

Technical Assistance – Market Studies of Pipeline and Stakeholders

Belgium

October 2024

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

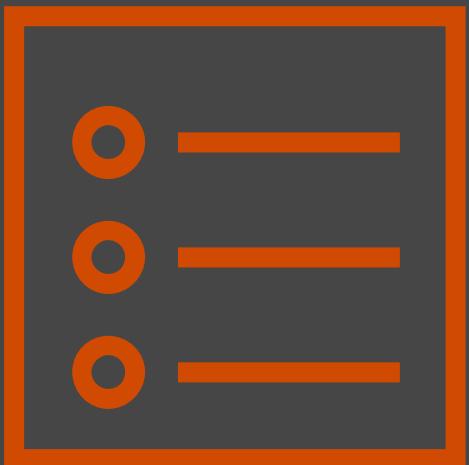
Introduction – Project in focus

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	 Methodology and phased approach	 Stakeholder engagement
<ul style="list-style-type: none">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.	<ol style="list-style-type: none">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.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.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.	<ul style="list-style-type: none">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.



Introduction



Belgium's economy has exhibited strong recovery, however, challenged by rising deficit and inflation

Introduction – Overview of the Belgium's Economy

Belgium's economic forecast

Belgium's economy is recognized as highly developed, high-income and greatly integrated within the European economy. Additionally, the country's recovery from the COVID-19 pandemic has been strong, mostly due to expansionary policies, and various supportive measures. Between 2018 and 2022, Belgium's GDP experienced a CAGR of 3,79% which is lower than the EU average of 4,67%. Belgium's economy is expected to remain broadly stable in the following years, growing with a forecasted rate of 1,4% in 2023 and 2024 and 1,5% in 2025. Belgium is the 8th largest EU economy, 26th largest global economy, and 6th on the list of the world's richest countries. Moreover, it represents approximately 0,6% of the total global economic output.

In 2023, due to measures addressing high energy prices, rising expenditures outpaced economic growth, setting the government deficit to reach 4,9% of GDP. Furthermore, the government debt-to-GDP ratio is expected to increase from 104,3% in 2022 to 106,3% in 2023 and is projected to further rise in the future, mostly driven by persistent primary deficit.

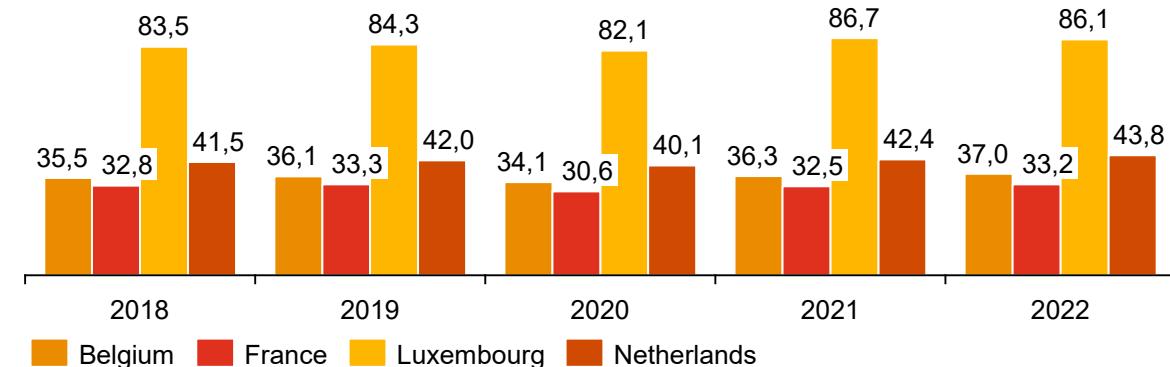
Belgium	2018	2019	2020	2021	2022	CAGR
Population (mil.):	11,40	11,46	11,52	11,55	11,62	0,38%
GDP bn. (current EUR)	460,05	478,68	460,75	507,93	554,04	3,79%
GDP growth	1,8%	2,2%	-5,3%	6,9%	3,0%	n/a
Real GDP per capita (EUR)	35.510	36.110	34.060	36.250	37.040	0,85%
Unemployment	6,0%	5,5%	5,8%	6,3%	5,6%	n/a
HICP (annual % change)	2,3%	1,2%	0,4%	3,2%	10,3%	n/a

GDP per capita and inflation

Over the past year, Belgium's economic landscape has been characterised by moderate growth recorded slightly under the EU average at 3,4%. Belgium's GDP per capita has been fluctuating, experiencing an upward trajectory from 2018 and 2019, followed by a slowdown in 2020 due to the pandemic. Over the period from 2018 to 2022, Belgium's real GDP per capita was growing with a CAGR of 0,85%, rising from EUR 35,5k in 2018 to EUR 37,0k in 2022. Notably, this places Belgium among the nations with the highest GDP per capita, indicating a higher level of economic development and living standards compared to its EU counterparts, with the EU average being significantly behind by 21,8%, or about EUR 30k per capita.

However, Belgium's economy has reportedly encountered one of the highest inflation rates among EU countries in the past 2 years, with a record headline inflation of 10,3% in 2022. However, there was a substantial, expected moderation in 2023, with inflation falling to approximately 2,4%. The HICP is projected to reach about 4,2% in 2024, before subsequently declining to 1,9% in 2025, and gradually stabilising and aligning with the EU convergence criteria of 2%.

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



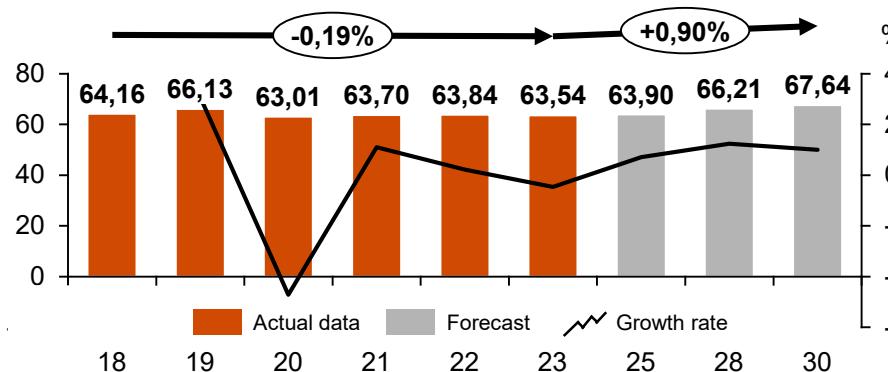
Source: Eurostat, OECD, IMF, National Statistics, Economy, PwC analysis



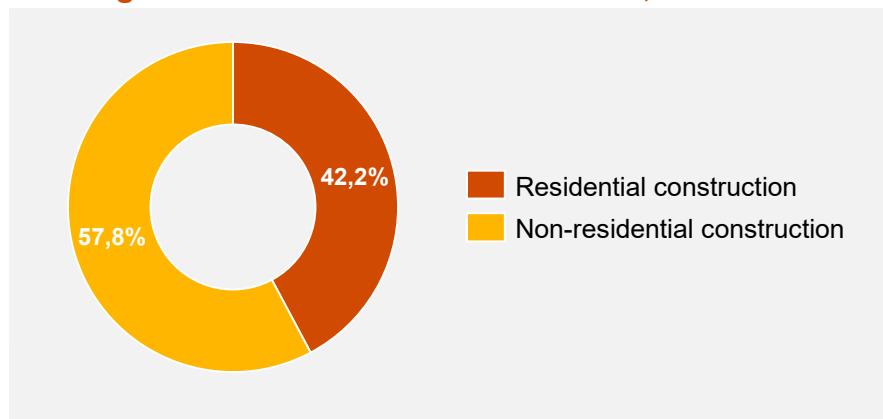
Belgium is experiencing a **decline in residential construction building permits** due to slow permit policy

Introduction – Overview of the Construction Sector

Buildings construction industry value, in EUR bn



Buildings construction works value share, 2022



The buildings construction industry in Belgium has seen a decline in 2020 during the COVID-19 pandemic. In the following years a stable growth was observed, however, still not reaching the pre-pandemic value. Moreover, in 2023 the industry has lost about 0,5% of its gross output, as compared to 2022. However, projections show that the industry will grow with about 0,9% on a yearly basis until 2030, and will surpass its pre-pandemic level in 2028. The market is dynamic and fragmented with a large number of operators, including BESIX Group SA, Stadsbader NV and Jan De Nul Group, with the latter recognized as a market leader.

Despite the difficulties and challenges due to elevated inflation leading to a substantial increase in material costs and labor costs coupled up together with uncertainties of the conflict in Ukraine, the Belgian construction industry experienced modest growth, demonstrating resilience. Notably, there has been a noticeable decline in building permits for both new housing and non-residential buildings, as reported by the European Construction Industry Federation. The number of permits granted for new construction projects falls behind other EU countries, including neighboring ones like Germany and Netherlands, mostly due to slow permit policy, resulting in long processing times presenting a modest obstacle to Belgian construction activities.

The construction sector in Belgium has witnessed a substantial expansion in the past few years due to the growing economy and rapid urbanization rate coupled with governmental initiatives, especially in state-promoted infrastructure development, encouraging the growth of housing in line with the Regional Housing Plan. Streamlining building permitting and capitalizing on government initiatives will play a pivotal role in market growth.

Residential construction

The residential construction segment accounted for 42,2% of aggregated revenues in the Belgian construction sector, totaling around 39.6B EUR in 2022. In terms of the number of residential building permits, Belgium has witnessed a substantial decrease by a CAGR of -3% from 2018.



Non-Residential construction

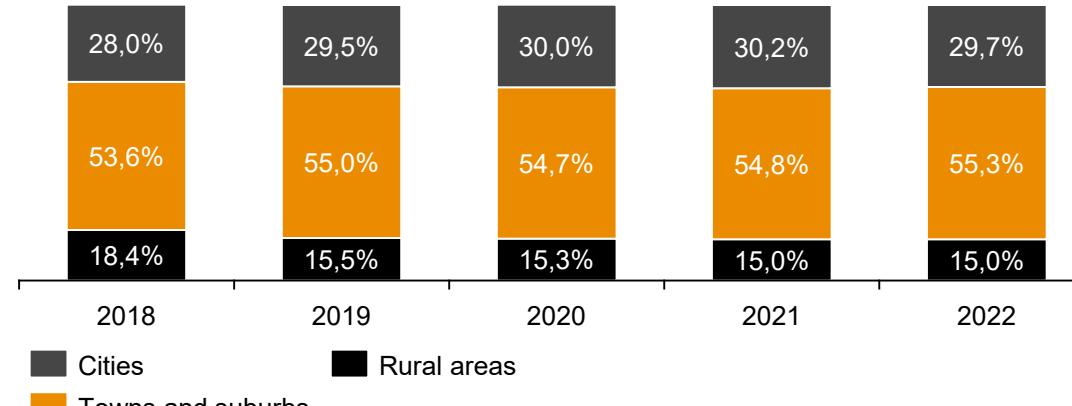
The non-residential construction segment accounted for the industry's largest proportion in 2022, with total revenues of 54.2B EUR, equivalent to around 57,8% of the total construction industry value in Belgium. The non-residential sector has been relatively stagnant in terms of building permits, experiencing a slight decline of 0,5%.



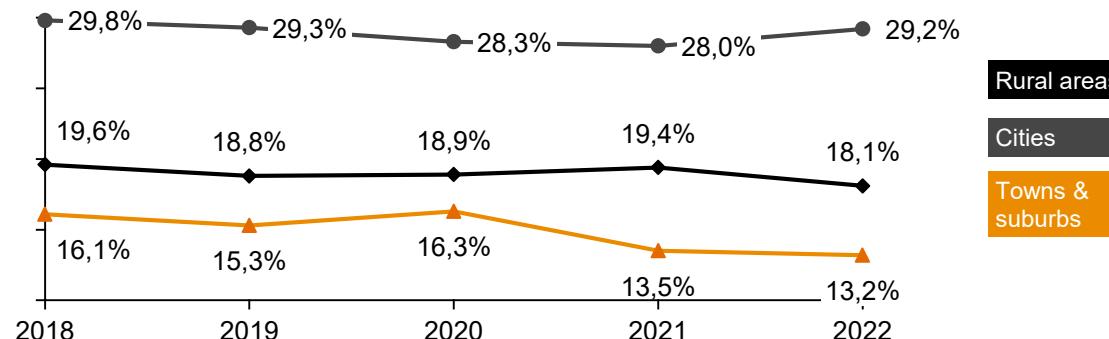
Significant urbanisation rate, showcasing potential strategic opportunities for urban development

Introduction – Overview of Belgium population

Share of population, by degree of urbanisation, in %



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



Source: Eurostat, World Bank, National Statistics, PwC analysis

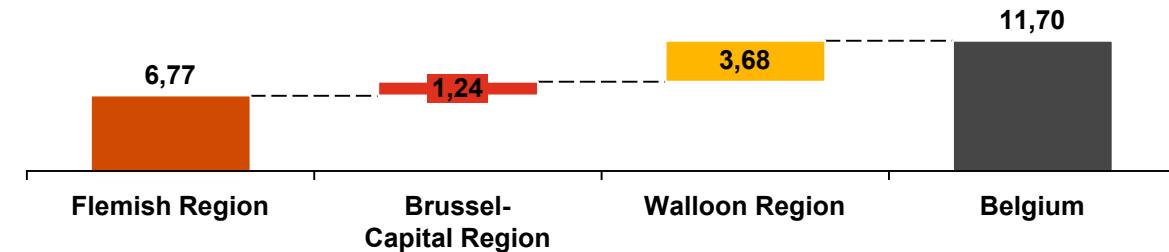
PwC

According to the National Statistics, Belgium's current population stands at around 11,7M, projected to rise to 12,03M by 2050. The year 2022 was marked by a strong population growth estimated at almost 1% equaling 113,5k inhabitants. Notably, the natural balance, representing the difference between births and deaths, was negative (about -2,8k), primarily driven by a declining trend in births due to evolving population structure and aging. The international migration balance, however, was positive in 2022 (116,5k), registering 233,6k immigrations. Belgium's immigration landscape is on an upward trajectory with a CAGR of 7% since 2018.

The rural population in Belgium is reported to score approximately 1.8% (212k), while a significant 98,2% of the total population (11,5M) is classified as urban. Regional segmentation reveals the Flemish region, encompassing 58% of the total population, occupying 44% of Belgium's area. The Walloon region, with 32% of the population, covers 55% of the land. The Brussels-Capital region, though only 1% of the country's area, houses 1,2M inhabitants, showcasing intense population density and urban development, and suggesting potential strategic opportunities for urban planning. The data above indicates urbanization as a predominant trend, demanding strategic solutions for both urban and rural area development.

Around 29,2% of the population in Belgian cities faces a risk of poverty or social exclusion, suggesting a substantial increase from 2021 at 28%. However, in rural areas, towns and suburbs, there's a slight improvement in the risk of poverty ratio.

Population, by region, in millions, 2023



2

A photograph of a modern apartment building with a blue facade and orange accents. The building features multiple balconies with black railings. The text is overlaid on a dark gray rectangular box.

Affordable social housing



Supply of social housing in Belgium is not meeting the demand, and is in need of renovations

Social and affordable housing

Key conclusions – Phase 1

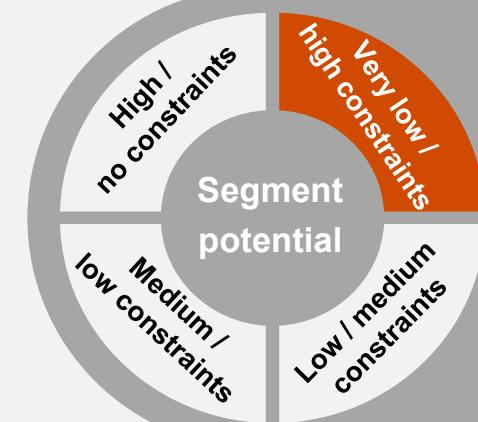
- The social housing is the responsibility of the regional governments, who are in charge of policy and budgeting, either from own taxes or federal gov. funds.
- It is provided through the Social Rental Agencies, while it is developed by a combination of public and private entities (not for profit in case of private)
- One of the key issues identified in Belgium is the comparably lower energy efficiency of the buildings as compared with the EU average, thus indicating potential need for renovations of the existing buildings
- Nationwide the waiting list for Social housing accounts of 0.8x of the total supply, with the longest waiting list observed in Brussels (accounting for 1.29x)

Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



PwC Assessment



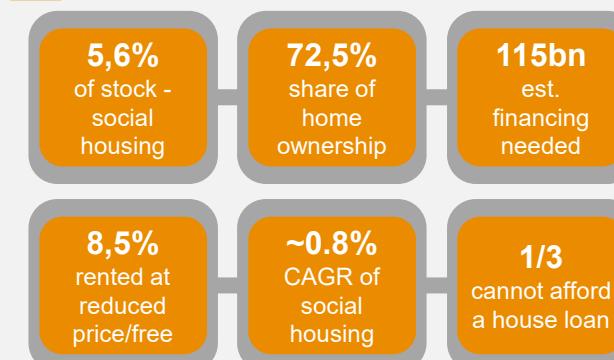
The state of existing supply of social housing dwellings is in need of modernisation, and energy efficiency renovation.



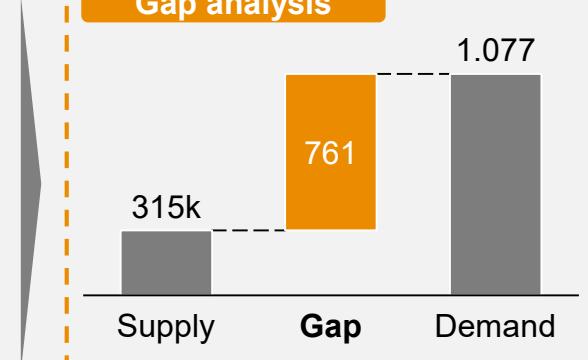
Social housing landscape is characterised with added level of complexity due to country's governmental division.



Key Segment Data



Gap analysis



Social housing in Belgium is decentralised, with regions having the authority over executive and legislative power

Social Housing – General Overview (1/5)

Social Housing definition, oversight, and responsibility

According to the website of the Belgian government, social housing is defined as housing that is designed either for single people or families, with modest incomes. Social housing takes form in the rental of apartments (or in some cases houses) with a reasonably priced monthly rent. Throughout regions, the social housing is provided by the social housing companies, which are owned or co-owned by the regional Governments.

The responsibility for social housing is delegated to regions (Brussels-Capital Region, Flemish Region, and Walloon Region), who are indirect owners, and are managing their stock. They have full autonomy regarding eligibility and allocation criteria of such units. Moreover, they are responsible for setting the price and providing good living conditions to tenants. Therefore, set variables differ throughout the country, and among regions.

Each region has implemented its respective Housing Code, outlining housing rights and delineating the framework for social housing, exemplified by the Wallonia Housing Code, Brussels Housing Code, and the Flemish Housing Code.

The funding for social housing is allocated top-down, from federal government to the local authorities, and then social housing companies. However, regional governments have the authority to collect taxes and form separate budgets. Funding is generally distributed to social housing companies through various loans and subsidies, based on the annual programmes.

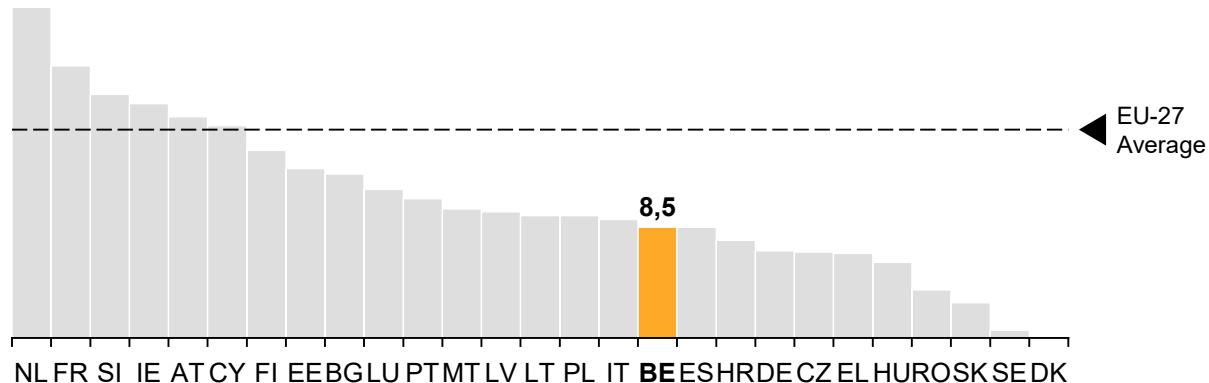
Considering a share of social housing dwellings per household as a coverage ratio, the most developed social housing landscape, in terms of quantity, was observed in the Brussels-Capital Region, where around 7,2% of total households could be accommodated in social housing units.

Due to the complexity and differences of social housing among the Regions, a further breakdown of the segment for each region is described on the following slides.

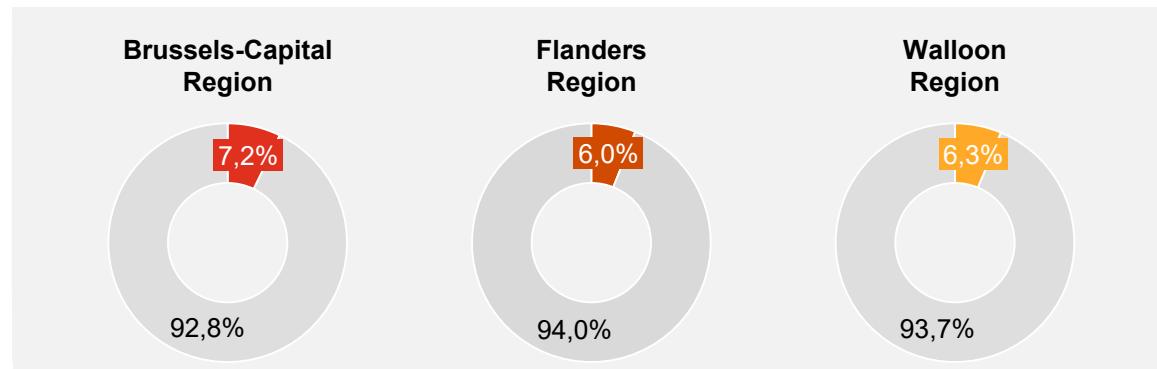
Sources: Eurostat, PwC analysis

PwC

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



Regional social housing stock coverage ratio, 2021



Social housing in the Brussels-Capital region is provided majorly by the public real estate companies

Social Housing – General Overview (2/5)

Social housing in the Brussels-Capital region

In the Brussels-Capital region, social housing is regulated and defined by the social housing code and other governmental decrees.

Social housing is provided either by public real estate companies, social real estate agencies, the Housing Fund, or in a form of communal housing. Moreover, in terms of making housing within the region more accessible, rental aids are granted by the region, more specifically: relocation allowance and rent subsidies.

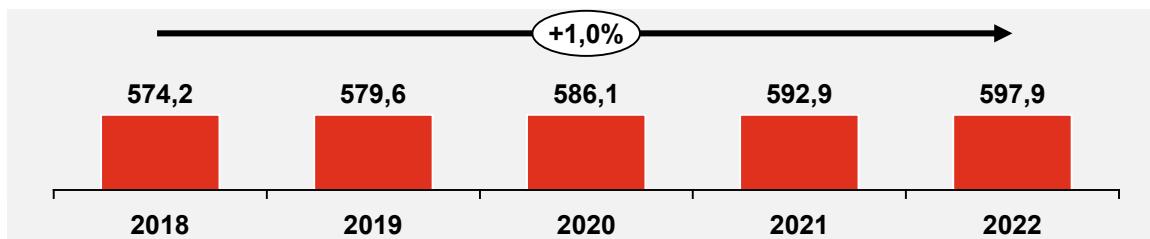
The majority of social housing is provided through public real estate companies, which are also the landlords / owners of social housing units. There are 16 such companies operating in the Brussels-Capital region, 10 of which are cooperative companies with limited liability, 4 cooperative tenant companies, and 2 public limited companies.

The government of the Brussels-Capital region is largely the owner of the share capital of the public real estate companies, except in the case of cooperative companies where the tenants are the owners of the shares.

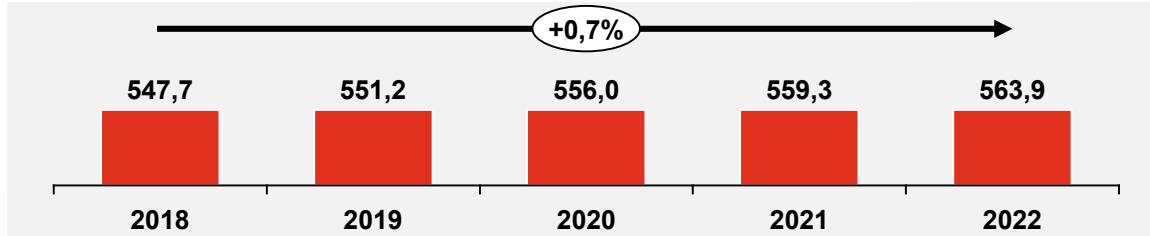
Public real estate companies are supervised, including the administrative aspects, by the Brussels Regional Housing Agency (SLRB) whose main objective is to make housings accessible to people with a modest income. The agency is carrying out tasks in accordance with the priorities set out by the regional Government. Moreover, it is responsible for ensuring that public real estate companies are compliant with all administrative rules and are carrying out their assignments correctly.

Additionally, prospective homeowners that fulfil the criteria can secure social loans to purchase or renovate their home. Such loans with reduced interest rates are offered either by the Housing Fund of the Brussels-Capital Region or by social credit institutions. There are 5 social credit institutions operating in the region.

Evolution of the total number of dwellings in the region, ths. units



Evolution of the total number of households in the region, ths. units



Housing prices in 2023, and price changes as compared to previous year



Due to the merger, in the Flanders region, social housing is provided only by 41 social housing companies

Social Housing – General Overview (3/5)

Social housing in the Flanders region

In the Flanders region, social housing policy is the responsibility of the Flemish Minister for Finance and Budget, Housing and Immovable Heritage. The Minister is responsible for fair and inclusive social housing accessibility in the region and just legal environment.

Social housing was, until recently, in the region provided by the social housing companies, social purchasing companies, and social rental offices. However, as part of the efforts to harmonise social housing rentals the different providers of social housing were merged on the 1st of July 2023. Hence, social housing is provided only by the housing companies. As of 1st of July, there were 41 such housing companies in the Flanders region.

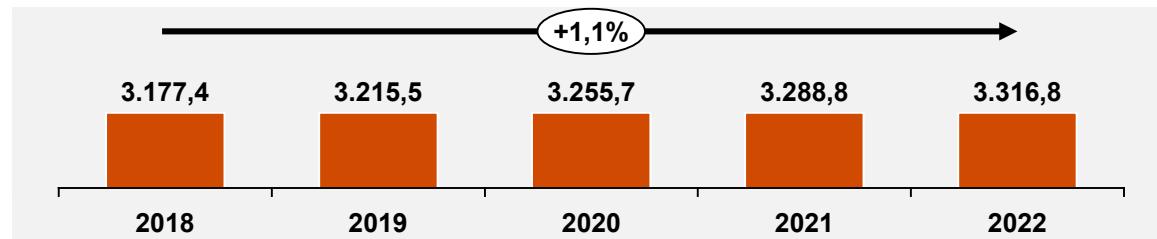
Activities of housing companies include construction of social rental housing units, renovation of units, and management of its stock. Moreover, housing companies are providing social housing also by renting dwellings from the private rental market. Thus, private citizens may offer their dwellings to be rented out as social housing, benefiting from management of their dwellings. Housing companies are supervised and supported (administratively, technically, and financially) by the Wonen in Vlaanderen agency.

Tenants are offered a nine-year lease, with the rent being calculated based on the criteria determined by the Flemish Government. The calculation of the rental price is made on the basis of household's income, the value of the property, and the size of the household. However, rental price may never be higher than the price on the private rental market for a comparable property.

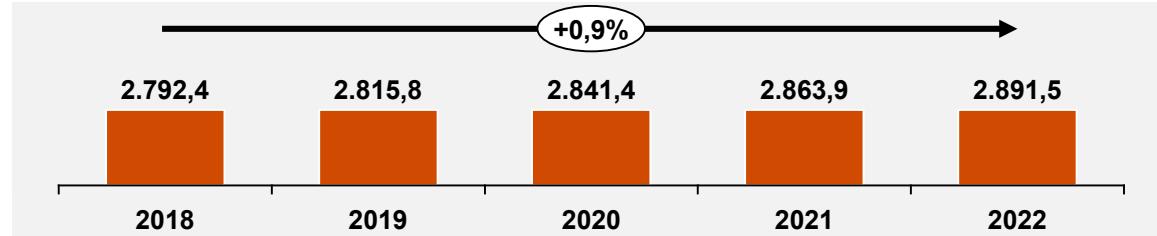
Additionally, tenants seeking social housing may find offers from municipalities, or public centres for social welfare (OCMW), both offering affordable rental housing to people with modest income.

Social housing may also be purchased by its residents. Alternatively, eligible persons may be entitled to taking a social loan from one of the 17 credit companies.

Evolution of the total number of dwellings in the region, ths. units



Evolution of the total number of households in the region, ths. units



Housing prices in 2023, and price changes as compared to previous year

Type of dwelling	Apartment	Attached / semi-detached house	Detached house
Median price	EUR 244,8k	EUR 295k	EUR 405k
% change (22/23)	6,4%	5,4%	3,8%

Social housing is in the Walloon region provided by 62 public service housing companies

Social Housing – General Overview (4/5)

Social housing in the Walloon region

In the Walloon region, the responsibility for social housing on the highest-level falls to the Department of Housing of the *Service Public de Wallonie* (SPW) of Territory, Housing, Heritage, Energy. The department is responsible for the realisation of the right to adequate housing for inhabitants of the region. It is operating in consultation with public interest bodies and other operators active in the field.

However, public housing is mostly provided by public service housing companies of Wallonia (SLSP). There are 62 such companies operating in the region. Those companies are supervised by the Walloon Housing Corporation (SWL) on behalf of the Walloon Government.

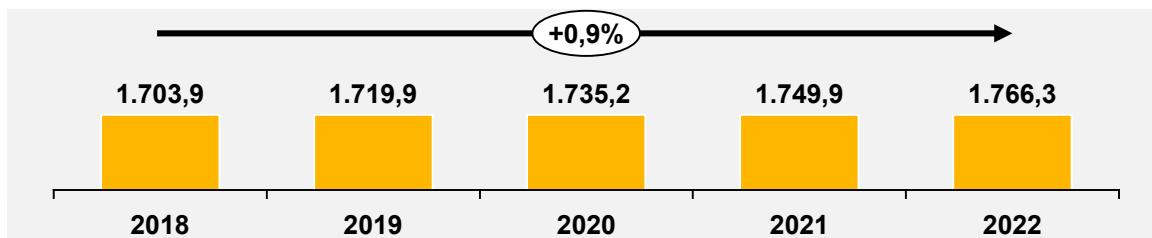
Aside from the supervisory responsibility, the SWL provides advice, technical, financial, and administrative assistance to public service housing companies of Wallonia. Moreover, it acts as a real estate operator, and is providing investment financing, strategy, and land management, essential to the sector's activities. Furthermore, it coordinates the development and rental management of public housing units.

Apart from SLSPs who are providing social housing from their own stock, social housing assistance is in the region also provided by the housing fund and Social housing agencies (AIS).

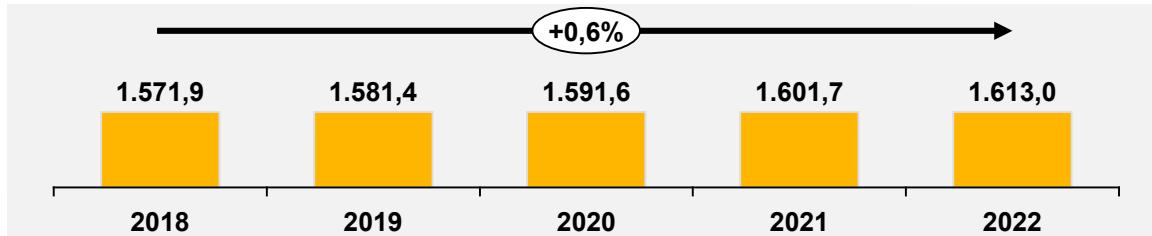
The housing fund is providing housing support to large families, mainly by renovating and renting old premises, and offering a low interest loans for the purposes of purchasing, construction, or renovation of housing. Moreover, the fund is financing non-profit social housing agencies that are renting and managing housing on behalf of third parties, intended for households with low income.

Moreover, social housing units can be bought, or prospective homeowners can take a social loan offered by Fonds du Logement des Familles Nombreuses de Wallonie (FLFNW), and Société Wallonne du Crédit Social (SWCS).

Evolution of the total number of dwellings in the region, ths. units



Evolution of the total number of households in the region, ths. units



Housing prices in 2023, and price changes as compared to previous year



Inflation of the housing prices is decreasing, households on average are spending ~30,7% of the total budget on housing

Social Housing – General Overview (5/5)

Tenure Breakdown

The Eurostat's data shows that the average share of homeownership in Belgium stands at around 72,5%, which is a bit higher than the EU-27 average of 69,1%. According to the Brussels Institute for Statistics and Analysis, there were in total ~5,7M dwellings in Belgium, therefore, ~4,1M dwellings are occupied by owners. Out of those, ~37,1% (or about 1,5M dwellings) are owned with no outstanding mortgage or housing loan, while the rest ~62,9% (or about 2,6M dwellings) are financed with a mortgage or a housing loan.

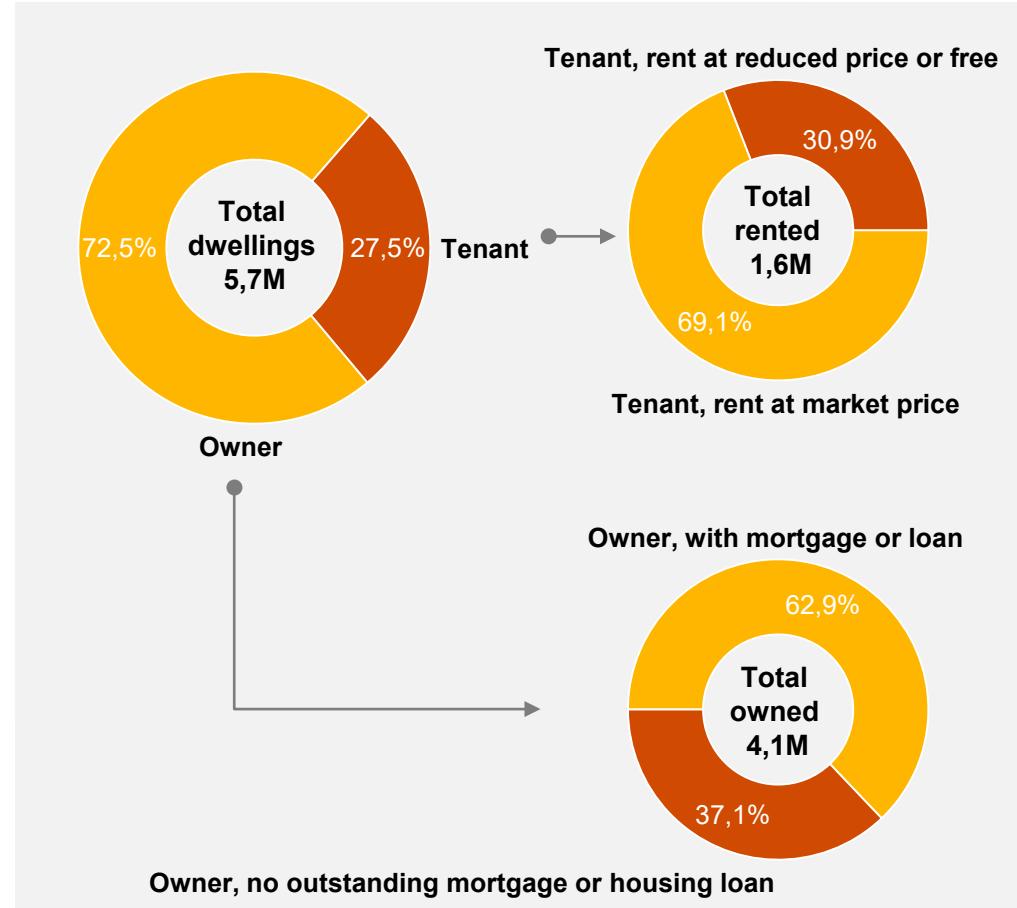
From the ~27,5% of dwellings that are being occupied by tenants (or around 1,6M dwellings), around 2/3 are being rented out to tenants at market prices, with the remaining 1/3 being rented at reduced price or for free. Thus, around 1,1M dwellings are occupied by tenants paying market price rents, while around 0,5M dwellings are occupied by tenants paying reduced, or no rent.

More than half of the total ~5,7M are located in the Flanders region (or around 3,3M dwellings), followed by the Walloon region where ~1,8M dwellings are located, and the remaining ~0,6M dwellings are located in the Brussels-Capital region.

While national statistics data displays a little deviation from the Eurostat's data it indicates that the highest share of homeowners was in the Flemish Region (around 71,9%), while the lowest share was in the Brussels-Capital Region (around 38,8%), in the Walloon Region the share of ownership stood at around 67,8%.

The annual inflation for house prices, in the Q2 of 2023 experienced a sharp decline to 1,8%, as compared to the previous quarter when it stood at 4,4%. Thus, reaching its lowest value since Q4 of 2015 when it stood at 1,5%. The annual house price inflation was the highest in the Q3 of 2021 when it stood at around 8,2%. In contrast, inflation of rents has been increasing, reaching 5,9% in Q2 of 2023, in comparison in Q2 of 2021 it was at 2%, and in Q2 of 2022 at 3,6%.

According to the survey conducted by the Belgian statistics office, in 2022, households on average spent around 30,7%, or about EUR 12,3k per year, of the total budget on housing (including utilities and maintenance costs).



Sources: Eurostat, IBSA, PwC analysis

The number of construction permits significantly decreased, data indicates the need for energy efficiency renovations

Social Housing – Key Issues

Decrease in new construction permits, and low overcrowding rates

In 2022, total housing stock that counted a total of about 5,7M dwellings was growing with a CAGR of ~1% in the five-year period. The highest growth of ~1,1% was observed in Flanders, followed by ~1% in the Brussels-Capital Region, while the rate in the Walloon region stood at ~0,9%.

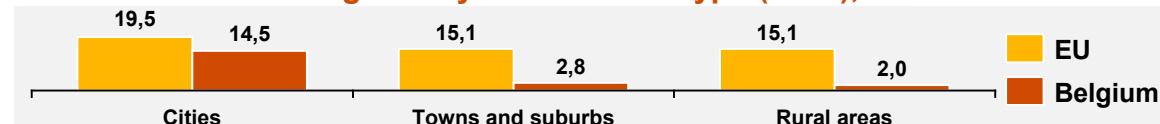
However, the total number of granted permits for construction of new dwellings has been decreasing across regions, reaching ~40k in the Flanders region, ~11k in the Walloon region, and ~0,6k in the Brussels-Capital region, amounting for the total of ~51,5k, new dwellings permits granted.

In the last decade, the number of permits granted for dwellings in the Flanders region peaked in 2018, when it reached ~49k permits, in the Walloon region it peaked at ~13k in 2021, and in the Brussels-Capital region it peaked in 2014 at ~2,6k permits.

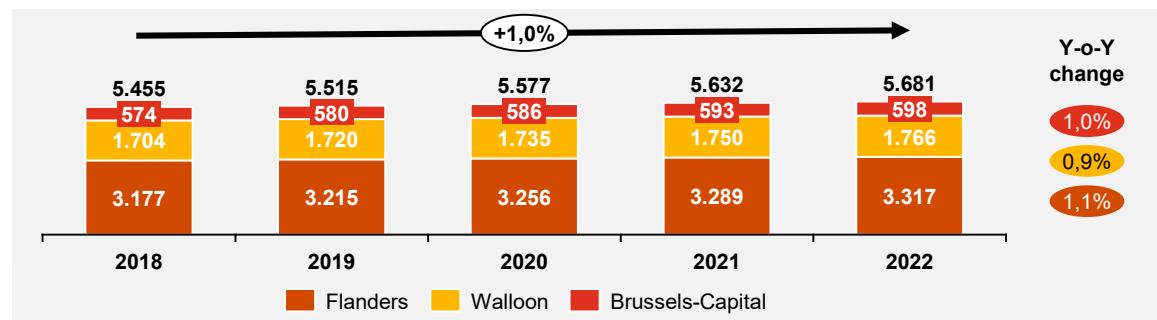
Nevertheless, the overcrowding rate is in Belgium lower than the EU-27's average across the board. The rate in urban areas (14,5%) is the highest and closest to the EU-27 average, while the rate in towns and suburbs (2,8%), and in rural areas (2%) is significantly lower than the EU-27 average. However, the rate has been increasing in all areas, with the biggest increase observed in cities, where it increased by 3,3% in 2015.

However, considering Eurostat's "greenhouse gas emissions by households for heating and cooling" data as an indicator, housing in Belgium is not in good shape, and increased investments in energy efficiency renovations of buildings will be needed. In 2021, Belgian households emitted 1,4k kg of CO₂ equivalents per capita, which is among the EU-27 countries the second most, only behind Luxemburg.

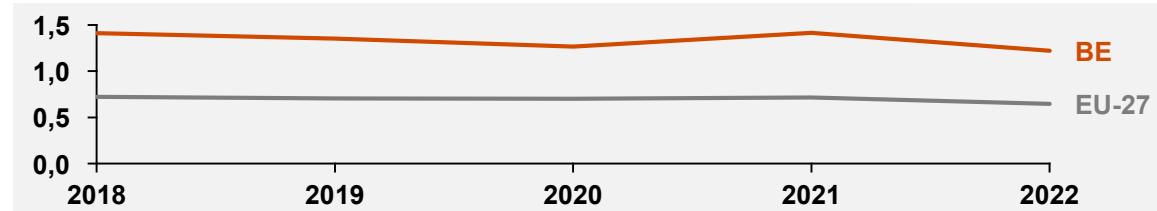
Share of overcrowding rate by urbanization type (2022), in %



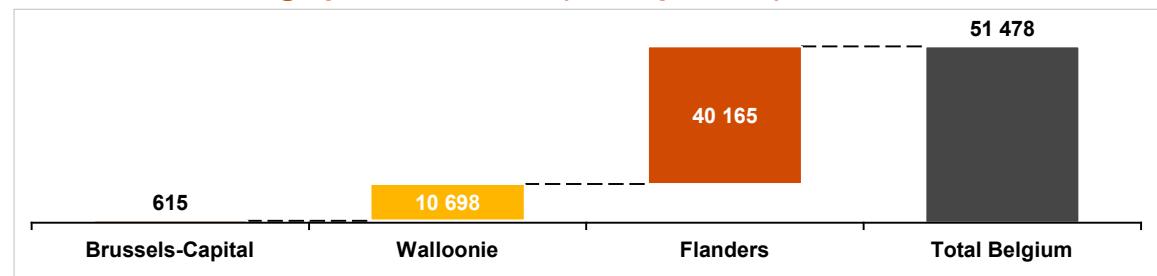
Total housing stock (ths. units)



GHG emissions by households for heating and cooling, kg per capita



Total new dwellings permits issued (2022, permits)



With the demand for housing loans decreasing, in Belgium one fifth of total households cannot comfortably afford housing

Social Housing – Market Demand

Decreasing trend in the demand for housing loans

According to the report by the Belgian statistics office, the Belgian housing market is experiencing an economic cooldown. In September of 2023, there were 23% fewer houses and 16% fewer apartments sold, as compared to the same period of the previous year.

The decrease in the demand for housing purchases is evident also in the decrease in demand for mortgages. Looking at the quarterly data, the number of new mortgage loans granted peaked in the second quarter of 2021, when Belgian banks granted ~123k new mortgage loans in the total amount of EUR ~17,5M. Since then, the demand for mortgage loans has been on the decreasing trend, reaching its lowest value in the second quarter of 2023, when ~52k new loans were granted in the total amount of EUR ~8,6M.

Calculation on the right considers the ability to purchase a home with a mortgage loan for a first home, at a commercial bank (BNP Paribas Fortis), for a 50m² 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 a repayment period of 20 years, and 10% down-payment (commercial terms of the bank).*

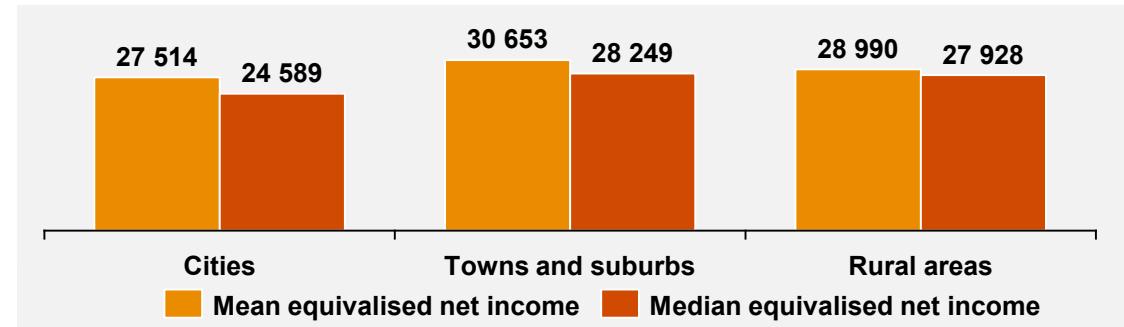
The average price for a square meter of a dwelling differs between regions, however, according to the leading real estate platform, Immoweb, the average price for a square meter of an apartment in 2023 in Belgium is EUR 3.024. Therefore, a 50m² dwelling costs around EUR 151k. After 10% down-payment, required by bank's commercial terms, the loan amounts to EUR 136k, with 5,58% APR, resulting in a monthly instalment of EUR 904.

Rent for an apartment differed between regions, with the highest being in the Flanders region (EUR ~853 per month), followed by the Brussels-Capital region (EUR ~799 per month), and the cheapest being in the Walloon region (EUR ~779). According to our research, we estimate the average rent for a 50m² dwelling in Belgium to be between second (EUR 761) and third (EUR 903) income decile. Therefore, at set conditions, the bottom two deciles (amounting for ~1,03M households) are candidates for social housing, as the cost of housing is higher than 40% of their HH income.

^{PwC}
*registration fees, notary fees, and application fees are not included in the calculation

Moreover, financing conditions may differ among banks, regions, income, and other conditions set by the bank.

Annual mean and median equivalised net income (2022, EUR)



Average total income per household (2022, deciles)

Decile	EUR	40% HH income, EUR
D 1	1.376,3	550,5
D 2	1.901,7	760,7
D 3	2.257,0	902,8
D 4	2.983,2	1.193,3
D 5	3.431,0	1.372,4
D 6	3.941,0	1.576,4
D 7	4.496,4	1.798,5
D 8	5.012,2	2.004,9
D 9	5.619,9	2.247,9
D 10	7.496,8	2.998,7

Rent Buy

Sources: EUROMOD 2023, Immoweb, National Bank of Belgium, BNP Paribas Fortis, Eurostat, Stabel

On average wait lists for social housing exceed the supply by 0,8x, the longest waitlist was observed in Brussels

Social Housing – Market Supply

Lack of social housing and decrease in supply

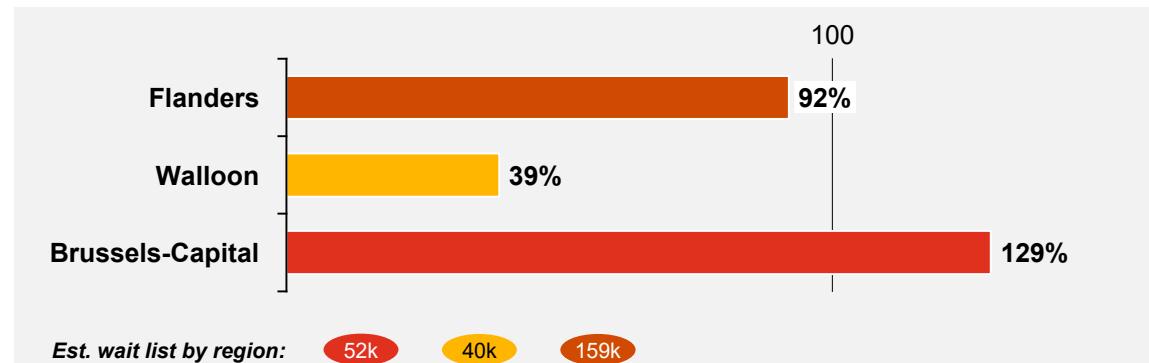
The latest available data shows that in 2021 there were ~315k dwellings of social housing in Belgium. The total number of social housing dwellings was, since 2017, growing with a CAGR of 0,8%.

The most social housing dwellings (about 172,9k dwellings) were located in the Flanders region, where also the highest growth of social housing dwellings was observed. Since 2017, the Flanders region added around 9k dwellings, amounting to a CAGR of ~1,3%. The wait list for social housing exceeded supply by about 92%, or about 159k dwellings.

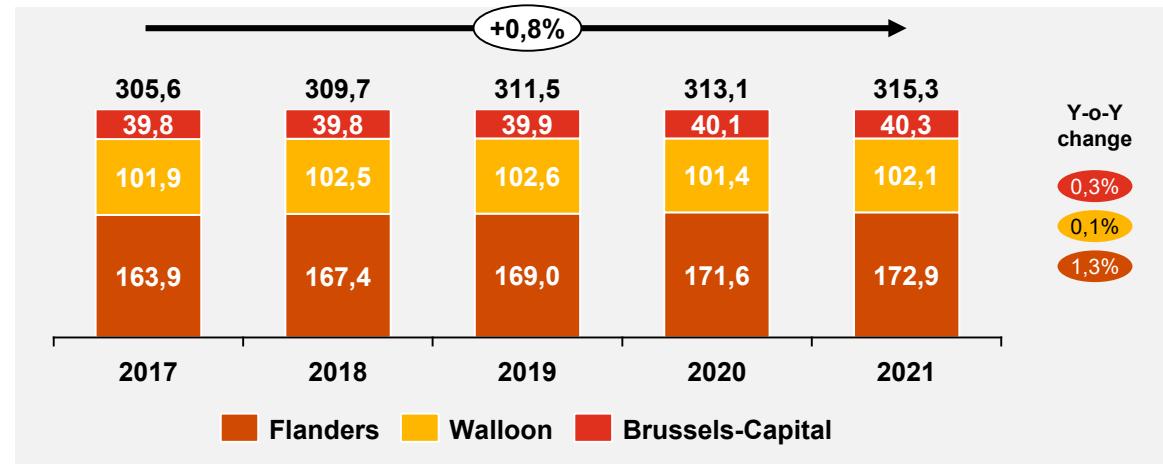
In the Walloon region, the supply of social housing dwellings fluctuated at around 102k in the period of 5 years since 2017. The wait list exceeded the supply by about 39%, or about 40k dwellings.

The least social housing dwellings (about 40k dwellings) were located in the Brussels-Capital region. The wait list in the region exceeded the supply by about 1,3 times, or 129%, meaning there were about 52k households on the wait list for social housing.

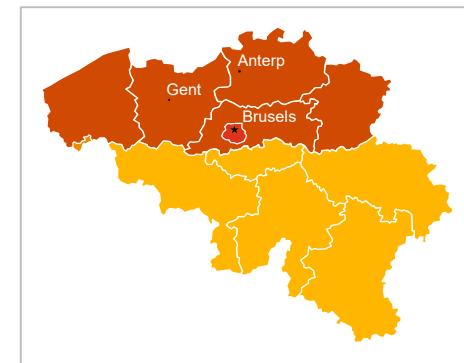
Wait list compared to available social housing capacities by region



Social housing stock by regions, dwellings (ths.)

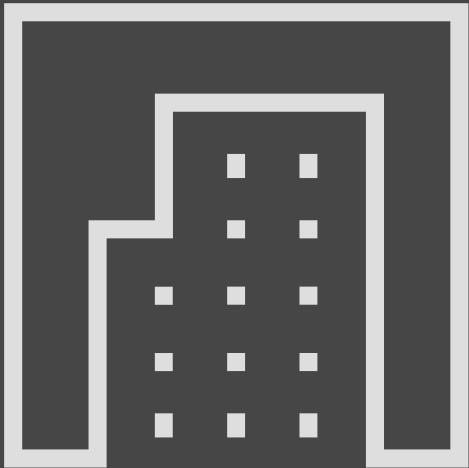


Share split of social housing stock and population by region (2021)



Region	Total public
Belgium	315,3k
The Brussels-Capital region	40,3k
The Flanders region	172,9
The Walloon region	102,1

3



Student housing

Student housing market in Belgium is heavily intertwined among private players and HEIs

Student housing

Key conclusions – Phase 1

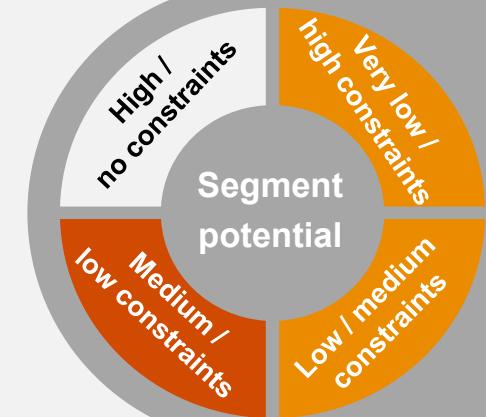
- Students in Belgium can choose a variety of options for their accommodation, with the most popular option still being private rental market
- Belgium's students also have an option to stay in dedicated student rooms ("kots" in French and "koten" in Dutch), where private landlords can offer a room in verified accommodation for students to rent
- One of the key identified issues is the cost of accommodation, which follows closely with the rental market, due to predominance of the private providers
- We have observed a sizable increase in PBSA investments in Belgium, mainly driven by the private segment

Key conclusions – Phase 2 (Student housing & universities)

- Private players often collaborate with higher education institutions, and rent accommodation directly to them, who later rent the accommodation to students
- The demand for student accommodation is high, and has been increasing in the recent years, especially in the affordable segment
- The increase in the demand is mainly attributed to increases in the rental prices on the private rental market
- The Flemish government deployed multiple initiatives to increase the supply of PBSA, such as: land purchases funding, cheap loans to housing companies, and interest-free loans to universities



PwC Assessment

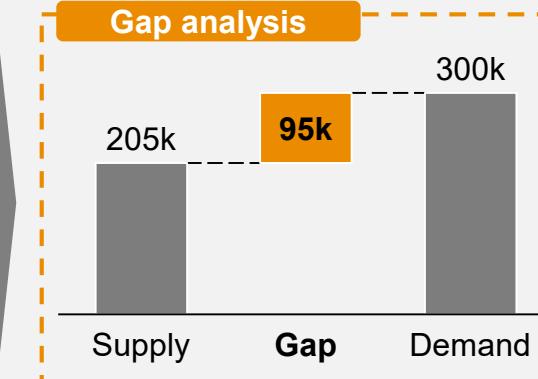
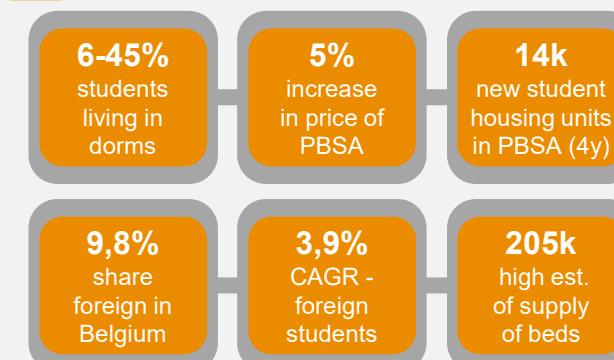


Specific of the student housing market in Belgium is high share of small private players.

In recent years demand for student housing has increased, especially in the affordable segment



Key Segment Data



Student housing in Belgium is broadly defined, by some estimations 45% of students live in student dedicated housing

Student Housing – General Overview

Student housing options

Students in Belgium can choose between various types of accommodation, however, the most popular option for students remains renting from the private rental market.

Purpose built student accommodation (PBSA):

PBSA provided by universities

Some universities offer their students PBSA that they own and manage. Such accommodation is provided on campuses or in vicinity of university facilities.
1 University provided accommodation tends to be cheaper than other options, however, it offers less flexibility with students having to contractually oblige at the beginning of the academic year.

Accommodation in private PBSA

2 Students that prefer to live in PBSA but were not able to secure residence in University provided PBSA or are willing to spend more for an enriched experience can choose to reside in private PBSA. Such accommodation is usually provided in privately owned student dormitories or hostels.

Renting from the private market or living at home

Majority of students are renting their accommodation from a private market, either a room in a shared apartment / house, or studio / small apartment. Additionally, various platforms are available throughout the country that offer verified accommodation intended for students.

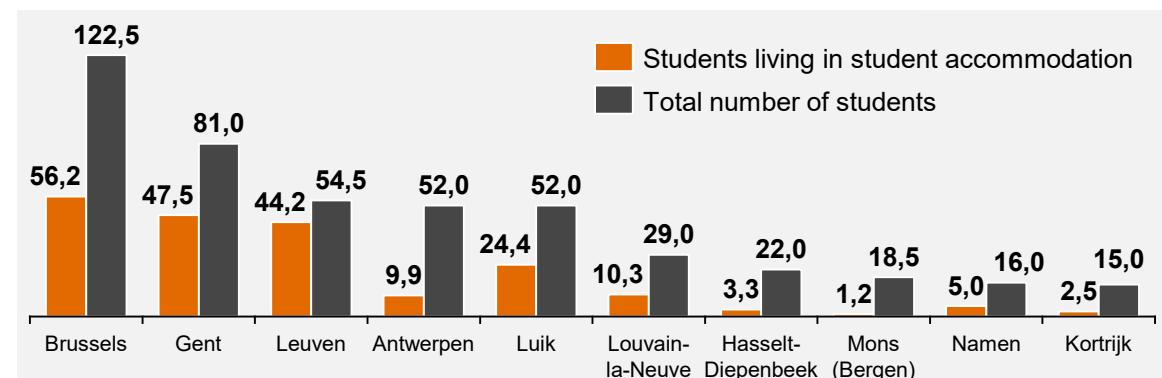
Some students are choosing to live at home with their parents. This option is usually chosen by students that reside near universities or see it as a financially more viable option than to rent from the private market.

Various forms of student housing are available

Apart from the generally available and defined forms of housing, student housing in Belgium is not specifically defined, but is rather understood as a form of housing specifically available for rent to students (in French called "kots" and in Dutch "koten"). Meaning that additionally from the standard forms of PBSA, as seen in other countries such as student dormitories and hostels, private landlords can offer a room in a shared flat specifically intended (and verified) for students to rent.

The Brussels Times reports that there are about 45% students living in student accommodation, amounting to about 232k students. However, according to the report issued on a yearly basis by Stadin, in 2023, there were about 205k students living in some form of student accommodation.

Total number of students and students living in some form of student accommodation, 10 most popular university cities*, in ths., 2023



*90% of total student population in Belgium

Due to the organisation of student dedicated housing, prices for accommodation are correlated to the private rental market

Student Housing – Key Issues

Insufficient supply and rising prices

Due to student housing being offered in various forms, including by private landlords in shared flats, student housing in Belgium is correlated to general housing prices in the rental housing market.

Price for a student room has seen the largest yearly increase in the Brussels-Capital Region where it increased by 18%, reaching EUR 545 per month with included costs. However, a room with a shared bathroom costs about EUR 615 per month, while a studio in the region costs about EUR 785 per month.

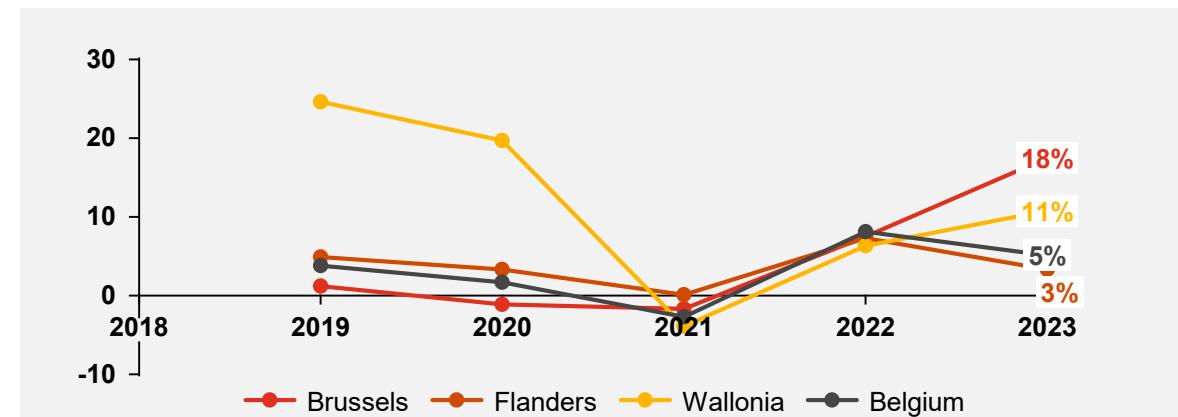
Moreover, due to the insufficient supply across the country the student accommodation prices increased in all three regions. As reported by some universities, the lack of supply and rising prices of student accommodation have also led to some foreign students not proceed with pursuing higher education in Belgium.

Average price of various types of PBSA, per region, 2023

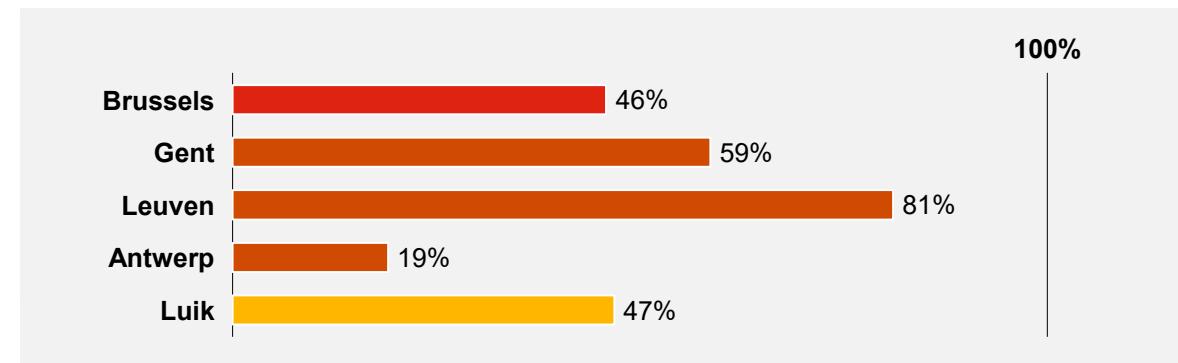
	 Belgium	 Brussels	 Flanders	 Wallonia
Room	475 €	545 €	470 €	460 €
Room + bathroom	545 €	615 €	575 €	490 €
Studio	665 €	785 €	655 €	640 €
Total	565 €	645 €	580 €	580 €

Note: Average price and price change includes rent and costs

Yearly price change of PBSA



Share of students living in PBSA in 5 cities with largest student population



Student housing market has in recent years seen significant investments from large private operators

Student Housing – Market Supply

Public market supply

Due to different definitions and lack of a unified reporting system, specific data for PBSA, in terms of student dormitories, across Belgium is not available. Moreover, estimations regarding the total number of PBSA in Belgium range from about 13k beds (estimation made by Bonard) to more than 205k student accommodation places (estimation by Stadim). Additionally, Catella Group estimates that around 6% of students reside in PBSA, amounting to approximately 31k students.

Moreover, the problem is recognised and being addressed by the Flanders Region through commissioning a study to map the total supply of student rooms and developing a monitoring system for the supply and demand for student rooms in Flanders.

However, private PBSA market is growing with multiple investments being observed in the past years. From 2020 to 2023, private investors invested in construction of about 13,5k new units across the country.

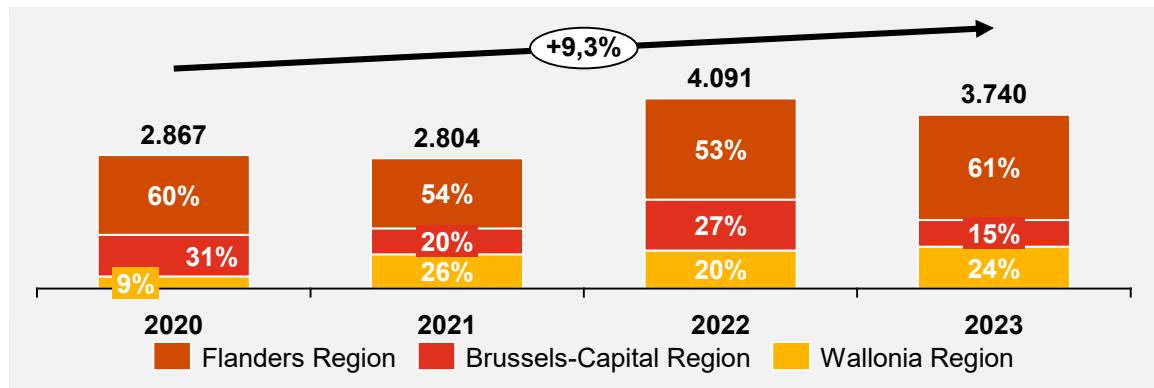
The vast majority of those units, about 7,7k units, are in the Flemish Region. Cumulatively, in the period of 2020 to 2023, about 2,2k units were developed in Gent, ~1,9k in Antwerp, ~1,4k in Kortrijk, ~1,1k in Leuven, with the rest being scattered in other Flemish cities.

In that period, in various municipalities of the Brussels-Capital Region, there were about 3,1k new student accommodation units.

In the Walloon Region there were about 2,7k new units developed in the same period, with the most being located in Luik, about 1,5k. Remaining new units were constructed in Mons and Charleroi.

The largest two investors in this segment were ION and Xior, with about 1,9k and 1,7k new units, respectively.

New investments in PBSA, by region, in number of units (absolutes)



Overview of total largest new investments in PBSA, by region (2020–2023)

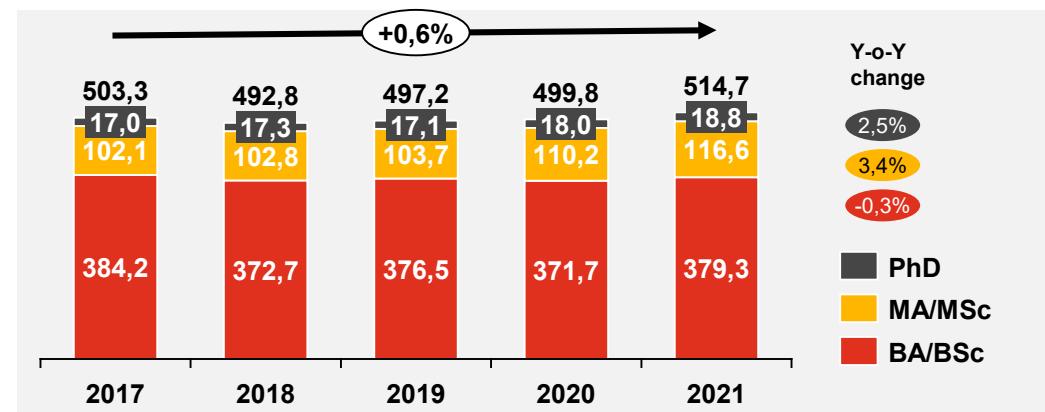


Region	Total new units
Belgium	13.502
The Brussels-Capital region	3.117
• Brussels	3.117
The Flanders region	7.657
• Antwerp	1.878
• Gent	2.240
• Kortrijk	1.447
The Walloon region	2.727
• Luik	1.460

Bachelor students and foreign students are identified as the key demand driver of the student housing segment

Student Housing – Market Demand

Number of tertiary education students, in ths.



Dynamics of the student population

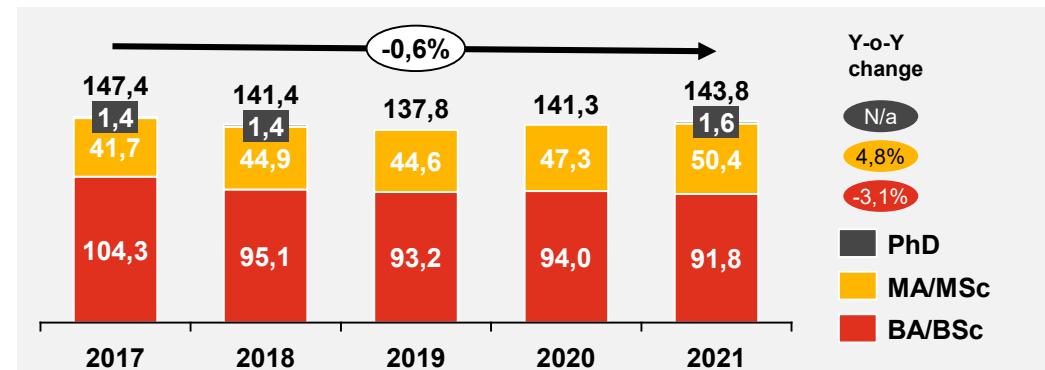
Due to the decrease of students in 2018 as compared to 2017, the total number of tertiary students was growing with a CAGR of 0,6%, reaching about 515k tertiary students in 2021. However, since 2018 the number of tertiary students has shown a stable growth with a CAGR of about 1,5%.

The group of Bachelor students, as the key demand group for student accommodation, has due to the COVID-19 pandemic reached the lowest value of that period in 2020, however, since then it increased to 379,3k students, which is about 4,9k less students than in 2017. On the other hand, the group of Master's programme students, representing the second largest group of students, has been steadily increasing with a CAGR of 3,4% in the same period. Similarly, the growth was observed in the number of PhD students, growing with a CAGR of about 2,5%.

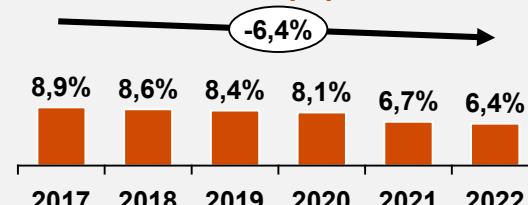
Total number of newly enrolled students has reached its lowest value of the period in 2019, when about 9,4k less students entered tertiary education. Due to the increased newly enrolled students in Master's studies, the number has since 2019 seen a steady increase of CAGR ~2,2%.

However, the number of early leavers from education in the age group of 18 to 24 years old has seen a significant decrease to 6,4%. The number of foreign students, who are typically the main focus group for accommodation in PBSA, has been growing with about 3,9% on a yearly basis.

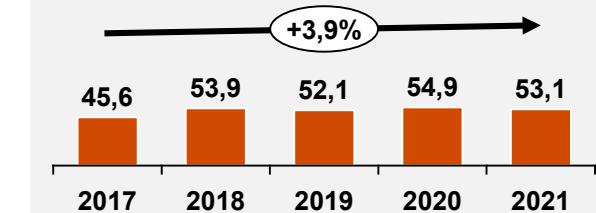
Number of newly enrolled student per year, in ths.



Number of early leavers from education, (% of the total student population 18–24)



Number of foreign students, in ths.



4



Universities



In terms of **optimal student to teacher ratio**, an **a gap of places was observed**

Universities

Key conclusions – Phase 1

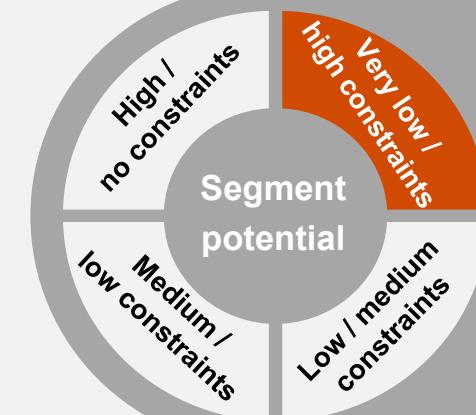
- Higher education in Belgium is under responsibility of the communities, while the central Government defines the school term, and the minimum applicable standards of education
- Belgium has higher share of population with tertiary degree as compared to the EU average
- Some of the key challenges identified include relative decrease in funding per student by communities, lower student progression rates from year to year, and insufficient support to research in university colleges
- Majority of HEI are located in French Community (69% of HEIs), while the majority of students are located in Flemish Community (57% students)

Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



PwC Assessment



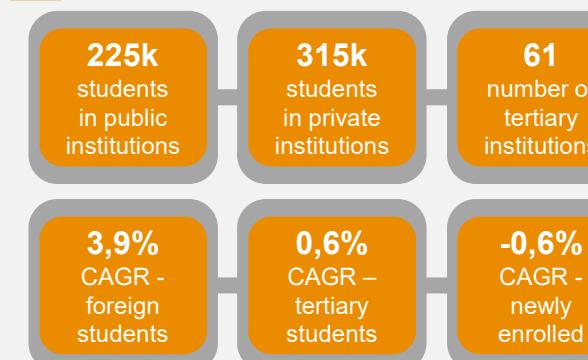
A high inclination towards higher education was observed among population and on the job market.



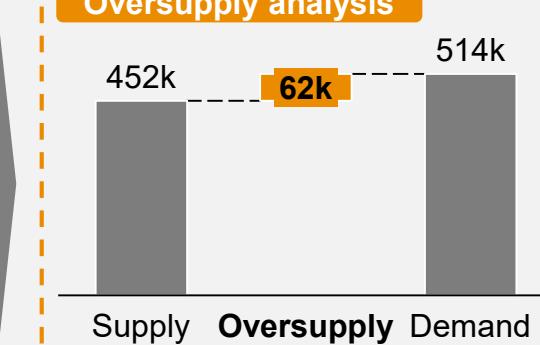
The opportunities are primarily estimated to be in the renovation of existing universities



Key Segment Data



Oversupply analysis



Major part of the responsibility for the higher education in Belgium falls to the Communities

Universities – General Overview (1/4)

Organisation of tertiary education in Belgium

According to the Belgian Constitution, education is in terms of federal law regulated by the Parliaments of the Communities (the Flemish, the French, and the German-speaking Community).

However, as defined by the Article 127 of the Constitution, the exception applies to the setting of the beginning and of the end of compulsory education, and minimum standards for granting the diplomas, which remains under the domain of the Government of Belgium.

Moreover, the external control of all budgetary, accounting, and financial transactions of the Federal State, the Communities, the Regions, public institutions, and the provinces is delegated to the State Audit Office.

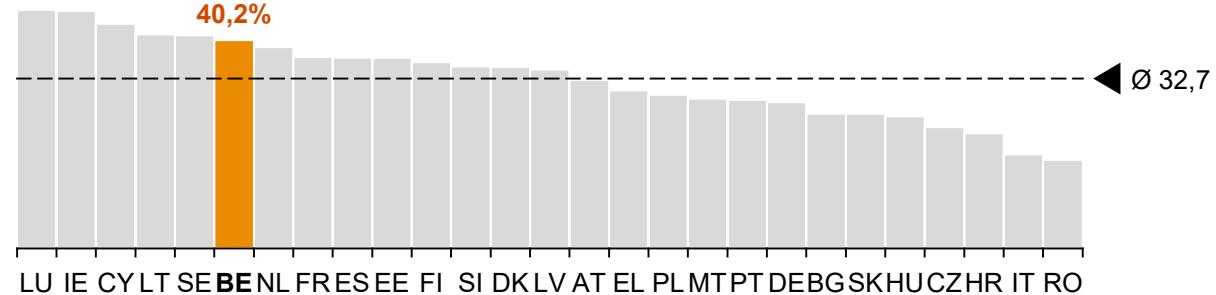
Higher education system in all three Belgian Communities follows the Bologna process, ensuring a cross-country recognition of education and compatibility with the European Credit Transfer and Accumulation System (ECTS).

In Belgium, the share of population with a university degree is higher than the EU average, standing at around 40,2%. Moreover, in 2021 more than half of young people (about 50,9%) between ages 25 and 34 held a tertiary degree, while the EU-27 average was about 41,2%.

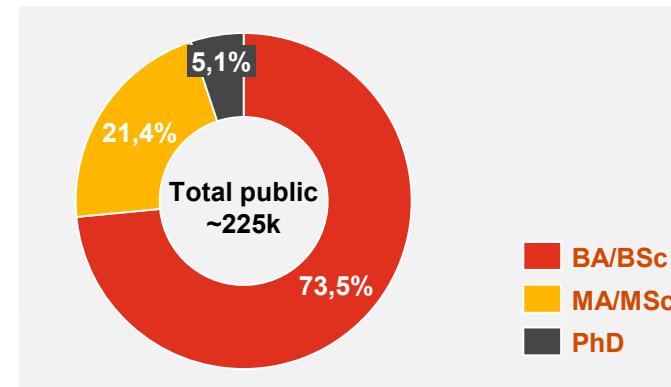
Furthermore, higher education attainment is positively reflected also on the labour market, where above average employment rate of recent young graduates can be observed. In 2021, the employment rate of recent graduates aged between 25 and 34 stood at 89,6%, whereas the EU-27 average was 84,9%.

Additionally, as indicated by the OECD, young professionals that obtained higher education earn significantly more than their counterparts. More specifically, persons aged between 25 and 34 with Bachelor's degree earn on average 42% more, while persons in the same age group with a Master's degree earn on average 71% more.

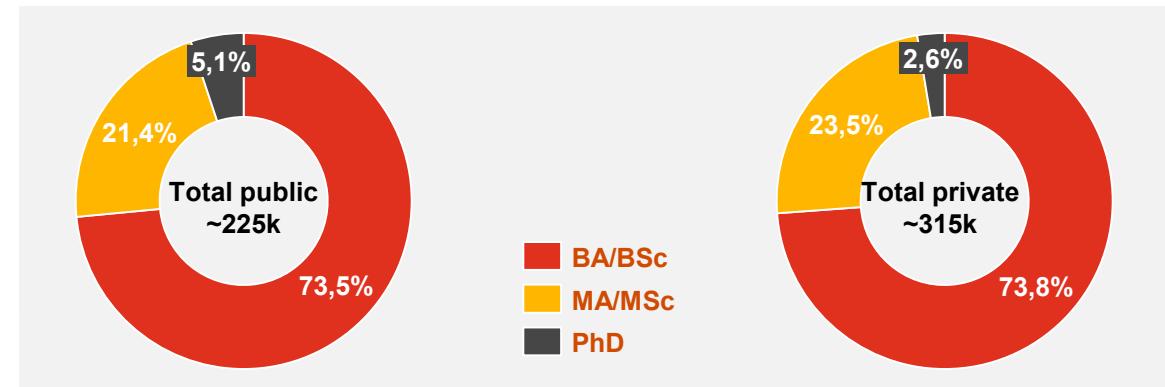
Share of population with university degree, 2022, in %



Split of students by public institutions, 2021



Split of students by private institutions, 2021



Flemish Community holds responsibility for HEIs in the Flemish region, and for Dutch institutions in the Brussels area

Universities – General Overview (2/4)

Higher education in the Flemish Community

The Flemish Community is governed by the Flemish Parliament and the Flemish Government. In practice the governing body exercises its powers in provinces across the Flemish region, and over speakers of Dutch in the Brussels area.

Within the Flemish Community, the education policy is defined within the Ministry of Education and Training. In terms of higher education, the responsible body for the policy is The division of higher education within the Division of Education and Training.

However, subsidising and funding of the purchases, construction, and renovation of school buildings, both, for compulsory education and higher education, is under the domain of an internal government agency AGION, the Agency for School Infrastructure.

Higher education in the Flemish Community is predominantly public funded with the Government providing “lump sum” funding to institutions, who are autonomous in regards of fund reallocation.

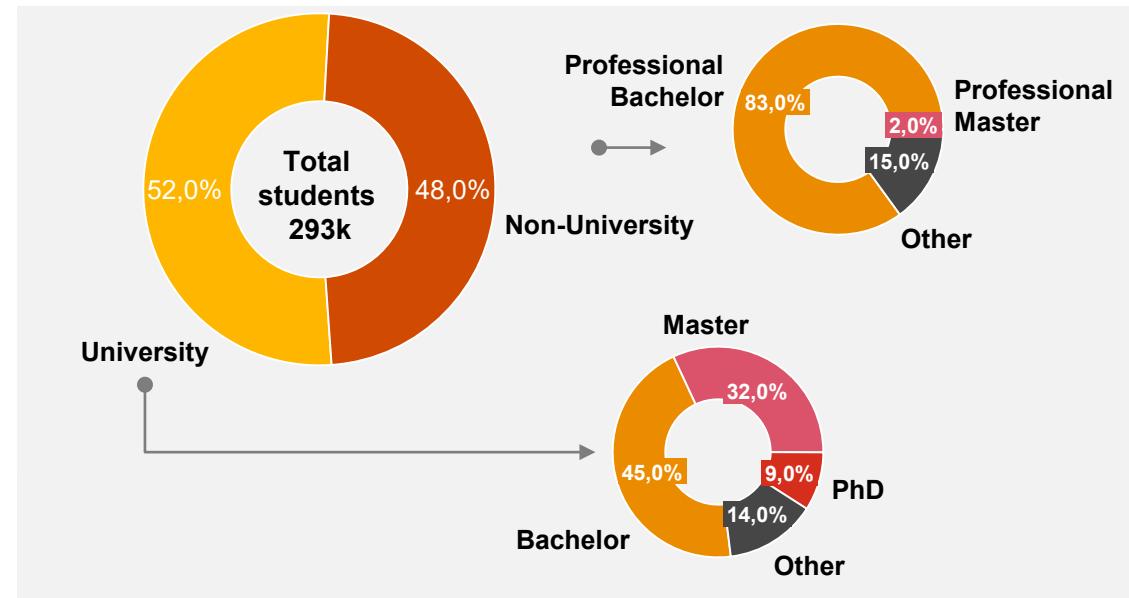
Higher education is comprised of the seven programmes; Associate degree programmes, Bachelor programmes, Master programmes, Doctoral programmes, Continuous education programmes, and Integrated and specific teacher training programmes.

Moreover, the higher education is provided in two types of institutions; universities, and in university colleges. Universities are research focused academic institutions, while the latter are focused on providing their students with strong practice-based knowledge. Additionally, the schools of arts and the Antwerp Maritime Academy can offer academic focused education.

Under the umbrella of the Community there are 18 institutions of higher education in total, out of which 5 are universities, and 13 are university colleges.

Sources: IBSA, OECD, European Commission, Community website, Government website, PwC analysis

Split of students per institution, 2021



Number of HEIs, 2023

Type of HEI	Number of institutions
University	5
University College	13

French Community has the major responsibility for HEIs in Walloon Region, and for French institutions in Brussels area

Universities – General Overview (3/4)

Higher education in the French Community

The French Community of Belgium is responsible for provision of higher education across the Wallonia, and the Brussels-Capital regions. However, the Community shares the responsibility for the provision of vocational education, and training with the Government of the Walloon region.

More specifically, the Community is responsible for the provision of higher education, and dual vocational education and training, while the Wallonia region is responsible for initial training through: the Walloon Institute of Dual Vocational Education and Training for Small and Medium-Sized Enterprises (IFAPME), and Small and Mid-Sized Companies Training Service (BCR).

However, reforms were put in place for the purpose of harmonisation of education, namely: the Decree on work and study training between Wallonia, the French Community and the COCOF, and the Decree on the cooperation agreement between the French Community, the Walloon Region, and the French Community Commission regarding the creation and the management of a French-speaking framework for education and training certifications throughout life (CFC).

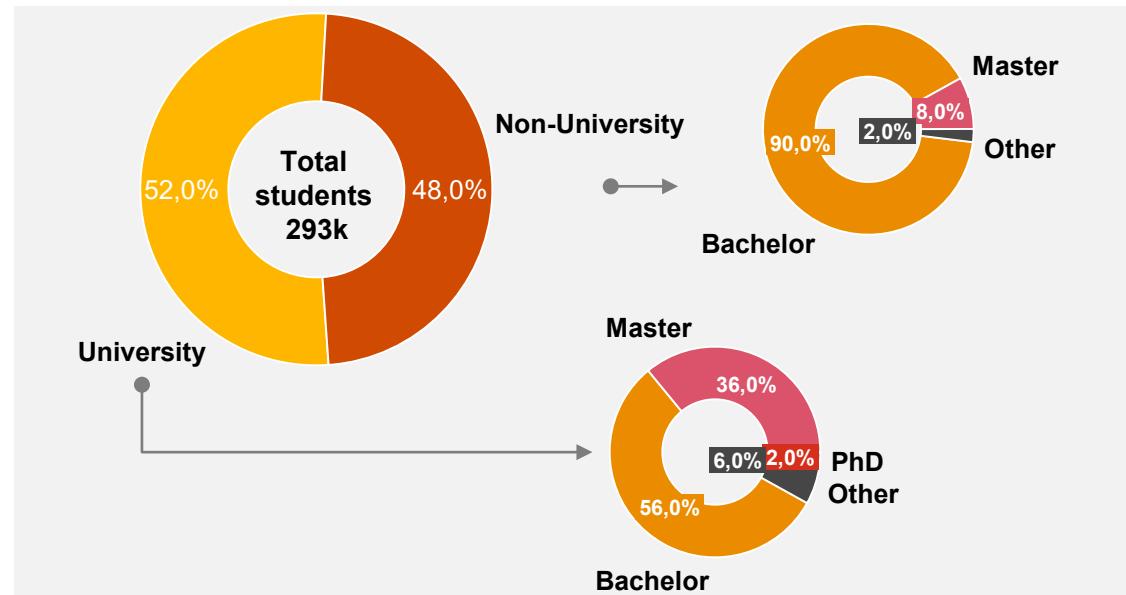
In the French community higher education is provided in Universities (academic education), Hautes Ecoles / University Colleges (professional education), and Schools of Arts / Arts Colleges (artistic techniques).

In total, there are 42 institutions of higher education, 6 of those are Universities, 20 are University Colleges, and 16 are Schools of Arts.

HEIs are part of the network, and they may be either state-run, or free / "private" and subsidised by the French Community. They are coordinated by the Academy of Research and Higher Education (ARES), which is a public interest organisation funded by the Community.

Sources: IBSA, Community website, Government website, PwC analysis

Split of students per institution, 2021



Number of HEIs, 2023

Type of HEI	University	University College	School of Arts
Number of institutions	6	20	16

In German-Speaking Community only one non-university-type higher education institution exists

Universities – General Overview (5/5)

Higher education in the German-Speaking Community

The legislative power in the German-Speaking Community is exercised by the Parliament, and by the Government. Its powers are exercised in the communes of the province Liège (located in the Walloon region) and the German-speaking area in Belgium.

The responsibility for higher education in the Community falls under the Ministry of the Community, more specifically, under the Department of Education and Teaching Organisations (Fachbereich ausbildung und unterrichtsorganisation).

However, in the Community only a non-university higher education system of short duration exists. Moreover, only one institution of higher education exists in the Community, the Autonomous College East Belgium (AHS).

The AHS is the only institution of higher education in Belgium that does not belong to any governing body, such as: state, community, municipalities, provinces, or ecclesiastical bodies.

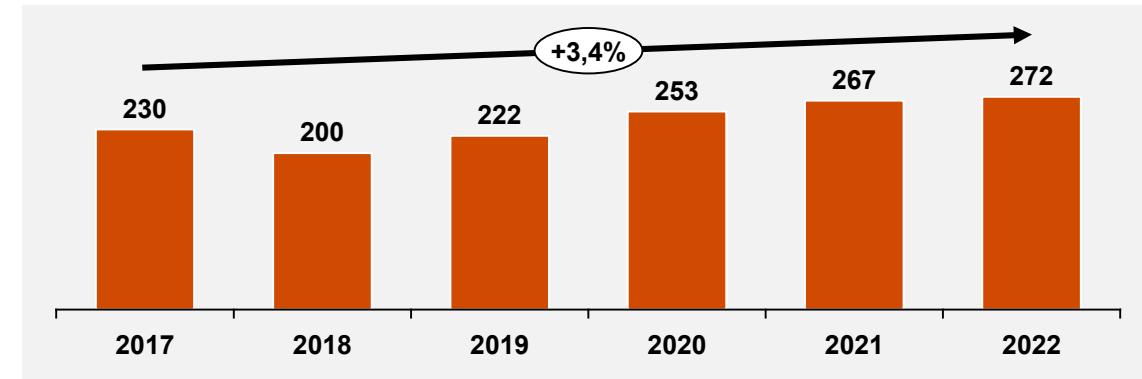
The AHS offers studies across three subject areas; health and nursing sciences, educational sciences, and financial and administrative sciences. Moreover, students can obtain only the following Bachelors diplomas: in Health and Nursing Sciences, in Primary Education, in Kindergarten, in Accounting (dual bachelor), in Public and Business Administration (dual bachelor).

The higher education studies of short duration aim to equip students with solid basic knowledge, professional, technical training, and a professional qualification in a specific field. The education focuses on practicality and is job-centred.

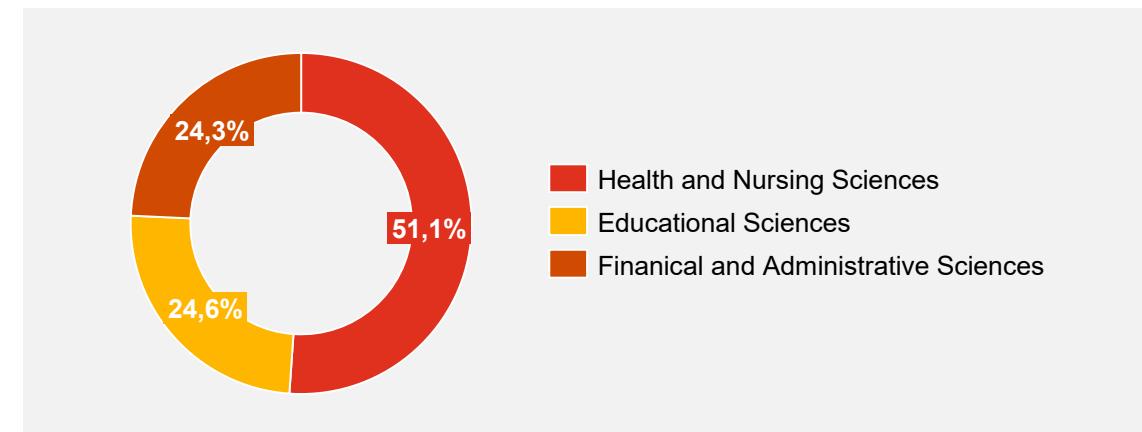
However, most students from the Community are pursuing higher education at French-speaking colleges and universities in Belgium, or are choosing to study abroad, with Germany being the most desirable choice.

Sources: Community website, Government website, PwC analysis

Number of students in AHS, in absolutes



Split of students per programme, 2022



Belgium has a relatively stable number of population of 18–24-year-olds, with low projected long-term decrease

Universities – Key Drivers & Issues

Relatively low projected demographic changes, and lack of STEM students

In Belgium, population in the age group of 18 to including 24 years old, as a key driver of potential demand for university students, has been relatively stable in the recent years, amounting for only around 3k students less in 2022, as compared to 2017.

However, as projected by the Eurostat, the group is expected to increase by around 0,8% on a yearly basis until 2030, when the growth is expected to shift to a declining trend. The decline will lead to a total of 114k people in the age group in 2050 as compared to 2030, amounting for a CAGR of around -0,6%.

In Belgium, the number of foreign students has seen a significant increase in the school year of 2018/19, when it increased by 8,3k students in a year. However, in the period of the next 4 years the number started to stagnate, peaking in the school year of 2020/21 when it reached almost 55k.

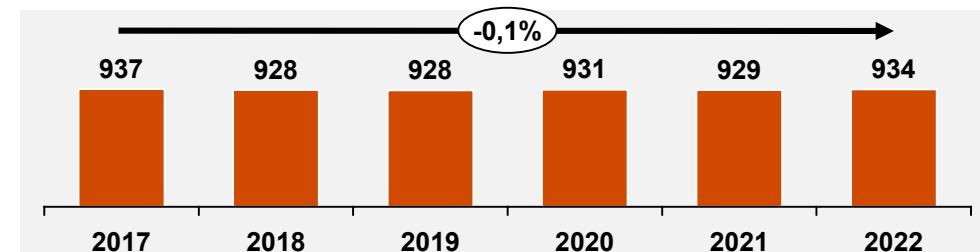
As identified by the European Commission, Belgium faces a challenge of a relatively low number of STEM graduates. In 2021, the share of ICT higher education graduates stood at around 2,2%, which is the second lowest in the EU (EU-27 average was ~3,9%). Additionally, the share of higher education graduates from the STEM field was significantly lower than the EU average (EU average was about 24,9%), amounting to around 17,6%. Moreover, despite dedicated action plans to increase the share of STEM graduates, the number is increasing only so slightly.

Higher education is across regions in Belgium subsidised for the EU/EEA nationals, with students having to pay only a share of the tuition fee. The amount that students have to pay is the highest in the HEIs of the Flemish Community, where students have to pay around EUR 980 per academic year of 60 ECTS. However, in the Flemish and French Community non-EU/EEA students have to pay significantly more, up to EUR 8k per academic year.

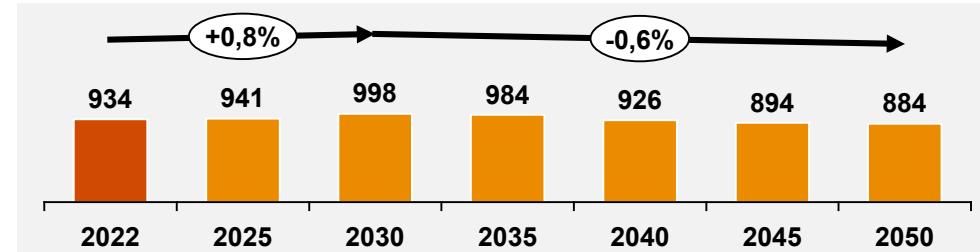
Average university tuition for EU/EEA nationals, per year, in EUR

	Flemish Community	French Community
Price per year	EUR 980	EUR 835

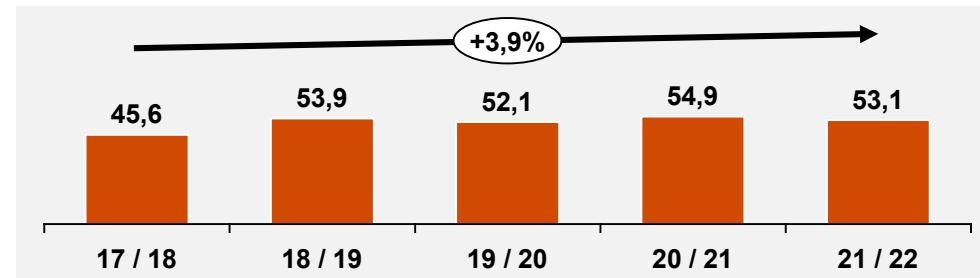
Population, 18–24-year-old, in ths.



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



Number of foreign students, in ths.



Size of the student body is stable, a small increase is observed due to prolonged studies and the decrease of early leavers

Universities – Demand

Increasing number of students

Across Belgium, the total number of students has been relatively stable, increasing by around 0,6% on a yearly basis since 2017. In 2021, the number has peaked at around 518k students, amounting for almost 15k more students as compared to the previous year.

The biggest increase in the number of enrolled students was observed for students of Master degree programmes, reaching 116,6k students in 2021, which is equal to a CAGR of 3,4% since 2017. Similarly, the number of students at PhD programmes peaked in 2021, with about 18,8k students, amounting to a CAGR of 2,5%.

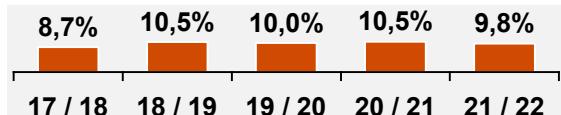
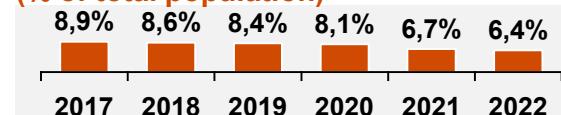
In contrast, the number of students enrolled in Bachelor degree programmes peaked in 2017, when around 384k students were enrolled in such programmes. In 2021, there were around 379k students in that group, or about 1,3% less students as compared to 2017.

Moreover, the number of newly enrolled students in Bachelor studies has been decreasing with about 3,1% per year since 2017, reaching its lowest value in 2021, when around 92k students enrolled in such study programmes. However, the number of newly enrolled students in Master's studies has been increasing with a CAGR of 4,8%, but due to the smaller absolute number of students in that group, the number of newly enrolled students in tertiary studies has been decreasing with a CAGR of ~0,6%.

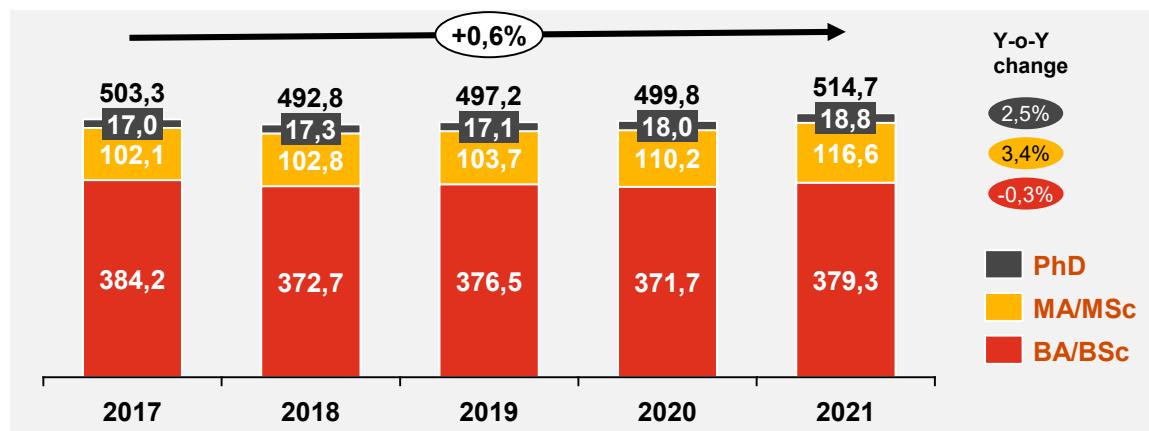
However, it has been observed that the length of time that students need to complete their studies has been increasing, which is also supported by the above-mentioned data. This coupled with the share of students that are not completing their education led to a slight increase in the total number of tertiary education students.

Number of early leavers from education, Share of foreign students

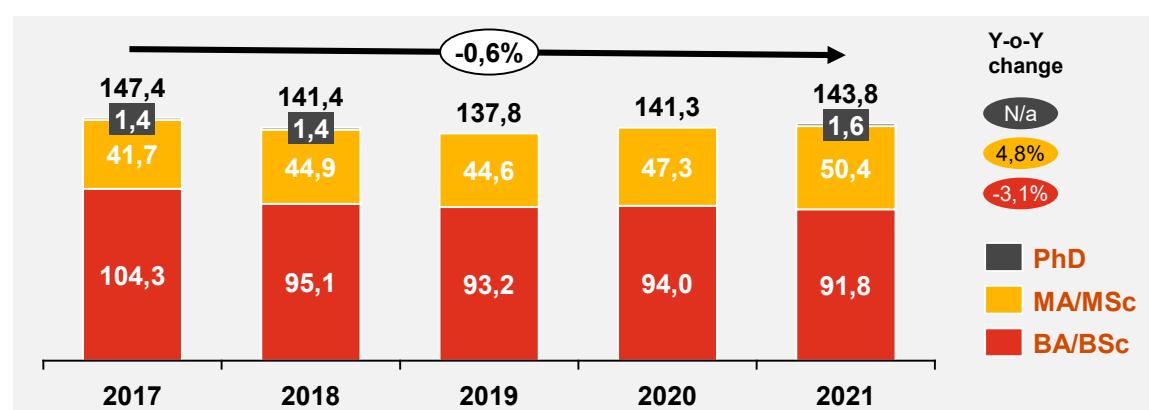
(% of total population)



Number of tertiary education students, in ths.



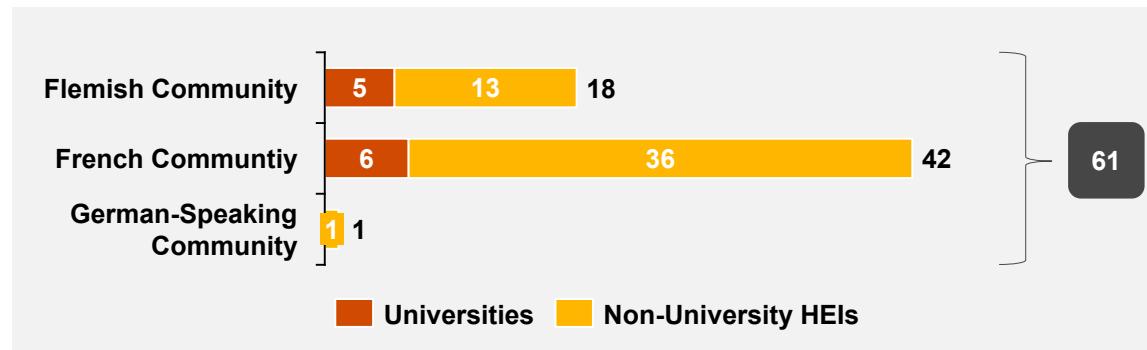
Number of newly enrolled student per year, in ths.



The majority of HEIs are located in the French Community, however, the majority of students study in the Flemish Comm.

Universities – Supply

Number of tertiary education institutions



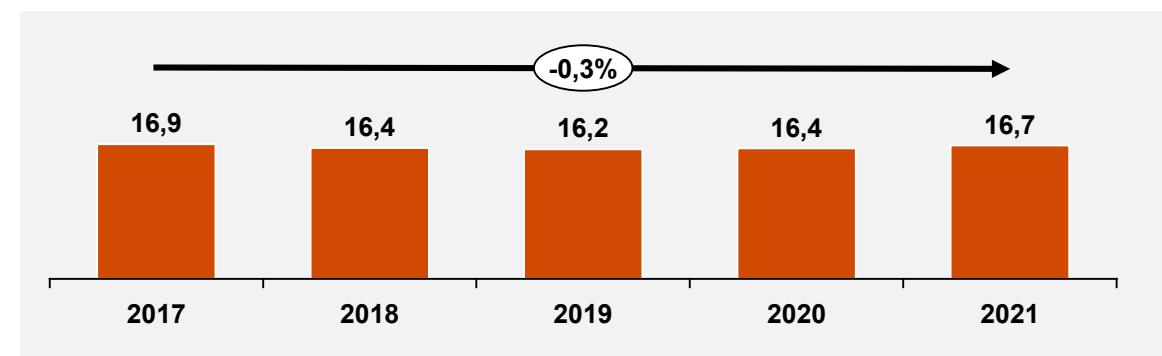
There are a total of 61 higher education institutions in Belgium, 11 of those are university-type HEIs, with the remaining 50 being non-university-type HEIs. The majority of HEIs (or 42 institutions) are located in the French Community, followed by the Flemish Community where 18 HEIs are located. Meanwhile, in the German-Speaking Community there is only 1 non-university-type HEI.

However, the majority of students were enrolled to HEIs in the Flemish Community, or about 57% of the total study body (amounting to around 293k students). The rest 43% of the student body was enrolled in institutions in the French Community (about 221k students). In the German-Speaking Community, there were only about 272 students.

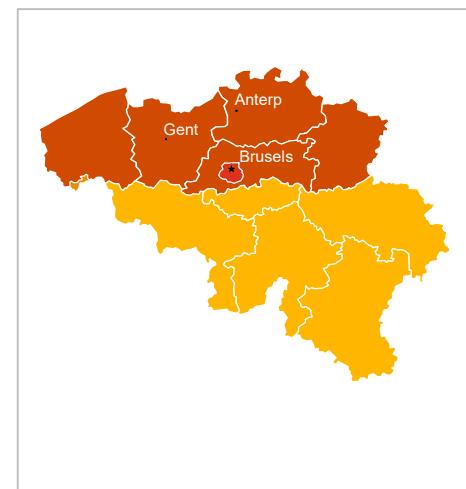
Considering that in the French Community there was 43% of the total student body, with about 69% of HEIs located in the Community, data indicates that institutions in the Flemish Community are on average providing education for more students per institution.

Student to teacher ratio has seen a slight improvement in 2019 when it decreased to 16,2 from 16,9 in 2017. However, in 2021, the ratio increased to 16,7, indicating that the number of teachers has been increasing with a lower rate than the total number of students.

Student-teacher ratio

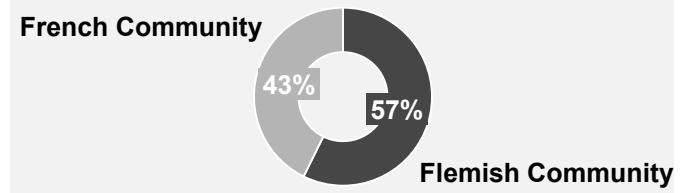


Share split of tertiary education students by region (2021)



Region	Total
Belgium	514,7k
The Brussels-Capital Region	125,4k
The Flanders Region	235,2k
The Walloon Region	154,1k

Split of students by Community, 2021



5



Pre-school facilities





Potential of the segment is estimated to be mainly in the segment of children up to 3 years old

Pre-school facilities

Key conclusions – Phase 1

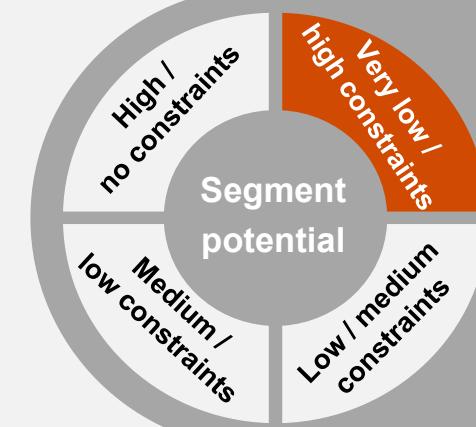
- Early childhood education is the responsibility of the Communities, however, in all Communities it follows the same age group segmentation: 1.) Early childhood education for children under 2,5 years (up to age of 3) / Childcare for toddlers, and 2.) Pre-primary education for children over 2,5 years
- Education is not compulsory until the age of 5; however, children over 2,5 years are universally entitled to pre-primary education
- The largest share of pupils attending non-compulsory pre-primary education from age 3 to starting age of compulsory education was observed in the Brussels-Capital Region (around 100%), followed by the Flanders Region (around 98%), and the Walloon Region (around 96%).

Key conclusions – Phase 2

This segment has not been shortlisted for phase 2.



PwC Assessment



Due to the Government guarantee for a place for children over the age of 2,5, and high enrolment we estimate that supply for in this age group matches the demand



A significant gap was observed in the segment of early childhood education for children younger than 3 years old.



Key Segment Data

37 children/ 1000 enrolled

53% children in private institutions

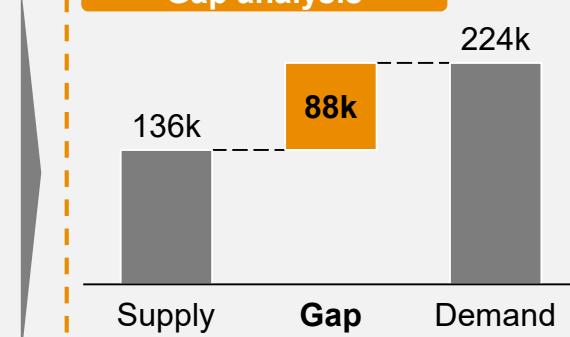
51% up to 2 y.o. enrolled

-0.3% growth of new-born children

99% 3 - 5 y.o. enrolled

0.7% growth # of places for 0-3y

Gap analysis



Responsibility for the early childhood education is delegated to Communities, starting with the age of 2,5

Pre-Schools – General Overview

Overview of the general ECEC system in Belgium

Early childhood education in Belgium is under the jurisdiction of the Communities' Governments. However, in all communities, early childhood education follows the same age group segmentation: 1.) Early childhood education for children under 2,5 years (up to age of 3) / Childcare for toddlers, and 2.) Pre-primary education for children over 2,5 years.

In all Communities, education until the age of 5 is not compulsory; however, children over 2,5 years are universally entitled to pre-primary education. Primary education starts at the age of 6, therefore, the last year of pre-primary education is obligatory in all Communities.

The Flemish Community

Childcare in the Flemish Community may be centre-based or home-based. The provisions are administered by the Flemish Minister of Welfare, Health and Family, and the agency Opgroeien (Kind en Gezin subagency), which issues permits and checks the quality.

The provision of pre-primary education is the responsibility of the Ministry of Education and Training. The Opgroeien agency is responsible for the implementation of policies.

The French Community

Childcare services fall under the responsibilities of the Birth and Childhood Office of the French Community (Office de la Naissance et de l'Enfance (ONE)) and are either centre-based or home-based.

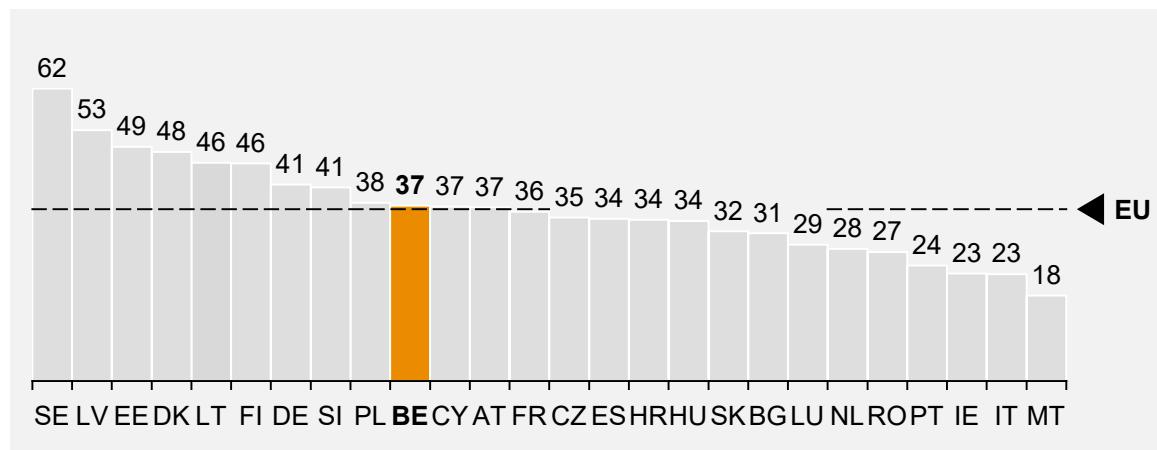
The area of the pre-primary education is responsibility of the Minister of Education of the French Community.

The German-Speaking Community

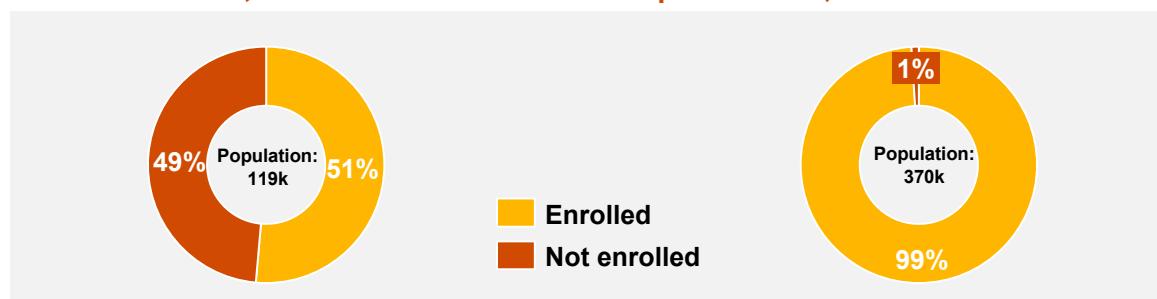
ECEC is usually provided through regulated home-based care by childminders, while centre-based setting in crèches is also available. The responsible body is the Department for Family and Social Affairs of the Ministry of the German-speaking Community.

The responsibility for pre-primary education falls to the Department for Education and Training of the Ministry of the German-speaking Community.

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



Share of children aged 2 years, enrolled in ECEC, 2021



*Eurostat's data for children enrolled in ECEC younger than 2 is not available, while children age of 6 are classified as attendants of primary schools

Sources: Eurostat, OECD, European Commission, Kindengezin, Eurydice, PwC analysis

Number of young children has been declining, however, in the near future it is expected to remain stable

Pre-Schools – Key Drivers

Higher enrolment in groups of older children

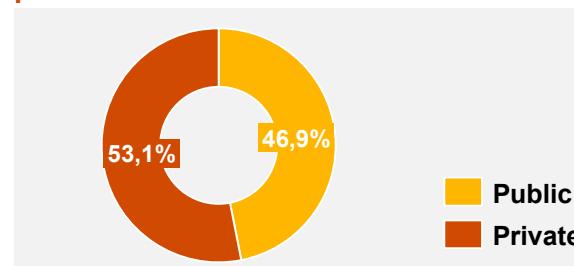
The number of children aged 0–5 (age group eligible for ECEC) has been steadily declining with a CAGR of ~1% in the five-year period since 2018, when it stood at about 754k, reaching about 723k children in 2022. The number of children aged up to 3 years old has been declining with a slightly lower CAGR of 0,9%, as compared to the CAGR of children aged 3 to below 6, which stood at -1,2%.

The same trend is also supported by the trends observed in the number of new-born children, which has been declining by only about 0,3% on a yearly basis in the period of 2017–2021. In 2021, there were about 118k children born, which is 4k more than in 2020, and only 2k less than in 2017.

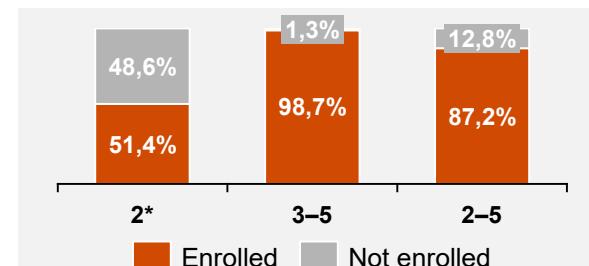
The fertility rate in Belgium in 2021 was around 1,6, which is above the EU average of around 1,53. Moreover, the fertility rate is projected to remain stable and hover around 1,6 until 2030. After that, the rate is projected to improve to 1,62 in 2040, and to 1,64 in 2050.

While data obtained from Eurostat indicates that the majority of children attend private schools, those are most exclusively government-dependent institutions, mostly confessional (catholic) subsidised institutions, and not independent private-for-profit institutions.

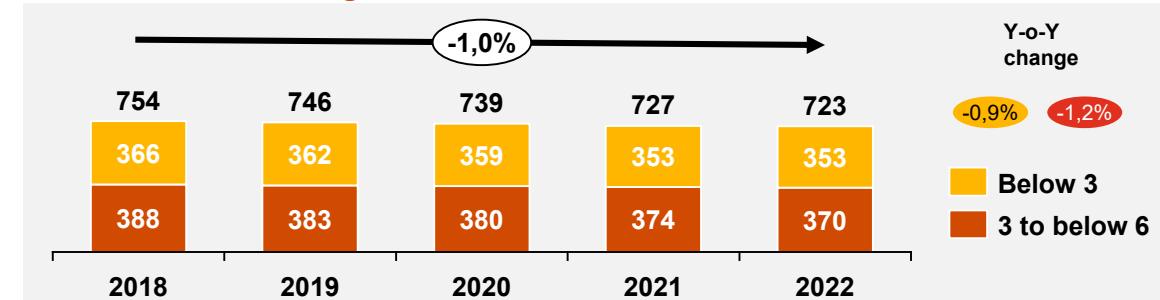
Split of children between public and private institutions



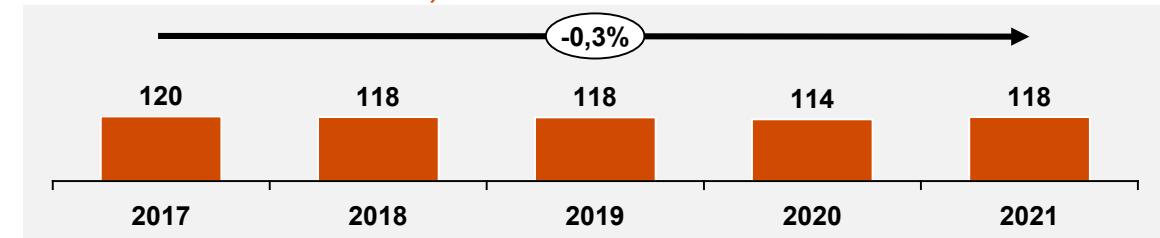
Share of enrolled children by age group, 2021



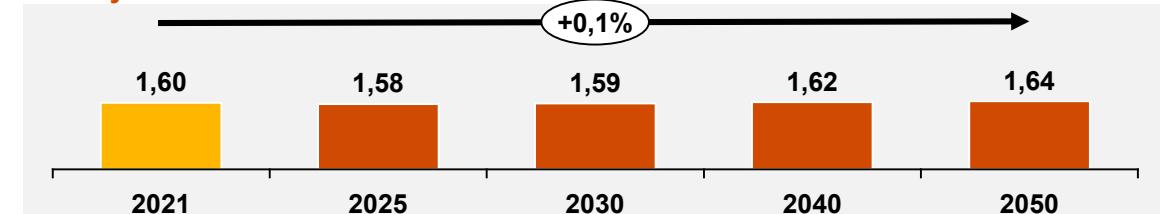
Number of children aged 0–5, in ths.



Number of new-born children, in ths.



Fertility rate



With high enrolment rates in non-compulsory pre-primary education, demand is expected to remain stable

Pre-Schools – Demand

Demand is expected to remain stable

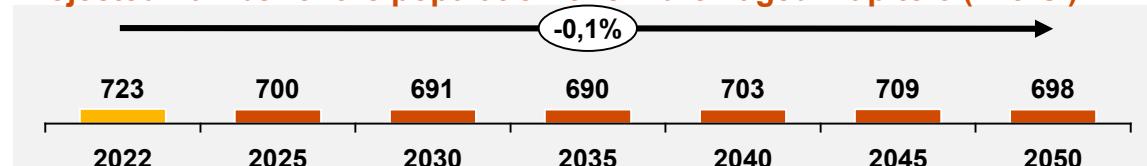
According to the latest Eurostat's data, in 2021, there were a total of 431,6k pupils enrolled in early childhood education in Belgium. In absolute terms, the majority of children were enrolled in early childhood education in the Flanders Region, about 245,5k children. In the Walloon Region there were about 129,3k children enrolled in the early childhood education, while in the Brussels-Capital Region there were 56,7k children enrolled in such education.

The same trend can also be observed when looking at the split of students enrolled in early childhood education by communities. The majority, or about 60% of total children enrolled in the ECEC, were enrolled in the Flemish Community, while the remaining 40% were enrolled in the ECEC in the Flemish Community. A small fraction of children were enrolled in ECEC in the German-Speaking Community; in 2021, there were about 2,6k such children.

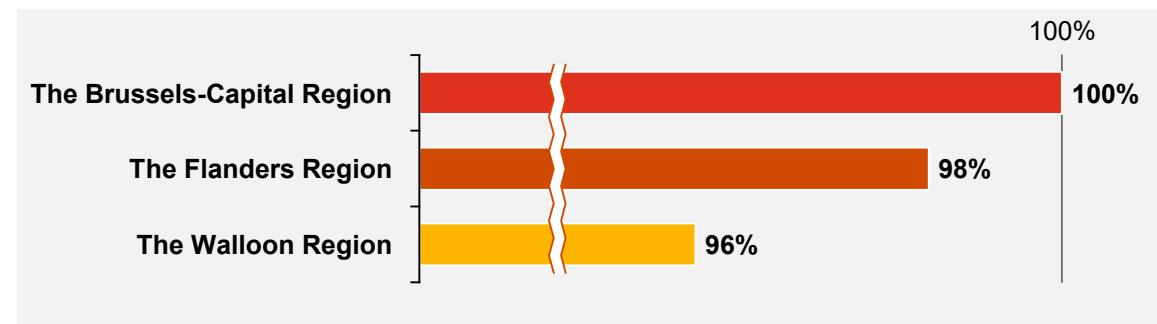
In Belgium, a high inclination towards pre-primary education is observed, meaning parents are willingly enrolling their children in non-compulsory education, which starts at the age of 2,5, and becomes compulsory at the age of 5. The share of children attending non-compulsory pre-primary education was the highest in the Brussels-Capital Region where 100% of children are attending such education. The second highest share was observed in the Flanders Region, about 98% of all children, while the smallest share was in the Walloon Region, about 96% of all children.

Considering high enrolment rates in pre-primary education and relatively stable projected group of children aged 1 up to 6, the demand for pre-primary education is expected to remain stable.

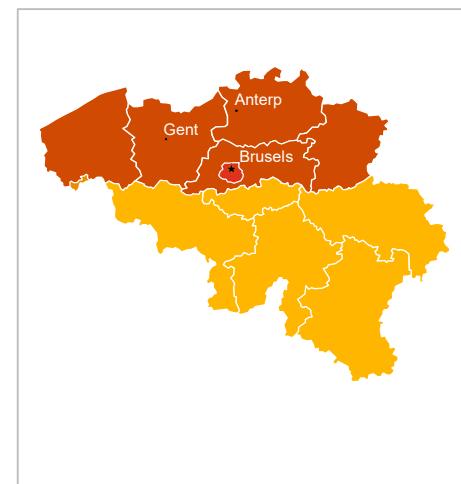
Projected number of the population of children aged 1 up to 6 (in ths.)



Share of pupils attending non-compulsory pre-primary education from age 3 to the starting age of compulsory education, 2021

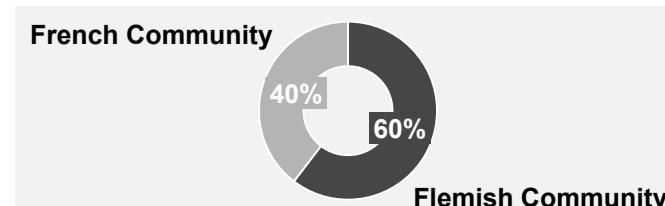


Pupils enrolled in early childhood education by Region, 2021



Region	Total
Belgium	431,6k
The Brussels-Capital Region	56,7k
The Flanders Region	245,5k
The Walloon Region	129,3k

Split of children in ECEC by Community, 2021



Sufficient supply of ECEC for pupils aged 2,5–6 is assessed, however, inadequacy of ECEC prior to the age of 2,5 may exist

Pre-Schools – Supply

Supply of early childhood education in Belgium

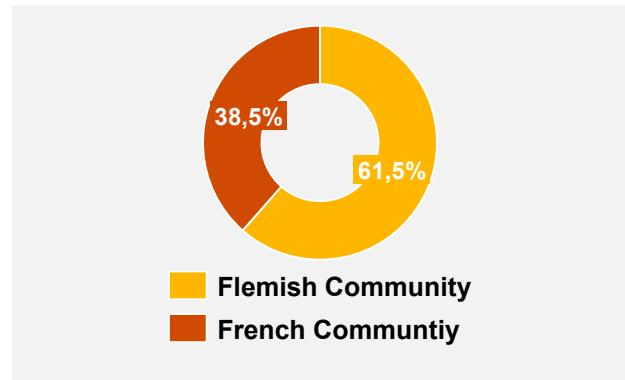
Despite pre-school education being non-obligatory up to the age of 5, the Belgian government dictates that a sufficient supply of pre-school education for children aged 2,5 to 6 years old has to be ensured. The national average enrolment for pupils enrolled in such education prior to it becoming compulsory was around 98%, which is significantly higher than the EU-27 average of around 92%.

Moreover, the inadequacy of the supply of such education was not identified, and due to high enrolment rates and a decreasing number of children, discrepancies were not identified.

However, research has shown a possible discrepancy in the supply of early childhood education for pupils up to the age of 3.

The supply of such education is neither compulsory nor guaranteed in Belgium. In total there were about 10,2k facilities of ECEC (for 0–2,5 y.o.) with about 136,2k available places.

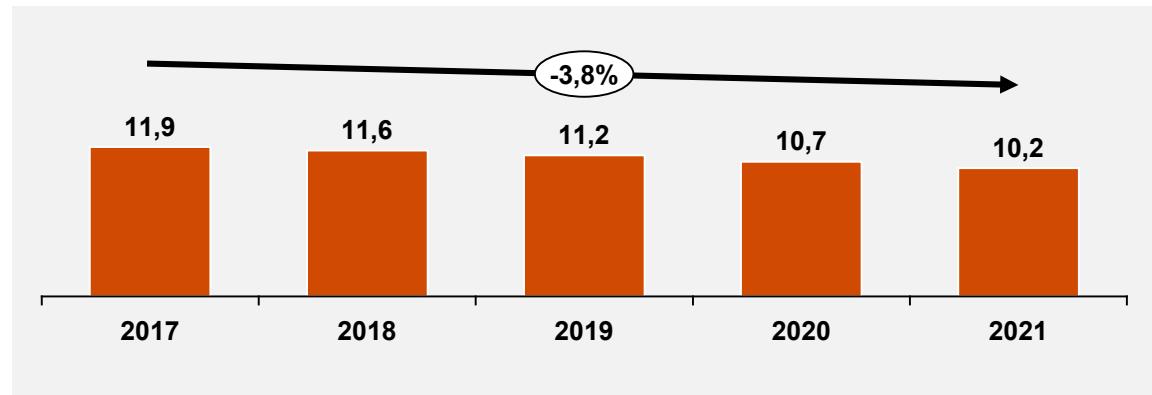
Split of ECEC (0–3 y.o.) institutions



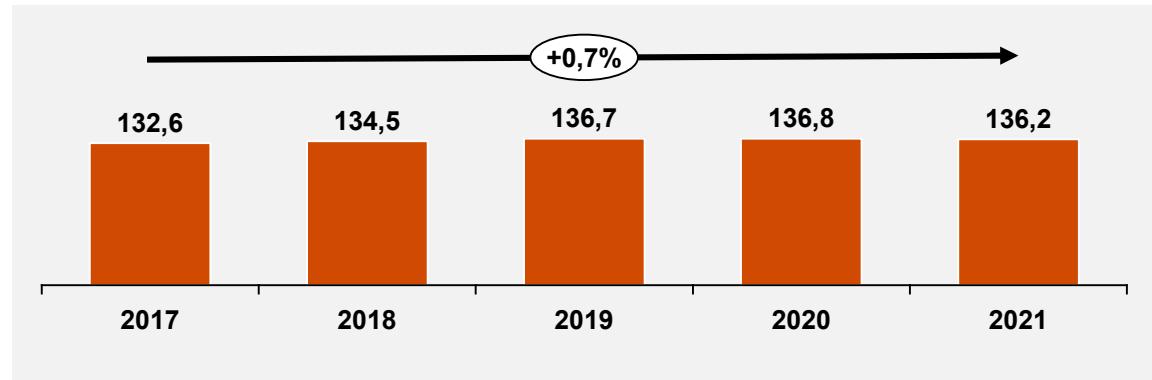
The majority (about 61,5%, or 6,3k institutions) of those institutions were French-speaking, while the rest ~4k institutions were providing education in Dutch. Additionally, there were about 680 institutions in the Brussels-Capital Region.

However, the coverage ratio remains below 50% in all three regions: ~45% in the Brussels-Capital Region, ~47% in Flanders, and ~43% in Wallonia.

Number of ECEC facilities (for 0–3-year-olds), in ths.



Number of ECEC places (for 0–3-year-olds), in ths.



6



Hospitals



With the introduction of locoregional hospital networks, the segment may offer new opportunities

Hospitals

Key conclusions – Phase 1

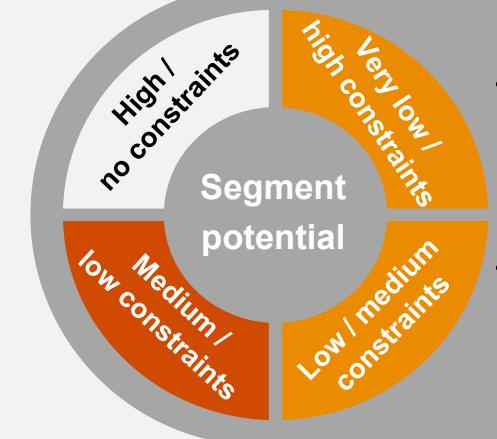
- In Belgium, the control over healthcare segments is shared among all levels of the Government. The majority of hospitals (70%) are in private not-for-profit ownership, while the public hospitals are generally in municipal, provincial, community or inter-municipal ownership
- 2020 reform introduced the need for hospitals to combine in locoregional networks, aimed to promote cooperation, where each hospital has to be part of one of the networks
- The main goal of the networks is to share resources, including investment resources, however, this is still not backed by the financial reform

Key conclusions – Phase 2

- Public financing within the segment is fairly limited and the competition for the financing among various hospitals is estimated to be very high, with criteria to obtain such financing being very selective
- General hospitals are under a heavy financial pressures; it is estimated that approximately $\frac{3}{4}$ of them are operating at a loss, with incurred costs being higher of their income
- Push towards collaborative investments among hospitals have been observed. On one hand such projects will allow for cost optimisation and efficiency increase on hospitals side, and on the other hand, such investments will require more funding



PwC Assessment

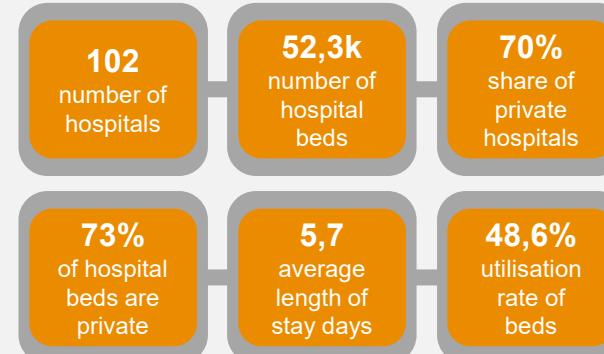


One of the key identified issues in Belgium is the cost of healthcare, as identified in Eurostat's unmet hospital needs survey.

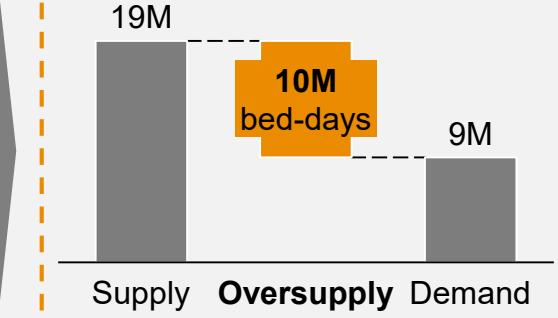
The segment has an oversupply, however, large scope of financing was observed, and is expected to continue in the future.



Key Segment Data



Oversupply analysis



Responsibilities are shared among all levels of Government, majority of hospitals are non-profit in private ownership

Hospitals – General Overview 1/5

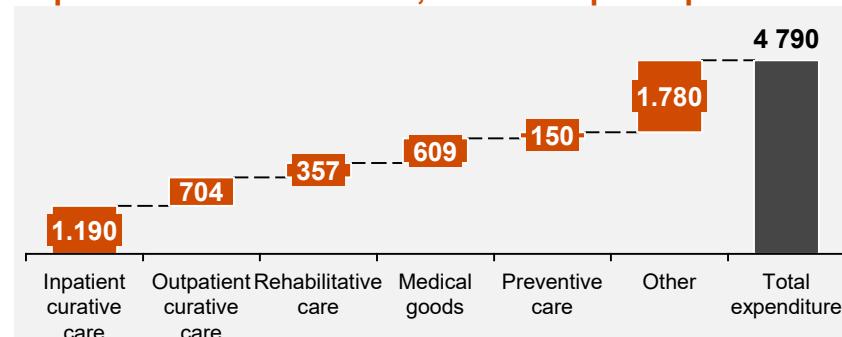
Definition of the segment and ownership

In Belgium, the responsibility for healthcare is shared among the Federal State, Regions, Communities, Provinces, and Municipalities. On the highest level, general organisation of healthcare is the responsibility of the Federal State, more specifically, of the Ministry of Health (Federal Public Service Health, Food Chain Safety, and Environment – Health Directorate).

There are three types of hospitals in Belgium: 1.) “Classic” general hospitals (generally those have to have at least 150 accredited beds, surgical and internal medicine services, etc.); 2.) General university hospitals (they offer the same services as classic general hospitals, and additional specialised treatment); and 3.) General hospitals with a university character (they have a share of beds connected to a university).

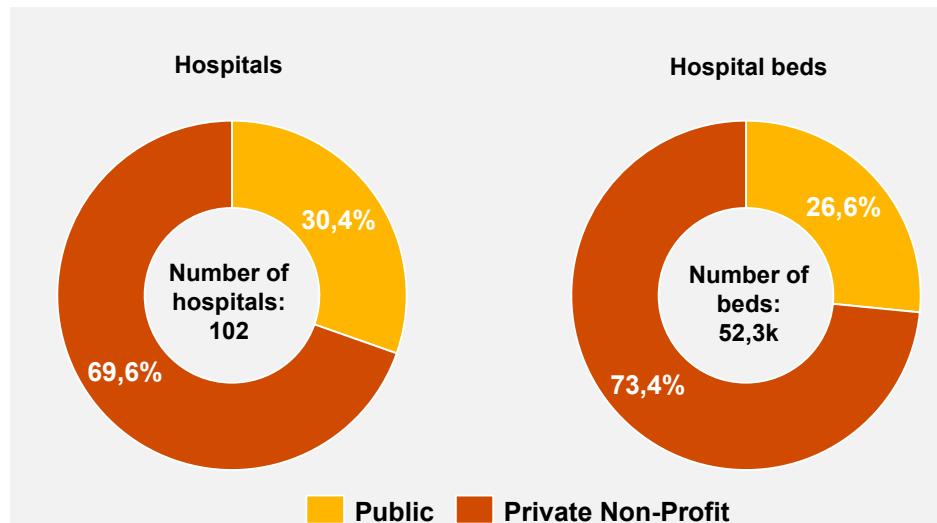
According to the national statistics, in Belgium there are 102 hospitals that have a total of 52,3k beds, with the vast majority (about 70% or 71 hospitals) being in private ownership. Public hospitals are generally owned by a municipality, a province, a community, or an inter-municipal association, while private hospitals are not-for-profit organisations, the legacy of former entities such as religious orders, mutual societies, free universities, or company hospitals. However, the Hospital Act does not distinguish between the two, which consequently means that funding provided through governmental schemes is identical. Moreover, according to the legislation, medical centres labelled as private clinics are not classified as hospitals.

Expenditure on healthcare, 2021 EUR per capita

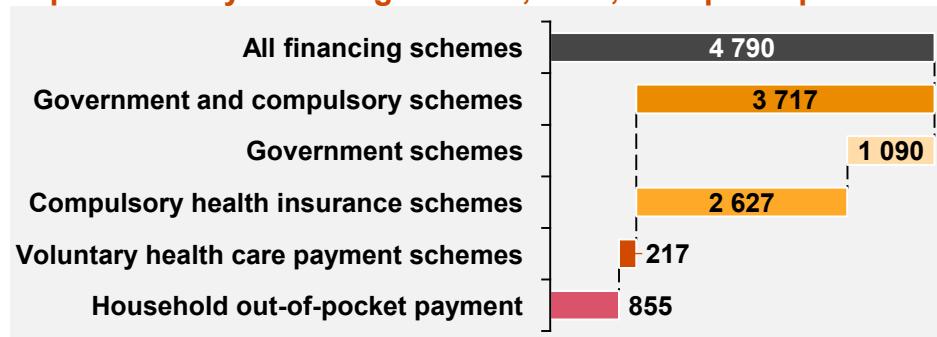


The majority of funding for hospitals in Belgium is sourced from governmental and compulsory schemes. Aside from governmental financing, hospitals can use their own resources for capital investments or can take out private loans. However, capital investments for buildings, refurbishments, maintenance, and heavy medical equipment are the exclusive competence of the Federal entities, in-line with the national planning.

Healthcare ownership, 2023*



Expenditure by financing scheme, 2021, EUR per capita



While the responsibilities for healthcare are shared, matters on the highest-level fall to the Federal State

Hospitals – General Overview 2/5

Responsibilities of the Federal State

The Federal State has responsibility over matters that are in the general interest of all Belgians. In the healthcare segment that translates to matters such as national compulsory health insurance, hospital budgets, legislations, regulations, and patient rights.

More specifically, the Ministry of Health is responsible for the general organisation, and planning of the rules of the national health system. However, the Minister is supported by several bodies, such as The Federal Public Service Social Security, The National social Security Office, The National Institute for the Social Security of the Self-employed, The Federal Agency for Medicines and Health Products, etc.

Responsibilities for the segment are further shared among other Federated authorities (Regions and Communities) and local authorities (municipalities and provinces). However, to facilitate cooperation, inter-ministerial conferences are regularly organised.

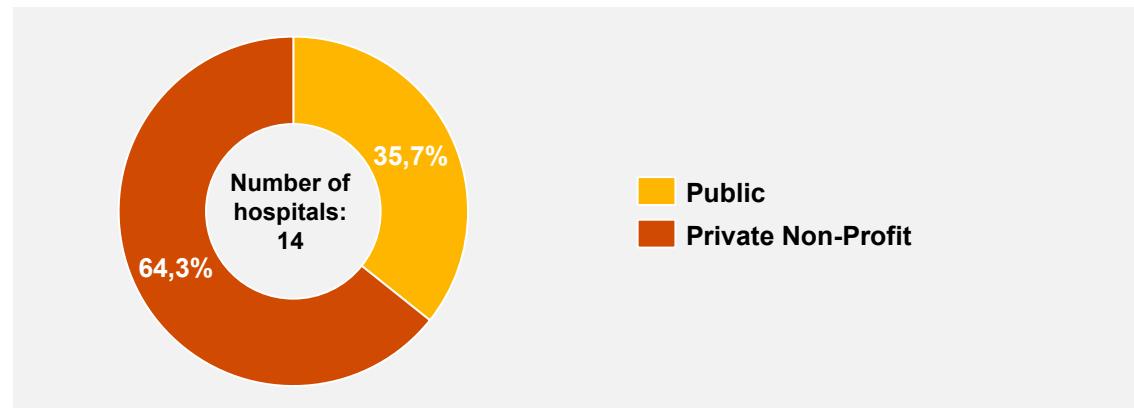
Municipalities are generally responsible for the organisation of social support for low-income groups and, in some cases, the management of public hospitals or healthcare settings. The responsibilities of the provinces are on the other hand more extensive, generally covering health screening, and coordination of mental health services. However, the role of local authorities remains limited.

Responsibilities in the Brussels-Capital Region

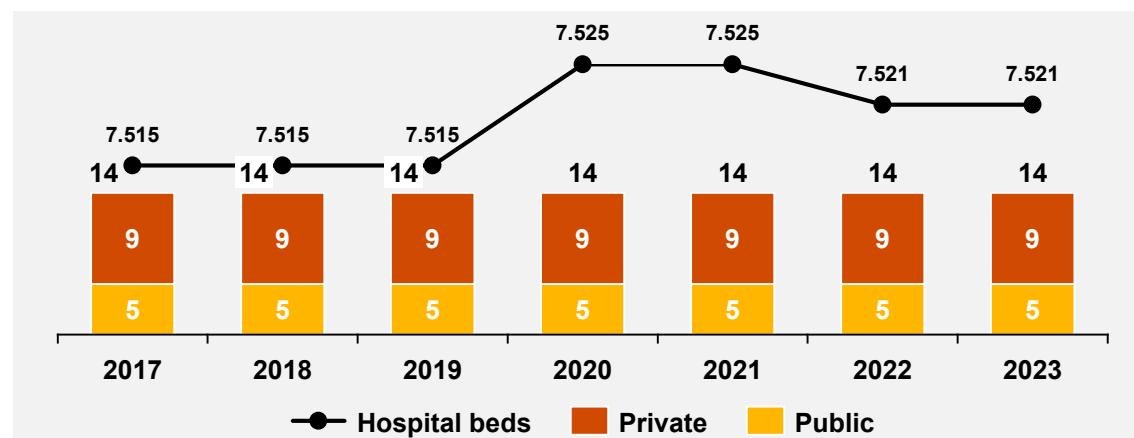
Due to the bilingual status of the Region (French and Dutch), three specific commissions are responsible for the healthcare segment in the Region:

- 1.) The Flemish Community Commission is competent for facilities and services organised exclusively in Dutch, however, it has no legislative power.
- 2.) The French Community Commission is competent for facilities and services organised exclusively in French, it has legislative power as transferred by the French Community.
- 3.) The Joint Community Commission is responsible for bilingual individuals and facilities that are not directly attached to one of the Communities, it has legislative power.

Hospitals ownership in the Brussels-Capital Region, 2023



Number of hospitals and beds in the Brussels-Capital Region, 2023



The Flemish Government is responsible for healthcare in Flanders, and Dutch institutions in Brussels-Capital Region

Hospitals – General Overview 3/5

Responsibilities of the Flemish Community

The Flemish Community and the Flemish region are operating under the same Parliament; there is a single legislative and political power, a single administration, and a single budget. Therefore, all healthcare institutions in the Flemish Region and Dutch speaking institutions in the Brussels-Capital Region are under the umbrella of the same responsible bodies.

The health responsibilities are delegated to the Flemish Ministry of Welfare, Public Health, and Family (Department for care), and the Flemish Agency for Care and Health.

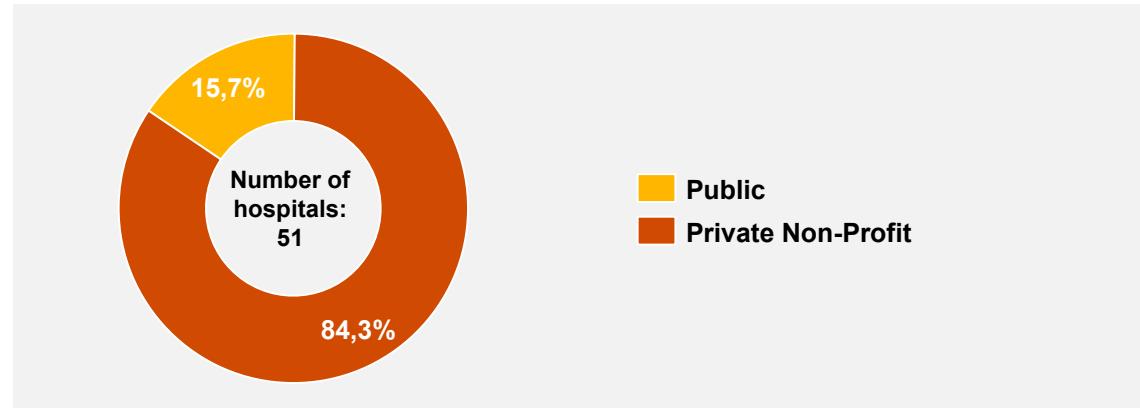
The ministry is more specifically responsible for the preparation and follow-up of public health policies and the establishment of up-to standard healthcare environment. Moreover, the Department for care accredits general hospitals, university hospitals and rehabilitation hospitals in the Flemish region, and one university hospital in the Brussels-Capital region.

The agency is responsible for ensuring that there is sufficient and high-quality provision of healthcare in the Flemish Community, and the recognition of individual health professionals. Additionally, the agency strives to maintain a healthy population of residents through the promotion of a healthy lifestyle and vaccinations.

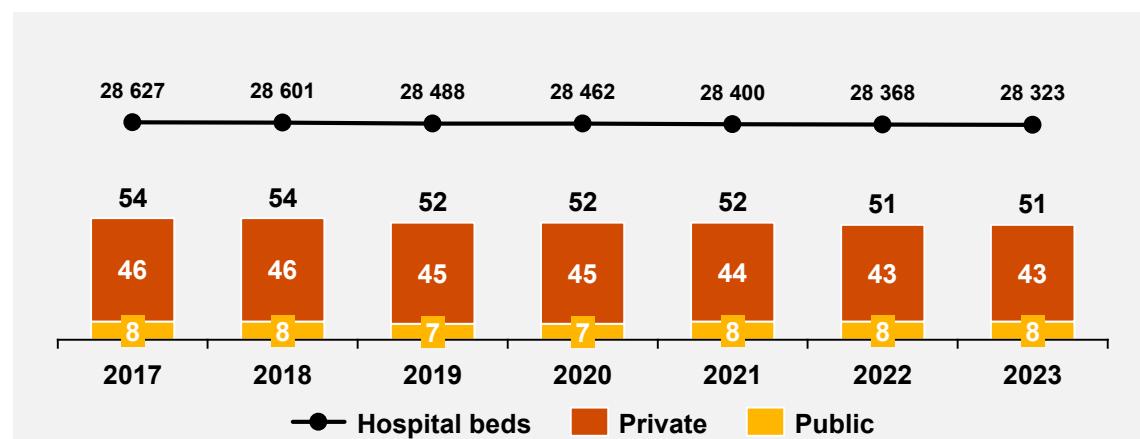
Moreover, the quality of healthcare in the Flemish Community is supported with competencies of The Flemish Institute for Quality of Care (VIKZ), which is working with the sector to develop a set of indicators, based on evidence-based methodology. The indicators are used to measure the quality of care in the Flemish general hospitals, and results are being used to compare services of different hospitals within the community.

Additionally, The Flemish Infrastructure Fund for Personal Affairs (VIPA) has the responsibility to support the realisation of affordable, high-quality, and sustainable welfare, and care infrastructure through various subsidies.

Hospitals ownership in the Flemish Region, 2023



Number of hospitals and beds in the Flemish Region, 2023



In Wallonia, responsibilities are divided among the Region, French Community, and German-Speaking Community

Hospitals – General Overview 4/5

Responsibilities of the French Community

Healthcare responsibilities for French-speaking institutions are shared among the French Community and the Walloon region.

The Walloon Minister of Health and Welfare is responsible for the segment on the highest level, while the agency for Quality Life (AVIQ) is responsible for the implementation of the Federated health competences in the French-speaking part of the Walloon region.

The French Community is responsible for matters regarding childbirths, and childhood healthcare that includes school medicine.

Additionally, the Community is responsible for licensing and financing (including capital investments and investment costs) university hospitals.

In the French-speaking part of the Brussels-Capital region, the responsibility for healthcare is under the domain of the French Community Commission.

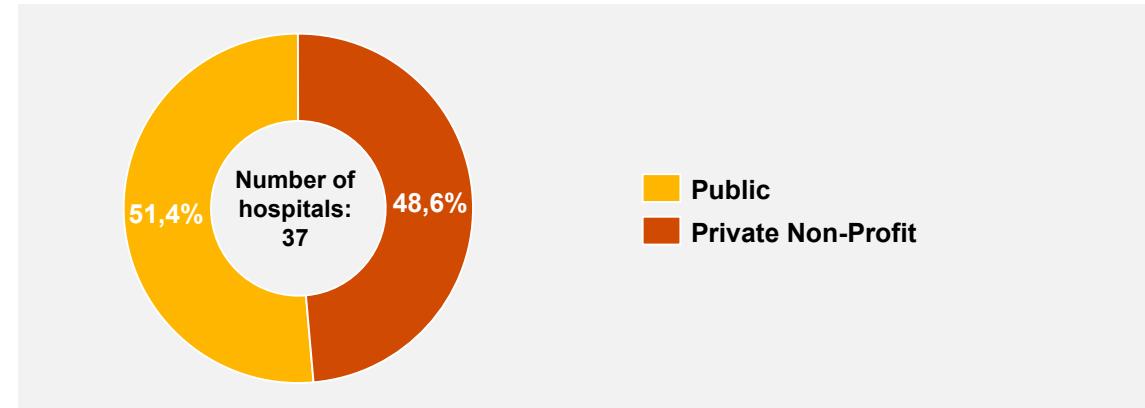
Responsibilities of the German-Speaking Community

The responsibilities and competences for healthcare related matters in the German-speaking community are exercised by the Government and Parliament of the Community.

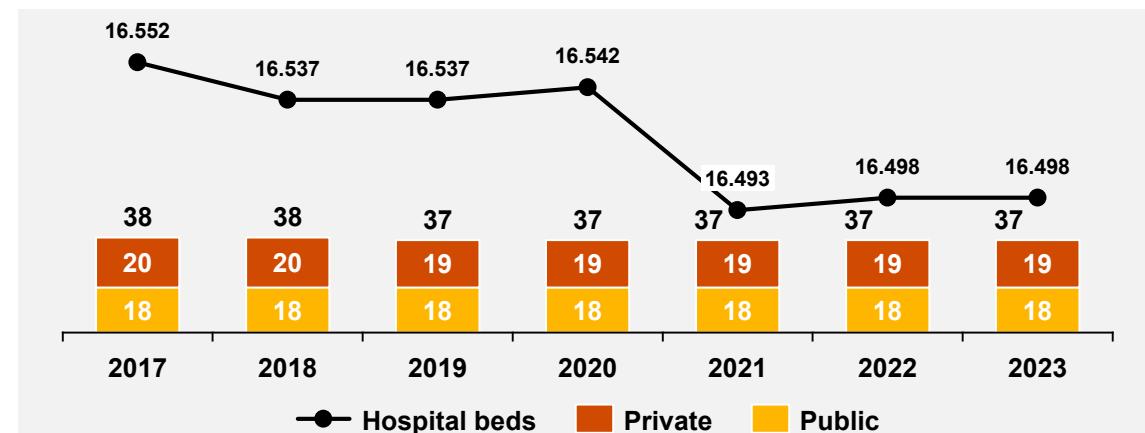
More specifically, the responsibilities for the sector are delegated to the Ministry of health, social affairs and family (department of health and senior citizens). Furthermore, the Department is responsible for matters related to public health and health promotion.

Additionally, in the Community responsibility for matters in the sector related to old age, physical, or mental disability, is delegated to the Agency for Autonomous Life (Dienststelle für selbstbestimmtes Leben).

Hospitals ownership in the Walloon Region, 2023



Number of hospitals and beds in the Walloon Region, 2023



Since 2020, each hospital has to be a part of the hospital network, purpose of which is to foster collaboration

Hospitals – General Overview 5/5

Establishment of locoregional hospital networks

With the purpose of continued provision of comprehensive and high-quality healthcare in Belgium, the Government of Belgium took steps to improve and strengthen cooperation between Belgian hospitals. To achieve these objectives, the Government introduced locoregional hospital networks that aim to encourage hospitals to share resources more efficiently and effectively. Additionally, hospitals in the same networks can share investments and collaborate in provision of services through the division of labour based on expertise.

Since 2020, when the establishment of hospital networks was made possible, each hospital has to be a part of one, and only one, hospital network. Hospital networks are its own legal entities, proposed by the hospitals, and approved by the local authorities (regions, communities, or in the case of Brussels-Capital region, the commissions).

The regulator states that each network should consist of at least two hospitals; however, a maximum of 13 networks may be formed in the Flemish region, 8 in the Walloon region, and 4 in the Brussels-Capital region.

The objective of the reform that introduced the locoregional hospital networks is twofold. On the one hand, it aims to provide care in the vicinity when possible, while on the other hand, it aims to provide specialist care where needed. In order to achieve this goal, a subdivision of care has been established, dividing healthcare into locoregional care assignments (basic care services that should be provided in every hospital network, but not every hospital), and supra-regional care assignments (services requiring considerable expertise that should be provided in supra-regional reference centres in each network).

While the networks were established with the purpose to share resources, investments, expertise, etc., and therefore provide more efficient and effective distribution of healthcare in the country, hospitals prioritised personal and philosophical connections before geographical proximity when establishing networks. Additional challenges present the fact that hospital networks were not supported by a financial reform, therefore, there is a lack of a value-based strategy.

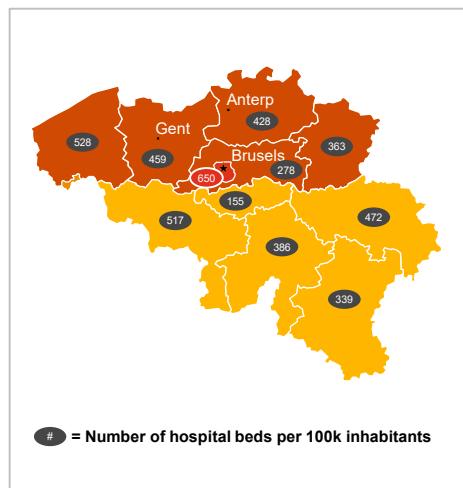
Overview of hospital networks by the region



The highest concentration of hospital beds is observed in the Brussels-Capital Region, 650 beds per 100k inhabitants

Hospitals – Key Issues 1/2

Regional split of hospitals and hospital beds, 2023



Region	Hospitals	Hospital beds
Belgium	102	52,3k
The Brussels-Capital Region	14	7,5k
The Flanders Region	51	28,3k
The Walloon Region	37	16,5k

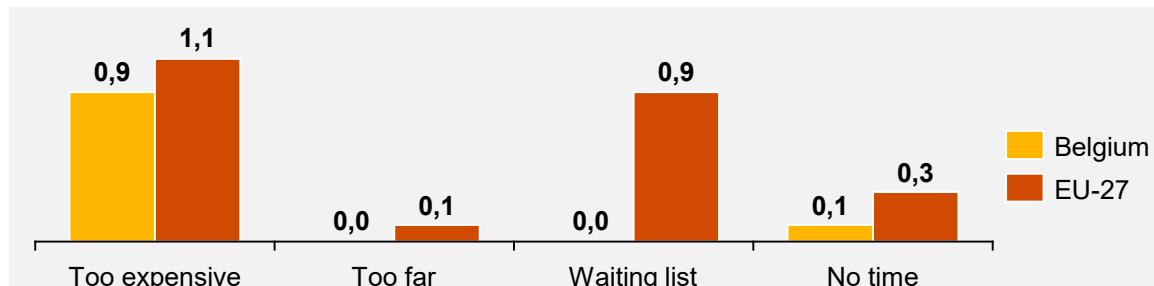
In Belgium, the most hospitals are located in the Flanders Region (51 hospitals) where, in absolute terms, also the most beds are available, about 28,3k hospital beds. In the Walloon Region there are 37 hospitals, with a total capacity of about 16,5k beds. The fewest hospitals (14 hospitals) and hospital beds (7,5k beds) are located in the smallest region, the Brussels-Capital Region. In total, in Belgium, there are 102 hospitals with a total capacity of 52,3k hospital beds.

However, this region had the most beds per 100 thousand inhabitants, or about 650 beds per 100k people living in the region. The second largest number of hospital beds per 100k inhabitants was observed in the West-Flanders province in the Flanders Region, while the least hospital beds per capita was observed in the Walloon Brabant province of the Walloon Region, at about 528 and 155 hospital beds per 100k inhabitants, respectively.

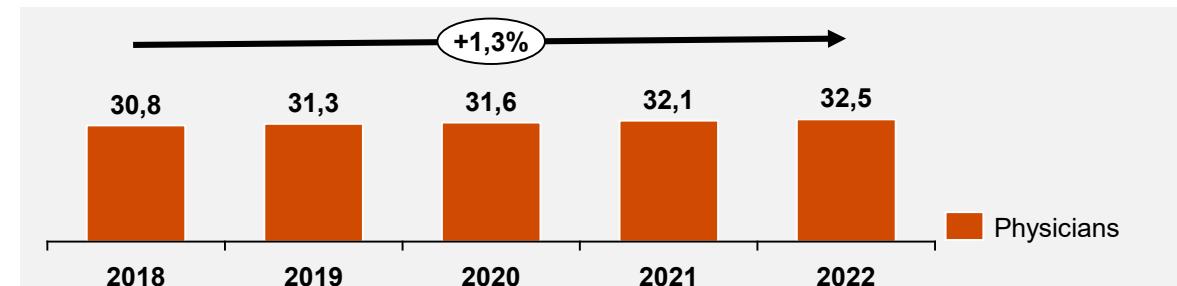
According to the Eurostat data, the majority of people who did not seek medical treatment did not do so due to the services being perceived as too expensive (about 0,9%); however, the share of such people was still lower than the EU average, which stood at around 1,1%. The second most common reason was the lack of time, representing 0,1% of people with unmet needs. However, about 98,4% did not have an unmet need to declare, leaving other reasons at insignificant percentages.

The number of physicians in Belgium has, in recent years, shown some improvement. In 2022, there were about 32,5 physicians per 10k people, or about 1,7 more physicians per 10k people than in 2018, amounting to a CAGR of ~1,3%. However, the number is significantly lower than the EU average, which was about 41 physicians per 10k people. Moreover, more than 80% of hospitals reportedly had to close beds due to staff shortages.

Self-reported unmet needs of population by reason (% of population 16+)



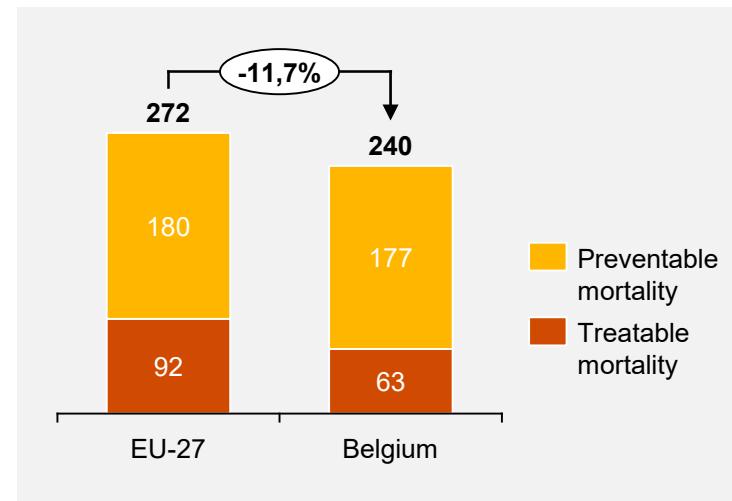
Number of physicians per 10 thousand residents



Treatable mortality rate was significantly lower than in the EU, indicating the effectiveness of treating acute conditions

Hospitals – Key Issues 2/2

Mortality rate compared to the EU average

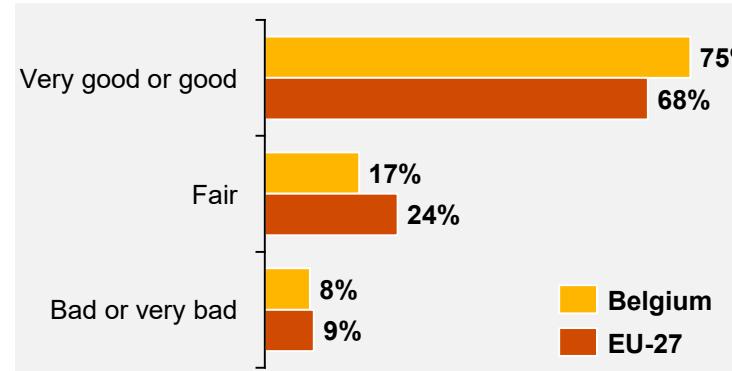


Belgium has both, the rate of preventable mortality (around 177) and the rate of treatable mortality (around 63), below the EU average (EU average for preventable mortality was ~180, while the average rate for treatable mortality was 92). While the rate for the preventable mortality was closer to the EU average, the rate for treatable mortality was significantly lower than the EU average (over 30% lower). This indicates that the healthcare system is in Belgium more effective at treating diseases or illnesses and saving the lives of people with acute conditions than at preventing mortality.

The latest available data shows that in 2020, there were around 18,5k deaths due to preventable causes of mortality. The largest share of those were due to COVID-19 (around 22%), followed by lung cancer (around 18%). Suicides, alcohol-related deaths, and accidents accounted for 8% of preventable deaths, respectively (the rest, ~36%, were attributed to other causes). Almost a third fewer deaths (or about 6,5k deaths) were due to treatable causes. Out of those, the largest share (around 16%) of deaths was due to ischaemic heart diseases, followed by colorectal, and breast cancer (around 15% respectively). Due to strokes, there were about 8% of treatable causes of mortality, and due to pneumonia about 8%. The rest, ~37%, of treatable causes of mortality was attributed to other factors.

Data for 2021 has shown that Belgium had with ~2,3% the lowest share of children with unmet needs for medical examination or treatment than the EU-27 average, which was ~3,6%.

Self-perceived health



In 2022, the majority of the population perceived themselves as having "good" or "very good health"; more specifically, the group amounted to ~75% of the population, which is about 7% more than the EU-27 average. Furthermore, that puts Belgium in the top 5 countries with the largest share of people perceiving themselves as such. The share of people perceiving themselves as in "bad" or "very bad health" was with ~8% in-line with the EU average of ~9%.

The biggest risk factors are attributed to behavioural risk factors, such as tobacco smoking, dietary risks, alcohol consumption, and low physical activity, amounting to over one third of deaths.

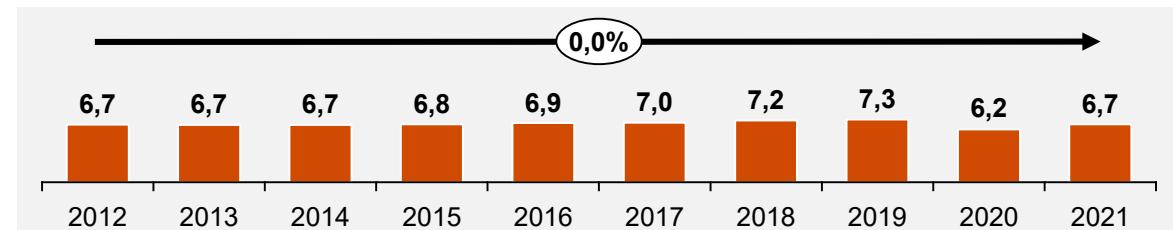
Health risk factors



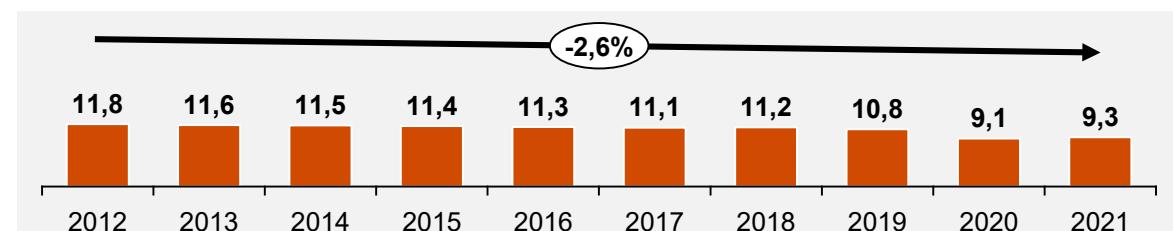
The number of hospital days has been steadily decreasing, average in-patient stay remains longer than the EU average

Hospitals – Market Demand

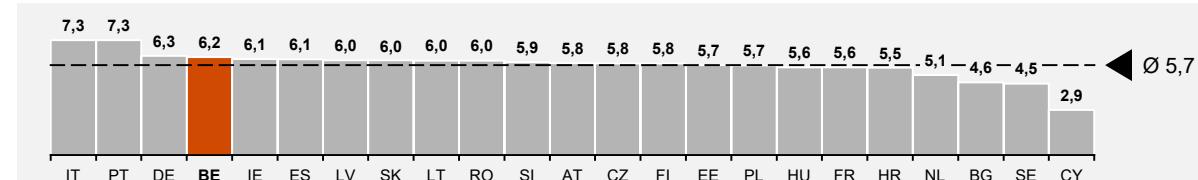
Average number of visits to physicians, per capita



Number of hospital days for inpatient cases in Belgium in M.



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



Sources: Eurostat, IBSA, PwC analysis

In Belgium, in the past decade, the average number of medical doctor consultations per inhabitant has been increasing until 2019, reaching 7,3 consultations per person. However, due to the effects of the COVID-19 pandemic, the number of consultations decreased to 6,2 in 2020, and finally reached 2012 levels in 2021 of 6,7 consultations per person.

According to available Eurostat's data, our estimation, calculated as the number of discharges of inpatient patients multiplied by the average length of inpatient stay, shows that the number of hospital days for inpatient cases has been steadily decreasing with a CAGR of about 2,6%, since 2012, reaching about 9,3M hospital days in 2021.

The majority of inpatient hospitalisations were due to circulatory system diseases and conditions (~12,5%), followed by diseases / conditions of the digestive system (~10,7%), injuries (~10,3%), respiratory system (~9,5%), muscles, bones, and joints (~9,3%), with the remaining hospitalisation being due to other illnesses (~47,8%).

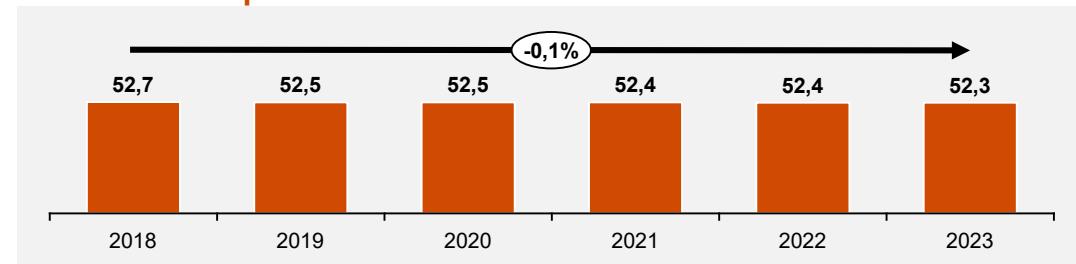
Eurostat's data for 2021 shows that the average inpatient length of stay for patients of curative care in Belgium was 5,7 days, which is the same as the average of the basket of selected EU countries for which the data is available. On average, the most days in hospitals (about 8,1 days) were spent by patients hospitalised due to injuries, poisoning, or certain other consequences of external factors. Patients hospitalised due to certain infectious and parasitic diseases spent in hospitals on average about 7,9 days, while patients hospitalised due to diseases of circulatory system spent in hospitals on average 6,9 days.

Considering the above, data suggests that the biggest demand for hospital beds in Belgium is due to the circulatory conditions, injuries, and diseases / conditions of the digestive system.

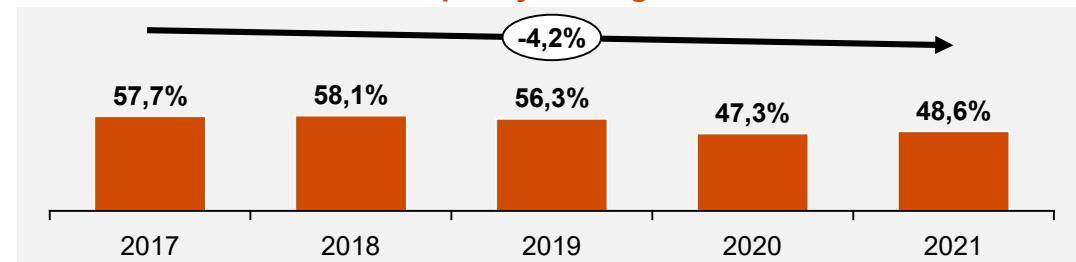
Due to demographic changes and medical innovations, the number of acute hospital beds has been decreasing

Hospitals – Market Supply

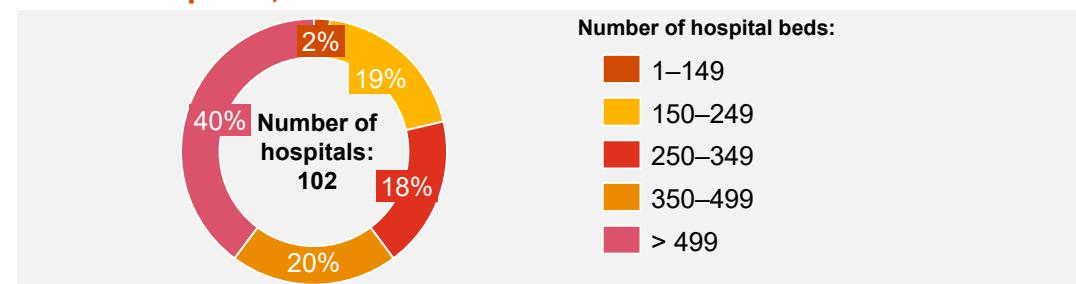
Number of hospital beds in ths.



Utilisation of current bed capacity in Belgium



Size of hospitals, 2023



The same trend of declining hospital beds that was observed across the EU can also be observed in Belgium. The total number of hospital beds has been declining since 2018 with about 0,4% on a yearly basis, amounting to a total decrease of about 800 beds.

Moreover, looking at the longer period, the trend started in 1995. Due to the ageing population and innovation in healthcare, people are spending less time in hospitals for certain illnesses. Consequently, the number of acute hospital beds has decreased by around 24%. However, on the other hand, the number of geriatric beds has increased by around 29%, the number of beds for specialist care by around 370%, and the number of psychiatric beds by around 67%.

Another contributing factor to the decreasing number of beds are the many reforms that were implemented with the goal of reducing the number of unnecessary overnight stays in hospitals in cases when it is medically safe and socially feasible for the patient. Moreover, due to medical innovations, medical procedures became less invasive, therefore allowing patients to recover faster and leave the hospital sooner.

In-line with that, since 2014 onwards, the number of day hospitalisations has exceeded the number of inpatient hospital stays, allowing for more efficient utilisation of hospitals' equipment and human resources.

However, the number of hospital beds is managed at the federal level by the Planning Committee. The number of hospital beds is programmed using criteria such as the number of beds per 100k inhabitants in a certain area, or in the case of maternity wards, per 1k births. Moreover, the number of acute hospital beds is fixed; therefore, in the event of the closure of given number of hospital beds, the same number of hospital beds will have to be replaced. Additionally, the national planning establishes rules and mechanisms for the purchases of heavy medical equipment, and also establishment of some specialised services and care programmes.

The majority of hospitals in Belgium (about 40%) are large hospitals with capacities of over 500 beds, while the rest are equally distributed in the hospital beds brackets (about 20% of hospitals per bracket), with only 2 hospitals having less than 150 beds.

7



Retirement homes





Despite **observed gap in supply** of places, the potential of segment **is limited due to lack of staff and regulations**

Retirement homes

Key conclusions – Phase 1

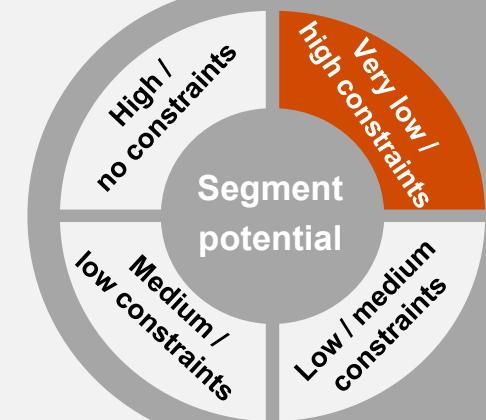
- The governance of long-term care services for the elderly in Belgium is decentralised, health-care related LTC is the responsibility of the Federal State, while the social aspect of the LTC is the responsibility of the Federal Entities (i.e. Regions and Communities)
- Due to the decentralised governance of the LTC, supporting institutions were established in each Federated Entity
- Ownership of the LTC facilities is mainly in the hands of private operators; ~75% in the Flemish Region, ~74,7% in the Walloon Region, and ~78% in the Brussels-Capital Region
- Federal model projects insufficient supply of about 149k to 177k places in the LTC institutions by 2025

Key conclusions – Phase 2

- Elderly care follows strict regulations, with operators not being able to freely open new facilities at their will, but rather have to follow strict planning managed by the state's licensing system. Meaning, the government determines the locations and number of new places.
- It is estimated that the supply does not follow the demand, and more investments in the segment are needed across the country, except in Brussels, where due to the regulated staff ratio (and lack of staff) elderly care facilities are not operating at their optimal capacity and are underutilised



PwC Assessment



The number of available places within the segment has been frozen until 2025 by the Federal government.

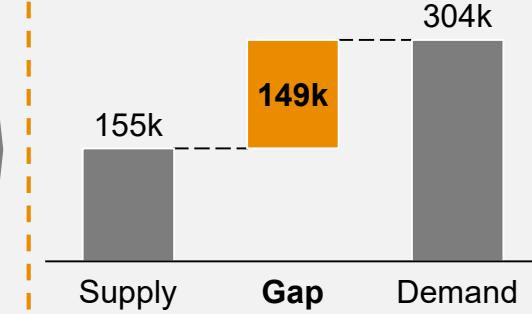
The aging population coupled with an above average preference for residential LTC, will drive the demand for LTC in the future.



Key Segment Data



Gap analysis



Responsibilities for long-term care for elderly is decentralised, shared between the Federal State and Federated Entities

Retirement Homes – General Overview (1/2)

Characteristics of the system

The governance of long-term care services for the elderly in Belgium is decentralised and shared between Federal State and Federated Entities (i.e. Regions and Communities).

On the highest-level, long-term care for the elderly, in terms of the regulatory environment of health-related services that are mostly covered through the Health Insurance Scheme, is the responsibility of the Federal State. Additionally, the Federal State has competencies over health professionals and is responsible for reimbursement of medical and health related care that includes long-term care in institutions, or at home.

On the other hand, the responsibility for the social aspect of the long-term care falls to the Federated Entities. Services as such include long-term residential care (nursing homes), semi-residential care (further divided into day-care and short-term care), and home care. Additionally, the Federated Entities are also responsible for financing and regulating nursing homes, home care, organising the coordination of care, organising and supporting the development of primary care.

Due to the decentralised governance of the long-term care segment and the increased responsibilities that were given to Federated Entities, in each entity, supporting institutions were established that are responsible for a specific segment within the LTC.

In Flanders, Agency for Care and Health (VAZG) and The Flemish Agency Social Protection (VSB), share the responsibilities for LTC which also include funding for nursing homes (responsibility of the VSB).

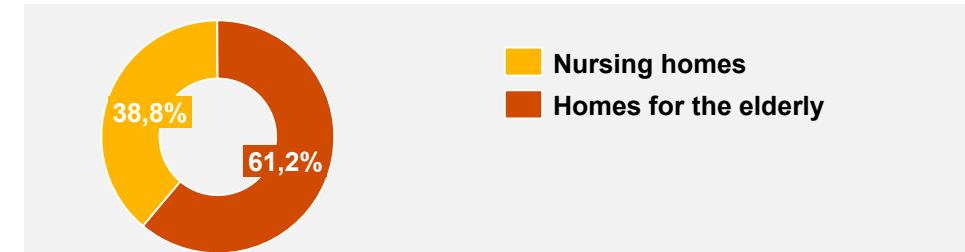
In Wallonia, funding for nursing homes has been delegated to the *Agence pour une Vie de Qualité* (AVIQ).

In the German-speaking Community, responsibilities for the care of older people and people with disabilities are delegated to the Dienststelle für ein selbstbestimmtes Leben.

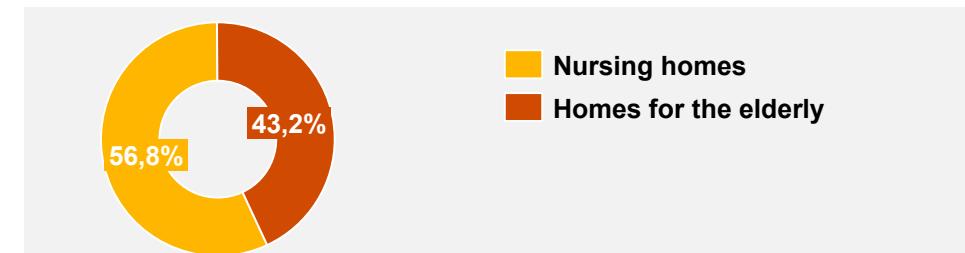
In the Brussels-Capital Region, the most responsibilities for the LTC are transferred to the IRISCare, while some responsibilities are also shared between the Common Community Commission, and BRUSANO.

To facilitate coordination between the Federal State and the Federated Entities, collaboration is managed through inter-ministerial conferences, inter-administration coordination structures, etc.

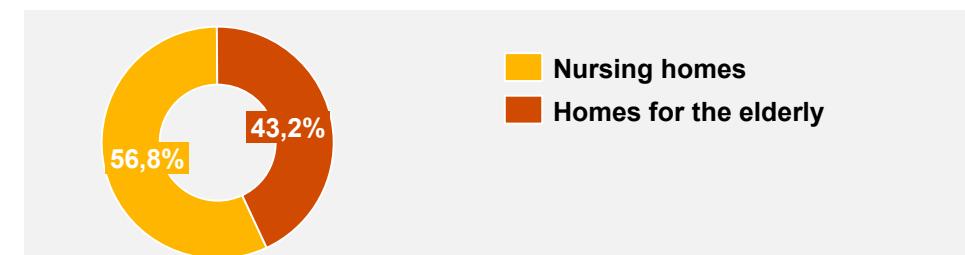
Share of places, by type of institution, Brussels-Capital Region



Share of places, by type of institution, Flanders Region



Share of places, by type of institution, Walloon Region



Adoption of residential LTC is with 5% higher than in other countries, majority of providers are privately owned

Retirement Homes – General Overview (2/2)

Large share of private ownership

According to the European Commission, Belgium has a well-developed system of social protection for the elderly population in need of long-term care. However, a study conducted by Belgian researchers has found a correlation between LTC and increased mortality as compared to persons that do not reside in the LTC (for about 50% in the first two years when a person becomes a resident of the LTC).

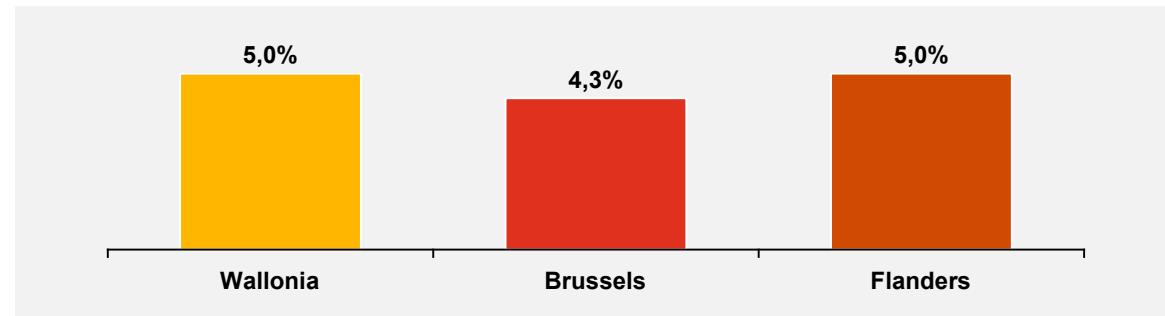
However, in Belgium, the proportion of elderly people residing in long-term care facilities remains high (in Walloon Region ~5%, in the Brussels-Capital Region ~4,3%, and in the Flanders Region ~5%). Moreover, the occupancy rate in the public sector of higher care beds with more nursing support was 100% in the Walloon Region, 95% in the Flemish, and 94% in the Brussels-Capital Region.

In absolute terms, the highest amount of beds is located in the Flanders Region (~84,1k beds), followed by the Walloon Region (~51,2k beds), with the remaining being located in the Brussels-Capital Region (~16,4k beds). However, the Brussels-Capital Region had the most beds per capita (~103 beds per 1k elderly inhabitants). In the Walloon Region, there were about 72 beds per 1k elderly inhabitants, and in the Flanders Region, there were about 60 beds per 1k elderly inhabitants.

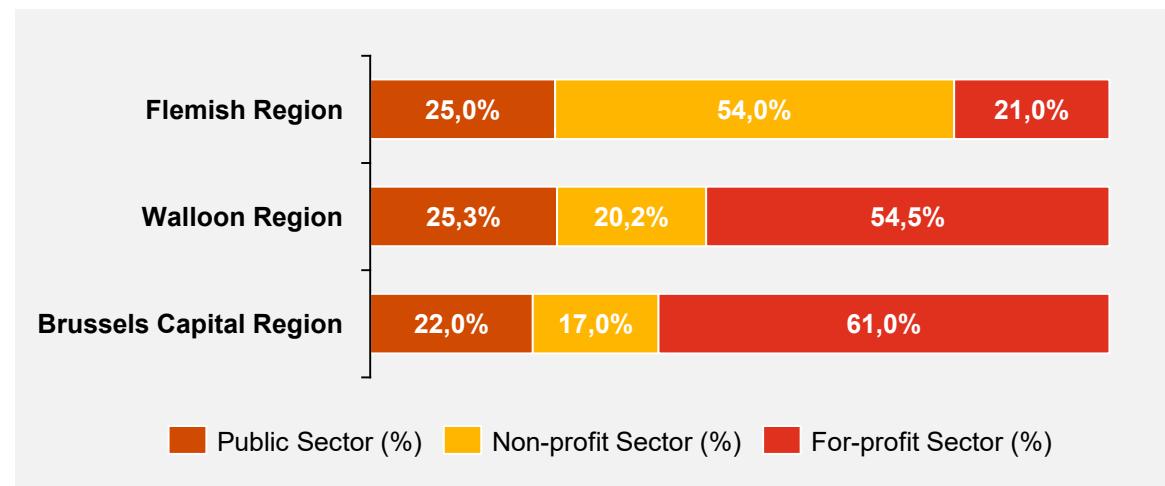
Data for the German-Speaking Community shows that there were in total 733 LTC beds in its jurisdiction in 2019, amounting to about 50 beds per 1k elderly inhabitants.

In all regions ownership of the LTC facilities is mainly in the hands of private operators, however, in the Flemish region, the majority (about 54%) of those are a non-profit institutions. The largest share of for-private institutions was in the Brussels-Capital Region (about 61%). However, efforts were observed by the Brussels-Capital region to nationalise the segment. More specifically, the Region plans to purchase up to a third of beds from private operators. Additionally, the Region will decrease the recognition of half of the number of vacant beds of all residential care centres without compensation every year.

Proportion of elderly people in residential LTC, 2021



LTC facilities ownership, by region



Ageing population and increased life expectancy coupled with an increase in dependency ratio are key drivers of the segment

Retirement Homes – Key Drivers

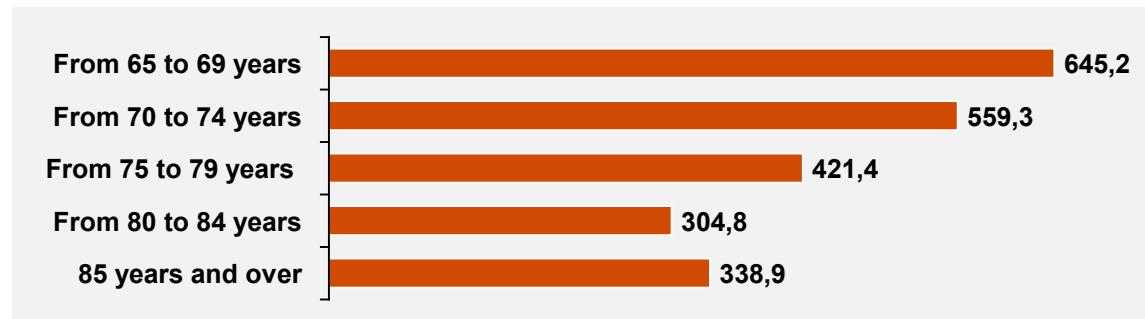
Life expectancy is expected to increase

For a person born in Belgium in 2022, Eurostat's data shows that the average life expectancy is around 81,8 years. The life expectancy at birth differs between males and females by about 4,3 years, being about 79,6 years for males and 83,9 years for females. Despite a small drop in 2020, a general trend shows an increase in life expectancy that remains above the EU average for both males and females (the EU average for males was about 78 years, and for females 83,4 years).

However, in 2022, males aged 65 years could on average expect to reach 83,6 years and females 86,6 years, increasing average life expectancy in the country to 85,2 years. Out of those, males could on average expect to live healthy for 11 more years, while females could expect to have 11,3 healthy years.

Simultaneously, the number of people aged over 65 years has been increasing at a higher rate than the working-age population (persons aged 20–64), as shown by the old-age dependency ratio.

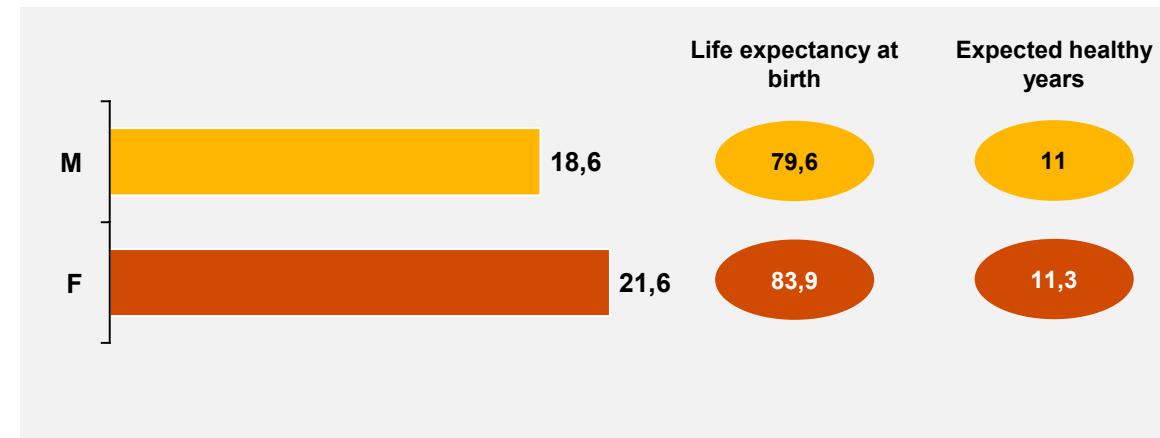
Population aged 65+ (2022), in ths.



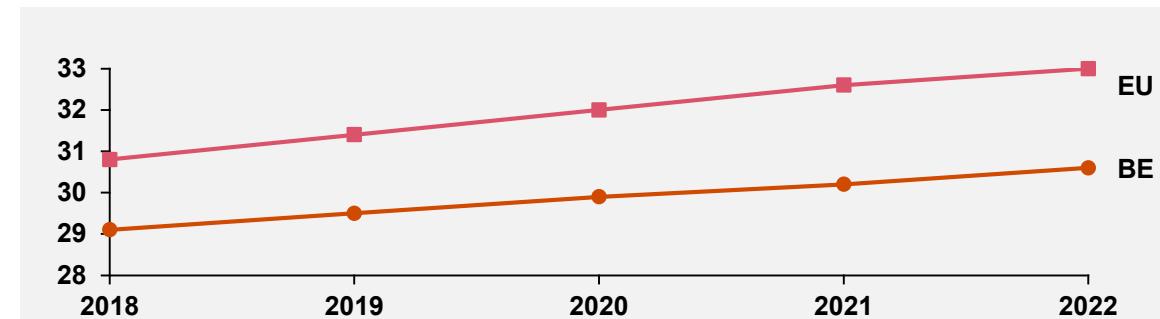
Sources: Eurostat, PwC analysis

PwC

Average life expectancy at age 65 (2022)



Old-age dependency ratio, in %



54

Growth of elderly population will continue to drive the demand, increasing the need for LTC

Retirement Homes – Demand & Supply

Demand & Supply across Belgium

The growth of the elderly population, identified as the main driver of demand for the long-term care segment, is projected to continue. In 2022, the elderly population aged 65 and over in Belgium amounted to about 20% of the population, or about 2,3M people. Persons aged 80 and over represented about 5,5% of the total population, or about 0,6M persons.

Eurostat's projections show that the number of persons aged 65 and over will increase to 2,8M by 2035, amounting to a CAGR of ~1,8% since 2020, while the number of persons aged 80 and over will reach around 860k persons, increasing with a CAGR of ~1,9%.

Moreover, life expectancy for males aged 65 is expected to increase to 85,2 years in 2035, and to 88,6 years for females of the same age group. Simultaneously, in 2035 life expectancy for males aged 80 is expected to increase to 89,4 years, and to 91,3 years for females of the same age group.

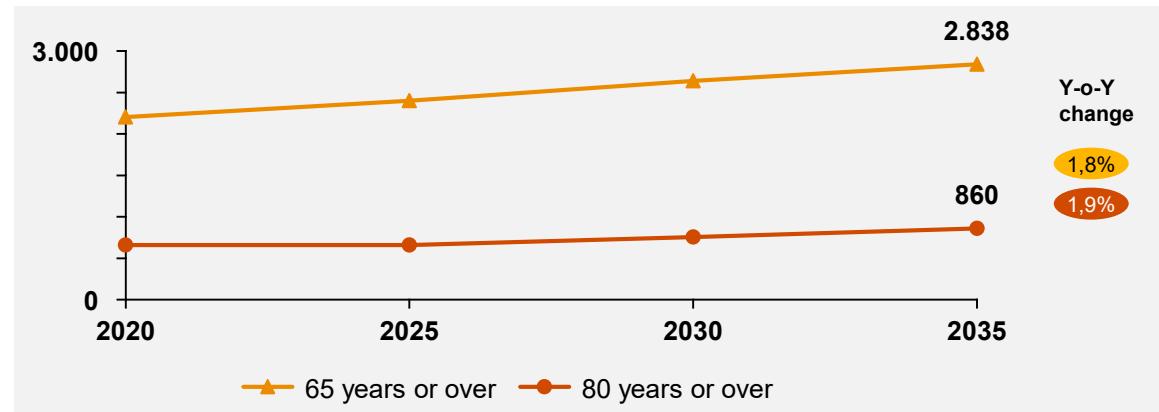
Additionally, projections for 2050 show that in Belgium the share of people aged 65 or over will amount to 26,3% of the total population, while the group of people aged 75 and over will amount to around 15,3% of the population.

Simultaneously, the share of people in need of some sort of LTC will increase in 2050 to around 1,2M people, amounting to around 10,3% of the population, which is expected to be higher than the EU-27 average.

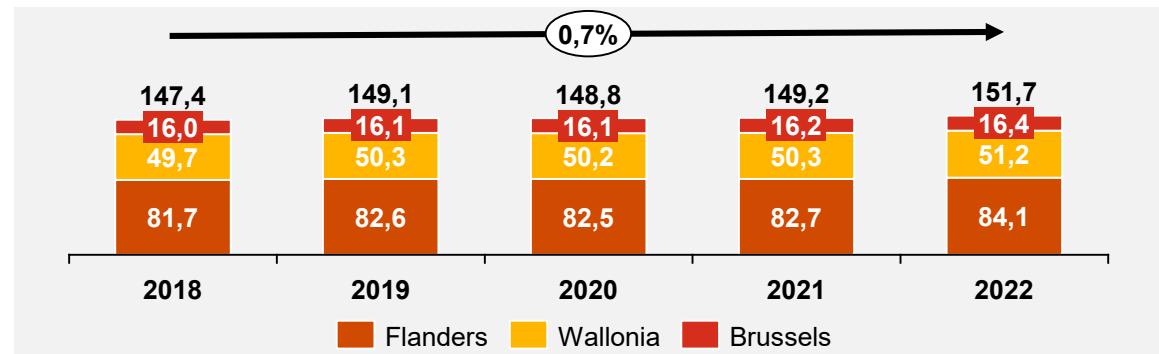
According to the projections made by the Federal Planning Bureau, overall Belgium has an insufficient supply of beds available in the LTC facilities, particularly of higher care beds for highly dependent people. For 2025, the model is estimating an insufficient supply of LTC beds in the range from 149k to 177k beds.

Additionally, Belgium is facing shortages of nursing professionals. Shortages were reported in the residential sector and home care services, especially for nurses, nursing staff, and general practitioners.

Population projections for elderly, in ths.



Beds in nursing and other residential long-term care facilities



Sources: Eurostat, European Commission, PwC analysis