



The Living Circle

A Case for Micro Living Real Estate Investments in Europe

- 1 Micro Living – a multifaceted asset class
- 2 COVID-19
- 3 Micro Living Market Environment
- 4 Student Apartment Market
- 5 Co-Living Market
- 6 Serviced Apartments Market
- 7 Assisted Living Market

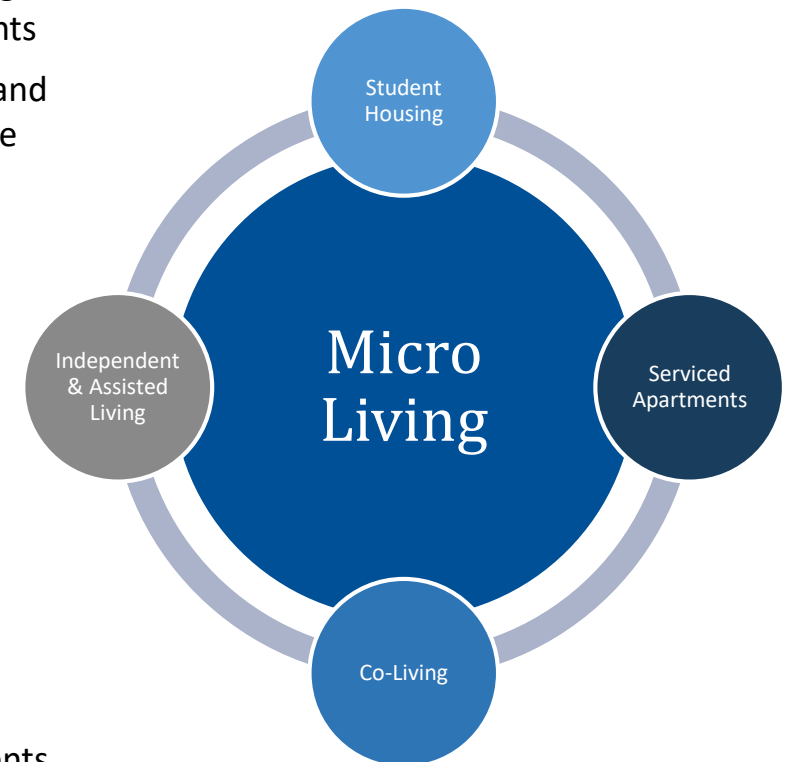


Micro Living Real Estate Investments in Europe

Executive Summary

- We see Micro Living as a young and dynamic asset class of which student housing, serviced apartments, co-living and independent & assisted living are sub-segments
- Demand for Micro Living is broad based: Demographic trends are multi-faceted and diverse and generate demand for a wide range of concepts of living, which can be captured with specific concepts and strategies
- Modern businesses generally require employees to be well trained, internationally experienced and flexible, further strengthening demand for a variety of Micro Living solutions
- While Micro Living properties' usage is clearly residential based, they share aspects of commercial real estate investments:
- Micro Living properties are mostly operator-run under a master lease, bearing a form of single tenant risk; the building structures, however, are often close to the classic residential sector, maximising the alternative use potential
- Being operator run assets, Micro Living investments typically feature a longer than usual lease contract
- At an operator level, shorter individual tenancies allow for regular rent adjustments
- As a result, as an investment product, Micro Living assets may benefit from a higher initial yield profile than the classic residential segment

» Micro Living investments can be an attractive and higher yielding alternative to the classic residential sector, but require a specific expertise and market knowledge to manage risks and maximise returns

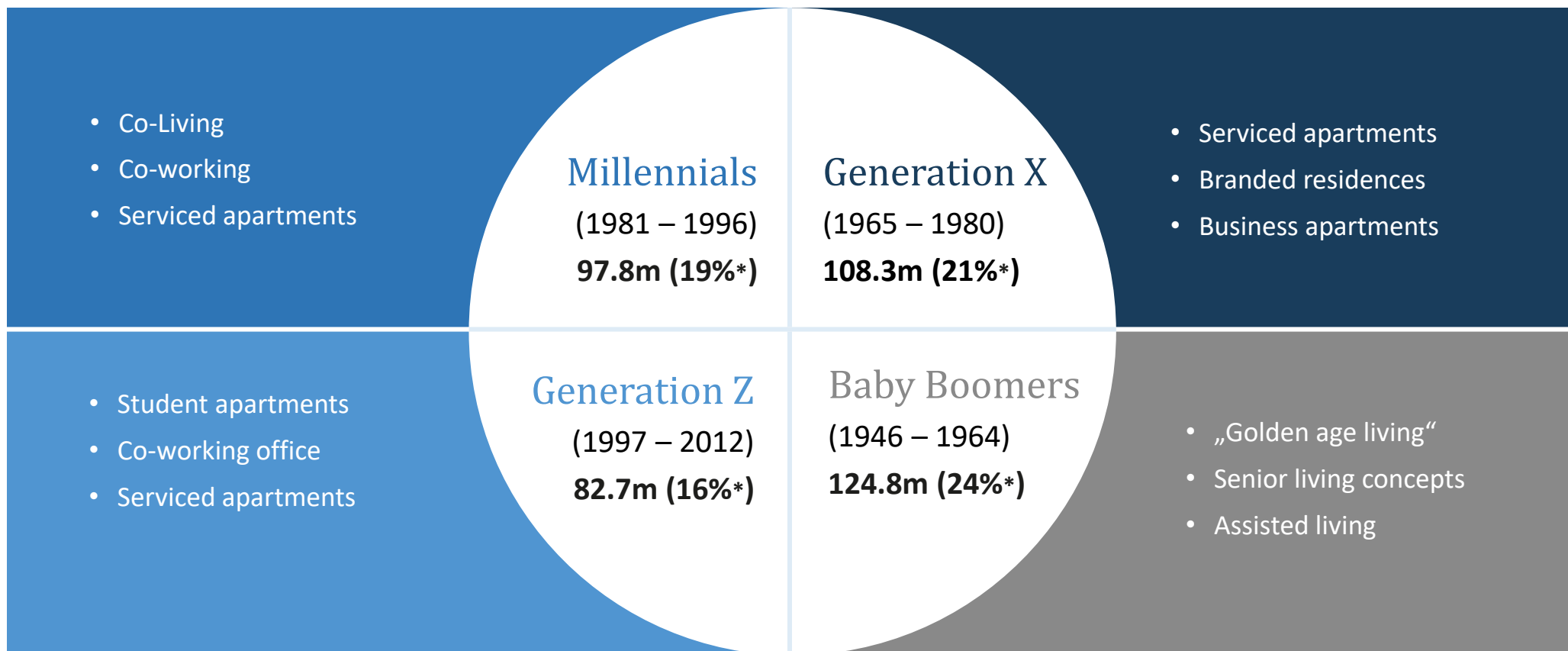




1. Micro Living – A multifaceted asset class

The Demographics Strata

Demographic and societal changes in Europe are creating multifaceted opportunities for real estate investors over the coming years and are making Micro Living relevant in several stages of life. Investors will be able to adopt multiple strategies to capture opportunities.



Population figures for the EU; *percentage of total population

The “Living Circle”

Micro Living offers concepts for various stages of life

- Business travellers
- Young professionals
- Project workers
- Expatriates
- Job nomads



Serviced Apartments



- Business travellers
- Professionals and executives
- Project workers
- Employees starting a new job
- Commuters
- Tourists visiting city

- Students
- Erasmus students
- Post Doc/ Ph.D. students
- Project workers



Independent & Assisted Living



- Retired professionals
- “Golden Agers”
- Seniors who seek a high level of autonomy combined with privacy with the benefit of supervision or assistance as needed

The buzz word “Micro Living“

Article

From micro-living to new alliances: How Germany is tackling its housing shortage

With more people in Germany choosing to live on their own and the population of its cities rapidly growing, the country's housing stock is struggling to keep pace - even with new accommodation models coming on to the market.

29.03.2019

Investor News | Asset Allocation | Listed Assets | Real Assets | AM Reports | AM Pers

Studien bestätigen Trend bei Immobilien zur Diversifikation im Mikro-Bereich

(Barbara Ottawa, 01.08.18) Diesen Artikel druck
 CBRE und Union/bulwiengesa verzeichnen neue Rekordinvestitionen bei Studentenzimmern und Mikro-Apartments.

Einen Zuwachs von 224% im Jahresvergleich vermeldete CBRE in einer Studie zu Investitionen in Studentenzimmern und Mikro-Apartments im ersten Halbjahr 2018 in Deutschland.

The rise of the micro apartment

© August 2, 2017 / J. Isla MacFarlane

Prime Central London (PCL) is seeing the rise of the micro-apartment, according to new research, as squeezed accommodation budgets have seen singles and couples opting for location and convenience over size.

According to statistics, analysed by London Central Portfolio (LCP), there is increasing demand for smaller properties which offer an affordable option for tenants who wish to be centrally located near their place of employment or study. In a similar dynamic to PCL's sales market, where luxury properties have suffered most in the face of the changing tax landscape and Brexit uncertainty, PCL's rental market is also notably fragmenting by size and price band.

Over the last 12 months, 42% of properties let have been studios or one bedrooms by tenants prioritising lifestyle and transport links over square footage. On the other hand, demand has been notably slower for larger rental properties as families consider less central options, offering greater value and more space. This has also been demonstrated in the sales market with a 68% increase in the rate of 30-39 year olds leaving London, compared with five years ago, according to Savills.

Micro Living auf dem Vormarsch – neue Investitionschancen für den Real Estate Sektor

NOV 27 2018

Jüngste Entwicklungen in der Immobilienwirtschaft zeigen, dass Micro Living zu den derzeit begehrten Trends des urbanen Wohnens gehört. Im Herbst 2018 verkündete der bekannte Berliner Investment-

Home | Markets | Investment | Companies | Opinion | Our Guests

Home / Markets /

No sign of let-up in booming student and micro housing market

by Charles Kingston
21 September 2018

HOME > REAL ESTATE > ALTERNATIVES

Student Housing: Graduating to the big league

MAY/JUNE 2017 (MAGAZINE) BY RUSSELL HANDY

Share | Email | Share | Comment | Add to my reading

Twitter | Like | Share

As the boundary between student and professional living blurs, Germany's growing sector is ripe for consolidation, says **Russell Handy**

As IPE Real Estate contemplates whether Europe's growing student housing

Not just four walls and limited floorspace. The rent for furnished student apartments at the Milestone in Graz includes utilities, Wi-Fi, TV, a fitness studio, and services. Robert F. Papp/Stoneisland

Small spaces are big right now

Housing for students, young professionals, and singles is both scarce and in great demand all over the world. It's therefore not surprising that more professional investors are entering this market.

Article

Are micro-units the future of city living?

More and more global cities are turning to small apartment units during housing shortages

September 04, 2018

Micro Living Concepts

No services

Selective services on demand

Services included

Traditional Residential

Micro Living

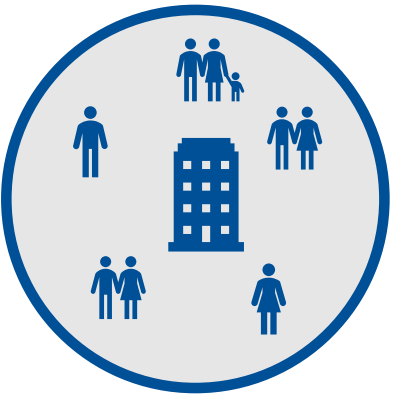
Segment	Student/Micro Apartments	Co-Living	Assisted Living	Serviced Apartments
Zoning	Residential	Residential	Residential	Commercial
Main target group	<ul style="list-style-type: none"> Students Erasmus students Post Doc/ Ph.D. students Research assistants Young professionals Project workers 	<ul style="list-style-type: none"> Business travellers Young professionals Project workers 	<ul style="list-style-type: none"> Retired professionals Golden Ager Best Ager Seniors who seek a high level of autonomy and the benefit of supervision or assistance as needed 	<ul style="list-style-type: none"> Business travellers Professionals and executives Project workers (B2B and B2C) Returnees (expats) Employees starting a new job Commuters Tourists visiting city
Furnishing	Modern furnishings (fully equipped kitchen or kitchenette)	Modern furnishings (fully equipped kitchenette)	Furnishings adapted to senior users	Lifestyle furnishing with individual furnishings (including a fully equipped kitchenette)
Common areas	<ul style="list-style-type: none"> Common area with leisure facilities Learning TV and laundry rooms Fitness facilities (depending on site) 	<ul style="list-style-type: none"> Common area with leisure facilities laundry room 	<ul style="list-style-type: none"> TV Lounge Fitness studio Spa Common area with leisure amenities F&B offer (depending on site) 	<ul style="list-style-type: none"> Co-working TV lounge Fitness facilities Laundry room Food and Beverage offer (depending on site)
Period of stay	+ 1 year (no upper limit)	+ 3 months (no upper limit)	+ 1 year	+ 1 day (upper limit: 6 months)

Micro Living assets are mostly operator-run

Classic residential



Investors



Micro Living



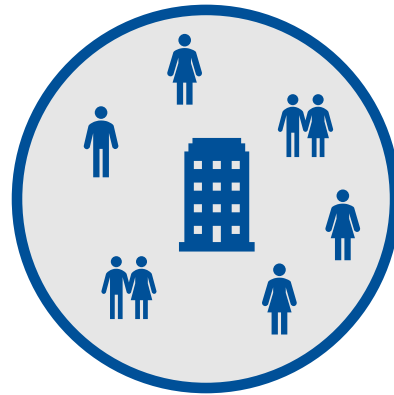
Investors

'Single tenant'
Lease between
Operator and landlord



Operator

Occupier rental
payments
to operator



Branded Micro
Living Facility



Service
providers

Facility
management

Additional
services

Micro Living lease terms

- Micro living concepts typically consist of a multi-party set-up, comprising, the landlord, an operator and the ultimate customers
- Typically, the micro living lease terms with operators are long-term, exceeding 10 years
- The form of the lease can vary from a classic lease to management contracts as well as hybrid forms, consisting of a base rent plus a turnover-based component
- The operator is responsible for the facility management, the management of third-party service providers and the operation of the business including strategic set-up, marketing and leasing and rent collection

Micro Living brands (examples)*

THE FIZZ

Linked
Living

SMART
ments
business

JOYN
SERVICED
LIVING

Homes
for Students

THE STAY CLUB

YOUNIQ

hmlet

*Linked Living, Youniq and Joyn are CORESTATE entities, Source: CORESTATE Research, Brands' websites

Excerpt 1: Asset Management I

Operational insights: Asset Management: Why it is not ,just' residential

Innovative concepts of living are essential in today's highly mobile times. Demographic and urbanisation processes as well as a shortage of housing in Europe's metropolises cause traditional forms of living and residential unit sizes to be insufficient to satisfy demand. Here we see Micro Living offering smaller, fully furnished and serviced apartments as a viable solution.

Within CORESTATE, we run four different micro living concepts, YOUNIQ, Linked Living, JOYN and CRM in the UK, which are specifically tailored to a variety of target users like expats, students or project workers. By segmenting our operational entities, we are in the position to meet the requirements of very individual demand groups. This complexity is both challenging and exciting.

To assess individual assets from an operational and asset management perspective, we identify the potential target audience including the number and distance of universities in the market (student housing) or relevant companies or trade fairs (micro living). Ultimately, our supply and demand analysis results in a forecast of the all-in rent per unit that is achievable at the location as well as the expected cost side to assess the economic viability of a project. As we offer our tenants a stable all-in cost, a precise estimate is essential. A few example aspects to be considered here are:

- How will we deal with the summer months in student housing when the semester term ends and student move out?
- What does a student or student apartment need today and – similarly important – in the future?
- Is there any risk to demand for a serviced apartment asset, if, for example, a certain company or industry that the asset benefits from is facing difficulties?

To answer these and other questions, a high degree of expertise, experience and local market knowledge is key (see market study, next page). Micro Living is a complex and unique asset class, that requires a dedicated team of experts on various levels. If that prerequisite is met, it is well suited to deliver strong returns to investors.



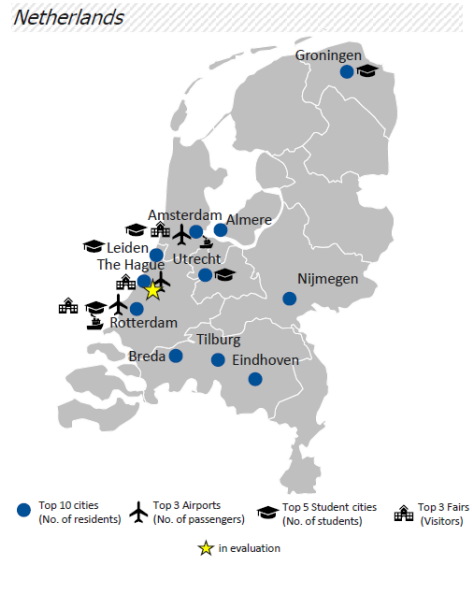
Lambros Reppas
Head of Asset Management
Micro Living & Residential

Lambros has 15 years of experience in Real Estate /-Finance, Investments and Asset Management, most recently at AXA Investment Manager.

Lambros is Managing Director of Asset Management Micro Living & Residential, he is responsible for the operating units of our two subsidiaries Apartments – with the brands JOYN, Youniq and Linked Living – as well as CRM Students. His focus lies on the operational performance, strategic direction and expansion of the Micro Living and Residential business units in Europe.

Excerpt 1: Asset Management II

Sneak-Peek: Local micro living analyses



Top 10 Netherlands Cities (by no. of residents / no. of students)

City	Number of residents	Avg. income (EUR)	Unemployment rate	No. of students	Share of students
Amsterdam	854,047	29,600 €	4.2 %	107,800	13%
Rotterdam	638,712	24,100 €	5.9 %	65,300	10%
The Hague	532,561	26,000 €	5.2 %	29,000	5%
Utrecht	347,483	25,700 €	3.5 %	70,000	20%
Eindhoven	229,126	25,200 €	4.1 %	31,400	14%
Tilburg	215,521	24,000 €	4.0 %	26,800	12%
Groningen	202,810	22,900 €	5.4 %	55,900	28%
Almere Stad	203,990	25,200 €	4.1 %	n/a	n/a
Breda	183,448	27,500 €	3.6 %	20,200	11%
Nijmegen	175,948	24,600 €	4.0 %	41,500	24%

Using the KPIs number of residents, number of large companies, number of fairs, average income, GDP per capita etc. following cities can be identified as potential locations for a Joyn, Linked Living or Youniq project:

- Amsterdam (1)
- Rotterdam (2)
- The Hague (3)
- Utrecht (4)
- Eindhoven (5)
- Tilburg (6)
- Groningen (7)
- Nijmegen (8)
- Leiden (9)
- Maastricht (10)

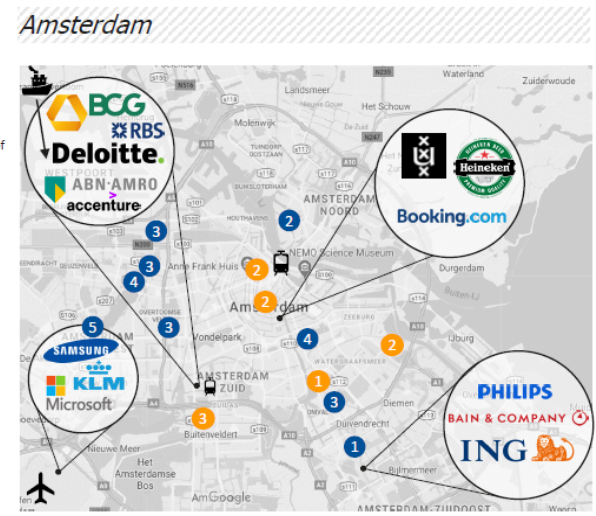
Due to high student numbers or a high share of be analyzed for a YOUUNIQ project:



Lambros Reppas
Head of Asset Management
Micro Living & Residential

Market analyses

- In depth analysis to capture supply and demand at a city level for a variety of micro living concepts
- With people on the ground in 7 countries, and an international Micro Living track record, we are well equipped to address the asset class' challenges



Universities (No. of students in 2017 or latest available):

1 Hog. of Amsterdam (46,675) 2 Univ. Amsterdam (32,739) 3 Vrije Univ. A. (18,000)

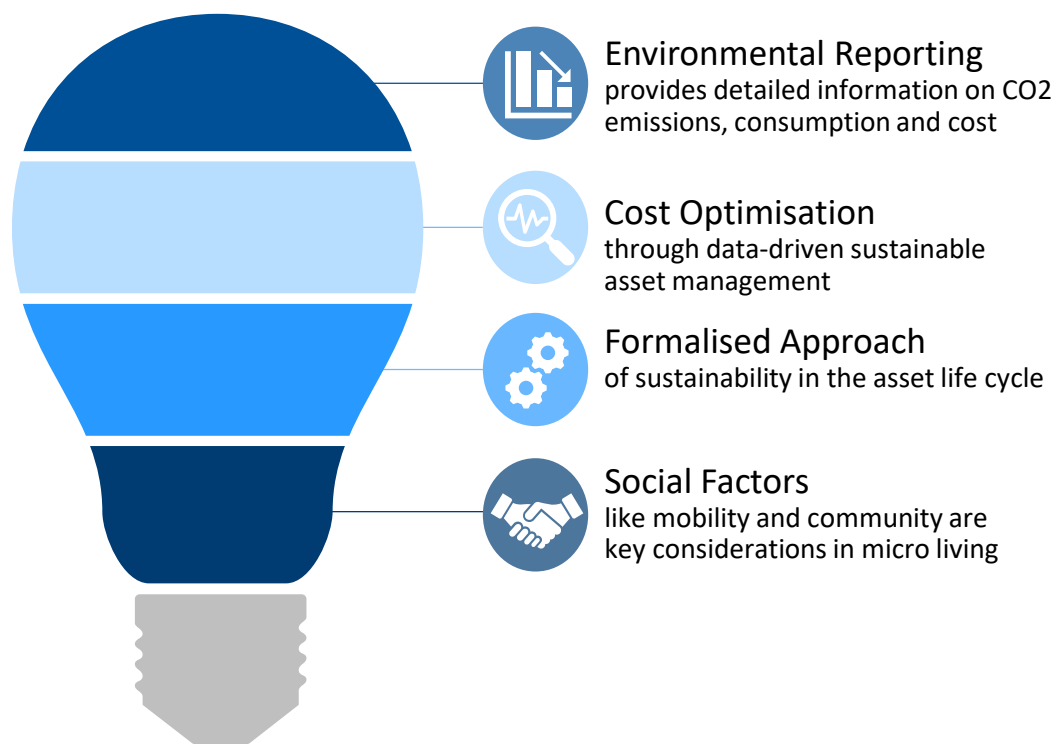
Com	apartment or comparable accommodation
1 Micro Living Facility 1	+100 beds 576€ - 625€ p.m.
2 Micro Living Facility 2	403 beds 523€ - 605€ p.m.
3 Micro Living Facility 3	4 locations +663€ - +845€ p.m.
4 Micro Living Facility 4	286+259 beds fully occupied
5 Micro Living Facility 5	in development

General Information	
Unemployment rate (2019)	4.2 %
Change in population (2016 - 2020)	+ 2.2 %
GDP per capita (2016)	44,000 €
Average income (2018)	29,600 €
KPIs JOYN	
ADR (2018)	154 €
OCC (2018)	85 %
RevPAR (2018)	131 €
KPIs YOUUNIQ / LL	
Number of students (2019)	107,800
Share of students / population	13 %
Share of international students (approx.)	12 %
Expected shortfall student housing (2025)	6,500 units
Avg. asking rent (residential market / 2019)	23.28 € / m ²

ESG integration enhances value for investors and the society

ESG as a value driver for investors

A proactive application of environmental and social criteria delivers benefits for investors:



Micro Living – an answer to today’s challenges

As the housing shortage in prime locations surges, the implications of the digital age has had a detrimental effect on social communities. As real life interactions have been changing and oftentimes decreasing, loneliness has become an issue of significant proportions. The U.S. has recently labeled it epidemic, requiring public health intervention and the U.K. has appointed a Loneliness Minister. This is not without reason, as mortality risk significantly increases with higher perceived rates of loneliness, similarly as smoking 15 cigarettes a day does¹. COVID-19 only aggravates this situation according to mental health experts².

Equipped with social spaces, working stations and trained staff, micro living contributes to a solution to the issue of loneliness. Creating a social community beyond the spaces is a crucial element of the operating concept.



2. COVID-19

The pandemic is the most impactful social, cultural and economic event of our generation



The COVID-19 pandemic had been confronted with unprecedented measures to contain its impact and flatten the curve of infections. Now increasingly health and security measures are being relaxed. However, at the time of finishing this document in early June 2020, the further development of the COVID-19 pandemic remains clouded with many unknowns. As a result, both the short-term economic outlook as well as the impact on commercial and residential real estate markets remain difficult to predict. We have, however, formulated macro scenarios that we believe are likely to materialise.

Impact on the economy

The short-term impact on the economy will be severe. We are in the middle of a rare global recession and it becomes increasingly likely that Europe's economic decline will be more pronounced than during the 2008/09 GFC recession. The short-term impact on the labour market is unprecedented around the globe. To support the economy and labour markets, governments implement stimulus packages and central banks have become very accommodative very quickly. As a result of this and the overall market uncertainty, government bond yields for countries seen as safe have plummeted to all-time low levels. In this 'even-lower-for-even-longer' interest rate environment, higher yielding asset classes, like real estate, are likely to see strong investor demand.

Impact on property

At a very macro level, the effects of the COVID-19 pandemic will mostly concern the income (rental) side of the real estate market, while the yield side should remain relatively defensive – supported by the low interest rate environment, which will support investor demand for property. The income side strongly depends on economic activity and is complex and heterogenous among property sectors and geographies. While residential, with its high diversity of tenants and relative inelasticity of demand, is likely to be the least affected in the current environment, impacts on the retail, hotel and leisure side are direct and deep. On the investment side, which is highly impacted by the interest rate situation, particularly the core end of the market should remain a stable asset during the downturn. Core meaning specifically security of income, which is quality and length of the tenancy.

The impact of COVID-19 on micro living is diverse



Impact on Micro Living

The impact of COVID-19 on micro living is diverse and dependent on the specific sub-class. It also differs at a country level. While there will be a short-term impact for most micro living segments, we believe that structural trends will support growth in a mid- to long-term perspective and outweigh cyclical distortions. Nevertheless, the deep economic recession dictates a high degree of selectiveness and risk awareness for serviced living asset investments. Below is a macro view of the expected short-term impact on the individual micro living segments:

Serviced apartments

While serviced apartments tend to tailor to a similar guest cohort as business hotels, the average length of stay is typically longer. From our experience, as a result most existing long-term occupations remained intact when COVID-19 hit, while the impact was more significant in the shorter-stay segment. As a result, occupancy rates for serviced apartment units remained somewhat higher than for classic hotels helped by long-term occupiers but fell significantly overall. As the situation normalises and particularly international travel recovers, so will occupancy rates.

Co-living

Co-Living rental agreements tend to be longer term of three, six or more months. Anecdotal evidence suggests that the impact on the existing Co-Living facilities was relatively low. In case of re-letting a unit or initial letting in a new building, the situation was more difficult, due to the lower short-term demand for concepts that tailor to business travellers and young professionals.

Student housing

The short-term impact so far has been relatively low. As an operator we have noticed that occupancy rates in most student housing facilities have remained high. The COVID-19 impact has been higher, the more the asset is tailored to international students. In the mid-term the situation of student housing assets strongly depend on the further development of the pandemic and how universities react to it. Just recently, for example, Oxford University announced some digital-only courses in 2020. While such measures have not yet been announced in other countries like Germany, it is a decisive factor to observe.

Assisted Living

Tailored to the elderly population, assisted living occupants tend to be counted as a high-risk cohort, so safety measures were typically high.

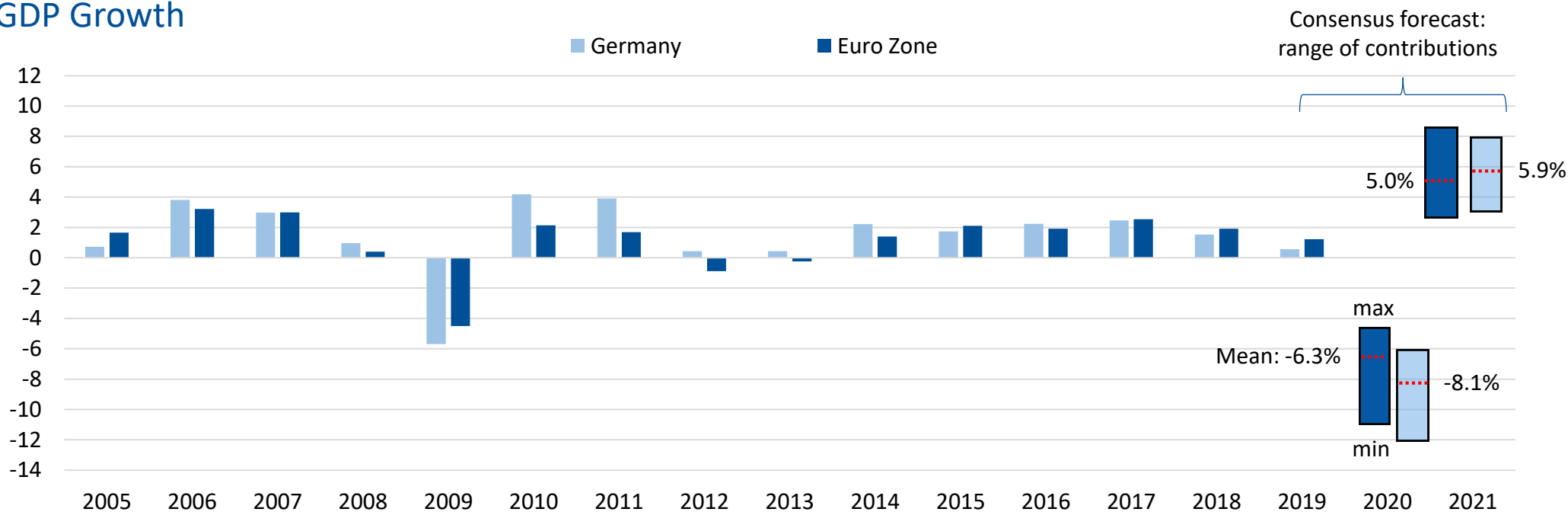


3. Micro Living Market Environment

European Economy

COVID-19 causes a significant (and global) recession / high uncertainty remains

GDP Growth

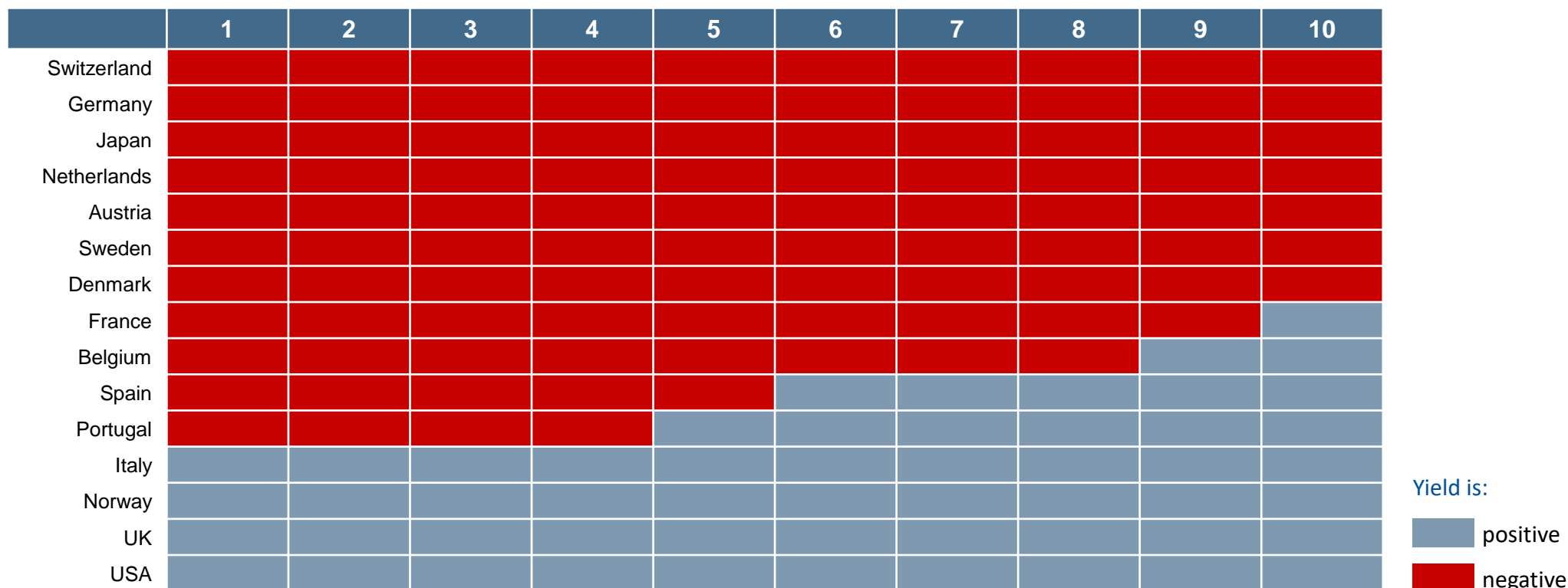


- While some easing efforts from the lockdown measures are under way in Europe it remains highly uncertain what the economic impact of the COVID-19 pandemic will be.
- As a result, the range of GDP forecasts for this year and next remains the highest it has ever been.
- A significant recession, which is more pronounced than 2009's GFC is probable.

European Interest rate situation

Accommodative central banks and market risk aversion are pushing government bond yields down

Government bond yields (by maturity in years)

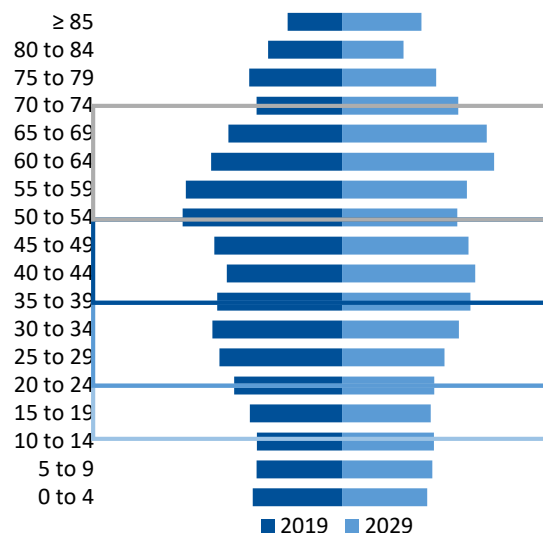


- With low or negative fixed income yields, real estate is seen as an attractive and higher yielding alternative asset class
- There is a clear divide in risk perception between core and southern Europe
- In Germany, for example, the yield spread between 10-year government bonds and prime student housing yields was close to 400 bps at the end of 2019

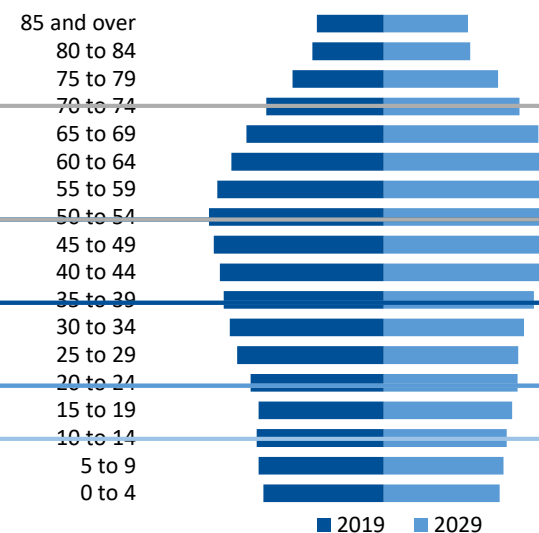
European Demographics

- Demographic trends are multifaceted and diverse. Clearly, there is a megatrend of an ageing population, with strong growth rates of the 60+-agers.
- At the same time, there is a new tech-savvy generation entering the workforce as well as a growing number of 15 to 24 year-olds in Europe.
- There is a continuous trend of urbanisation, which tends to drive the young working-age-population into the economic, cultural and education hubs.
- In the context of digitisation, knowledge capital as a production factor is becoming increasingly important to ensure competitiveness and innovative strength. These experts need direct exchange and cooperation and increasingly live and work in corresponding agglomeration clusters and metropolitan areas.
- In the short term, the urbanisation trend could be slowed by people considering to move into the more rural surrounding areas of urban centres in response to the COVID pandemic. However, we don't expect this to break the general trend of urbanisation.

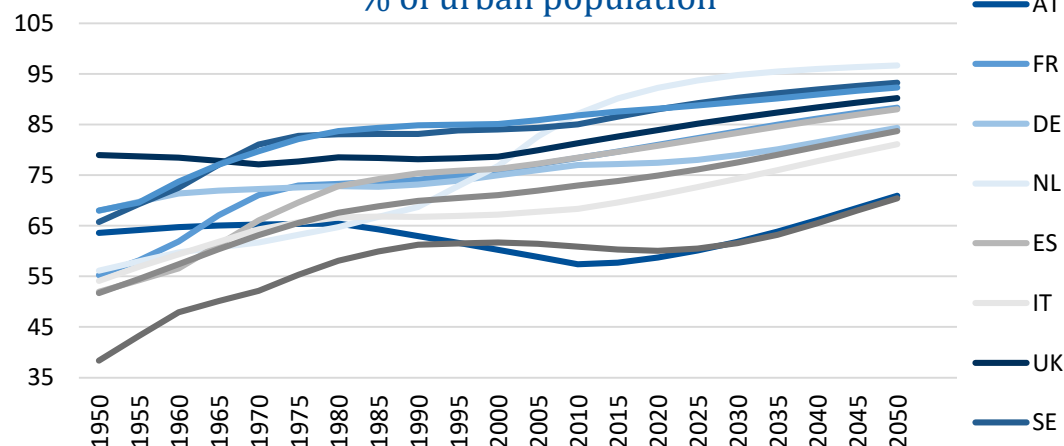
Population pyramid Germany



Population pyramid EU



% of urban population



Demographic cohorts – what shapes and defines them

Demographic cohorts in Europe are shaped by the common experience of increasing technological, societal and economic development of Europe overall. Nevertheless, for every generation there are key experiences and circumstances that shape the way they think and behave.

	Baby Boomers (1946 – 1964)	Generation X (1965 – 1980)	Millennials (1981 – 1995)	Generation Z / Zoomers (1996 – 2012)
Age bracket 2020	56 - 74	40 – 55	24 - 39	8 -23
Percentage of population (2020)	24%	21%	19%	16%
Influential experiences	Cold War Post-War boom “Swinging Sixties” Apollo Moon landing Youth culture Woodstock Family-orientated	End of Cold War Fall of Berlin Wall Live Aid Introduction of first PC Early mobile technology “Latchkey” kids; Rising levels of divorce	9/11 terrorist attacks PlayStation Internet and Social media Invasion of Iraq Reality TV Google Earth Economic downturn	Effects of Great Recession on their parents Global warming & environmentalism Globalisation Mobile devices Produce own media Cloud computing Influence of social media
Family experience	Traditional Mothers often stayed at home	Women widely expected to work outside the home The first “day care” generation Dual income families	Merged families Coddled kids	Diverse family structures „Bubble wrap generation“

Demographic cohorts – what shapes and defines them

Demographic cohorts in Europe are shaped by the common experience of increasing technological, societal and economic development of Europe overall. Nevertheless, for every generation there are key experiences and circumstances that shape the way they think and behave.

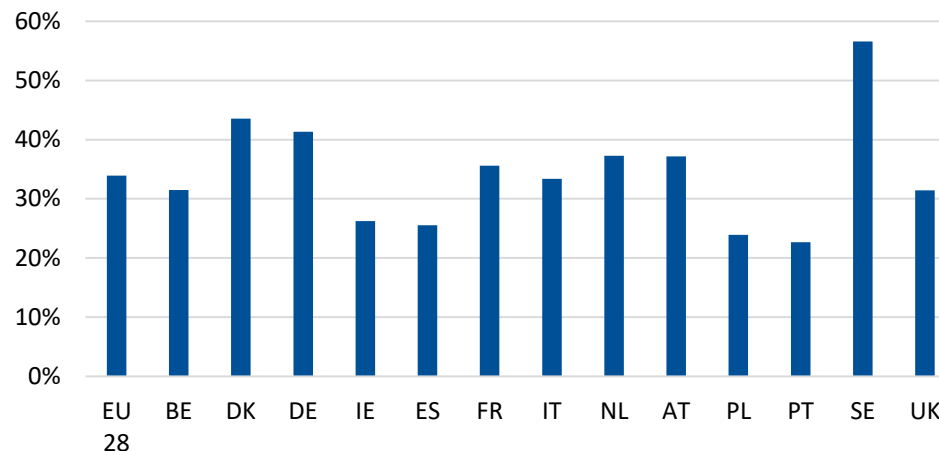
	Baby Boomers (1946 – 1964)	Generation X (1965 – 1980)	Millennials (1981 – 1995)	Generation Z / Zoomers (1996 – 2012)
Attitude towards work	Job Security Workaholic	Career driven But – work as “means to an end”	Success driven Lifestyle-orientated	Highly entrepreneurial Want jobs to be interesting Career multitaskers
Values	Family Socially liberal Prosperity	Family Independence, Transparency Balance	Freedom Flexibility Happiness – living for the moment	Diversity Equality Self actualization Stability & security
Characteristics	Largely conservative Idealistic and visionary movements Optimistic Property owners	Imaginative innovators Pragmatism Seek life balance Self-reliance	More educated than previous generations Connected Self-confident Environmental attitude	Socially aware Global attitude Environmentally conscious Distrust and frustration with politics and corporations
Technology	Innovators and early adopters of PC technology	Digital pioneers	Digital natives	Mobile natives
Signature product	Television	Personal Computer	Tablet / Smart Phone	VR / Self-Driving Cars / 3D printer
Housing	Mostly homeowners; some downsizing to senior accommodation	Mostly homeowners, often with large mortgage	Mostly renters	First renters (Student Housing) or still living home

European Demographics

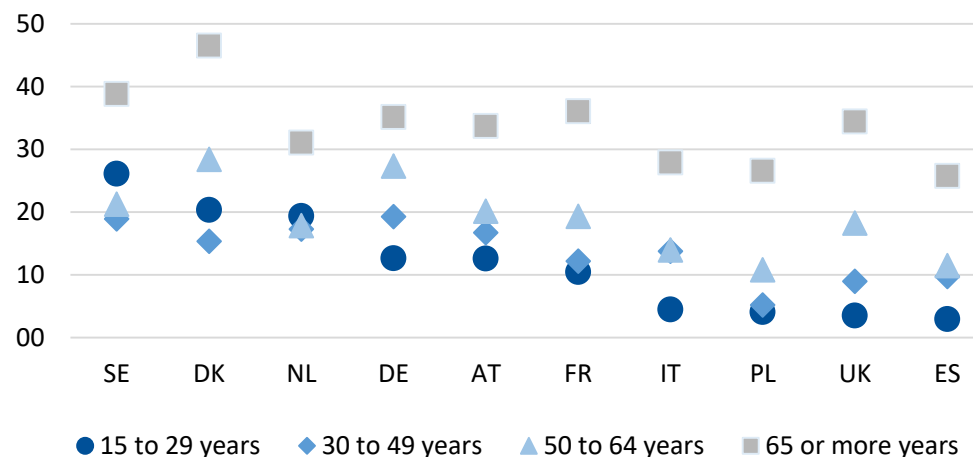
- One third (34 percent) of households in the EU were single-person households in 2018.
- According to calculations by the Federal Statistical Office, the number of one-person households in Germany is expected to rise by a further 4% to 44% by 2035, representing almost 19 million one-person households. This expected growth relates to an additional demand of about 730.000 one-person apartments.
- As the above example indicates, the demand for apartments in Europe will exceed the change in population as living circumstances keep evolving. This is particularly the case for smaller apartments.
- In Europe, there generally is a north-south disparity, with larger households in the south. Broken down in age groups, the age cohort with the largest share of single-person households are the 65+-year-olds.

→ The **mobility of the population**, the **urbanisation trend**, as well as the **growth in demand for smaller residential units** is expected to remain high. We therefore expect demand for Micro Living concepts to remain strong in the longer-term.

Percentage of single person households in 2018



Percentage of single households per age group in 2018



Excerpt 2: Investment Management

Operational insights : Why a dedicated Micro Living team is key

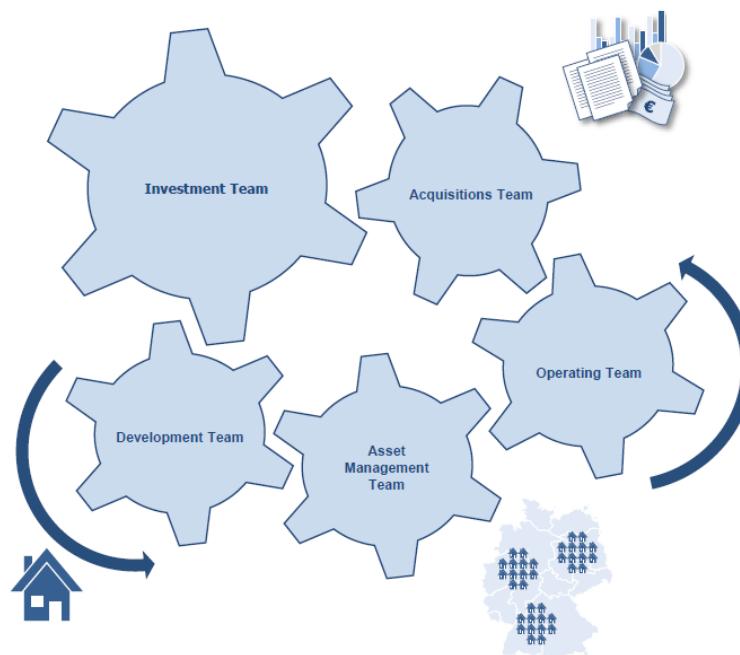
While Micro Living as an investment class has evolved out of the niche, it remains a relatively young sector that requires a specific expertise and market knowledge. Being a young asset class, it still is a relatively non-transparent market segment that is also less liquid than, say, the classic residential market.

Therefore successful sourcing capabilities depend on a number of aspects, most notably recognition and track record in the market as well as a local network on the ground. As an early mover in the segment, we have closed Micro Living transactions of 10.000 units representing a transaction volume of EUR 1.4 bn and acquired CRM, a leading UK based student housing operator, managing 23.000 units. Another 5.500 units are in the pipeline as of June 2020.

As an operator asset class, the investment process is highly complex

A high share of the roughly 197 Micro Living assets we analysed in 2019* comprises project developments. While developments and forward funding deals add to the complexity of a transaction, it helps securing assets in a highly competitive environment.

To ensure a successful investment process and profitable venture in the long run, of course, a high degree of exchange and collaboration with the individual teams very early in the process is key.



Tobias Gollnest
Group Head of Investment

Tobias Gollnest is responsible for all national and international purchases/sales of commercial properties and products in the CORESTATE Capital Group, as well as the two investment areas Micro Living and Residential.

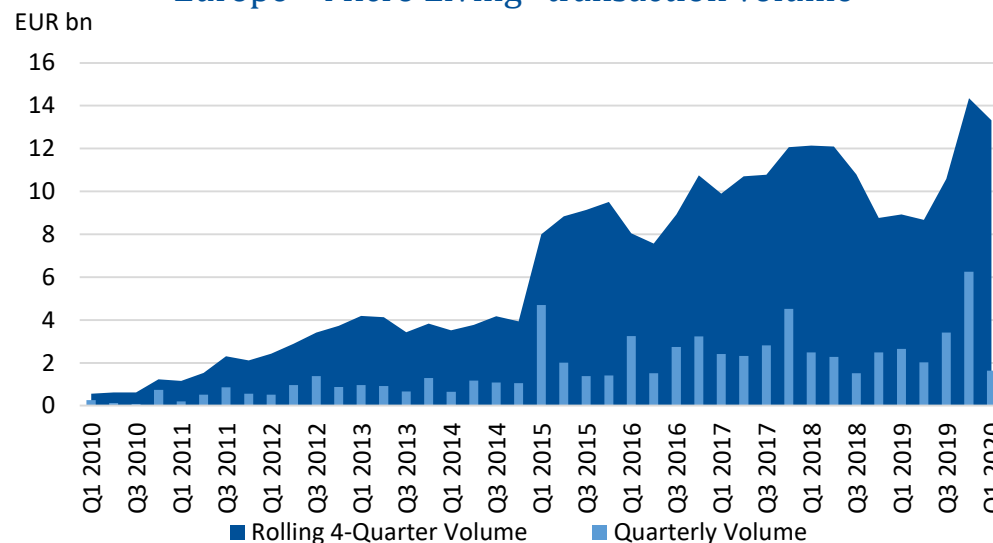
Before joining CORESTATE, the lawyer worked for the FREQ Group and Merrill Lynch. During his career, he was responsible for transactions with a total volume of over € 6 billion.

* Number of sourced opportunities in 2019

Micro Living Investments – Emerging from the niche

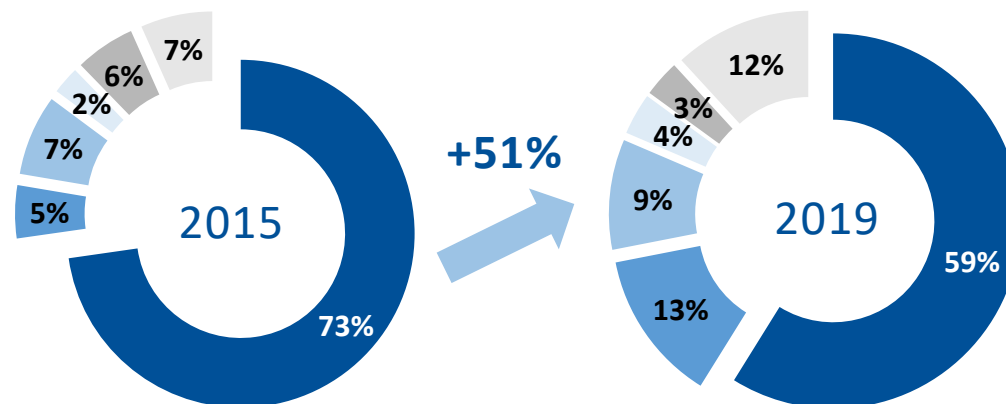
- Investor demand in the Micro Living sector has increased remarkably over the last 10 years, reaching an all-time high of about EUR 14 bn in 2019 for Europe.
- While varying considerably from year to year, on average the transaction volume rose by 40% p.a. since 2010.
- Typically, a relatively high share of the micro living market is traded as portfolio deals. As such, during the twelve months to end of March 2020, 65% of the transaction volume was generated by portfolio transactions.
- While the UK was – and still is – a leader in the micro living investment market, more recently the share of the other European countries has risen notably over the last few years.

Europe – Micro Living* transaction volume



- As the transaction volume rose, the Micro Living asset class became not only **more liquid**, but also **more transparent**.
- As such, **Micro Living’s risk profile has eased and it has become an institutional asset class**. In fact, over the last three years, institutional investors have been the strongest or second strongest net buyer in the sector in Europe.

United Kingdom France Germany Sweden Netherlands Other

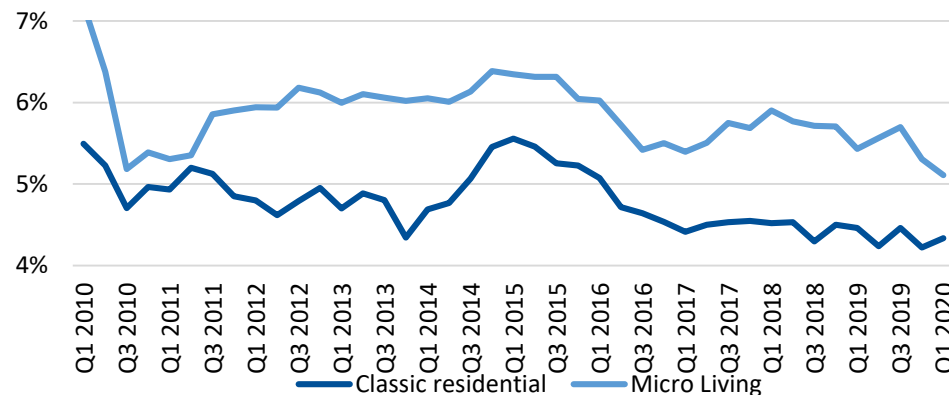


* Long-stay, limited service hotel; student housing; senior housing, Source: Real Capital Analytics (RCA)

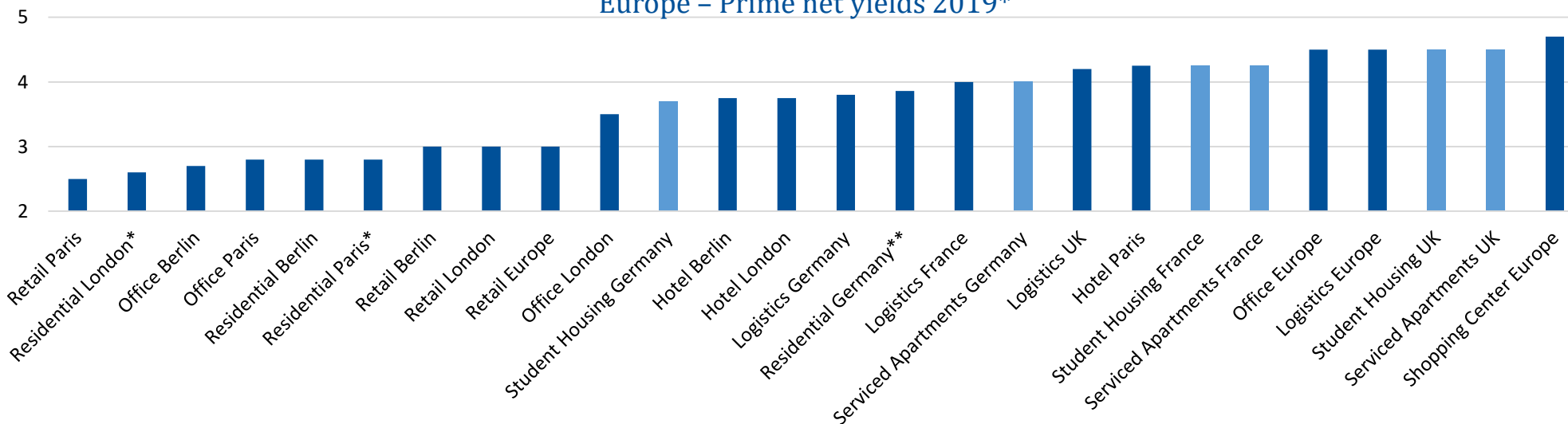
Significant yield spread over classic residential

- The increased demand for micro living assets is reflected in the pricing profile.
- Both the classic residential market as well as the micro living market have experienced yield compression over the last couple of years.
- On average, across Europe, net initial yields were 5.1% during the first quarter of 2020.
- While being volatile over time, on average, micro living properties featured a yield premium over classic residential of 110 bps.

Europe – Average yields by sector



Europe – Prime net yields 2019*



*Prime net yields as of end 2019 or latest available; due to the COVID-19 impact and a very limited transparency in the market, more recent pricing indication often is not available,

** Gross yield netted down; **** B-Market average, Sources: RCA; PMA; Savills; Knight Frank; CBRE; Riwis, bulwiengesa, CORESTATE

Excerpt 3: Development

Operational insights: Good communication with all stakeholders is key!

In order to be able to develop a well thought-out and designed Micro Living product, various aspects must be considered:

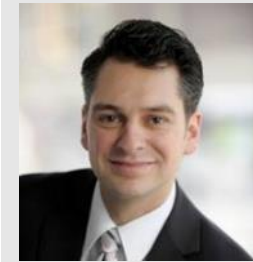
- Sustainability to optimise value for owners and users
- Flexibility for a possible asset conversion in case of changing market conditions
- Forward-looking - both in the short term because of the duration of a development project (approx. 3 years) and in the long term because of the operating time of +10 years of a micro living object until the first revamp is necessary
- Branding & design - a profile and character of the asset adapted to the target group/customers

When searching for land or existing properties, it should be considered that, depending on the target group, the operation of an object is usually only really profitable starting at 100 units (young professionals, commuters, etc.) or 150 units (students). In addition, the location must fit the target group (e.g. city centre or proximity to campus).

It is important to engage all parties involved in the project implementation at an early stage - e.g. neighbourhood information, utilities, road traffic offices, local authorities and neighbourhood associations - as “building today for tomorrow” should not only lead to acceptance but also to identification and enthusiasm for the project.

Likewise, the general contractor or the most important subcontractors, e.g. elevator technology, heating, ventilation, sanitation and air conditioning, must already be involved in the preliminary design phase. This ensures, for example, that the built-in recesses match the furniture and the furniture does not have to be adapted to the building later. In order to use both time and money as effectively as possible, very effective coordination is essential when building on an inner-city plot that is difficult in terms of construction logistics. In addition, the operator must already be involved in an advisory and informative capacity when the business plan is drawn up and regularly updated during the construction phase. After completion it is important to transfer all the experiences gained into the next or parallel running projects in order to become even better and more effective.

Developments can be successfully realised if one acts in a preventive, appreciative, open and respectful manner and is prepared to lend a hand for the overall success and to make decisions quickly and with clarity. In this way, companies can gain the partners they need to realise a (building) project together.



Peter Wittel
Head of Project Development
Germany

Peter has more than 25 years experience in all areas of project development & management, facility & property management, operational optimisation and risk management of commercial, residential and special-purpose properties like refurbishments, museums, hospitals and monument listed buildings as well as in transaction management in Germany.



4. Student Apartment Market

Introduction – Student Housing

What distinguishes purpose-built student housing from private rented apartments?

- The unit mix is designed for student occupancy
- The property is operated and leased on a ‘by-the-bed’ basis, with fully furnished units and a rental period of 6 months minimum
- Usually there is a range of amenities included in student housing projects, as well as high-speed internet service



Student Housing – then and now

- Student requirements have risen over the years due to the increasing choice available
- There is a tendency towards private rooms rather than shared dormitories
- Nowadays, it is no longer about ‘a bed’; students want larger rooms, double beds, study space, communal space, excellent customer service and hassle-free living
- With regards to services, focus on wellbeing and security continues to gain momentum
- Events are aimed at helping students to connect with each other; no longer “beer-and-pizza focused”, there is now a wide range of events on offer to suit all tastes – from fitness classes, to meditation, to cooking lessons

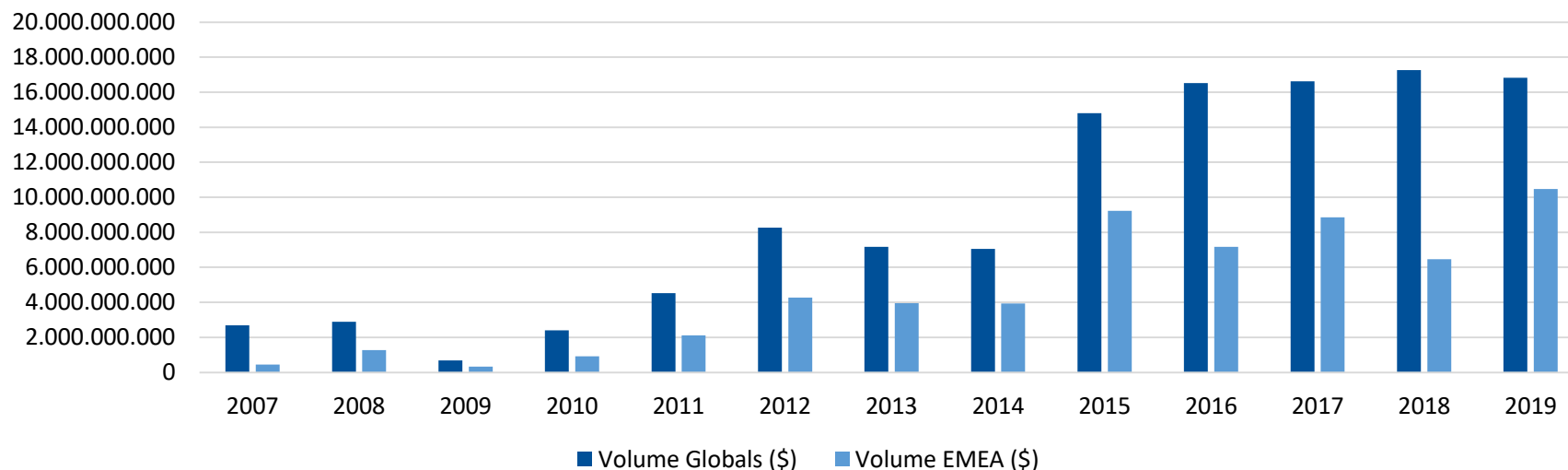


Student Housing – Historic development

Student Housing – development as an asset class

- The private, purpose-built, student housing market emerged originally in the US in the early 1990s. The sector was developed in response to outdated on-campus accommodation, coupled with growing demand from domestic and international students seeking superior living space. The expansion of the sector has seen an increase in higher-quality, single student rooms in purpose-built residences, both on and off campus.
- In Europe, investment in private student housing initially focussed on the UK and then expanded to other European countries. In 2015, Savills saw the student housing market as recognised as a mainstream real estate asset class with worldwide potential.

Student Housing – Transaction Volume



Generation Z's lifestyle drives Student-living

Generation Z students' lifestyle- with increased mobility and demands for connectivity and services – drives demand for modern student housing. Private PBSA* is especially well positioned to adapt and respond to the special requirements and needs of Generation Z students – and internationally mobile students in particular.



Education is seen as the most important good. Generation Z is highly driven and competitive and see higher education as a launch pad to a career



Generation Z being digital natives, expect to find **digital excellence and connectivity** in student housing



In consequence there is an increasing number of **internationally mobile students**



Millennials and Generation Z students (and their parents) expect **MORE** and want to see **clear value** from their purchases, including from student housing



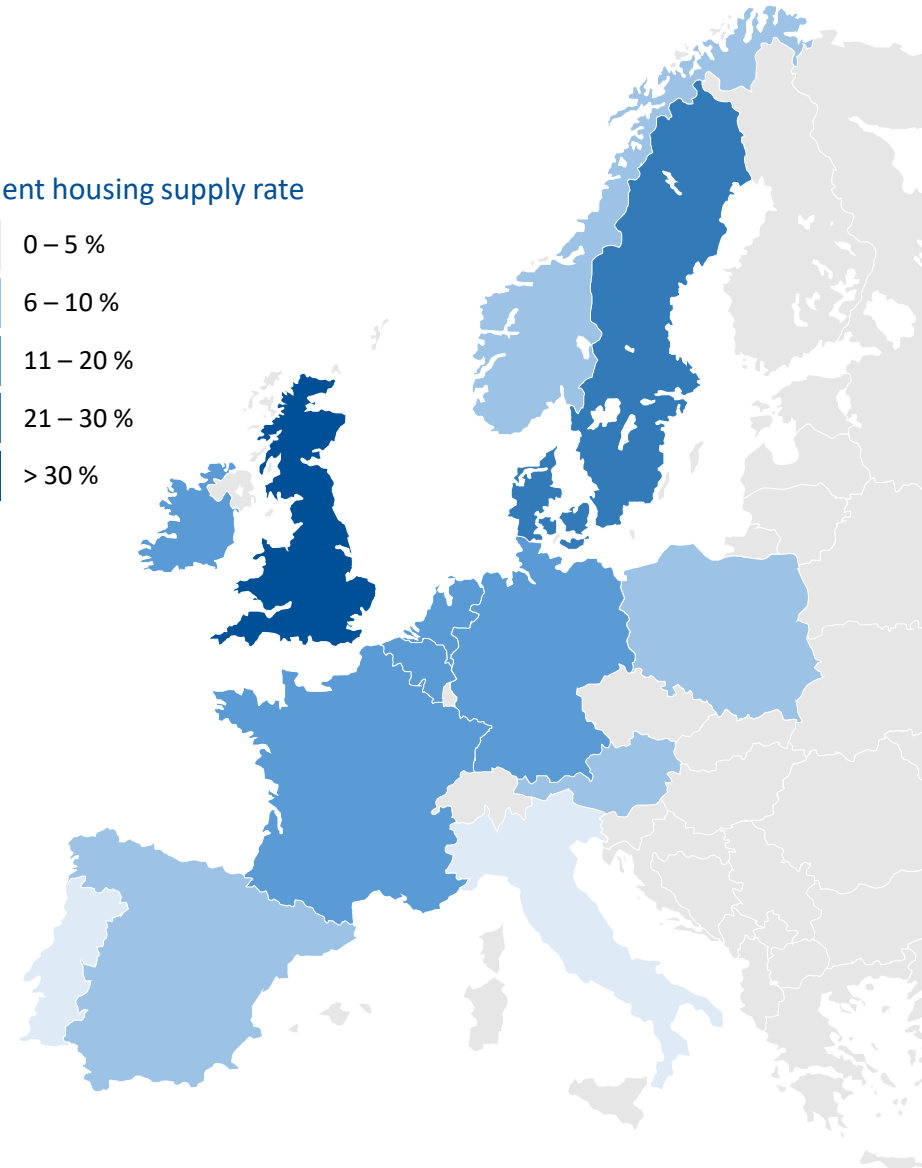
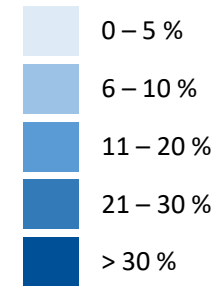
There is a strong focus on **achieving academic excellence** as Generation Z competes with a global workforce

Student Apartments Markets in Europe

Some markets are acutely undersupplied to meet the demand for beds of local and international students

Country	Full time students	International students	No. of units
United Kingdom	1.97m	23%	approx 627k
Germany	2.87m	14%	approx 316k
Sweden	0.41m	11%	approx 94k
Spain	1.56m	8%	approx 93k
Poland	0.80m	8.5%	approx 80k
France	2.62m	13%	approx 350k
The Netherlands	0.73m	10%	approx 130k
Italy	1.89m	4%	approx 57k

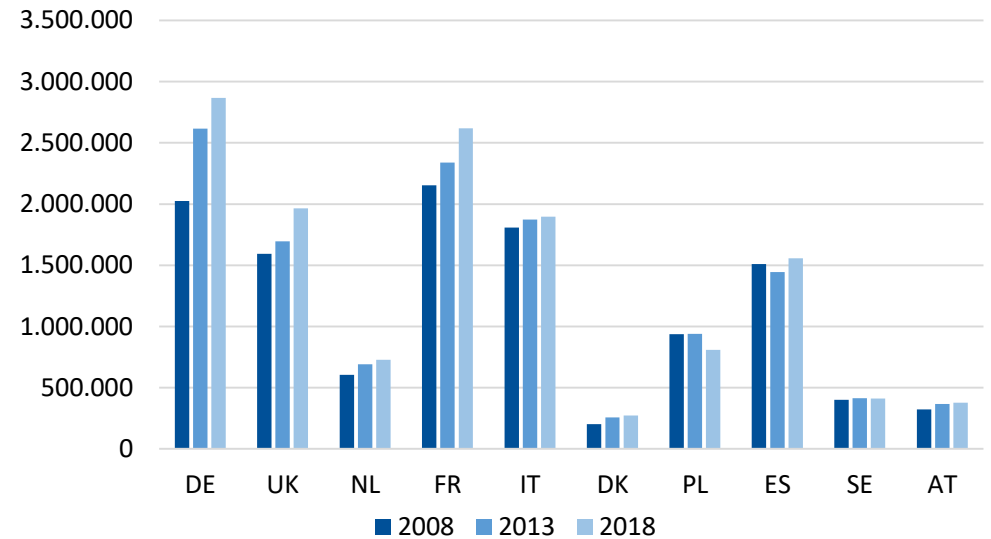
Student housing supply rate



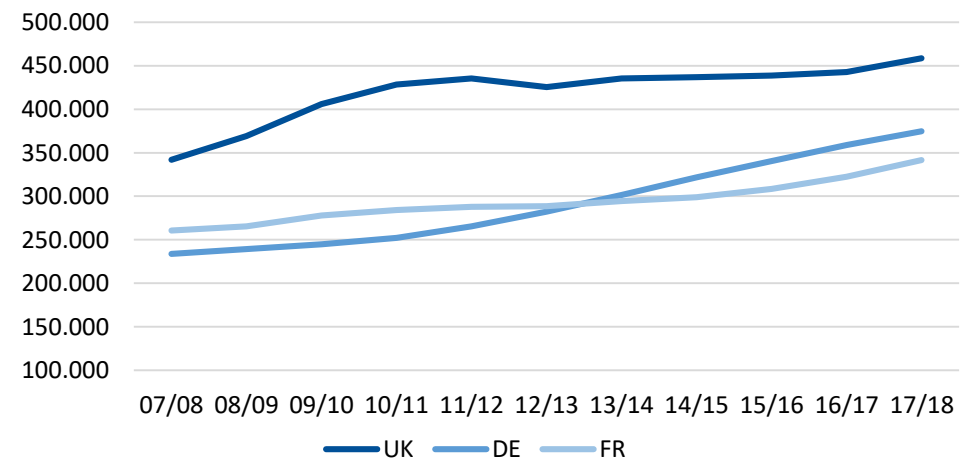
European Student Apartment Market

- Most of the European countries this study focusses on have registered a steady increase in student numbers over the past ten years. Germany, the UK and France have seen the biggest increase in numbers.
- According to UNESCO, the UK, France, Germany, Italy and the Netherlands are among the top 20 destinations for global students studying abroad. This is one reason for the relatively strong increase in student numbers compared to other European countries.
- However, there is a general trend towards higher education with a rising proportion of the population in Europe pursuing a university education. In the OECD member countries, for example, the share of the population aged 25 to 34 holding a tertiary exam has gone up from 35% in 2008 to 44% in 2018.
- We expect demand for higher education to keep rising in a longer-term perspective, because global businesses increasingly require well trained employees. This will strengthen demand for student accommodation.

European countries by size of student body



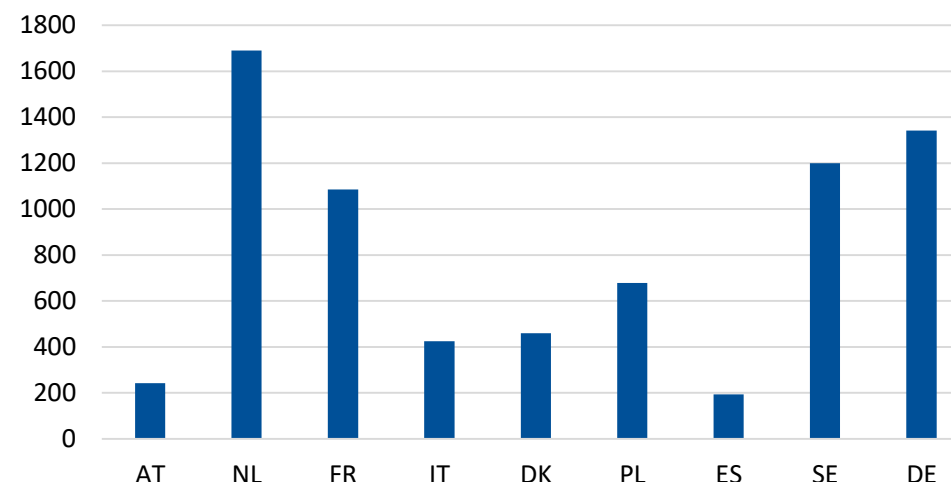
Number of international students



European Student Apartment Market

- The university sector is becoming more commercialised on an international scale and the number of English Taught Programmes (ETPs) is increasing across Europe as universities seek to attract the best (and ultimately more) students. Students have increasing choice in terms of destination, cost, and method of study. The cost of a degree across European universities differs significantly with many countries offering free or limited cost study.
- A more internationally mobile, more flexible student population with more choice in what and where they study means that demand for student accommodation is expected to remain high.
- Of the QS World University Rankings 2019, 381 European universities are listed, roughly 38% of all universities, with the UK (76 universities), Germany (45), and France (35) the most significant contributors.

Number of English Taught Programmes (Bachelors /Masters)



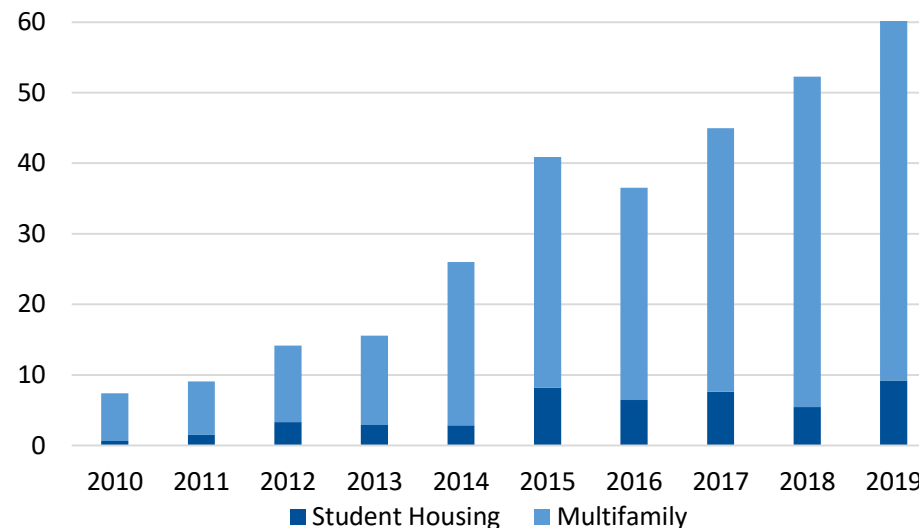
Tuition fees at public universities per academic year in €

	For EU/EEA students	For students from other countries
AT	-	726.72
NL	700 – 2,100	8,000 – 20,000
UK	10,725	7,000 – 40,000
FR	170 – 650	170 – 650
IT	0 – 5,000	0 – 5,000
DK	-	6,000 - 16,000
PL	500 – 8,000 (English)	1,000 – 8,000 (English)
ES	150 - 3,500	1500 – 4500
SE	-	7,500 – 25,500
DE	-	3,000 in Baden Württemberg; otherwise free

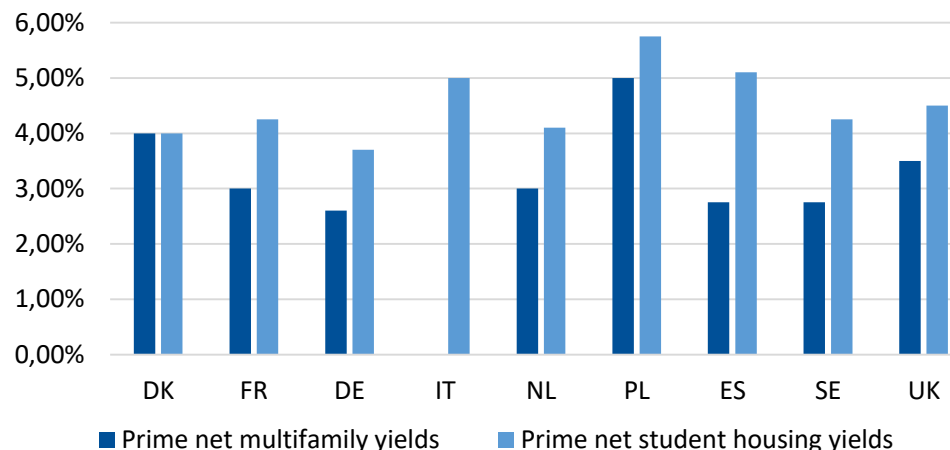
European Student Apartment Market

- The European student accommodation investment landscape has continued to evolve in the past year and competition and transaction activity intensified, reaching a transaction volume of almost €9 bn in 2019.
- In 2019, the strongest investment activity was seen in the UK (+84% year-over-year to €6.2bn) and France (+232% year-over-year to €1.2bn). In these markets large portfolio deals were closed in 2019.
- The student housing market is still dominated by the UK, but expanding stock is seen in France, Germany and the Netherlands in particular.

Transaction volumes in Europe in €m



Student Housing Yields in Europe Q2 2019



Excerpt 4: Operational Management

Operational insights

Integrated operational management is the key for success

It is commonly understood that the European market lags both the UK and US markets for maturity within the micro-living space. Whilst some may see this as a challenge, it can also be viewed as an outstanding opportunity. Key learnings for success can be utilised from these two markets to ensure that the operational, or 'delivery side' of the business is optimised to deliver the real asset value.

CRM Students was the UK's largest independent manager of student accommodation in the UK, with over 20,000 beds under management. Now part of the CORESTATE Group, the operating platform which the CRM team now manages has expanded beyond the UK and now covers Poland in the east, Spain and Portugal in the South, UK and the DACH region. The next expansion will see management of schemes in Italy, Ireland and the Nordics. The sectors in which CRM operates have also expanded with co-living, micro-living and BTR now being managed. Operating in these markets and sectors, with almost 400 staff delivering value day in, day out to our clients, provides unique insight into the needs and wants of the key audience - an important factor for the success of Micro Living products.; today's students will be the target audience for co-living and in turn will become a driver for the BTR market.

Integrating the operating platform into investment and asset management is fundamental to continued success. As an operating platform, CRM recognises the 'real-world' opportunities and challenges, and these can be fed in to the entire process; from initial research to acquisition and then in a cyclical relationship with the asset management team. The complete management cycle enables assets to be developed and acquired which will deliver predictable value over their entire lifetime.

More and more funds and investment houses recognise these benefits and are forming long-term strategic partnerships with operating platforms and in some cases, purchasing a platform to ensure that value is maximised.



Stewart Moore
Chief Executive Officer
CRM Students

Originally starting out in advertising agencies, Stewart Moore worked at McCann-Erickson before moving to Saatchi & Saatchi to be a member of their experiential and B2B team.

In 2011 Stewart joined CRM as Marketing and Commercial Director and was appointed as CEO in 2018.

At CRM he is responsible for

- Management services provided to nearly 30,000 beds across Europe
- Almost 400 staff delivering value day in, day out to clients.

European Student Apartment Market Comparison

Country	Total students	International students	Prime Yield	% students live away from home	No. of units approx.	No. Of English programmes	PBSA supply rate	Adjusted supply rate**
Sweden	0.41m	37k	4.25%	87%	96000	1199	23%	27%
Germany	2.87m	374k	3.70%	79%	316000	1342	12%	13%
The Netherlands	0.73m	86k	4.10%	58%	130000	1690	18%	28%
UK	1.97m	458k	4.50%	81%*	627000	n.a.	32%	37%
Poland	0.80m	78k	5.75%	59%	80900	678	10%	16%
France	2.62m	341k	4.25%	67%	340000	1086	13%	18%
Denmark	0.27m	34k	4.00%	92%	68000	460	25%	27%
Spain	1.56m	121k	5.10%	45%	94000	194	6%	12%
Italy	1.89m	97k	5.00%	31%	57000	425	3%	9%



5. Co-Living Market

Introduction – Co-Living

What distinguishes co-living from regular housing?

- Co-living is aimed at and designed for digital or job nomads, young professionals and project workers who value flexibility to move and community with like-minded people
- Properties are operated and leased on a ‘by-the-bed’ basis, with a rental period of 12-18 months on average
- Units come fully furnished and usually accompanied by an inclusive range of amenities and services
- Currently lacking a clear definition, there are different co-living concepts available – ranging from self contained apartments with shared spaces in large apartment blocks to houses with bedroom units and shared bathrooms, kitchen and lounges. In this document, we concentrate on concepts with a stronger focus on community and sharing

Co-Living – Still a comparatively new segment within Micro Living

- Co-living as an industry is still at an early development stage
- The most dynamic region in the world for co-living is Asia. The region has exhibited the strongest growth in co-living spaces globally and is gaining increased institutional interest from global investors. By comparison, the existing US and European markets are much smaller, currently with a focus on the Germany and the UK. From there, co-living has developed also in other large cities in Europe.
- The concept currently appeals to the target audience that is most willing to live in community: the millennials. However, some industry experts believe that there will be a rise of more inclusive co-living spaces, including those focussed on multigenerational and family living.



Millennials' lifestyle drives Co-Living

Due to globalization and digitisation, Millennials and Generation Z are increasingly mobile when it comes to their jobs and their home. Co-Living appeals to this demographic – offering flexibility, designed spaces, a range of services for hassle free living and community with like-minded people.



As a consequence of globalisation and digitalisation, employees **change their job** more often and move to another city or another country.



According to a study, the gig economy appeals to four in five millennials and Zoomers. This in combination with their **wish to travel** makes project work or short-term assignments abroad interesting for Millennials and Zoomers and has led to the emergence of the so-called “nomad lifestyle”



Millennials **stay single longer** and start a family later than the generations before them. This puts homeownership in the background.



In order to make the most of their experiences, Millennials want to be able to have **access to a range of services** that facilitate hassle free living.



Shifting consumption habits **mean less focus on owning** cars or apartments but a preference for experiences and sharing

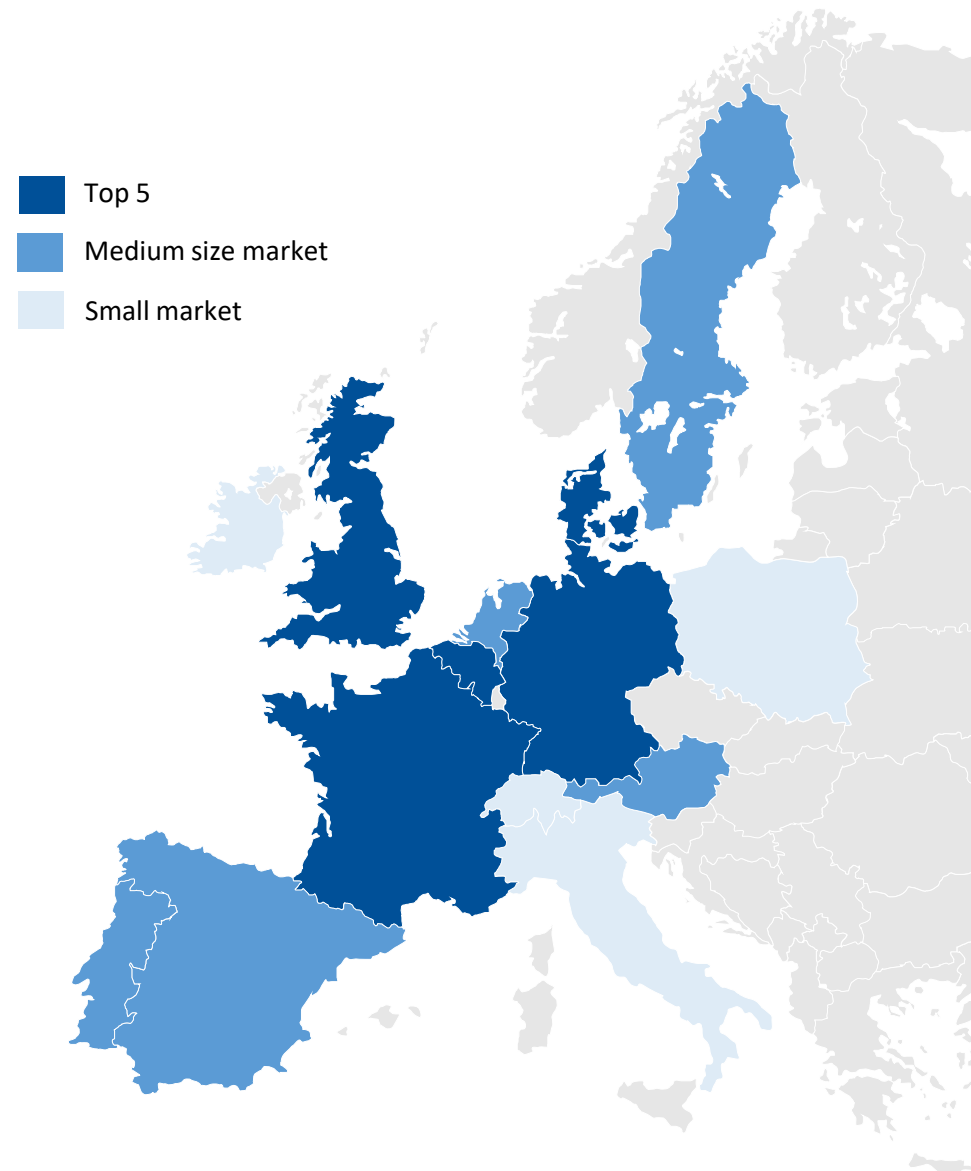


Even though highly connected, Millennials can struggle with **loneliness**, do not have an easy time making friends and may long for community.

Co-Living Markets in Europe

Currently, a few major European cities dominate the co-living market in Europe

<p>Germany</p> <p>Largest market currently in Europe</p> <p>Supply spread across Top7 cities*</p>	<p>France</p> <p>3rd largest markets by number of current beds</p> <p>Paris is main focus</p>
<p>United Kingdom</p> <p>2nd largest market in Europe</p> <p>London largest market by city</p>	<p>The Netherlands</p> <p>Smaller pure co-living market in Europe as spaces available in Amsterdam closer to serviced apartments</p>
<p>Belgium</p> <p>4th largest market in Europe</p> <p>Focus is currently on Brussels</p>	<p>Sweden</p> <p>Smaller market with current focus on Stockholm</p>
<p>Spain</p> <p>Smaller market with few co-living beds available yet but solid pipeline</p>	<p>Austria</p> <p>Smaller market with some beds available and good pipeline</p> <p>Focus on Vienna</p>



*Top 7 cities are: Berlin, Frankfurt, Munich, Stuttgart, Cologne, Hamburg, Düsseldorf, Source: CORESTATE Research

European Co-Living Market - Supply

- Since 2015, global investment into co-living developments has increased threefold each year. There is a substantial pipeline of co-living projects across Europe.
- In terms of already available co-living space, Germany, the UK and France are Europe's largest co-living markets.
- Nearly three-quarters of the current co-living stock can be found in the top 4 cities.
- Many new co-living developments are projects from established developers of student housing, with all-inclusive bills and regular community events. Others are developed by coworking providers, with the added benefit of a coworking membership in the rent.
- Currently, several different concepts are being pursued under the term co-living - some closer to the serviced apartment concept, others more oriented towards the shared flat concept.
- We focus on the shared living concept than on the concept of self-contained units with their own kitchen and bathroom.

Largest Co-Living Markets by City:

1. London
2. Berlin
3. Paris
4. Frankfurt
5. Brussels
6. Munich
7. Copenhagen

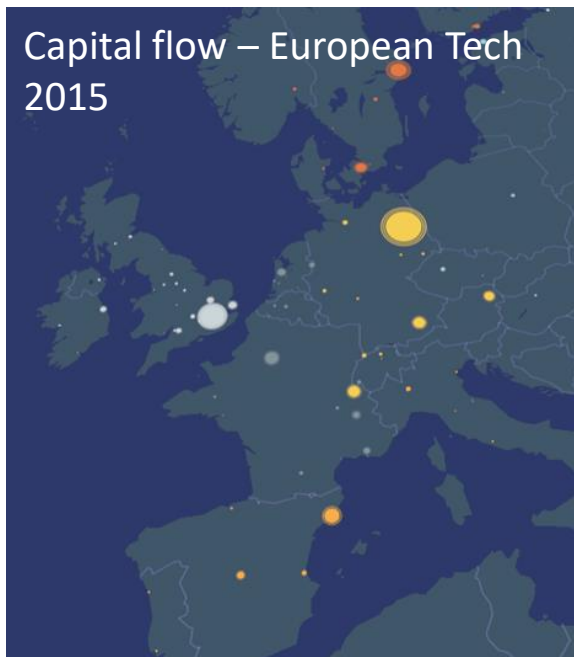
Top 5 Providers in Europe

Provider	Number of beds
Homefully	923
The Collective	900
Station F	600
LifeX	358
Quarters	356

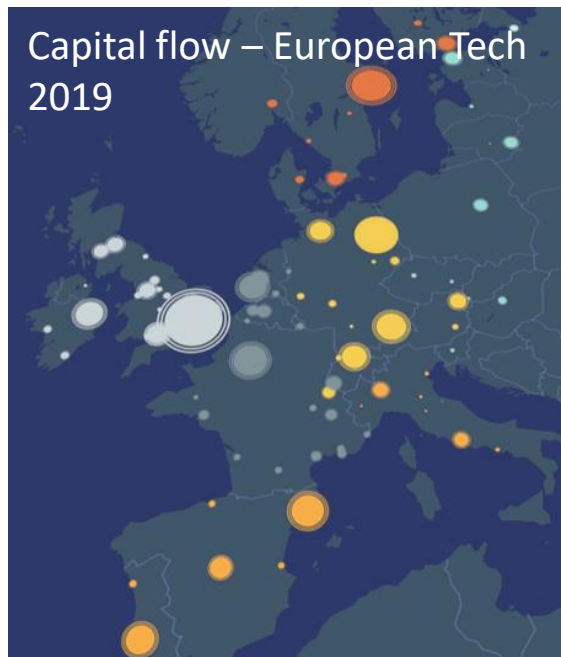
European Co-Living Market - Demand

- In our globalised, digitalised world, professionals often change jobs and move to another city in the process. Internships in different countries, project work and fixed-term contracts attract young professionals to the major hubs of Europe.
- Europe has generated more tech IPOs than the US for the last five consecutive years. And while investment focused mostly on the top three cities (**London, Berlin and Paris**) in 2015, capital flows into European Tech has extended to a range of other large cities in Europe by the end of 2019. Among these are **Barcelona, Lisbon, The Hague, Munich, Zürich and Dublin**.
- This development is reflected in the development and supply of co-living space. While co-living in Europe focused mainly on London and Berlin initially, there can now be found an increasing number of co-living spaces in other large European cities.

Capital flow – European Tech
2015



Capital flow – European Tech
2019



Top 10 Cities for Millennials*

- Berlin
- London
- Amsterdam
- Barcelona
- Cologne
- Manchester
- Hamburg
- Bristol
- Paris
- Munich



6. Serviced Apartments Market

Introduction – Serviced Apartments

What distinguishes serviced apartments from regular housing and hotels?

- Serviced apartments have been growing in popularity as an alternative accommodation concept since the 1990s – initially in the US and from there also in Australia and Asia.
- While there were still only 114,000 units in Europe in 2016, the market has expanded in Europe to now 204,733 units in 4,068 locations.
- While supply was initially very fragmented across smaller providers, the number of serviced apartments in branded residences has increased in recent years.

Development of the Serviced Apartment segment

- Serviced apartment units/rooms offer more space than classic hotel rooms and a kitchenette. The self-contained apartments resemble micro-apartments, but are available for shorter rent periods and are considered “commercial” use;
- units come fully furnished and both short to medium (1-28 days) and long (28+ days) stays are possible
- the property is operated and rented on a ‘by-the-bed/unit’ basis
- Usually there is a range of amenities and services included, such as a laundry rooms, fitness facilities, etc.



The Mobile Society drives Serviced Apartments

Serviced Apartments appeal to a certain demographic with a particular lifestyle and mind-set. The main target audience are business travellers (Generation X), but also project workers or job nomads (Millennials), seeking a product with a more residential flair, with flexible length of stay, while not sacrificing location, service, amenities or quality.



Companies are increasingly interested in booking **serviced apartments for business travellers** rather than hotels to save on costs



Business travellers now more often **combine travel for work with leisure travel**. Serviced apartments offer maximum flexibility for extended work and private travel



Generation X and Millennials appreciate **independence, flexibility**, but also the possibility to use common rooms - if they feel like it. The feeling of privacy for the duration of the stay is perceived as luxury, as is a "home, away from home"-feeling



"**Nomad lifestyle**" of Millennials is driven by flexible working, the desire for a global life and also the need to travel and creates demand for the flexibility serviced apartments offer

Serviced Apartments Markets in Europe

United Kingdom

Largest market with the strongest pipeline in Europe

Focus on London, Manchester & Edinburgh

Ireland

Current stock focuses on Dublin
Strong pipeline for the next three years

Germany

2nd largest market and strong pipeline spread over the top 7 cities

Austria

Vienna among the top 15 cities for pipeline units in Europe

France

Strong expansion over recent years and solid pipeline over the next four years

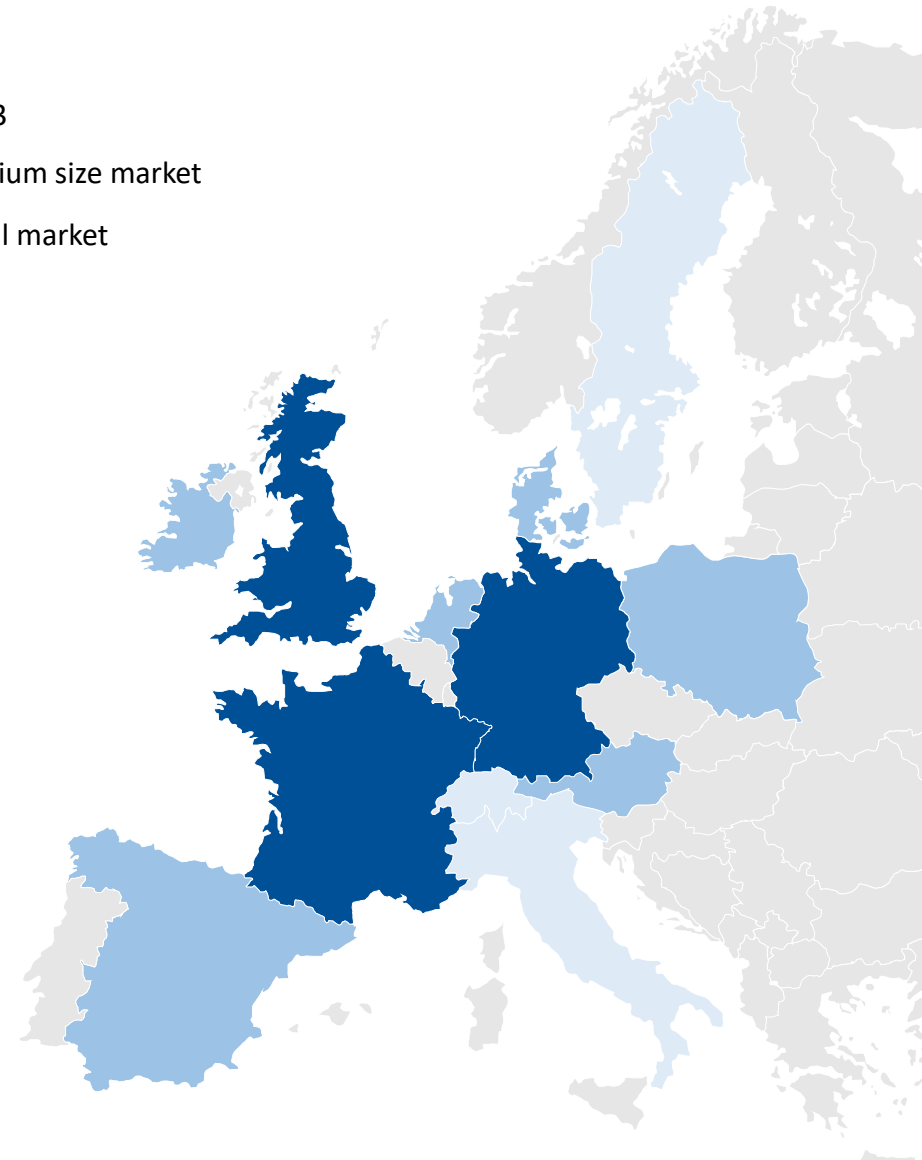
Poland

Relatively new market with good pipeline due to increased interest in CEE
Focus on Warsaw

The Netherlands

Strong focus on Amsterdam with more than 50% of the serviced apartments supply

- Top 3
- Medium size market
- Small market



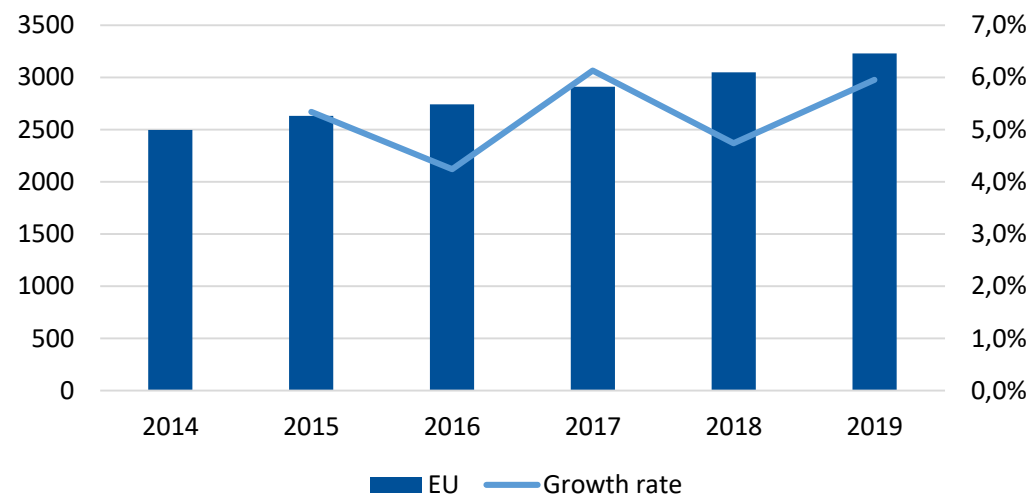
Serviced Apartments offer maximum flexibility

Segment	Serviced Apartments	Hotel
Stay of Duration	Maximum flexibility with both short to medium (1-28 days) and long (28+ days) term stays possible	Average stay duration between 1-5 days
Apartment Size	Apartment options include studios, one, two or three-bedroom spaces with separate workspace	Room options usually studios, meeting short stay requirements
Pricing	Daily rate which has an inverse relationship with duration of stay, thus providing more attractive pricing than hotels	Volatile pricing dependent on occupancy
Amenities	<ul style="list-style-type: none"> • Apartment: Hotel standard with (optional) fully equipped kitchen, work/relaxation space • Communal: (Included) Concierge, fitness centre, terrace, laundry facilities, resident lounges 	<ul style="list-style-type: none"> • Room: Hotel standard bed, desk, bathroom, wardrobe, mini-bar • Communal: Usually limited hour Food and Beverages, fitness centre

Serviced Apartments Supply

- According to GSAIR, there are currently 1,174,012 serviced apartment units globally in 15,464 locations. In Europe there are now 204,733 units in 4,068 locations.
- While the serviced apartment market was initially very fragmented with many small providers, there are now a number of lifestyle brands offering innovative and stylish concepts in the market and large hotel groups have expanded into the sector.
- Now more than 50% of the serviced apartments available in Europe are branded

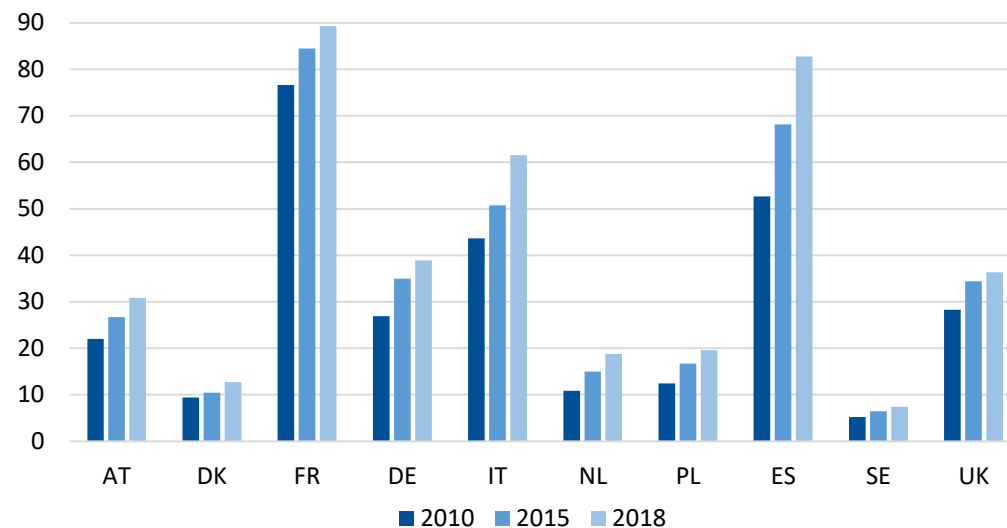
European extended stay market size (US\$m)



Serviced Apartments Demand

- Business travel, assignment and relocation remain the core market for extended-stay products. However, also more and more tourists discover serviced apartments as an interesting alternative to hotels.
- Global business travel spending reached \$1.4 trillion in 2018 according to the Global Business Travel Association (GBTA).
- The COVID pandemic has had a strong impact on the travel industry, but the drop in occupancy has been less severe in the serviced apartment sector than in the traditional hotel sector.
- Experts expect at least a short-term decrease in business travel even after lockdown restrictions are eased. Providers of serviced apartments could, however, compensate for losses due to fewer business travellers by increased interest from leisure travellers. Especially in the short-term, travellers will be interested in accommodation with reduced exposure to shared facilities and a large number of people, and the option to use the kitchenette or order food in.

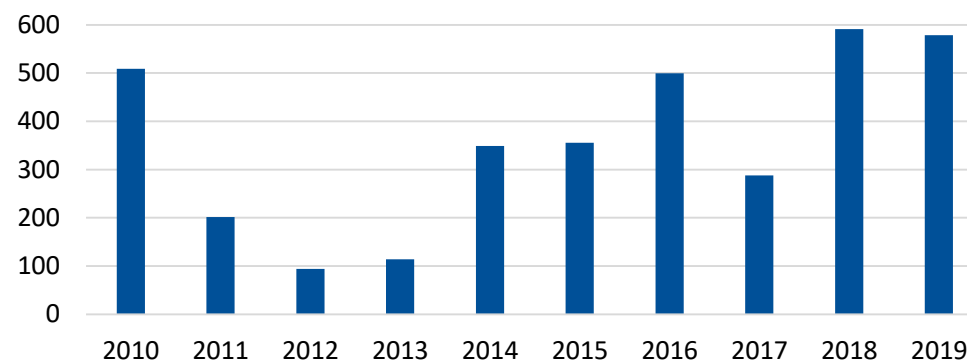
International Tourism – Number of arrivals (in m)



Serviced Apartments Market - Transactions

- In 2019 the UK contributed 44% to the total transaction volume for serviced apartments, after two years of substantially lower transaction volumes. Germany followed with 24% of the total transaction volume.
- The Nordics are a fairly recent entrant into the serviced apartment sector, with transactions mostly in the past two years.
- As in previous years, more than half of the serviced apartment pipeline is concentrated in the UK and Germany in 2020 (5,414 units). In 2021 the UK and Germany even represent two third of the pipeline (4,568) units.
- While the UK pipeline has a large focus on London, Germany's development is distributed mostly across the Top 5 cities (Frankfurt, Berlin, Hamburg, Düsseldorf and Munich).

Transaction Volume – Extended Stay Europe in €m



European Pipeline for Serviced Apartments

Country	2020	2021	2022	Total
UK	3,052	2,614	262	5,928
Germany	2,362	1,954	1,180	5,496
France	505	357	234	1,096
Ireland	1,456	714	150	2,320
Netherlands	345	110	0	455
Austria	420	44	0	464
Poland	308	326	100	734
Other	1,547	854	270	2,671
Total	9,995	6,973	2,196	19,164



7. Independent and Assisted Living Market

Baby Boomers' lifestyle drives Senior Living concepts

The demographic development in Europe (and globally) creates opportunities for private initiatives to supply housing suited and adapted to the growing elderly population. Like their children, the baby boomers want flexible, quality accommodation with accesses to amenities and services, and a feeling of community.



Independent and Assisted Living facilities meet demand of an ageing population

- Flexible rental period from 12+ months
- Flexibility to move when needs change
- No long term commitment
- No acquisition of a flat/house
- Flexibility to book services depending on their needs and add on further services when needs change
- For the part of the elderly population who do not yet need extensive assistance and care

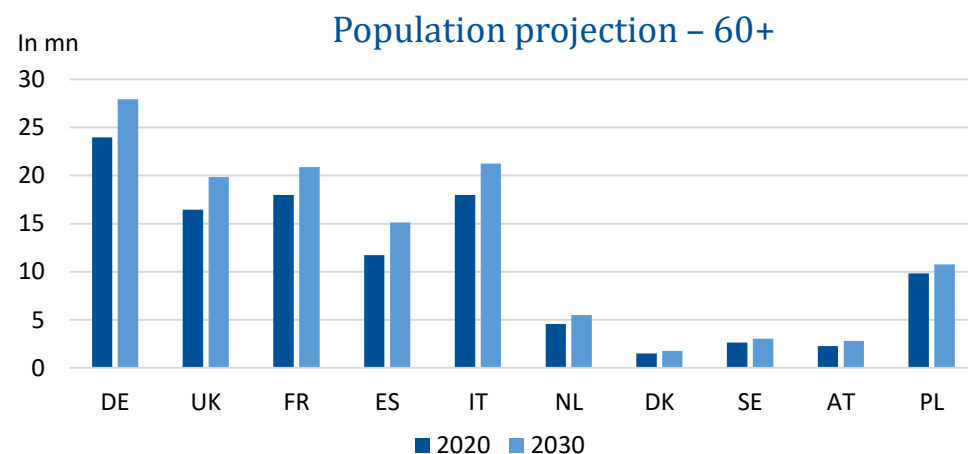
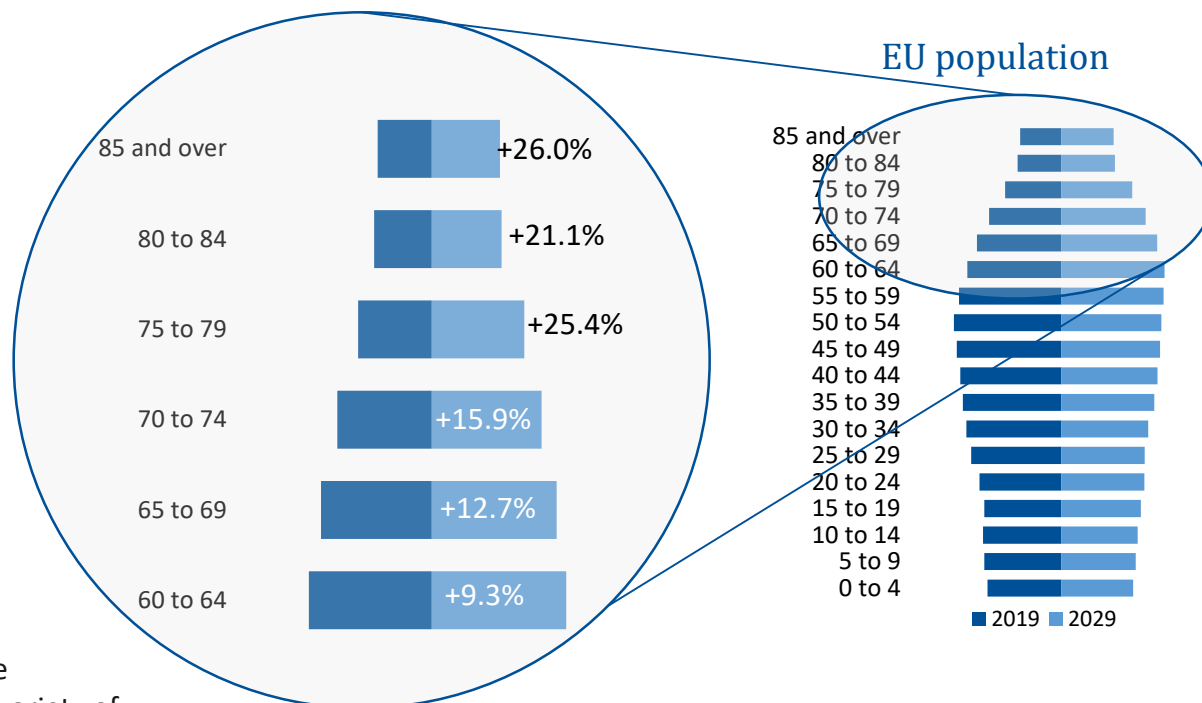
- The developments of work and living have resulted in fewer people living in multi-generation households. This means less family-support systems are available to older people and a higher risk of loneliness.

→ This cultural/demographic phenomenon is tackled by modern senior related housing concepts like independent living and assisted living facilities

- „Golden agers“ want to enjoy and make the most of their post-retirement age.
- Their mindset, lifestyle and the affluence level are increasingly changing their living arrangements towards more privacy and independence
- A larger proportion of baby boomers are university educated compared to previous generations. They are often well-travelled and have many (cultural) interests and want to have contact with like-minded people, which makes living concepts with shared spaces interesting

Considerable growth in relevant population

- This is the result of both the aging of the large Baby Boomer generation and improving medical quality, which is supporting longevity and ‘staying fit for longer’.
- The European population aged 60 and above is forecast to see considerable growth of 23 mn people over the next 10 years. This is an increase of 16.6% and by far the largest growth of any age cohort.
- In addition to pure demographic processes, a trend of “Empty Nesters” (Households where children have grown up and moved out) downsize from an owner occupied house to a smaller, often urban apartment strengthens demand for specific forms of housing.
- This offers interesting opportunities and demand for “purpose built” senior living projects beyond nursing homes.
- There are different levels of assistance and types of services the demographic will need and this creates a significant need for a variety of purpose built housing, and thus opportunities for private initiatives to supply housing that meets these needs.
- Within senior living, several concepts are possible to imagine from co-living for an older demographic to concepts that offer services and assistance catered to the needs of older people to (light) assisted living.
- Since older residents tend to spend much more time in their homes than younger occupiers, shared spaces will have to be larger and there will be a demand for extensive, optional services, such as meal plans, cleaning services and activities.
- While no medical services are included, these concepts can benefit from nearby nursing homes that provide medical services if attention is needed



Overview – Levels of Senior Housing

Type of housing	General description	Reasons for occupation
Active senior communities	Housing community limited to residents aged 55 and older; includes a variety of amenities and activities. It may include a restaurant. Typically, no support services; residents may help each other. Various price point choices	Lifestyle choice; social and community driven; amenity driven
Independent Living	Facility that includes amenities and activities, as well as communal dining, transportation services and leisure activities. Provides some help for residents who are not able to function completely independently in their homes. Can be in vicinity to nursing home or other health facility	Lifestyle choice; likely inability to manage completely independent; community driven; security driven
Assisted Living	Facility that offers assistance similar to independent living plus moderate help with activities of daily living, including support for taking medication, bathing, toileting, mobility support, etc. May provide all meals. A nurse may be on-site, but skilled nursing care is not provided.	A choice, driven by necessity or expected necessity;
Nursing homes	Facility that offers skilled nursing and extensive assistance. All meals are provided. Offers possibility of some social interaction and activities if the individual is capable of participating in them.	Generally opted for when there is no other alternative

Micro Living / Serviced Apartment property sector

- Choice
- Community
- Amenities

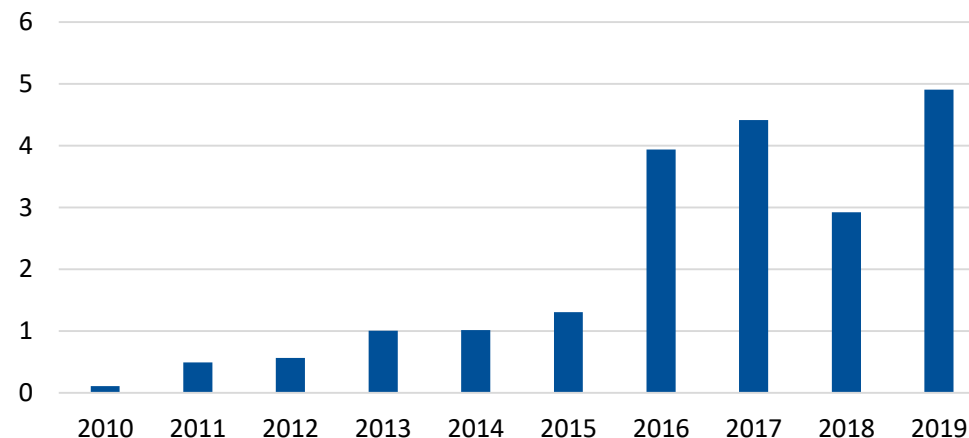
Health-care property sector

- Necessity
- Support
- Health

Independent and Assisted Living Transactions

- In Europe, the senior housing model is growing fastest in France, where there are more than 47,000 units across 620 schemes, according to Savills.
- In the UK, where there is a preference for homeownership over renting, so far senior housing has been focused on development for sale.
- However, taking into account the preferences, expectations and experiences of the Baby Boomers, senior rental housing models should become a more natural fit – even in markets with traditionally a high rate of homeownership and especially in urbanite areas.
- Transaction volumes have increased substantially in the past 4 years and senior housing investment activity was mainly concentrated on the UK, France the Netherlands, Germany and Belgium.
- As the sector requires solid knowledge of rapidly changing regulations and a good understanding of anchored habits from the elderly population, which can differ greatly from one European country to another, the sector so far has mainly attracted domestic investors.

Transaction Volume Senior Housing*
Europe in €bn





Micro Living Market – Deep Dive Germany

Micro Living Market - Germany

Germany



Total population: 83.15 million

Area: 349 360 km

Population density: 237 people per sq. km of land area

Urban population:



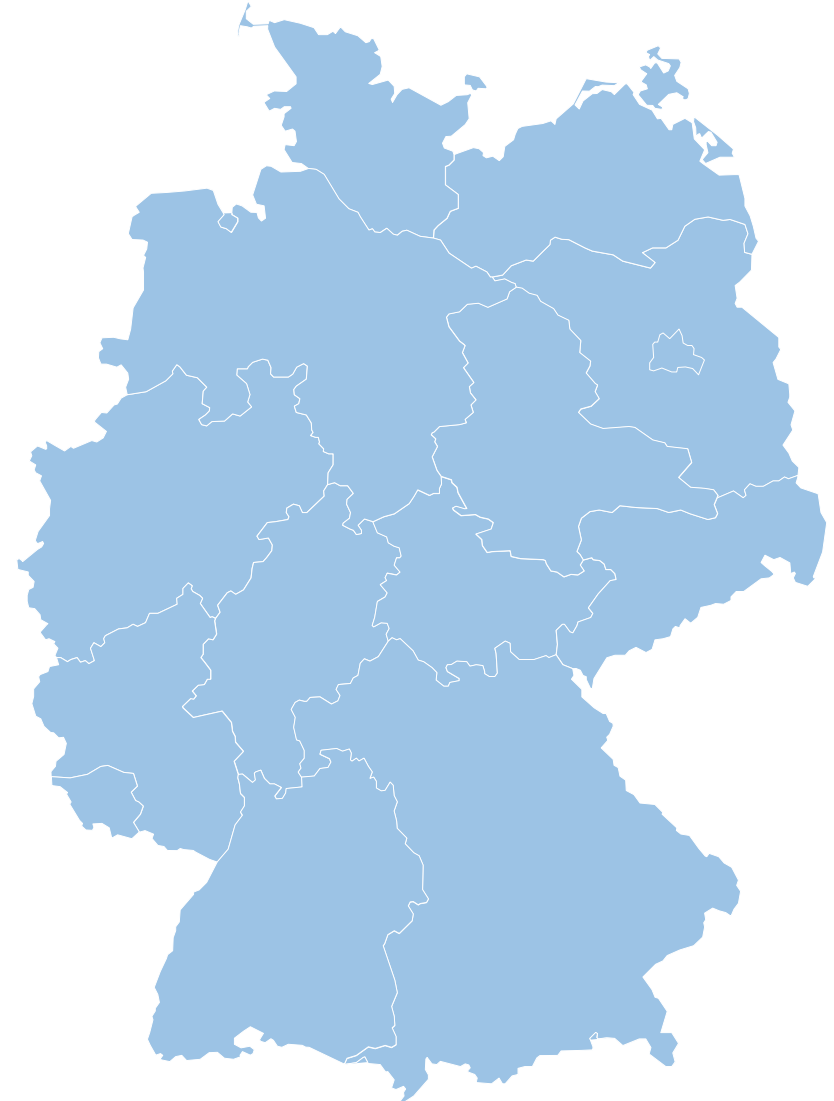
Total student population: 2,868,222

Number of universities: 424



Tourism – number of arrivals in 2019: 190,944,318

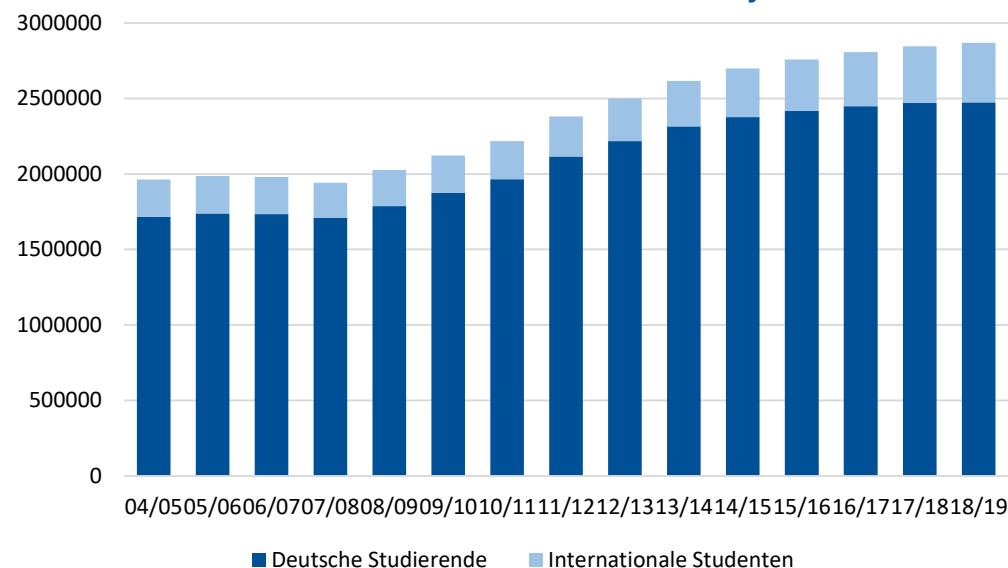
Tourism – number of overnight stays: 495,615,504



Student Housing Market – Students & Universities

- Germany has become increasingly popular for international students over the past years and both the total number of students as well as the number of international students are expected to continue to rise
- In education.com's „Top Ten Places to Study Abroad – 2020“ ranking, Germany takes 3rd place globally (after Canada and Australia) and 1st in Europe. Germany has also ranked top in the two most recent Study.EU Country Rankings
- Chinese students form the largest group of international students in Germany (13%), followed by students with a Turkish passport and students from India. Nearly 20% of the foreign students, however, acquired their university entrance qualification in Germany and one can assume that a large proportion of the Turkish students in Germany fall under this category
- Students from Italy form the largest group of students in Germany from EU countries
- There are currently 424 universities in Germany (2019/2020)

Number of students in Germany



Top 5 Universities according to THE Ranking:

1. LMU Munich
2. Technica University Munich
3. Heidelberg University
4. Humboldt University of Berlin
5. Charité Berlin

48 universities are listed in the Times Higher Education World University Rankings

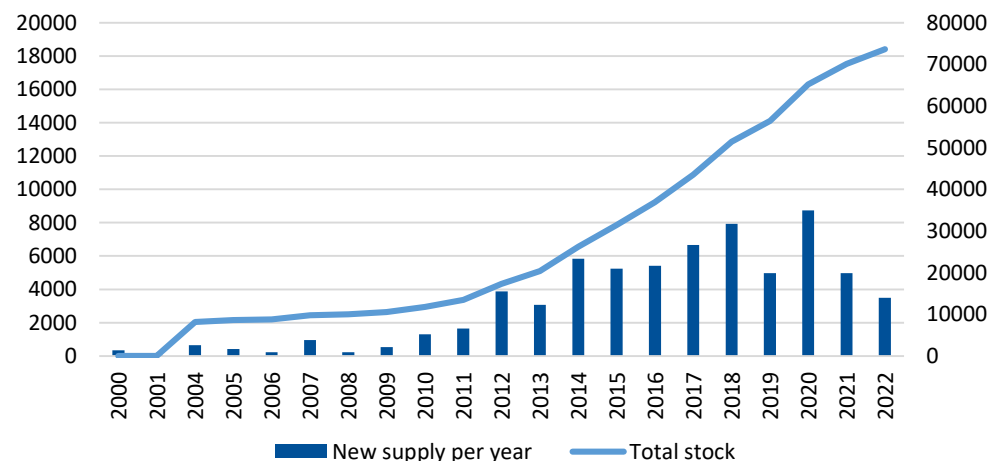
Student Apartments – Providers & Supply

- In 2018 more than 2.8 million students across Germany had access to around 240,000 publicly subsidized student accommodation places, equalling an accommodation rate of only 8.6%.
- Transaction activity in the German PBSA market has increased significantly in the past three years. The private sector stock of student accommodation has more than tripled in the past 6 years. In 2017, investment in student accommodation accounted for around 6.4% of the entire residential transaction volume.
- The provider structure in the student housing market in Germany is relatively strongly fragmented, with the top 5 PBSA providers representing around 20% of the PBSA supply. In response to the growing competition in the student housing market, many operators are looking to diversify their supply and target group to open up a larger market with higher demand. In addition, a consolidation of operators in the student housing market is to be expected.

Top Ten PBSA Providers in Germany

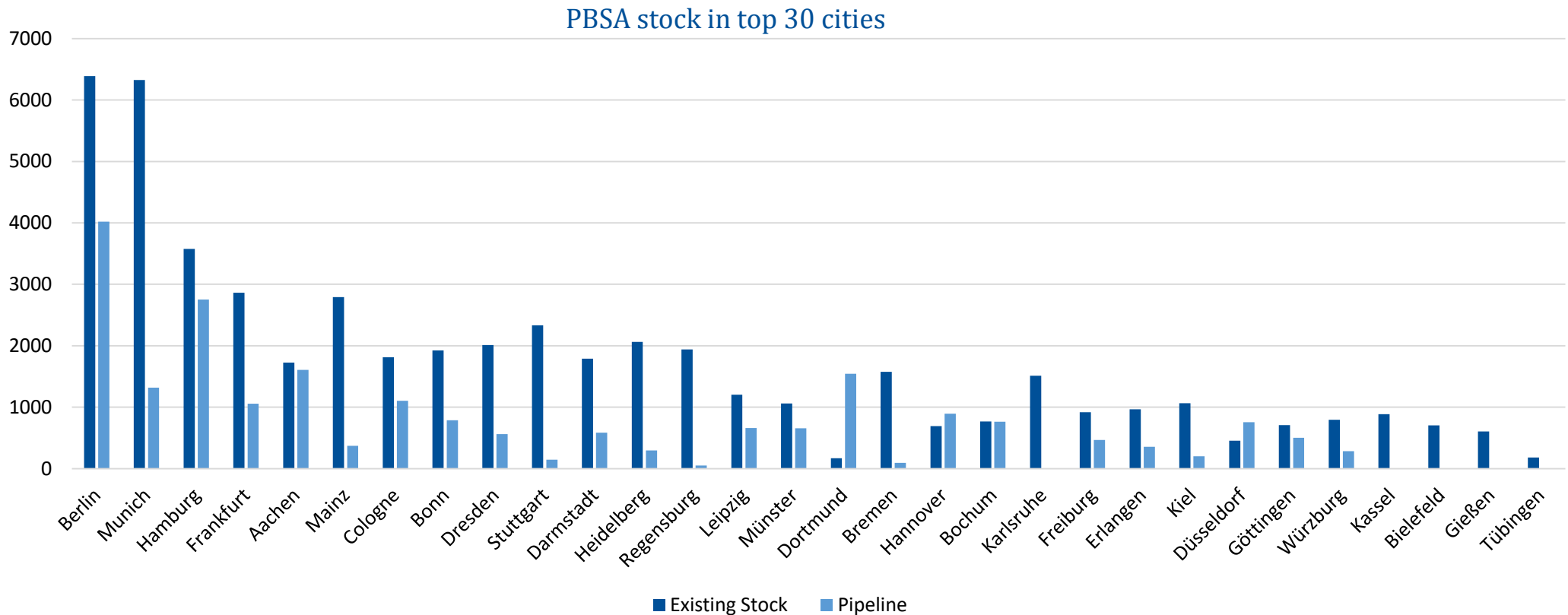
Provider	Brand	No. assets	No. units
GBI	SMARTments student	22	3879
I live	I live	22	3542
CORESTATE	Youniq	11	2996
MPC	Staytoo	5	2657
GSA	Uninest Student Residences	8	2569
IC (International Campus)	The FIZZ	7	2499
Campus Viva	Campus Viva	12	2460
Nido Student	Nido Student	7	1800
Campo Novo	Campo Novo	5	1659
Uni Apart	Uni Apart	9	1231

Development private student apartment supply Germany



Student Apartments – Providers & Supply

Development activity from private investors remains buoyant and is focused on the major university cities. Consequently, the provision rate in these cities is growing rapidly and, in some cases, will rise to more than 50%.



Serviced Apartments Supply in Germany

- Currently there are 28500 serviced apartments available in 540 buildings in Germany, distributed across apartments with service providers and apartment hotels.
- The German serviced apartment market is very fragmented and has been characterised by small, individual providers. However, Germany is increasingly in the focus of international players. These include some hotel chains that offer serviced apartments in addition to hotel rooms.
- As of March 2019, the market share (by number of units) of individual serviced apartment providers remained at 55 percent, while international chains accounted for 37% and national chains provided 8 percent of serviced apartments units.
- While so far most of the serviced apartments in Germany can be found in the top 7 cities, there has been a trend towards other medium-sized towns and cities recently. With apartment buildings opened in Bielefeld, Nuremberg and Bonn. In Germany, major company bases and headquarters are not only located in the metropolitan areas but are spread across the whole country, offering attractive investment opportunities in B and C cities.

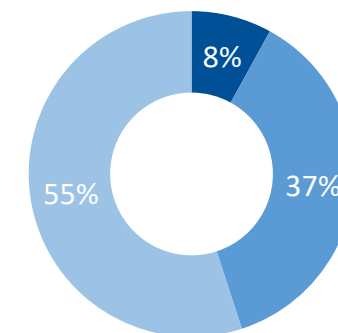
Top 3 Cities*

Frankfurt: 5735 apartments

Munich: 5660 apartments

Berlin: 5026 apartments

Market share - provider type by nr. of units



- National Chain
- International Chain
- Single Operation

Largest serviced apartments providers in Germany

Provider	Number of units
Derag Living Hotels	1840
Adina Apartment Hotels	1359
The Flag	794
Adagio Aparthotels	698
Smartments business	591

Serviced Apartment Demand

- The main target group for serviced apartments are business travellers, commuters and, increasingly, tourists.
- Job mobility is constantly increasing and demand for long-stay serviced apartments will be driven especially in cities with internationally operating companies and demand for talent.
- Additionally, according to the VDR Business Travel Analysis 2019 the number of business trips in Germany rose to a new record of around 190 million in 2018 - an increase of around eight percent compared to 2014.
- Of the total of 64.5 million foreign business trips by Europeans in 2018, 13.0 million were to Germany, followed by France with 4.9 million and Italy with 3.9 million business travellers.
- Germany takes second place in regards to number of international conferences hosted, with Berlin taking the lead in Germany, followed by Munich, Hamburg, Dresden, Cologne and Frankfurt.

Business travel in Germany*

	2017	2018
Nr. overnight stays	72.5	72.5
Nr. overnight stays in Germany	53.9	54.3
Nr. overnight stays abroad	18.6	18.2

City trips in Germany, national and international visitors in millions

	2018	2019
Berlin	13.5	13.9
Munich	8.3	8.7
Hamburg	7.2	7.6
Frankfurt	5.9	6.3
Cologne	3.7	3.8

Top 5 business travel destinations

1. Berlin
2. München
3. Stuttgart
4. Düsseldorf
5. Köln

Co-Living Supply in Germany

- Almost all of the top 5 co-living providers in Germany also have co-living spaces in other European countries.
- For co-living providers the question is, in which cities do the mobile millennials and generation Z want to live. First and foremost, they want to live in Europe's metropolises, where international employers are based and where they can find an environment that suits them. Many restaurants, cafés, co-working opportunities and international residents as well as a well-connected airport is equally important.
- Therefore in Germany, the focus is currently mostly on Berlin, Frankfurt and Munich.
- Three of the Top five providers only offer co-living beds in Berlin, which underpins that providers have so far focused on the workforce for (tech) start-ups.

Top 3 Cities

1. Berlin

- capital and largest city in Germany, and home to the largest population of expatriates
- Berlin is known as the start-up capital of Europe, and global companies such as Volkswagen, Pfizer, and SAP have locations in the city

2. Frankfurt

- 5th largest city in Germany and a large economic centre, with HQs for the ECB, German Federal Bank, Frankfurt Stock Exchange, and Deutsche Bank

2. Munich

- 3rd largest city in Germany, and home to major global corporations including BMS, Siemens, MunichRE and Allianz.

Provider	Nr. of beds	Locations
Homefully	920	Top7 Cities
Quarters	356	Berlin
CAASA Living	130	Berlin
Habyt	100	Berlin
LifeX	91	Berlin, Munich



Douglas Edwards

Head of Group Equity Raising & Client Services

+49 69 3535630-230

+49 162 7765471

douglas.edwards@corestate-capital.com

Mark Holz

Group Head of Research

+49 69 3535630-233

+49 1522 4407637

mark.holz@corestate-capital.com

Author

Irina Malcolm
Research Analyst

+49 69 3535630-203

irina.malcolm@corestate-capital.com

Disclaimer

This document has been prepared for general information purposes only. It does not constitute or form part of, and should not be construed as constituting or forming part of any offer or invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for, any shares or securities in CORESTATE Capital Holding S.A. or any other company of the CORESTATE Capital Group (hereafter collectively referred to as the “Company”) or in any other financial instruments, fund products or investments of the Company or third parties which are not part of the CORESTATE Capital Group, nor shall any part of this document nor the fact of its distribution form part of or be relied on in connection with any contract or investment decision relating thereto, nor does it constitute a recommendation regarding the securities of the Company or of another entity, which recognize the personal circumstances of the potential investor. Therefore, this cannot be deemed as financial services, investment advisory services, an offer for the acquisition of a financial instrument or general investment advice, legal or tax advice.

The information contained herein is for discussion purposes only and contain not sufficient information of the terms of the offer and a financial instrument itself. This document does not purport to contain all information that may be required to evaluate the Company and/or any other entity and/or the financial position of any of the foregoing. The potential investor should itself seek information from an investment advisor, certified accountant or tax accountant regarding the potential or actual investment.

The data and information contained herein has been obtained from various sources is believed to be reliable and accurate.

All data and information derive from sources which the Company believes to be reliable. Furthermore, the

Company has used its best endeavors to ensure that the presented facts and opinions are adequate and correct. Forward-looking statements and statements are based on current estimates, expectations and forecasts of the Company regarding market and industry developments at the time of preparation. Nevertheless, no reliance may be placed for any purposes whatsoever on the information contained in this document or on its completeness, accuracy or fairness. Neither the Company nor any of its directors, officers or employees or any other person makes any warranty or gives any guarantee, neither express nor implied, as to the accuracy or completeness of the information contained in this document, in particular as to the accuracy of third party data, and accepts no liability for loss or damage of any kind in connection with this document, unless caused by gross negligence or intent of the Company and unless standing in a causal connection to the potential damage. The information is subject to change at any time (even without notification to the recipients).

The document, its contents, any discussions at a meeting or otherwise made available (whether orally or in writing) is being provided to you solely for information.

This document is an advertisement and not a financial analysis or a prospectus and investors should not subscribe for or purchase any shares or securities referred to in this document. The information and opinions expressed in this document are provided as of the date of this document. Certain statements, beliefs and opinions in this document, are forward-looking, which reflect the Company’s or, as appropriate, the Company’s directors’ current expectations and projections about future events. By their nature, forward-looking statements involve a number of risks, uncertainties and assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. These risks, uncertainties and assumptions could adversely affect the

outcome and financial effects of the plans and events described herein. Forward-looking statements contained in this document regarding past trends or activities should not be taken as a representation that such trends or activities will continue in the future. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should not place undue reliance on forward-looking statements, which speak only as of the date of this document. No statement in this presentation is intended to be nor may it be construed to be a profit forecast.

By attending the presentation to which this document relates or by accepting a copy of this document you agree to be bound by the foregoing limitations and, in particular you will be taken to have represented, warranted and undertaken that you have read and agree to comply with the contents of this notice.

This presentation has been compiled by CORESTATE Capital Investors (Europe) GmbH a company of the CORESTATE Capital Group, 20.07.2020.