural risk factors, with a notable emphasis on dietary risks (such as obesity) and smoking. Finland has already implemented a range of policies to control drug consumption, resulting in a lower (decreased by over 11 percentage points) share of adults in Finland smoking (11%), in comparison to the EU average (19%). However, the obesity rate has been steadily increasing over the past decades and is now higher (24%) than the EU average of 21%.

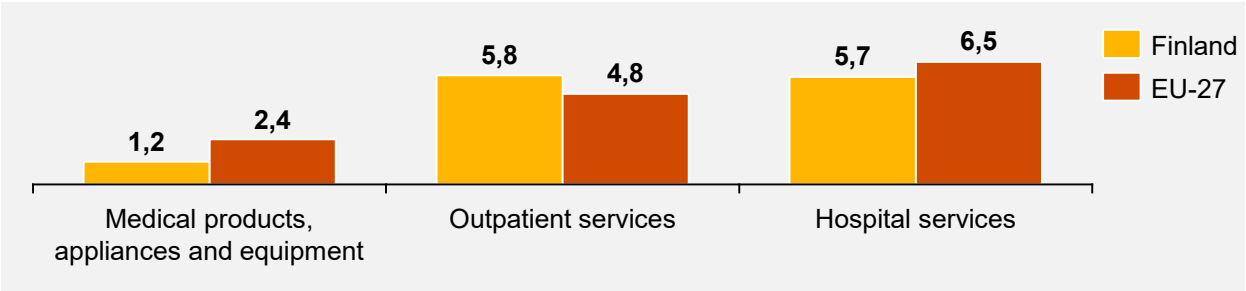
According to the Digital Economy and Societal Index (DESI) 2022 Finland is recognized as the most advanced digital economy in the EU, with its advancements extending significantly into healthcare. Finnish health technology is globally renowned, leading to a surplus in health-tech exports. However, in 2021, Finland was ranked 21st in the World Index of Healthcare Innovation (WIHI), indicating a moderate overall innovation index. Despite this, the healthcare system in Finland is generally considered of good quality, ranking 14th out of 167 selected countries, with an overall Legatum Prosperity Index score of 81,4, in contrast to neighbouring countries like Sweden (82,1), Norway (84,0) and Estonia (77,3).

It is also worth noting that the operating budgets of Finnish public hospitals have been reduced, with major hospital procurement focused mainly on replacing older equipment. Additionally, investments in new medical equipment in the private healthcare sector are expected to continue increasing.

Self-reported unmet demands of population by reason (% of population)



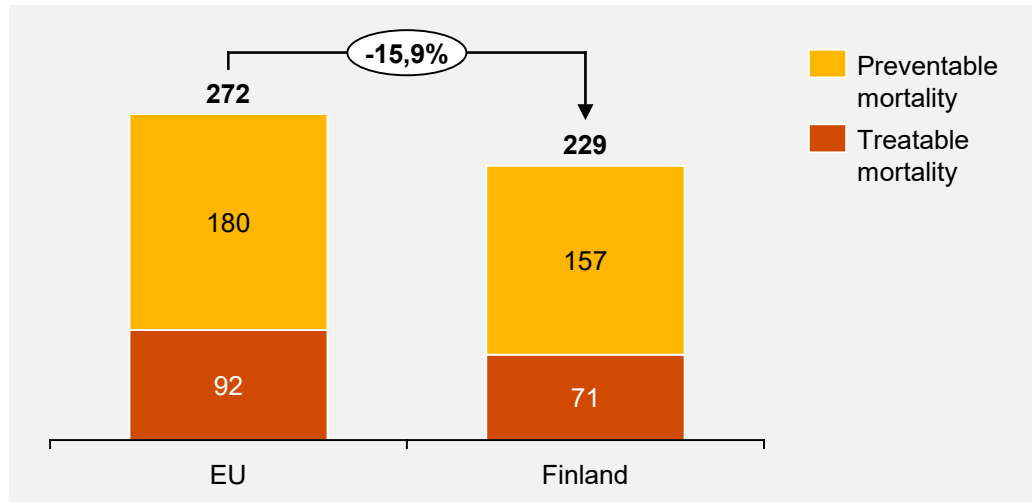
GDP spend on healthcare (% of total)





# Despite low mortality rates, Finland encounters significant obstacles in terms of accessibility and a scarcity of professionals

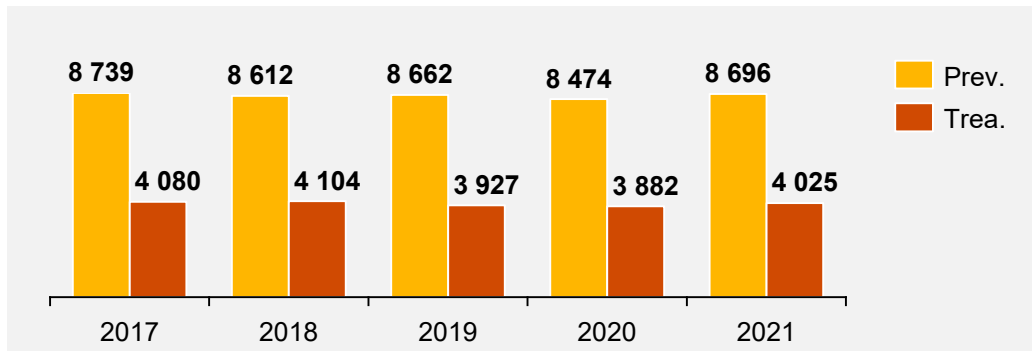
## Mortality rate compared to the EU average



Although Finland performs well in many aspects of healthcare, challenges persist, particularly regarding the availability of health services. Issues such as long waiting times and high levels of cost-sharing are common problems within the Finnish health system. In 2022, the percentage of Finns who reported unfulfilled health service needs was almost three times higher (at 6,5%) than the EU average at 2,2%. This disparity is even greater when compared to other Nordic countries. Research from THL indicates that self-perceived health is the poorest among those in the lowest income class, with an estimated ratio of 1:10 people in the bottom fifth income level reporting unmet service needs. This figure is 4,5 times higher than the EU average. With an increasing demand for health and social care, ensuring access to care through private resources to complement public provision is becoming a high priority.

Households in Finland bear a higher burden for healthcare services compared to other Nordic countries, especially for medicines and dental care. Out-of-pocket payments by households in Finland exceed both the EU average and the share in other Nordic countries. Notably, pharmaceuticals and dental care together account for half of all out-of-pocket expenditure.

## Treatable and preventable mortality of residents (#)



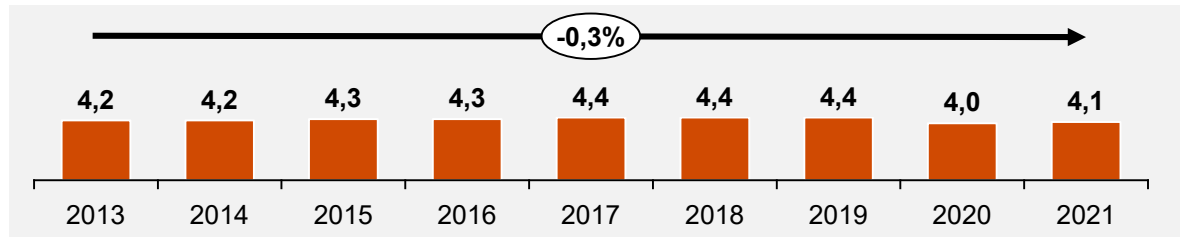
Furthermore, the number of people waiting for treatment has significantly increased in 2021 and 2022. According to the Finnish Institute for Health and Welfare, over 160.000 people were waiting for non-urgent specialist treatment, with 12,7% of them waiting for more than 6 months. The State of Health in Finland report by the Commission and OECD also highlights a shortage of healthcare and long-term care employees. Finland has fewer doctors than the EU average but more nurses, indicating challenges in recruiting personnel. The Ministry of Economic Affairs and Employment has acknowledged this shortage, which includes general practitioners, registered nurses, practical nurses, home care assistants, psychologists, and dentists. The primary source of new doctors and nurses in Finland are domestic medical and nursing graduates.

However, since 2010, the number of new medical graduates relative to the population size has been moderately increasing (13 medical graduates per 100k inhabitants), remaining below the EU average (17 medical graduates per 100k inhabitants).

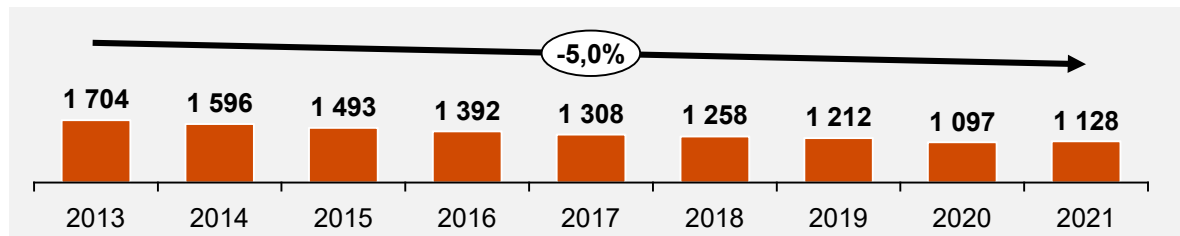
# Finland has a decreasing number of hospital days, and an average in-patient stay in the EU

## Hospitals – Market Demand

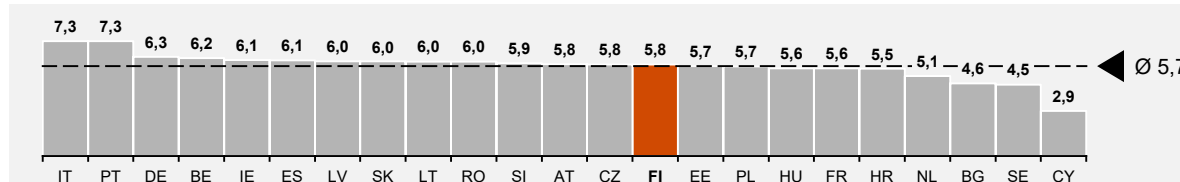
### Average number of visits to physicians, per capita



### Number of hospital days for inpatient cases in Finland, per 1000 inhabitants



### Average in-patient length of stay across EU in days in 2021 (curative care)



Sources: Eurostat, Sotkanet, Finland statistics, PwC analysis

In the last decade in Finland, the number of hospital days for inpatient cases has been steadily declining with a CAGR of about 5,0% since 2014. The largest decline, of about 9,5%, as compared to the previous year can be seen in 2020, when COVID-19 pandemic started.

Regarding the regional breakdown of average hospitalization duration, it is observed that North Karelia has the highest average length of stay, amounting to 9,5 days. Conversely, South Ostrobothnia registers the shortest average duration at 5,9 days. It is imperative to acknowledge the influence of regional policies, resource availability, and demographic variables in shaping these statistics, as they are pivotal factors contributing to the disparities.

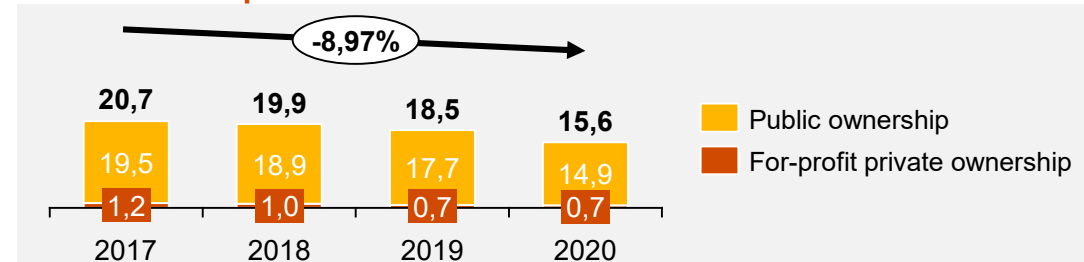
The number of medical doctor consultations per inhabitant were slowly increasing up to 2019, reaching 4,4 consultations. Due to the effects of the COVID-19 pandemic the number of consultations dropped to 4,0 and is slowly starting to rebound.

In 2021, the longest average hospitalization duration was associated with HIV, where patients remained in care for about 142,2 days, highlighting the significant healthcare needs of individuals with this condition. Mental and behavioural disorders resulted in an average hospital stay of 20 days, whereas nervous system disorders led to an average of 10,4 days. COVID-19 ranked as the fourth condition leading to extended hospital stays, with an average duration of 9,7 days, indicating the considerable impact of the pandemic on Finland's healthcare infrastructure, with other European countries reporting even higher averages. In contrast, patients suffering from circulatory system diseases, which are a leading cause of death in regions like Italy, experienced relatively shorter hospital stays, averaging only 8 days. The briefest hospitalizations were observed in cases involving eye and adnexa diseases, pregnancy-related complications, and digestive system disorders, with average lengths of stay being 2,4, 3,1, and 4,4 days respectively, underscoring the varied demands different medical conditions place on hospital resources and the efficiency of healthcare interventions for certain ailments.

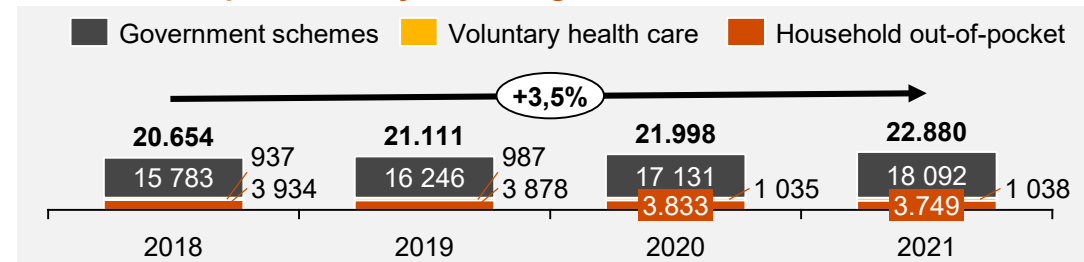
# In Finland, we can observe a significant decrease of the number of hospital beds, which has been falling by 8,45% annually

## Hospitals – Market Supply

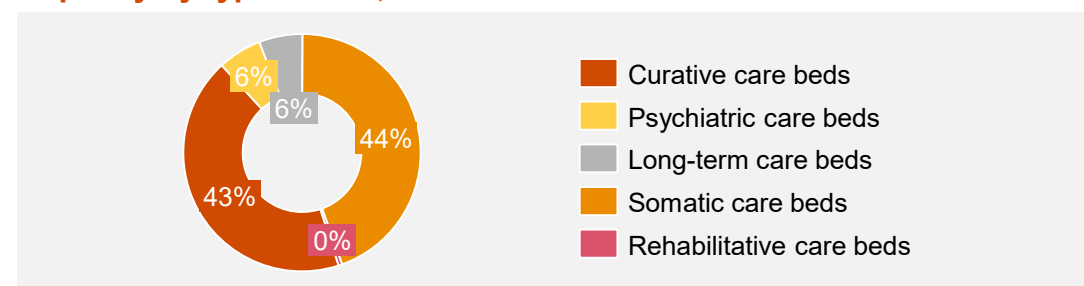
Number of hospital beds in ths.



Healthcare expenditure by financing scheme



Capacity by type of bed, 2022



In 2021, Finland's healthcare landscape consisted of a total of 217 hospitals, comprising 148 publicly owned hospitals and 69 privately owned hospitals. Public hospitals accounted for 68,2% of the total hospital stock, while privately owned hospitals constituted 31,8%. Among these, there were 116 general hospitals, including the largest one, Helsinki University Hospital. Over the past decade, Finland experienced a decrease in the number of hospitals, with a compound annual growth rate (CAGR) of -2,1% from 2010 to 2021. This downward trend was primarily driven by a decline in publicly owned hospitals due to various healthcare reforms, including hospital mergers and closures of smaller facilities, reflecting a broader trend observed across the Nordic countries. Notably, although the number of privately owned hospitals slightly grew (by 0,24%) between 2010 and 2021, Finland reported a decline between 2017 and 2021, with a CAGR of -2,67%.

The main argument for a substantial decline in the number of hospitals, especially publicly owned, further leads to an explanation for a marked reduction in hospital beds to 2,8 per 1000 inhabitants in 2021, which is below the EU average of 4,8 beds. According to the OECD, in 2021, a total stock of hospitals beds equalled to 15.286 beds, consisting of 14.723 beds in publicly owned hospitals and 563 beds in privately owned ones. The following suggests that only 3,7% of the total hospital bed stock in Finland is private. Furthermore, in line with a downward trend in the number of hospitals, the number of hospital beds in Finland declined by a CAGR of -5,87% between 2017 and 2021. Again, the trend is driven by a decline in publicly owned hospital beds with a CAGR of 5,46% between 2017 and 2021. Alarmingly, the hospital beds ratio is significantly lower than the EU average, positioning it among the lowest in the EU and suggesting potential shortage in bed availability.

Finland's healthcare system is facing a shortage of healthcare staff, with fewer doctors (3,6 per 1000 inhabitants) but significantly more nurses (18,9 per 1000 inhabitants) compared to the EU average of 4,1 doctors and 8,5 nurses per 1000 inhabitants. While most professionals working in the health sector are employed in county-run health services (health centres and hospitals), only 16% work in private medical centres.



7



# Retirement homes







# The majority of older Finns live independently, with the long term model also **shifting toward home-based care**



## Retirement homes

### Key conclusions – Phase 1

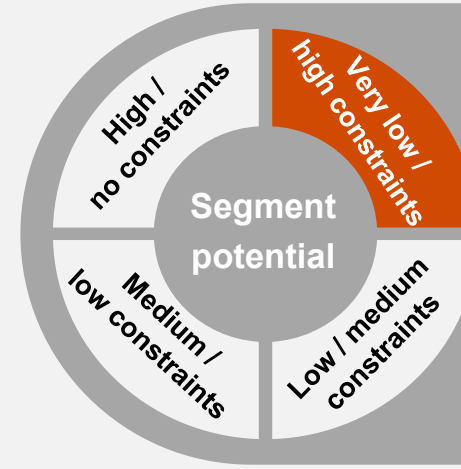
- The Ministry of Social Affairs and Health, along with the administrative agency of the Ministry of Social Affairs and Health - Valvira and the Regional State Administrative Agencies, regulate social care, while municipalities play the key role in operational delivery. Services integrate into the universal health system, funded by the government and user contributions (averaging 18,5%).
- Over 90% of Finns aged 75+ live independently, with less than 10% living in 24-hour care.
- Life expectancy in Finland is expected to rise, contributing to the growing demand for long-term care facilities.
- Finland's long-term care system is increasingly shifting towards home-based care, supported by services like "kotihoito" and incentives for family caregiving.

### Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



### PwC Assessment



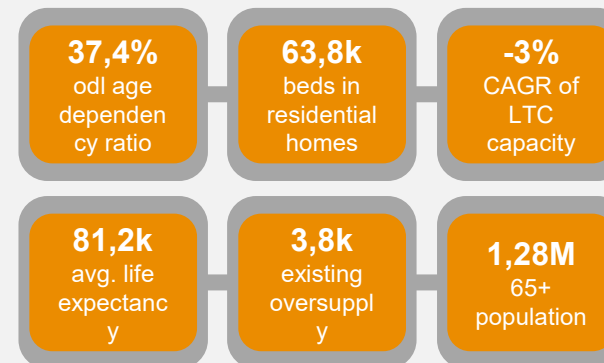
Majority of elderly chose to remain at home, which is also a focus of government's policy aiming to provide services in homes.



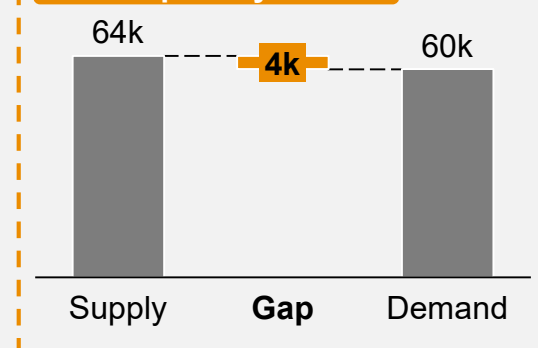
The identified oversupply and the fragmentation of the stakeholders to small providers limits the potential of the segment.



### Key Segment Data



### Gap analysis



# Retirement homes segment in Finland is fragmented, and mostly driven by smaller private operators

## Retirement Homes – General Overview

### Organisation of the system

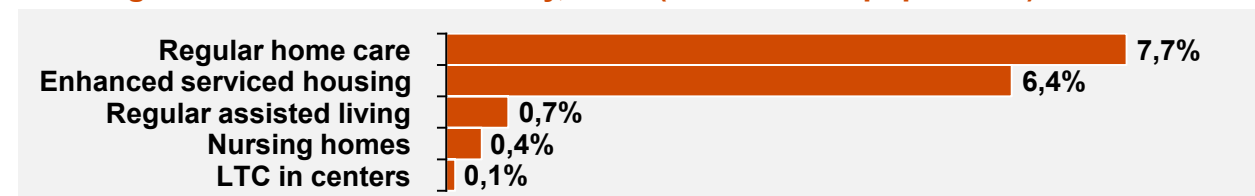
In Finland, over 90% of the elderly (75+) live in their own homes, with around 75% receiving no formal care. A small fraction, less than 10%, reside in 24-hour care facilities. The Ministry of Social Affairs and Health, with support from Valvira - Central agency within the administrative sector of the Ministry of Social Affairs and the AVI - Regional State Administrative Agencies, oversees the social care policies and ensures service standards across the nation.

Municipalities play a crucial role in the Finnish social and health service system, responsible for the provision and oversight of services in their regions. The rising older population and the need for formal care have made Long-Term Care (LTC) a policy focus, aiming for clear accountability and quality in service plans, despite the challenges of aligning self-determination with quality care provision.

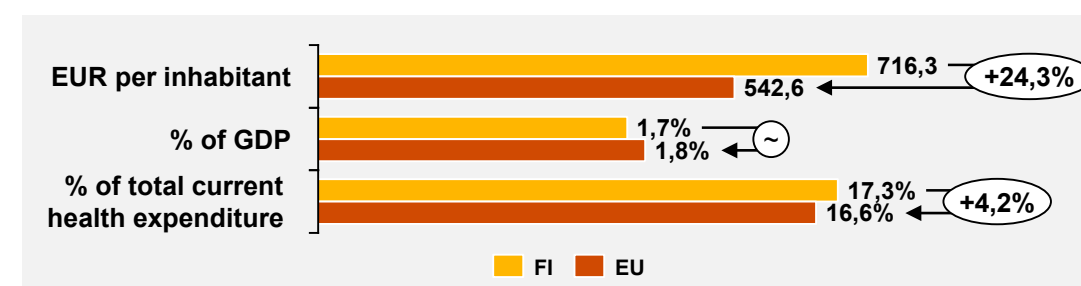
Finland's LTC services are integrated into the universal health and social care system, funded mainly by state and municipal governments. However, care users contribute to the costs, with older people paying an average of 18,5%. The system increasingly relies on unpaid family care, supported by cash-for-care schemes, with municipalities having flexibility in how services are provided.

The supervision of LTC provision is managed by Valvira and the AVIs. First issues licenses to care providers, processes complaints, and conducts investigations, while AVIs focus on regional supervision. Care plans are personalized, fostering a principle of 'self-supervision' where clients are involved in monitoring service quality. Recent quality issues in private care settings have prompted new regulations, including mandatory staff ratios and comprehensive assessments.

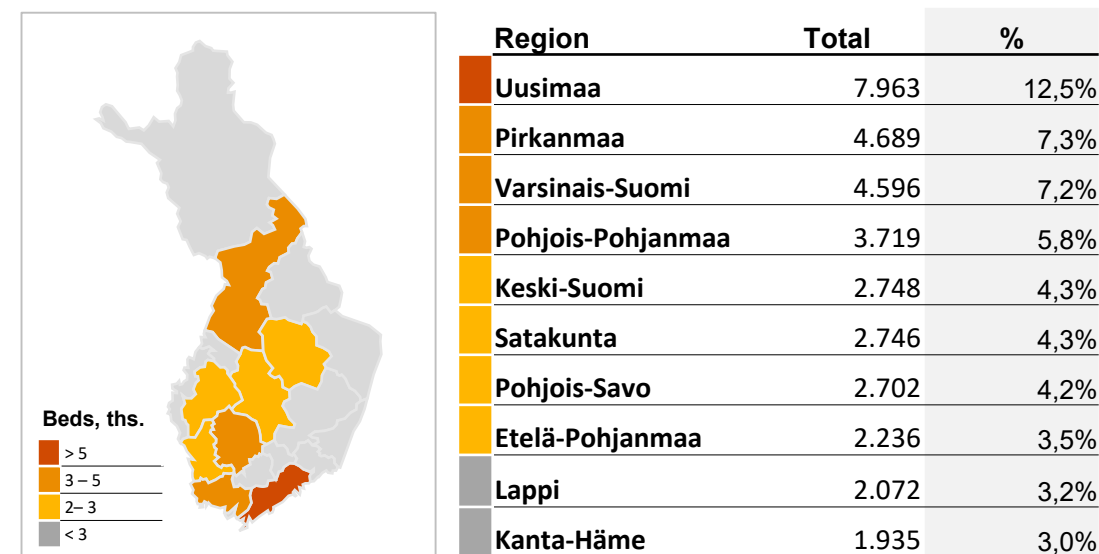
### Coverage of services for the elderly, 2022 (% of the 75+ population)



### Long-term care (health) expenditure



### Split of beds in residential homes, by regions (top 10)



# Finland has a high share of elderly people and above EU average old-age dependency ratio

## Retirement Homes – Key Drivers

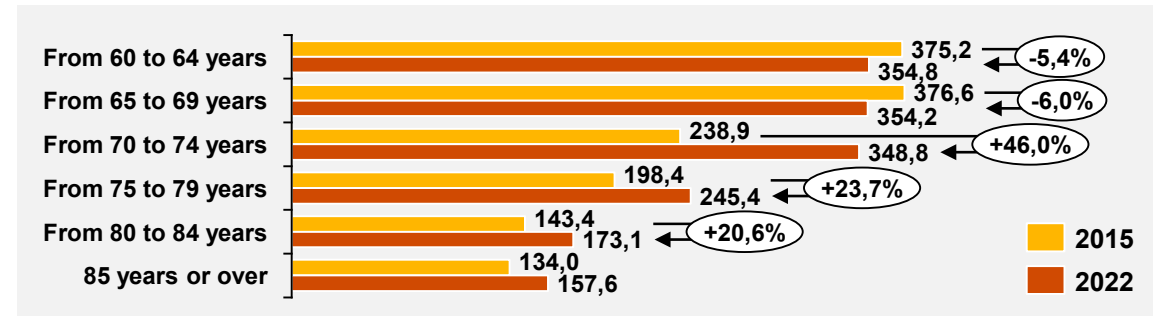
### Life expectancy is below the EU average

The average life expectancy at birth for a person living in Finland in 2022, was accordingly to the Eurostat's data around 81,2 years old. Difference between life expectancy of a male and female on average differed by about 5,1 years, being 78,7 years for males and 83,8 for females. Compared to the EU-27 average, life expectancy for females was higher by about ~0,9 years (the EU-27 average was 82,9 years), while life expectancy for males was higher by about 1,5 years (the EU average was 77,2 years).

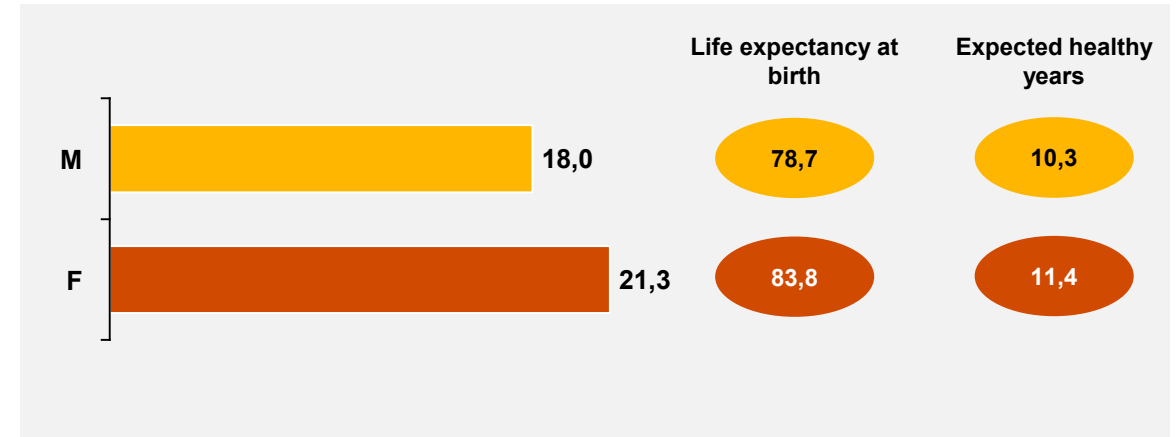
However, in 2022, persons of age 65 could on average expect to live for 19,6 more years, reaching 84,6. Males of the same age class could expect to live for 18,0 more years, reaching 83,0, and females for 21,3 more years, reaching 86,3. Out of those, males could on average expect to live healthy for 10,3 more years, while females for 11,4 more years. Taking into account this data, we can expect an increase for demand of the LTC services.

Old age dependency ratio (population 65 and over to population 15 to 64 years), is above the EU-27 average (~33% in 2022), reaching 37,4% in 2022.

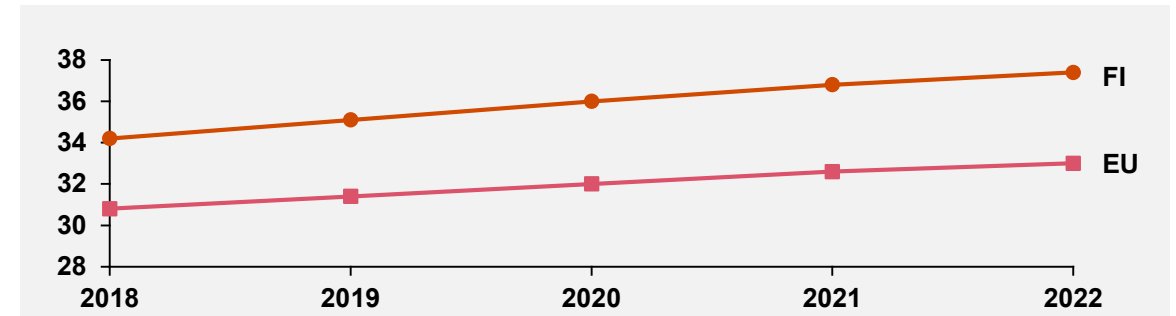
### Population aged 65+ (2022), in ths.



### Average life expectancy at age 65 (2021)



### Old-age dependency ratio, in %



# Finland faces a trend away from institutional care evidenced by a 56% increase in home care users from 2015

## Retirement Homes – Demand & Supply

### Demand

We identified growth of the elderly population as the main driver of demand in this segment. In 2022, there were around 1,28M persons 65 years or older, which is around 23% of the total population of Finland. Projections show that in the following years the number of elderly people in Finland will increase to ~1,46M by 2035, amounting for a ~26% increase over a 15-year long period. What is more, also the number of persons aged 85 years or over will in the same period increase by ~67%, reaching 0,26M persons in 2035 (in 2022 the number of 85-year-olds stood at ~0,16M amounting for ~2,8% of total population).

However, life expectancy is projected to increase both for males and females. By 2035, for both genders at the age of 65, it is expected to increase for ~1 year on a yearly basis, reaching 19 years for males, and 22,3 for females.

All of this indicates that the demand for retirement homes will strongly increase in the near future.

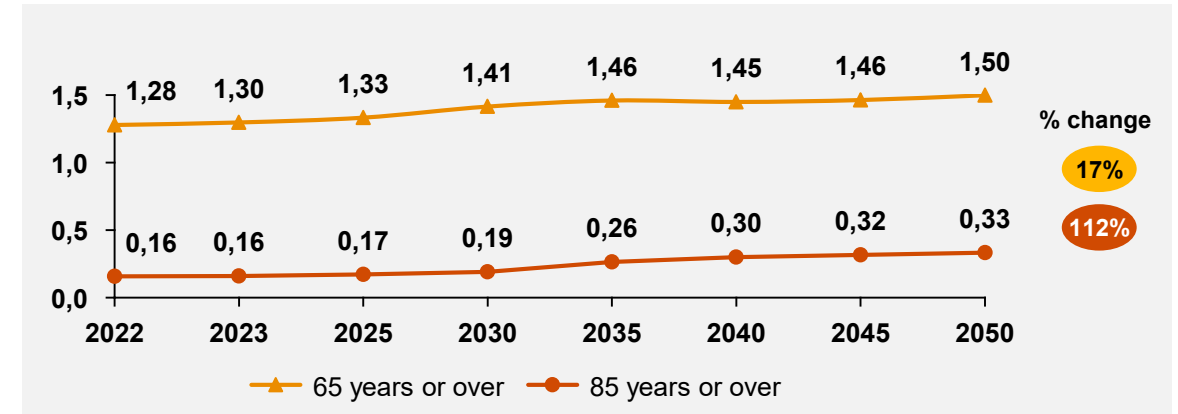
### Supply

Accordingly to the OECD statistics office, there is capacity of more than 63k places in Finland's retirement homes. In the period of 5 years, since 2017, the capacity has been decreasing by 0,7% on a yearly basis, increasing the number of places by 3%.

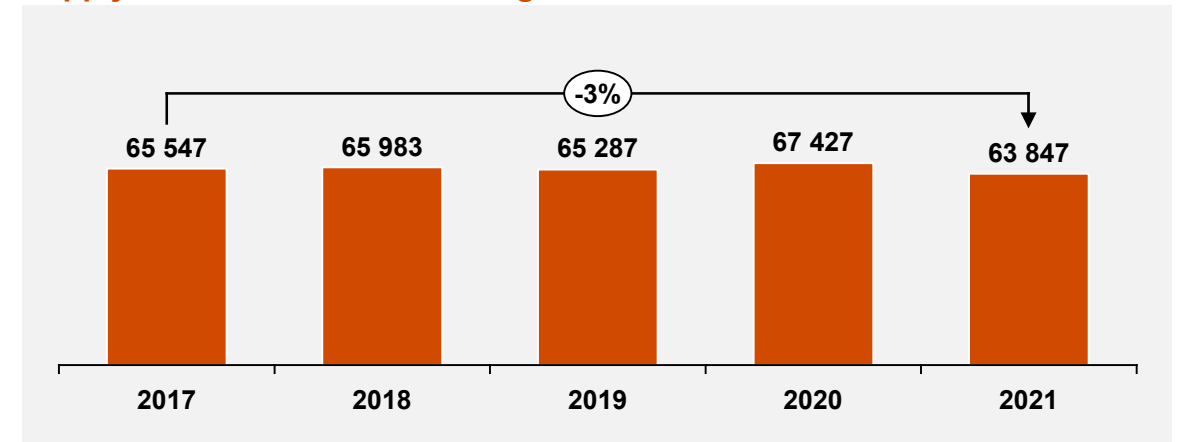
Besides institutional care, Finland has established a strong home care system, "kotihoito," offering a suite of services like meals, cleaning, and transport, supporting those with health issues to live at home. The country values informal caregiving, providing allowances for family caregivers and organizing elderly daytime activities, showing a preference for home care over institutional settings. Despite a steady number of institutional care patients at 51.000, home care recipients have increased by 56% from 2015 to 2021, reaching 114.000. This trend highlights a shift towards home-based long-term care in Finland, indicating a future focus on expanding these services to meet the needs of its ageing population, balancing legislative goals with individual autonomy.

PwC

### Population projections for elderly, in M



### Supply of beds in residential long-term care facilities



Sources: Eurostat, OECD, Statistics Finland, PwC analysis