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REPORT
Savills Research

World Research 2020

Global Living

savills

Foreword

In a year of uncertainty, the operational residential sector has shown remarkable resilience. Significant numbers of global investors are recognising the value offered by a sector with strong underlying fundamentals.

Investment into operational residential real estate (which includes sectors such as multifamily, co-living, student accommodation and senior living) reached an all-time high in 2019. That came despite rising economic headwinds. When those headwinds strengthened after Covid-19 became a global pandemic, operational residential real estate continued to show resilience, with investment volumes holding up better than for other established real estate asset classes.

This resilience is due to strong underlying fundamentals. Housing is a basic need, and many markets are chronically undersupplied. Young people, meanwhile, moving to urban centres for work and study, have driven demand for rental residential accommodation. This is a trend unlikely to be altered by the pandemic in the long term, and coupled with rapidly ageing populations, means that there is an urgent and growing need for purpose-built accommodation for all age categories.

Once considered alternative, operational residential has become a mainstream investment asset class and the defensive benefits of investing in beds are set to continue. Investors, seeking portfolio diversification prior to the pandemic, have doubled down on their 'beds and sheds' strategies in a bid for secure income streams.

Significant opportunity remains. Barriers to home ownership, changing cultural norms and better quality product means that renting has become a more desirable option for all age groups. Larger, cross border management platforms will further improve the user experience, while bringing efficiencies to investors.

While Covid-19 has brought near-term challenges, the response to climate change remains perhaps the greatest long term challenge, and opportunity, for the sector. Tackling climate change and making a positive difference for society are causes that have moved up the global agenda across all industries. Investors in operational residential are getting serious about this, as our ESG survey of the sector shows.

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“Operational residential real estate has proven resilient to date”

New economic realities

The new economic conditions brought about by the Covid-19 pandemic bring challenges for operational residential real estate, but the sector remains more resilient than most.

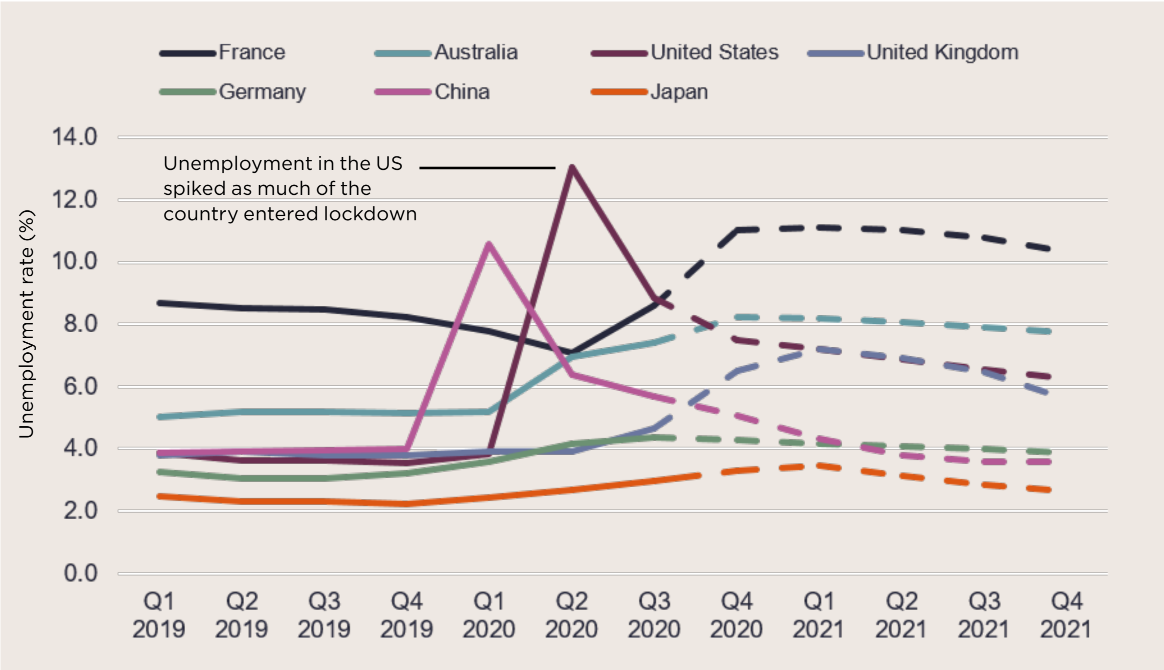
Operational residential sectors, whether multifamily, student or senior living, have experienced significant growth globally over the past five years. Demographic trends such as urbanisation and an increase in household numbers, the desire for flexible living, increased mobility and affordability constraints in the sales market have driven demand from renters. Interest from global investors in these operational residential asset classes has increased considerably as a result.

For investors, these assets have provided the opportunity to diversify away from more traditional real estate sectors, and to receive secure income-streams. Investment volumes in the sector increased by 58% from 2014 to 2019, compared to just 21% for all real estate investment.

The world now looks a very different place as a result of Covid-19. Travel restrictions and social-distancing measures are the new norm for the foreseeable future. The pandemic has also brought economic challenges as business activity has slowed.

The impact has not however been felt equally across all real estate asset classes. Operational residential real estate has proven relatively resilient to date. Housing is a basic need - people still need a place to live during an economic downturn. The demand for rental housing can even rise during periods of uncertainty, should stricter lending criteria slow demand in the sales market.

Global unemployment rates and forecasts



Source Savills Research using Oxford Economics

Unemployment: a global comparison

The multifamily sector is most attractive at times of economic growth, when employment prospects improve and wages rise. This makes rent increases easier for tenants to absorb. However, the Covid-19 pandemic has caused a rise in unemployment and created an uncertain jobs market in many countries around the world.

Lots of national governments have implemented furlough or similar job retention schemes, which have so far prevented the full impact on jobs being realised. Once these schemes end, unemployment levels are expected to rise further. The ability for rental growth will be more limited in such an environment.

The target market for many multifamily developers, higher-earning professionals, has to date been less susceptible to disruption to employment as a result of Covid-19. In the UK, for example, employees in the accommodation and food services and arts, entertainment and recreation sectors saw the highest share of total employments furloughed. By comparison, finance and insurance stood at just 3% as of August 2020.

“Evidence from Europe and US operators shows strong multifamily rent collection levels”

Global unemployment rates and forecasts

The effects of Covid-19 were felt fastest in the US, where the jobs market is particularly flexible and reactive. Here, unemployment rose quickly in the early stages of the pandemic, up to 13.0% in Q2 2020 from 3.8% in Q1 2020, according to Oxford Economics data. Unemployment has since fallen, as lockdown measures have eased and economic activity resumed. It stood at 8.4% in August 2020, according to the US Bureau of Labour Statistics.

Unemployment rates in Europe have risen more gradually, with furlough schemes introduced in some countries. The UK's furlough scheme has been extended to March 2021, with employees receiving 80% of their current salary for hours not worked. In other European countries, such as Germany and France, the schemes have been extended until the end of 2021.

In Asia Pacific, Australia entered its first recession in nearly thirty years as a result of the pandemic and unemployment is forecast to rise in a similar pattern to European countries. By comparison, Japan has been less severely impacted by the pandemic and their unemployment rate is anticipated to remain low by international standards. China is expected to see unemployment return to pre-pandemic levels by the second quarter of 2021.

US: Share of typical rent received by asset April-September

Sector	April	May	June	July	August	September
Industrial	97.0%	95.7%	97.8%	99.4%	N/A	N/A
Office	93.0%	92.5%	97.4%	96.3%	N/A	N/A
Apartments	93.8%	94.8%	96.0%	95.7%	96.0%	95.7%
Health Care	90.4%	90.3%	94.9%	95.2%	N/A	N/A
Retail - Free Standing	72.7%	70.1%	79.3%	91.4%	90.5%	94.9%
Retail - Shopping Centres	50.2%	49.1%	60.6%	69.5%	80.2%	81.6%

Source: NAREIT

What do the early signs tell us?

Evidence from European operators is positive. Grainger, the UK's largest listed residential landlord, reported rent collection of 95% in September, while occupancy dropped to 91% compared to 97% a year earlier. Savills UK Residential Management team report that the multifamily (Build-To-Rent) portfolios over 3,000 units under their management achieved 97% rent collection in Q3 2020.

Vesteda, an institutional residential investor in the Netherlands, also reported a limited negative impact on occupancy in their half-year report. Occupancy stood at 97.5% as of June 2020 compared with 98.1% at the same point the year before.

In the US, a survey by NAREIT (National Association of Real Estate Investment Trusts) found that rent received for multifamily assets fell to 93.8% of normal levels in April – the initial period of the pandemic. As economic activity increased along with the easing of lockdown restrictions, the ability of tenants to meet their rent obligations also increased. As of September, the share of typical rent received for multifamily assets stood at 95.7%.

Looking ahead, the forecast weaker economic environment may create more sensitivity to a rise in rent levels. Affordability will be key and the multifamily sector will need to adapt to this. Diversifying the product offering to meet a greater range of price points might need to be considered.

Rental affordability

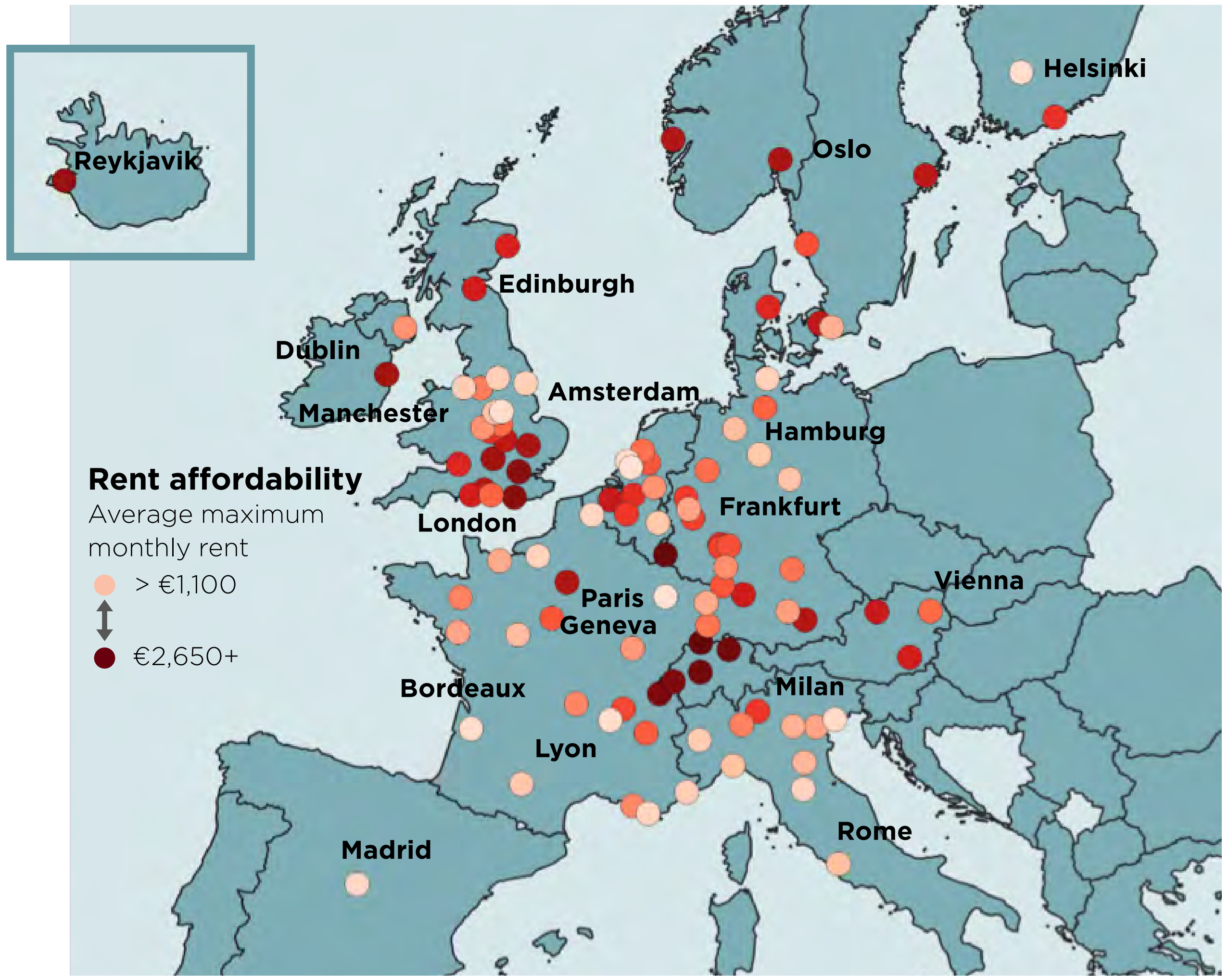
The new economic realities brought about as a result of Covid-19 mean rental affordability will be more important going forward. The amount that people are able to spend on rent varies significantly by geography.

Assuming the absolute maximum amount households can spend on rent is 30% (the traditional ratio to measure affordability according to a report by the UK's Affordable Housing Commission) of household income, we can see how affordability varies for the top 100 cities in Europe ranked by average household income (see map).

Cities in Luxembourg and Switzerland rank the highest. Cities here all have an average maximum affordability of over €2,200 per month. Luxembourg ranks the highest of all, at €3,380 per month.

Cities in the UK rank comparatively high. London is the highest ranked city in the UK and seventh overall, at €2,040 per month. Dublin also ranks highly, at tenth overall, with a household affordability of €1,720 per month.

Household rent affordability comparison Top 100 cities in Europe by average household income



Source: Savills Research using Oxford Economics

> “As sales markets start to cool in some countries, the multifamily sector has the opportunity to meet housing needs”

Multifamily viability

The economic viability of the multifamily (or Build-to-Rent) sector compared with the traditional build-to-sell (BTS) model has been a big barrier to delivery in some markets, particularly where land values are high. Yet rising economic uncertainty coupled with government incentives is beginning to tip the balance in favour of multifamily.

Incentivising the sector

Public incentives can help improve profitability and increase delivery. In China, house prices have seen remarkable growth, especially in key cities, creating similar affordability constraints seen around the world. To incentivise the rental market, the government released land plots specifically for the development of rental apartments at reduced pricing. Land is one of the largest input costs in China's major cities, so lower land prices dramatically reduced the cost of development. Recently, there has been a fall in land allocated for lease only. Governments want more income for land, and there is a push for conversions of commercial assets to rental units. This means there is likely to be less new-build in the future, though the leasing market is expected to continue to grow.

In Australia, the multifamily sector is taking off. Since the start of the downturn, the New South Wales government has acknowledged the need to boost the housing construction industry. The State Government announced a 50% land tax discount on new (post July 1st 2020) purpose-built, single-ownership rental units, over a threshold of 50 units.

An exemption from foreign investor surcharges will also be provided until 2040 for multifamily developers.

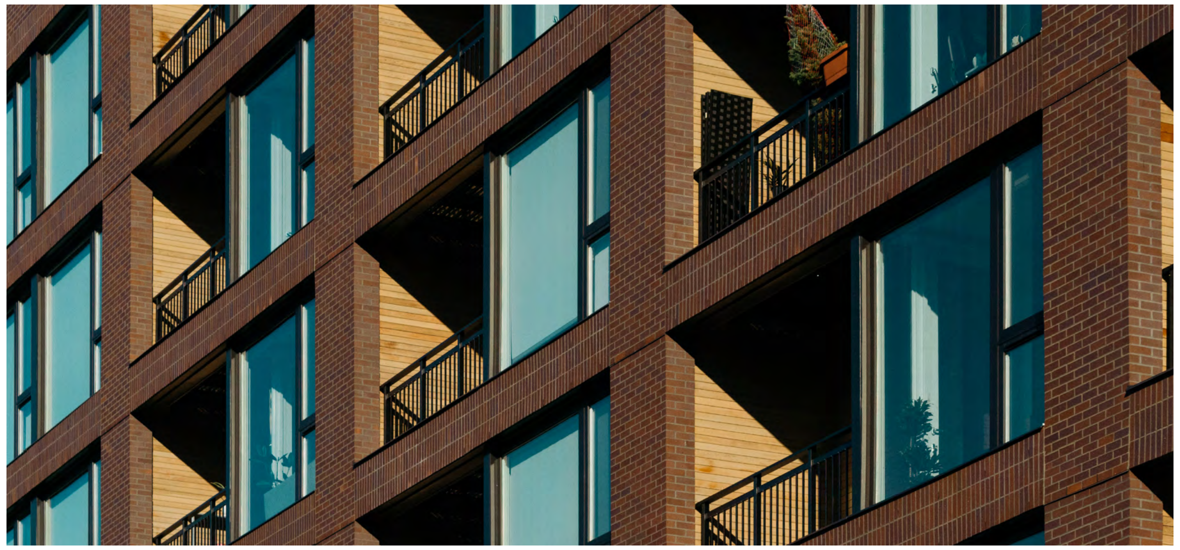
In the US, the multifamily market is large and mature. Incentives vary by state, but are largely targeted towards the construction of affordable units. In New York, for example, tax credits are awarded to new developments (or substantial rehabilitation projects) where 20% of units are reserved for low-income households.

The view from Europe

Such incentives are less prevalent across Europe. In the UK, there is no separate planning use-class for private rented property, so any site suitable for residential development can be used either for homes for sale or rent. High land values have been the main issue preventing delivery in high-value markets outside London, such as Oxford and Cambridge.

Germany is Europe's most mature multifamily market. Many municipalities have regulations which oblige developers to build a certain proportion of affordable rental housing, because of housing shortages and rising rents.

In September 2020, the Dutch National Government announced €290 million in financial incentives to the construction of 27 residential projects, totalling 51,000 dwellings, most of which are multifamily, student or senior units. Similar incentives may become more common in a weaker economic climate if governments need to incentivise residential construction to meet housing shortages.



Do the new economic realities present an opportunity?

In times of strong economic growth and high purchaser demand, the BTS model is often more profitable for developers. In Spain, for example, residential developers have primarily been focused on the BTS model for this reason.

Now, certain developers in Spain are turning their attention to the multifamily sector, with the aim of diversifying and mitigating risk during this period of economic downturn. The recurring income generated by multifamily assets is viewed as a way to protect against slower BTS sales.

As sales markets start to cool in some countries, the multifamily sector has the opportunity to meet housing needs. This is not limited to inner-city apartment living either, particularly as less densely populated areas grow in appeal following the pandemic. If the sales market is seen as riskier or less attainable in times of uncertainty, the rental market benefits as an alternative. Quality multifamily – and increasingly single-family – rental assets can capitalise on this.

Focus on student housing

Prior to Covid-19 global student mobility had been booming – what might the long term implications of the pandemic be for the sector?

The pre-pandemic picture

In recent years, students have been moving around the world more than ever before. In 2017, over 5 million students studied abroad, according to figures from UNESCO. A large proportion of these globally mobile students are from the Far East. China is the largest source market, but an increasing number come from India, which has seen faster growth in outbound students as the country's wealth has increased.

Greater international student mobility has gone hand-in-hand with a growing, global, purpose-built student accommodation (PBSA) market. International students have contributed significantly to the success of this sector. Unfamiliar with local housing markets and often possessing greater budgets than domestic students, they have acted as an important and growing demand base.

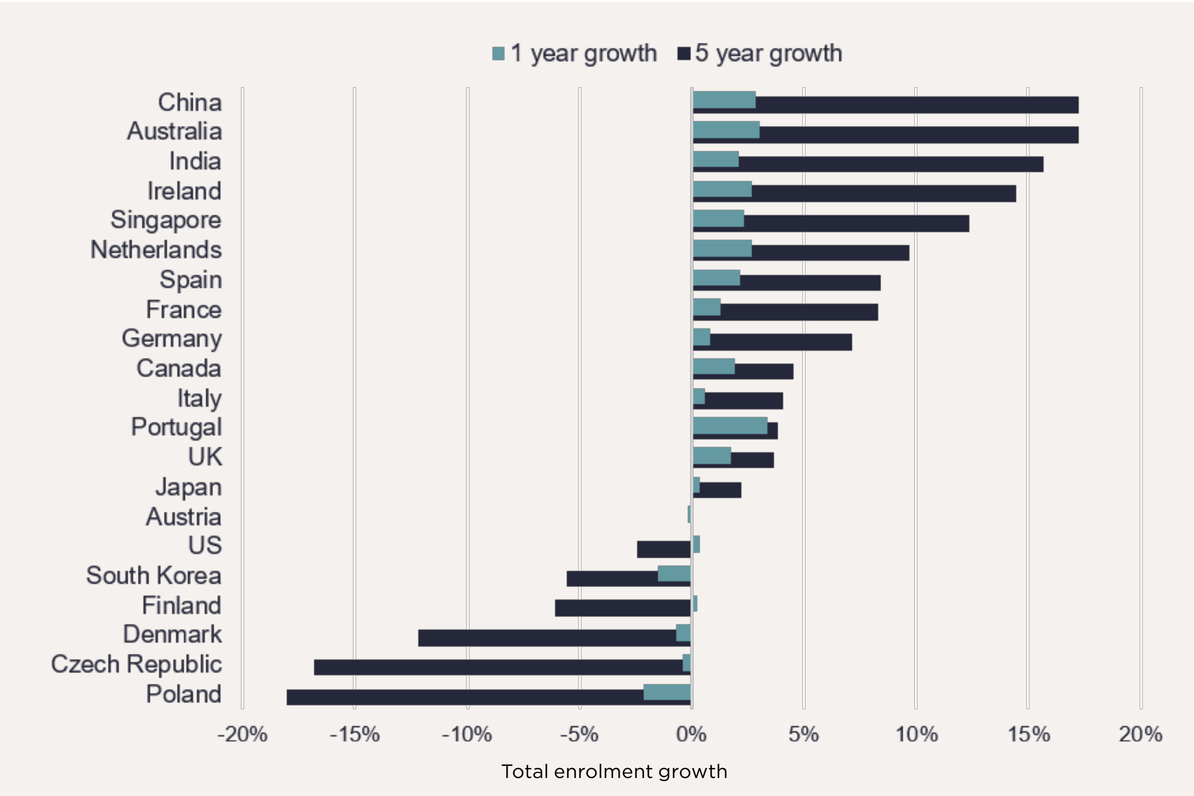
Investment volumes in the sector have grown considerably in recent years, increasing 135% between 2014 and 2019.

University degrees from English-speaking countries are highly desirable for international students and so Anglophone markets tend to be the most attractive destinations. The US is the largest inbound market for international students, followed by the UK.

Australia has also seen fast growth in recent years, benefiting from its proximity to major source markets such as China and boasting attractive post-study employment rights. The latest data shows that international student enrolment in Australia increased by 21% between 2017 and 2019, compared with 10% in the UK (between the 2016/17 and 2018/2019 academic year).

Attracting international students has helped universities, particularly in the UK and the US where the student-age population has declined, making up for a natural fall in domestic enrolment. International students also make a significant economic contribution, often paying higher tuition fees than domestic students. In the UK for example, the Institute for Fiscal Studies estimates that international students made up 37% of total fee income for UK universities for the 2018-19 academic year, despite accounting for only 20% of students. This has made the competition amongst universities to attract international students greater than ever before.

Before the pandemic Higher education enrolment by country



Source: Savills Research using higher education statistics
Note: Growth to the 2018/19 academic year, or latest available

"Some universities in the UK chartered flights to bring international students over, highlighting how valued they are"

What has Covid-19 meant for universities?

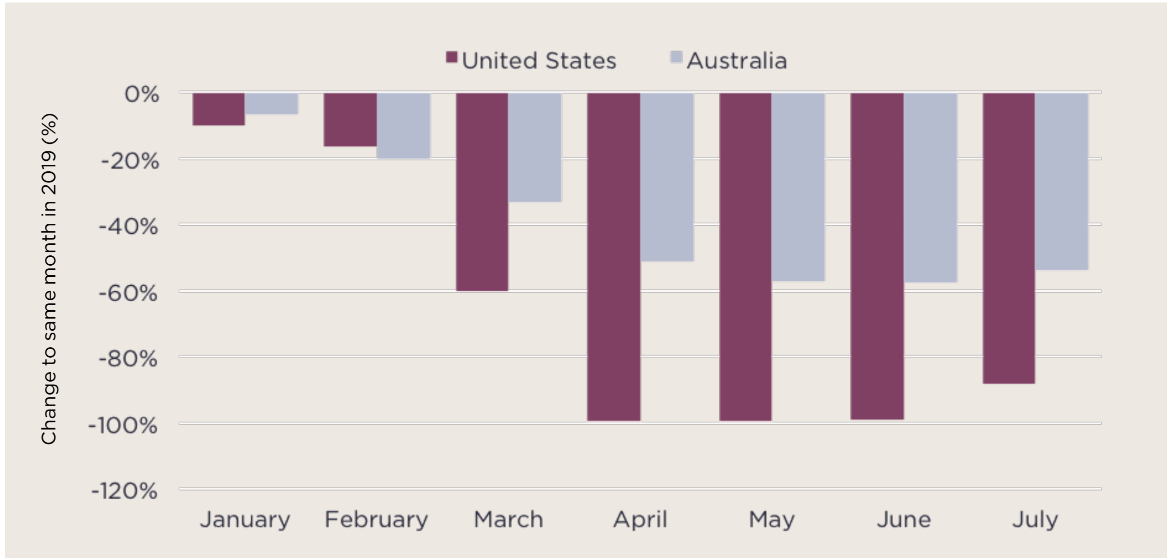
When the pandemic first hit, many universities were forced to close their campuses to prevent the spread of Covid-19. Any students unable to travel home were restricted to their accommodation and lectures were shifted online. With the new academic year now underway, universities, students and accommodation providers alike, are adapting.

The real impact on student numbers will not be known for some time. Early indicators suggest there is likely to be a moderate fall and given the current travel and social restrictions in many countries, this would not be a surprise.

In a survey by QS in September 2020, 69% of respondents stated that Covid-19 had impacted their plans to study abroad. The majority of these (57%) said they planned to defer their entry until next year.

Visa data also gives us an indication of how student mobility has been impacted. In the US, consulates stopped issuing all visas in late March and the number of student visas issued consequently fell dramatically (see chart). Visa issuance resumed again in July but the number of student visas issued remained well below the same month in 2019 and annual figures are likely to remain below 2019. Data from Australia tells a similar story.

Monthly Student Visas Issued Comparison to 2019



Source: Savills Research using US Department of State and Australian Department of Home Affairs

Focus on Europe

Some early signs here are more positive. In the UK, the latest data from UCAS shows that applications from non-EU international students for September 2020 rose 9.6% compared with 2019. The number of EU student applications fell by only 2%, in spite of Brexit-related uncertainty.

In France, initial data also does not suggest a significant drop. According to the Ministry of Education, around 90,000 international students have submitted applications for the 2020-21 academic year compared with 100,000 last year. The deadline for applications was extended to 15th October.

The UK, and other European countries, could benefit as other countries have taken a tougher stance on international students. In Australia, all international arrivals were banned in March, virtually bringing to a halt the flow of international students, but has begun to bring international students back with the help of state government led programmes.

The US initially proposed removing visas for students taking their entire course online. This was reversed later (a similar decision has been imposed in Germany for new students, but not existing ones). At the same time, some universities in the UK chartered flights to bring international students over, highlighting how valued they are and making the UK appear more welcoming. Political tensions could see the US fall out of favour with Chinese students, potentially benefiting the UK and other European countries. In September 2019, the UK Government changed the law to allow international students to remain in the UK for two years after graduating, up from just four months previously. The UK now has one of the most generous post-study work visa systems in the world.

Domestic enrolment

The pandemic halted school exams and students in some countries were given centre assessed (or similar) grades. In the UK, this left a larger than usual proportion of school leavers with the grades needed for university, and the number of 18-year olds going into higher education increased by 5% compared with 2019. In France, the entry success rate jumped to 95.7% in 2020, from 88% in 2019. Student enrolment is expected to increase 2.1% from last year.

Initial figures do give us some indication, but these numbers are not final and the actual number of students who turn up or drop out will not be known for some time. The university experience will be different this year, which may influence students to defer their studies. For international students, travel restrictions and risks of further waves of the virus will also hinder arrivals.

Implications for PBSA

International students are an important source of demand, so a fall in arrivals could create challenges for some PBSA providers - particularly those at the premium end of the market where affordability is a greater concern.

Initial signs from Europe are mixed. Markets where there is a lack of supply of good quality PBSA have proved resilient. In the Netherlands, many long-stay providers are still fully booked, such as Our Domain in Amsterdam for instance.

In Germany, the Deutsches Studentenwerk, with 194,000 beds, is the largest (non-profit) operator of PBSA in Germany. In July, it announced that its vacancy rates were between 5% and 10%. Tenants often have semester contracts. The company is expecting further occupancy problems for the winter term. For context, Studentenwerk usually announce that they are fully occupied.

When a non-profit operator like the Studentenwerk expects occupancy problems, we can assume similar or even higher risks for the private PBSA sector, which targets international students and has higher price points. The Student Hotel in Dresden, for example, has closed for an indefinite period due to the pandemic. In Spain, PBSA providers are seeing pre-bookings at around 60-70% of the levels from September 2019.

In the UK, The Unite Group's Q3 2020 results showed a modest hit from Covid-19. 88% of beds were let across their portfolio, compared with 98% at the same point last year. Unite also reported that rental income was down by 10-20% compared with 2019/20.

One factor that has underpinned the sector is the undersupply of student beds across Europe. In Germany and France, for example, provision rates (defined as the number of beds to students) stand at around 12% and 16% respectively, but are even lower in some cities.

Schemes located in cities where provision is the lowest should prove the most resilient over the coming year (or more), and any rise in domestic enrolment should help sustain occupancy levels in these locations.

The shift to online

A survey by Universities UK found that 97% of UK universities planned to provide some in-person teaching in 2020/21. Universities will however have to adapt to the new reality, which means a greater online presence than before. A survey by QS in September 2020 found that just over half (51%) of respondents stated their course was being taught entirely online.

Students may not feel the need to move into student residences if most or all of their course is online. Those who are within commuting distance may decide that travelling in once or twice a week is now the more logical solution, especially as the experience within student residences will be different.

Some countries have taken a tough stance on issuing visas for international students whose courses have shifted online. For some international students, taking an online course from another country may not be realistic, due to difficulties such as time differences and access to adequate internet.

For those who do manage to travel, the likelihood is that more of their study will be done from their residences than in previous years. For PBSA providers, ensuring their residents can stay connected will be vital, as well as providing adequate space to study.

More than just learning will shift online. The important social element of the university experience will also have to adapt. Networking, sports clubs and other societies will have to host at least some events online too. For example, e-sports offerings at some universities in the US, such as Brown University and MIT, have increased since the pandemic, with popular games like League of Legends seeing increased take-up. This was an emerging trend prior to the pandemic, but will now be accelerated globally. Online socialising may be a solution for now, but long-term it can't replicate the life experience that traditional university living provides.

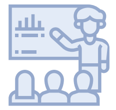
The flight to quality

A big question for many students will be whether a partly online course is still worth the same fees. This may depend on the university in question. The University of Cambridge has said that it will offer lectures online for the entire 2020-21 academic year. Smaller teaching groups will still be held in person, as long as social distancing requirements are met.

As one of the highest-ranked universities in the world, people will likely still see value in a Cambridge degree, even if it is mostly online. For mainly online courses to be viewed as valuable, universities may need to re-think their teaching model. Online lectures could be engaging if they are a high-quality and interactive experience.

In the UK, centre-assessed grades created a rise in interest for higher-ranked universities as students received better grades, but lower-tier institutions saw little change.

The universities with the strongest finances will be more resilient during this time. Smaller, lower-ranked universities may feel the burden more. Even more so if they were already struggling prior to the pandemic. Universities that have become dependent on international students may also feel a greater burden. Chinese students were estimated to make up just under a quarter of the total last year at the University of Sydney, for example.



> "Mainland European markets with a combination of low tuition fees and accommodation costs could become more attractive to cost-conscious, globally mobile students"

Price sensitivity

In a weaker global economic environment, universities which offer value could be favoured. Assuming international students can make the journey, markets such as Germany and France, where fees are lower, could benefit. There is a smaller choice of highly-ranked universities however, than in the US or the UK. Neither Germany nor France has an institution ranked higher than 50th in the QS World University Rankings 2021. PBSA located near higher-ranked universities with competitive fees could prove particularly resilient.

Locations which offer good-value accommodation could also benefit, should students weigh up the advantages against the costs of relocating in this increasingly online world. Mainland European markets with a combination of low tuition fees and accommodation costs could become more attractive to cost-conscious globally mobile students.

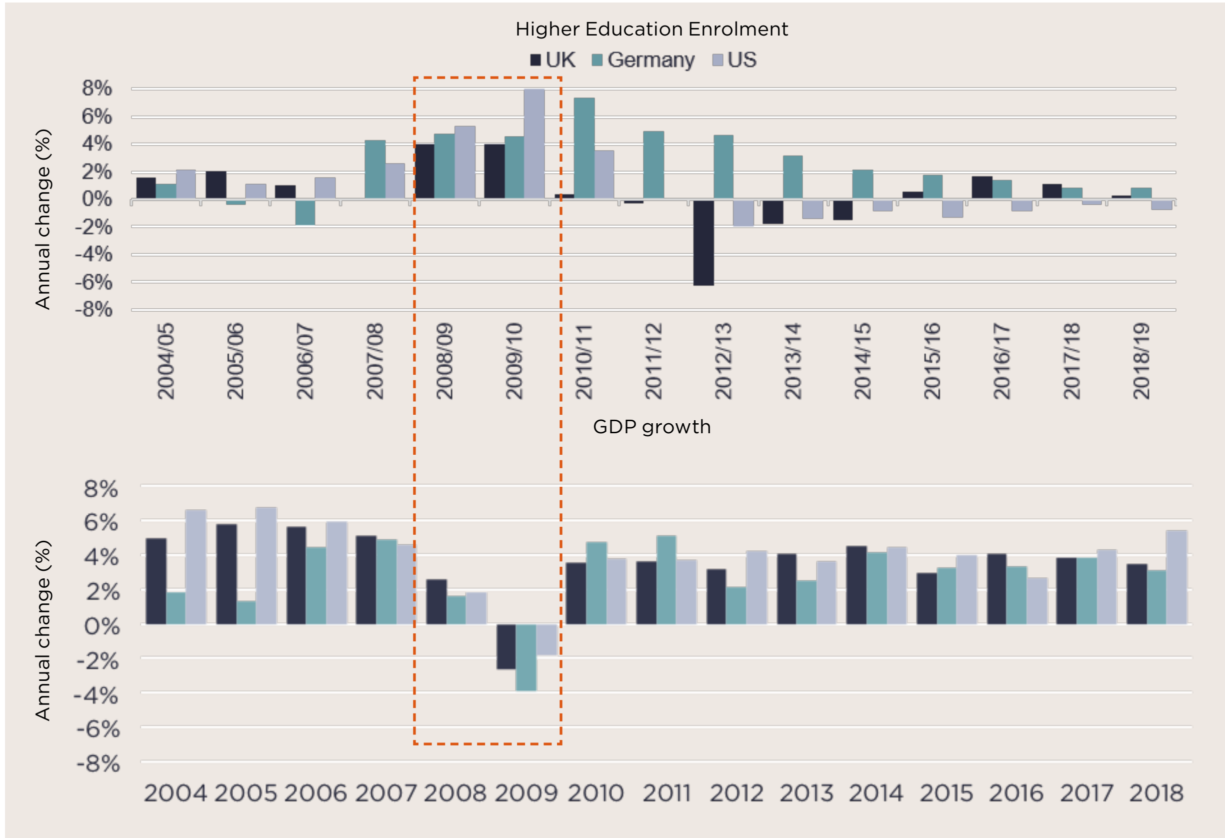
Looking ahead

Is this just another downturn? During previous economic slumps, higher education enrolment has proven counter-cyclical. When job prospects are weaker, people are inclined to use the time to upskill and hence enter higher education (see chart below).

Early indications from 2020 enrolment figures suggest resilience. In normal times, a rise in student enrolment should create increased occupier demand for PBSA. But, current travel restrictions may hinder international arrivals, an important occupier group.

In the near-term, the university experience will be different. With more online teaching and less opportunity for socialising in person, value for money matters more than ever. Higher-tier universities are likely to fare better as a result. Well-regarded institutions in mainland European markets, where tuition fees are low, may also benefit.

Higher Education Enrolment and GDP Growth UK, US and Germany



Source: Savills Research using Oxford Economics, US Department of Education, HESA and German Federal Statistical Office

Note: For enrolment chart 2018 refers to 2018/19 academic year

Housing solutions for an ageing society

As life expectancy increases and people live healthier lives for longer, where and how the 'super-aged' are going to live can't be ignored. For real estate investors, this presents an opportunity.

Super-aged tipping point

According to the UN, we're on track for the worldwide number of over-65s to more than double to 1.5 billion by 2050. But many cities are already at the super-aged tipping point, defined as where the 65-plus age group makes up more than 20% of the population. These cities are mainly in Japan, Germany, Italy and France.

Joining them soon will be Russia, Spain, Poland and the USA. By 2035, China will have 71 super-aged cities and the USA will have 53.

While they are over 65, this is a youthful, healthy and mobile group of people.

This creates a major opportunity in senior living, and specifically the 'housing with care' subsector, a range of residential formats for older people that have broad appeal for investors. At its core, housing with care recognises this generation's ability to live independently for longer, while also offering the benefits of being part of an organised community.

From independent-living housing schemes and retirement villages through to those with light-touch support, such as assisted living or extra care, super-aged living is a clear gap that needs to be filled. Yet, it is underdeveloped in many markets and requires an understanding of cultural, regulatory, and operational factors in order to unlock its growth potential.

Global leaders in housing with care

We can learn a lot from countries such as New Zealand and Australia, global leaders with major listed and private players who own large portfolios of retirement villages. Here, a transparent regulatory foundation for what operators and residents can expect has tipped the sector into meaningful growth. The USA, the most mature market globally, offers transferable lessons on integrating diverse housing formats and tenures on one campus.

However, market entrants need to be mindful of cultural and social differences. The relative vitality of future generations means that more are likely to be nationally or internationally mobile, and will want their housing to reflect this.

Culture and ageing in place

For now, those with a more traditional attachment to their family home tend to be falling in line with government policy, which is to encourage 'ageing in place' or providing services in the family home.

Singapore, for example, encourages downsizing, while supporting ageing in place by offering bonuses or promoting multi-generational living in apartments suited to three generations of family.

Prioritising 'ageing in place' could change for many markets if more of the right kind of product shows the benefits of communal living (which also frees up traditional housing stock).

There are also different traditions around caring for older generations. In Asia, culture dictates that parents are cared for by their children in old age. In China, it's the law. Taiwan cuts off the inheritance of neglectful children. While these deeply-held beliefs might make these markets appear more challenging, just a small proportion of housing with care in each would offer huge investment potential.

Global models for housing with care

Housing with care is set to become a major real estate sector for investors. Think of it like student housing – operational assets that quickly became mainstream for many investors. It offers all the traits that attract investment into residential alternatives: a deep and growing demand, a lack of supply in many markets, and a consistent and secure rental income stream.

The market is moving towards a more flexible offering of tenure, with both traditional sale and rental models now being offered. With an attractive supply/demand imbalance, the potential for long-term stable income profiles and the chance to diversify from more traditional sectors, housing with care presents real estate developers, investors and operators with significant opportunities across Europe and beyond.

> "The market is moving towards a more flexible offering of tenure, with both traditional sale and rental models now being offered"

Global Investment

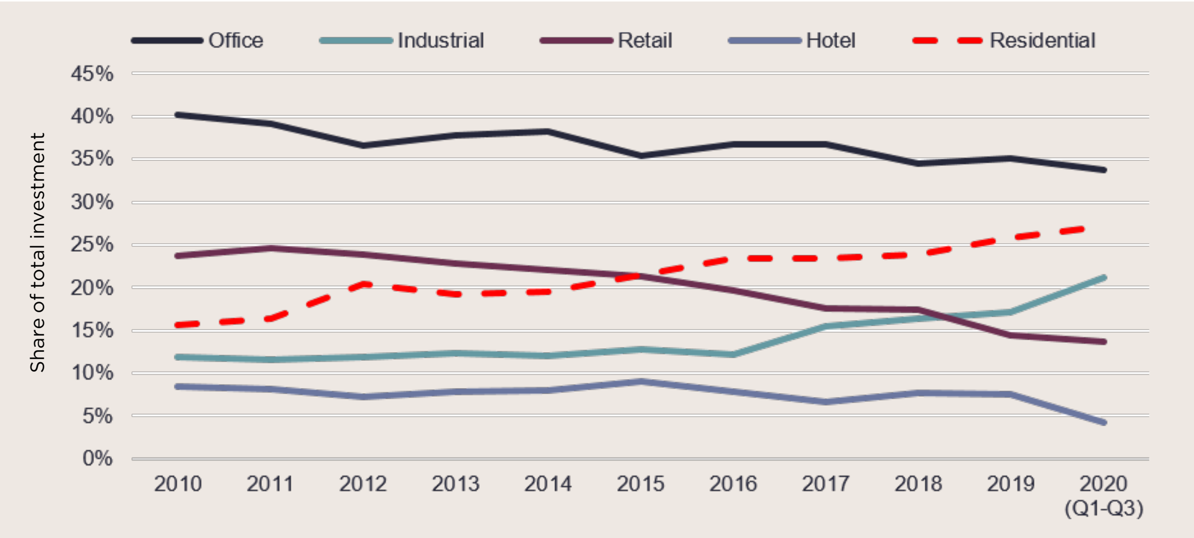
Investment in operational residential assets has proven resilient as investors double down on 'beds and sheds' strategies.

Investors' focus on operational real estate has been growing over the past decade. Strong underlying fundamentals, stable income-streams and the desire to diversify portfolios have significantly increased investor appetite for these assets. Residential investment accounted for 27% of global real estate investment in the first three quarters of 2020, up from just 16% a decade ago.

The operational residential sector's fundamentals hold true in today's challenging macro environment. People still require a place to live, and demographic trends and affordability constraints will continue to drive demand for rental accommodation. Total investment into operational residential reached $297bn in 2019, a new record.

Testament to the sector's resilience, volumes in the first three quarters of 2020, set against the same period in 2019, were down 31%. This compares to a 37% fall in office sector volumes, and a 38% fall in retail. Only industrial saw a smaller decline in investment volumes (-16%) compared to the same period in 2019.

Residential investment share rises as investors pursue 'beds and sheds' strategies



Source Savills Research using RCA

Which investors have been most active?

Investment activity over the past year in the operational residential sector has been driven largely by consolidation. Despite wider global uncertainty, a number of major deals have completed – several at such a large scale that national records were broken.

Cross border investors have increased their participation. Total cross border investment into residential stood at just over $46bn in the four quarters to Q3 2020, accounting for 20% of total investment in the sector. This is up from the 14% that cross border deals accounted for just four years ago, in 2016.

Multifamily

By far the largest of the global residential subsectors, $223bn traded in 2019, the highest on record. Some 71% of this was in North America, the largest and most mature market, followed by Western Europe, at 24%. As the sector develops outside the US, the Western European (including the UK) share increased to 27% in the first three quarters of 2020. Germany was once again the largest market in Western Europe, with €15.6bn of transactions in the first three quarters of 2020, according to Savills data.

German operator ADO properties was the largest multifamily investor by volume globally in the four quarters to Q3 2020. It merged with fellow German operator Adler Real Estate for around $5bn. The combined group now manages a portfolio of around 80,000 rental units in Germany. The largest cross border deal was from another German operator, Vonovia. It purchased Swedish operator Hembla in Q4 2019 for around $3.5bn.

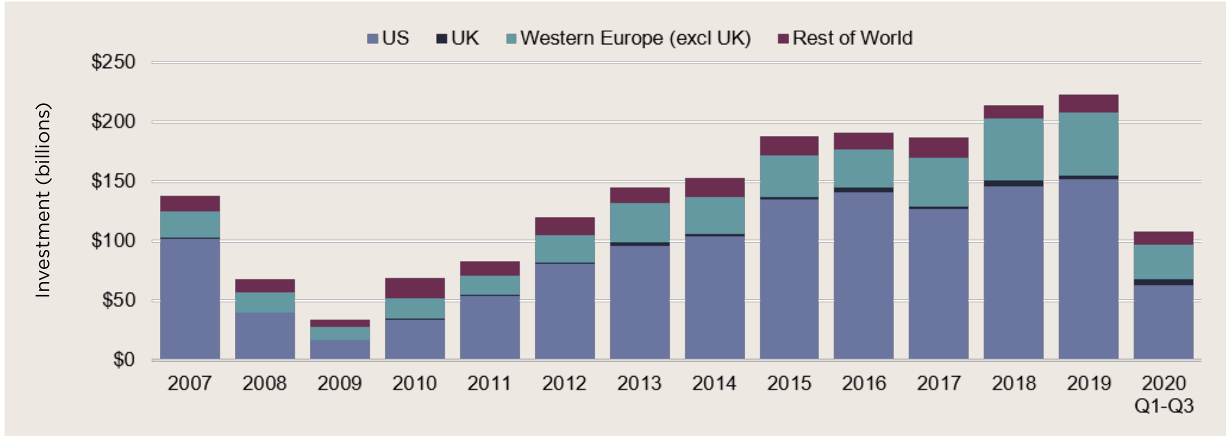
Blackstone remains very active in the sector, one of the largest cross border investors over this period. The American private equity fund completed a number of deals, including the purchase of a Japanese multifamily portfolio from Anbang for $2.8bn. The deal was the largest real estate deal ever in Japan.

Further consolidation in the multifamily sector is expected. Starlight Investments, a Canadian investment manager, is to purchase Northview Real Estate Investment Trust (REIT), a major Canadian multifamily landlord, joint with KingSett Capital (a Canadian equity fund). The portfolio includes 27,000 residential units across Canada and is expected to close at $4.5 billion in November 2020.

27%

"Residential investment accounted for 27% of global real estate investment in the first three quarters of 2020"

Global investment into multifamily



Source Savills Research using RCA

Student housing

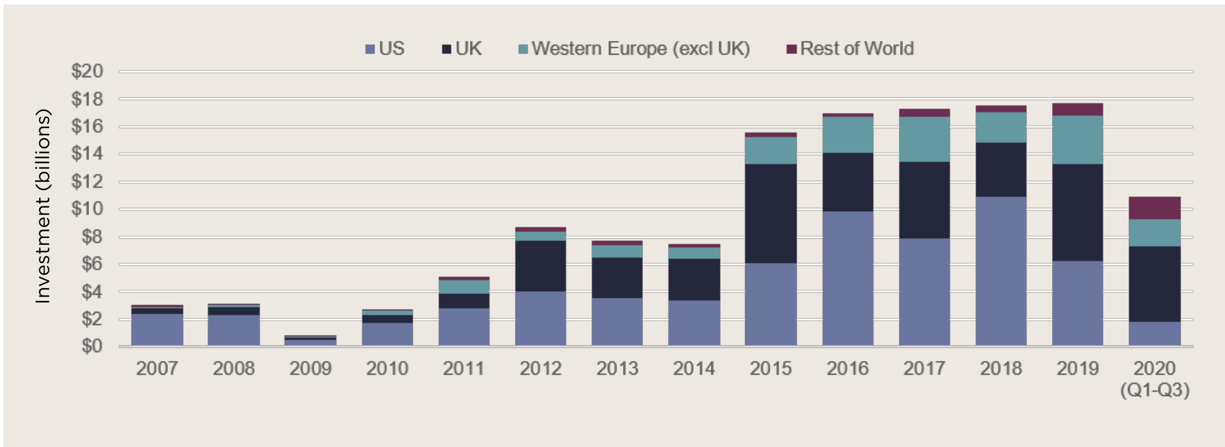
Total student housing investment volumes reached $17.7bn in 2019, the fourth successive year volumes exceeded $16bn. In spite of headwinds, volumes in the first three quarters of 2020 still stood at 62% of 2019 levels.

Blackstone was again a dominant force. Their private equity fund purchased iQ Student Accommodation for $6bn, completing in the second quarter of 2020. The deal was the largest private property deal ever in the UK.

As with multifamily, consolidation was a driver in the student housing sector. In the UK, Unite Students REIT purchased Liberty Living from the Canada Pension Plan Investment Board (CPPIB), for a reported $1.8bn.

French Insurance company AXA Group, meanwhile, was the next largest student investor over this period, and the second largest cross border investor behind Blackstone. AXA purchased French operator Kley, with 2,500 beds, in late 2019. AXA also jointly purchased (along with German insurer Allianz and Dutch pension fund APG Group) Urbanest Australia, the owner of Australia's largest PBSA portfolio. It represented the largest ever student accommodation transaction in Australia and reflected a new low in terms of net initial yields for the sector in the country.

Global investment into student housing



Source Savills Research using RCA

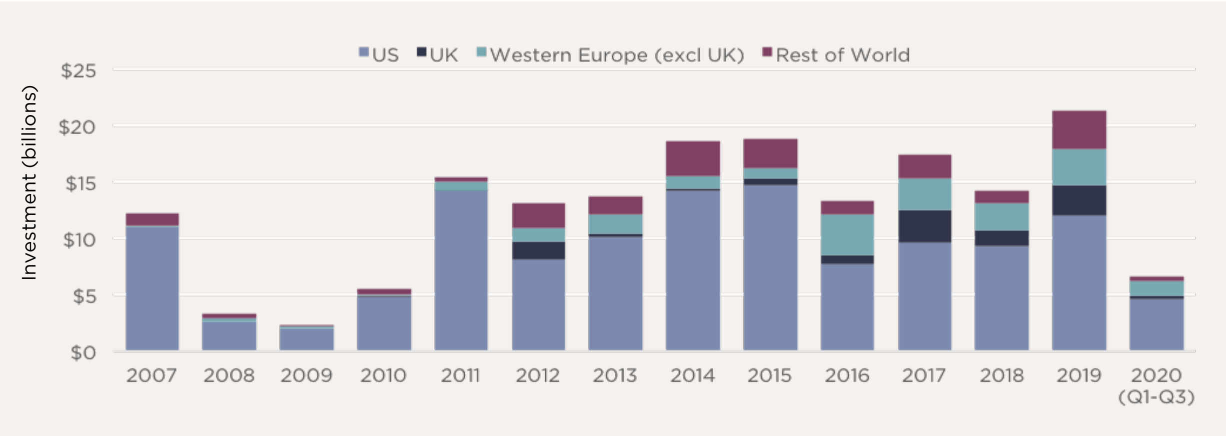
Senior living

2019 was a record year for senior living investment globally, with volumes reaching $21.4bn. Investment in the first three quarters of 2020 has remained subdued to date, 69% below 2019 volumes. Western Europe's share of total investment (excluding the UK) increased to 20% for this period, up from 15% for 2019.

Brookfield Asset Management was the largest investor in senior living in the four quarters to Q3 2020. The Canadian firm purchased Australian senior living operator Aveo in late 2019 for $1bn.

The next ten largest investors were all US based, reflecting the sector's maturity there. Omega Healthcare, a REIT, and investment manager Harrison Street were among the most active over this period. Both investors completed large US portfolio deals in late 2019.

Global investment into senior living



Source Savills Research using RCA. Data excludes nursing care

Prime net yields Q3 2020		
	Multifamily	PBSA
Munich	2.10%	N/A
Berlin	2.80%	3.50%
Frankfurt	2.70%	3.50%
Hamburg	2.50%	3.50%
London	3.25%	3.75%
Paris	2.80%	3.70%
Amsterdam	3.25%	4.00%
Utrecht	3.50%	5.30%
Stockholm	3.75%	4.25%
Helsinki	3.30%	4.30%
Oslo	3.50%	4.00%
Copenhagen	3.50%	3.50%
Dublin	3.60%	N/A
Barcelona	3.10%	5.00%
Madrid	3.10%	5.00%
Milan	N/A	5.00%
Australia*	4.75%	5.75%
USA	5.14%	5.49%

Stated yields are direct let
*blended country wide (off-campus) stabilised direct let single assets
Source: Savills Research

Yields

For both multifamily and student housing, yields have generally moved in recent years as the residential asset classes have matured.

In Europe, multifamily yields are now stabilising in most markets, following a significant inward yield shift trend over the past five years.

Further yield compression in the coming year is likely to be more limited as the impact of Covid-19 subdues rental growth ability.

60%

“ increase in dry powder targeting the operational residential sector ”

Single-family home REITs expand the market

In the US, single-family home REITs are now well established and provide a glimpse of the sector's potential globally. Focused in fast-growing sunbelt metro areas, their model plays particularly well to growing occupier demands for more space, a trend accelerated by the pandemic. They also appeal to those looking for a single-family home but not yet able to afford a deposit to purchase. Unlike 'lumpier' multifamily blocks, the model is easier to scale in response to demand.

Invitation homes, one such REIT, announced in October a $375m joint venture with investor Rockpoint group to acquire additional single family homes for their 80,000 home rental portfolio. Also in October Nuveen announced plans to invest up to $400m in its own vertically integrated single family home rental platform called Sparrow. Additionally, Private Equity firm Ares and investment manager Pretium announced plans to acquire the single-family rental platform Front Yard Residential in a $2.4 billion deal.

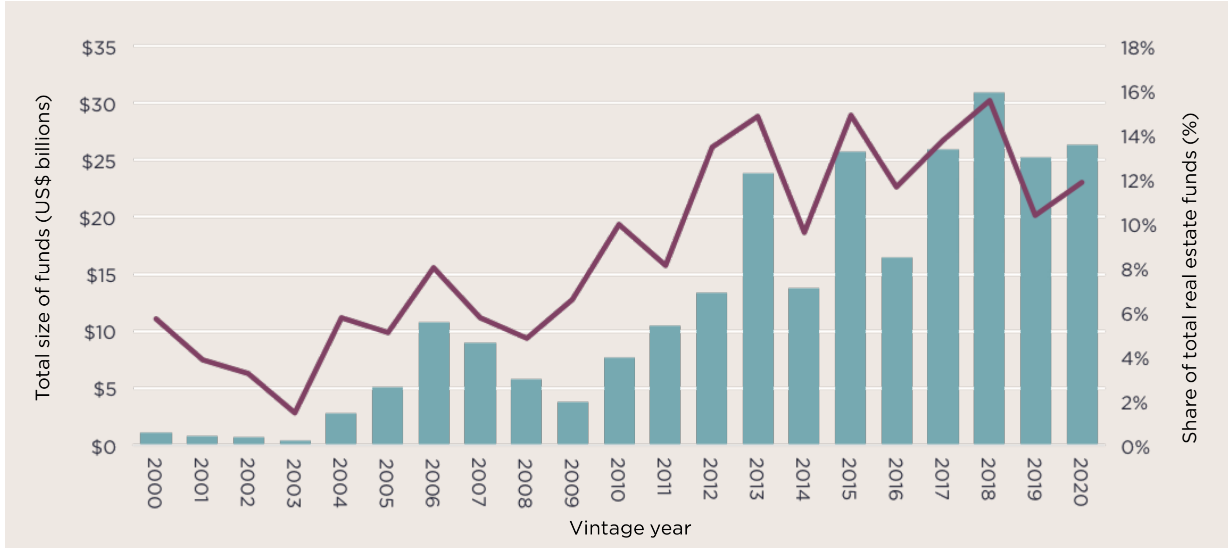
Reflecting investors' confidence in the sector's long term fundamentals, residential REITs have outperformed their all-sector benchmarks this year.

Capital targeted at residential

There is no shortage of capital targeting operational residential assets. The challenge (and opportunity), in Europe at least, is finding prime development sites, completed assets or conversion opportunities in which to invest.

Data from Preqin shows capital targeted at the sector from funds has risen from $16.4bn in 2016 to $26.3bn in 2020. Residential is taking a larger share of all funds too, up from 10% in 2019 to 12% in 2020. Undiminished by the pandemic, the amount of capital targeting residential is already above 2019 levels (see chart), though down slightly on a 2018 high.

Global private real estate funds size of funds targeted at residential



Source Savills Research using Preqin

Debt markets

After taking stock of their loan exposure when the pandemic hit, there had been an easing in the credit markets as lenders start to look to put loans to work. Whilst the impact on lenders portfolios has been significant, overall the lending markets are in a much stronger place than they were after the global financial crisis (GFC).

Lessons learned from the GFC, such as rapid intervention by central banks, have supported liquidity. Banks are less geared and also underlying real estate lending has been more conservative. While bank lenders are now more cautious, non-bank lenders (having expanded rapidly since the GFC) are willing to take on opportunities with greater risk, which provides the borrower market with greater options.

All in, pricing in the bank market is not materially different as higher lending margin requirements are largely offset by a lower risk free rate. Residential remains a favourable asset class to lend against, thanks to the sector's favourable long term fundamentals.

Covid-19: implications for design and operations

From the end of the business handshake, to the practice of wearing face coverings in public, the Covid-19 pandemic has changed many aspects of everyday life. Operational real estate has also had to adapt. Proptech is increasingly being employed to mitigate risk through automation, both in private and communal spaces. Places where people live in close quarters with one another, such as senior housing, student housing and multifamily, are making changes in order to ensure the safety of their residents. For investors, this may present opportunities to step in with the capital required to upgrade and reposition ageing stock.

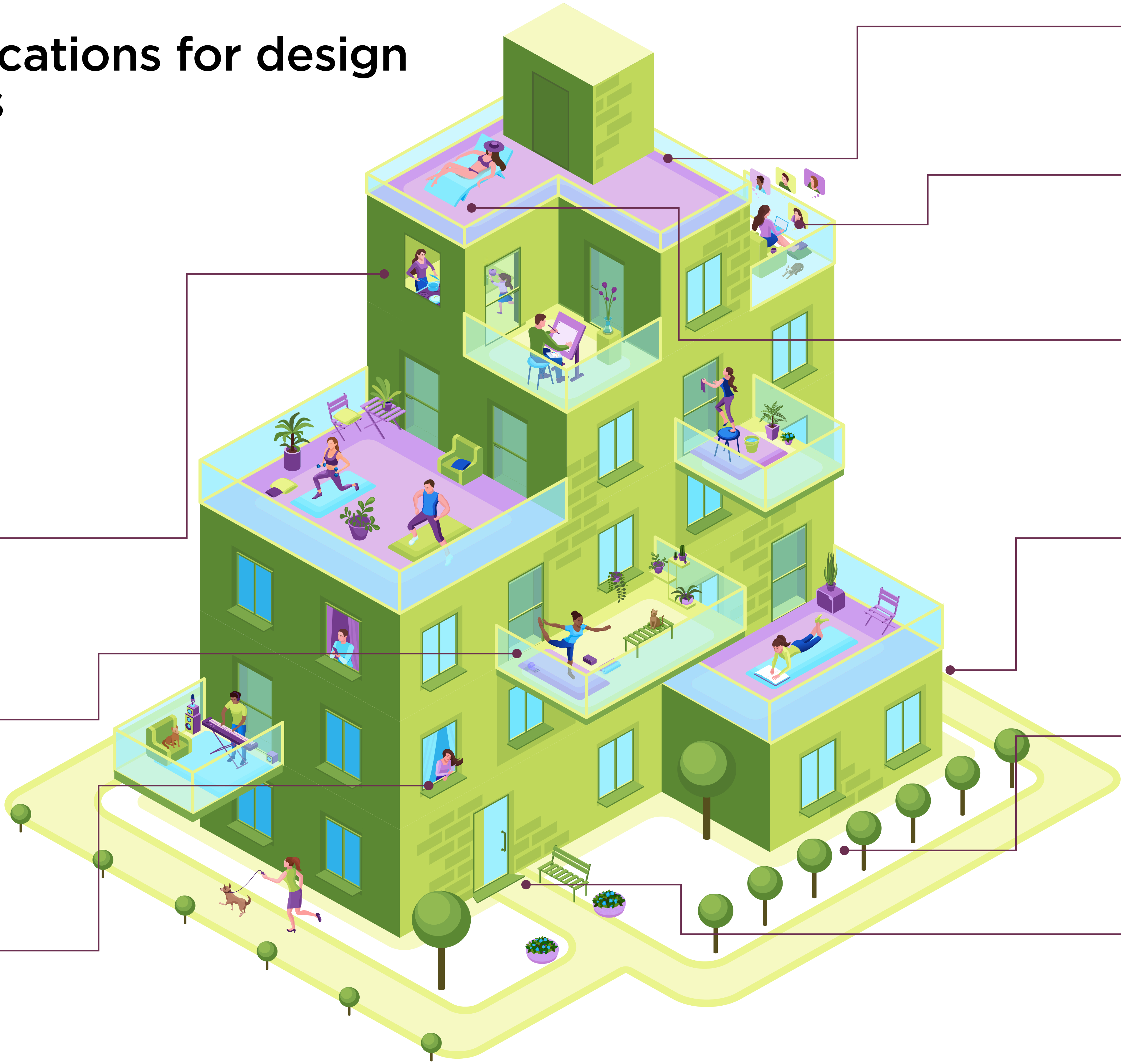
Private spaces
Communal spaces

Smart HVAC systems optimise energy use during peak times and modulate temperatures when buildings or units are unoccupied. Advanced filtration and clean air circulation will also be key to minimise potential virus spread.

Wellness is a greater consideration than ever before. New developments may prioritise green spaces and private balconies as amenities for residents.

Dedicated building apps can allow tenants to request maintenance, or schedule an appointment to speak with the building managers through a chatbot, all without speaking directly to a person.

AI can be integrated into building management systems to monitor for breakdowns and report issues to management.



More ‘greyspace’ may be introduced with the flexibility for multiple uses.

An increase in homeworking may lead tenants to look for properties which offer space for home offices.

Communal spaces and their function will be reassessed. Limiting capacity in fitness centres, dining facilities and other common areas, but enabling residents to book times to use these amenities may be necessary.

An appropriate mix of apartment sizes and types (with the local market in mind) are essential to support letting rates. Larger units may be more attractive than they were previously.

Car and bicycle parking will likely also be increased, as residents avoid public transport in favour of personal transportation.

Touch-free entries and exits may become more common. Smart locks could be opened with a smartphone and building entries and exits could be unlocked with a key fob or contactless card. One-way systems of movement through buildings and automatic lifts can also be used to keep buildings and residents safe.

Serious about sustainability

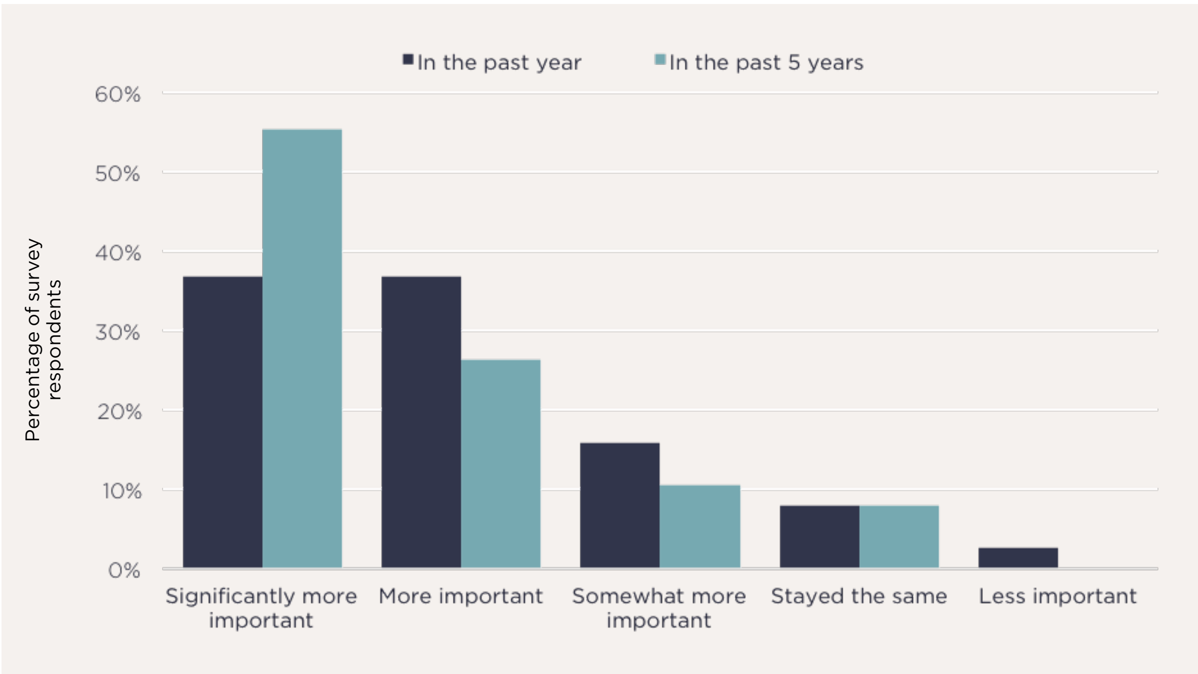
Tackling climate change and making a positive change for society have moved up the global agenda across all industries, particularly in the last couple of years. Within the investment community, the rise in ESG (environmental, social and governance) investment has been well documented. This is particularly important in real estate as the built environment is responsible for almost 40% of carbon emissions globally.

To understand the situation in the residential investment sector, Savills conducted a survey of clients. Our findings show that an ESG corporate strategy is "very important" to two-thirds of respondents, which is a marked increase over the past five years. Company ESG strategy has become more important or significantly more important in the last five years for 81% of survey respondents.

Over the last year, just 10% of respondents said that their company ESG strategy has stayed the same or become less important, despite the global pandemic, which had the potential to derail the progress made. Instead, it appears to have had the opposite impact and strengthened the majority of companies commitments.

The increasing importance of environmental strategy is demonstrated by over 40% of respondents indicating that their companies have committed to a net-zero objective. However, of those that have made the commitment, two thirds stated that their company target is for 'operationally net-zero', as opposed to 'full lifecycle net zero' or a science-based carbon target.

How has your company's ESG strategy changed?



Source Savills Research

Build a better building

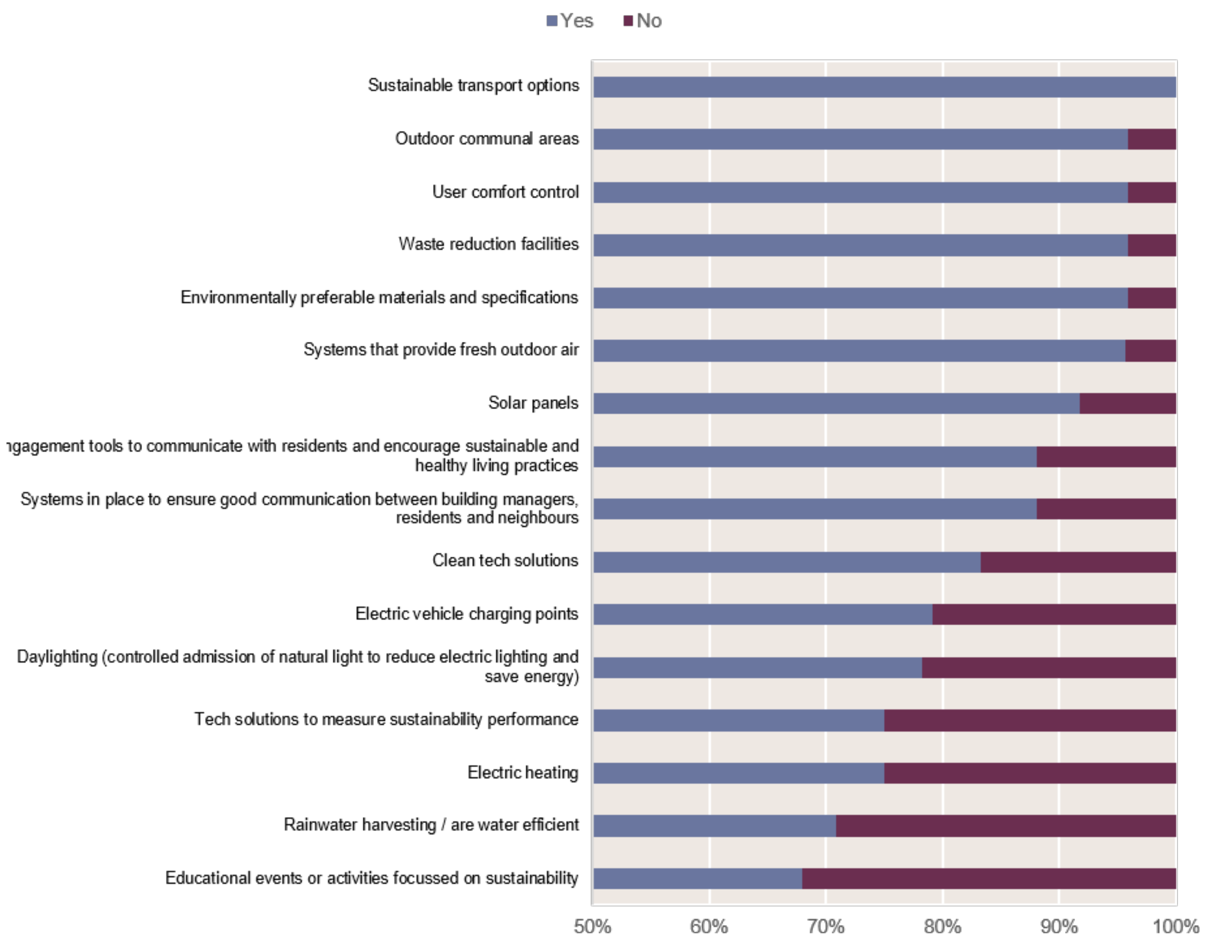
Increasingly, buildings are being designed, constructed or refurbished to a certified sustainability standard and 80% of survey respondents indicated that at least one building in their portfolio met such a standard. An even higher proportion, nearly 90%, plan to do so in the future. There is a lower proportion of schemes being managed or operated to certified sustainability standards, with 58% of respondents indicating that buildings in their portfolio are being operated to such standards.

Better, more sustainable buildings, can offer different features to boost their green and social cohesion credentials. These elements often have the added bonus of boosting user experience and lowering costs in the long term.

44%

"of respondents expect to be able to charge a green premium"

Does at least one of the buildings in your portfolio have:



Source Savills Research

Top 5 features respondents will include in future developments	
Outdoor communal areas	100%
Systems in place to ensure good communication between building managers, residents and neighbours	96%
Clean tech solutions	96%
Sustainable transport options	96%
Engagement tools to communicate with residents and encourage sustainable and healthy living practices	96%

Source: Savills Research

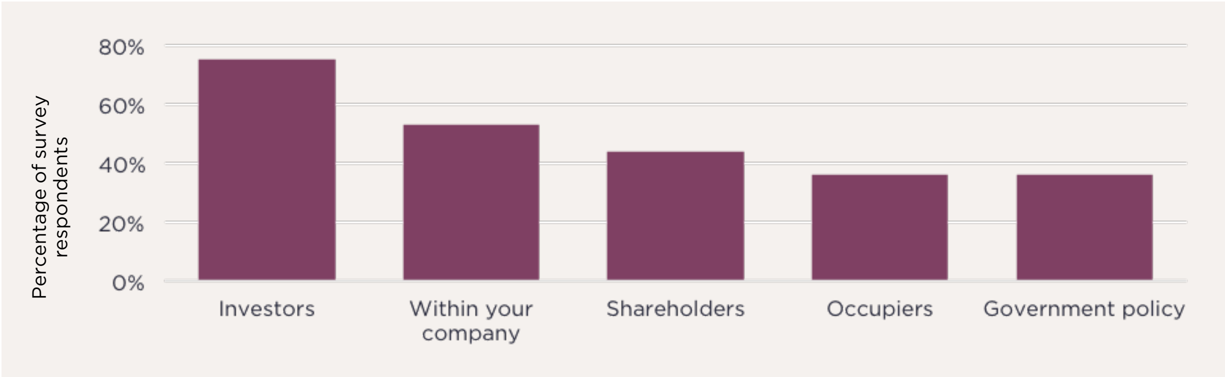
The green premium

There is much debate about whether a green premium can be achieved by a more sustainable building and the responses from our survey were split. Respondents stating they expect to be able to charge a 'green premium' accounted for 44%. However, the degree of premium they are expecting is moderate, as 87% of respondents expect to charge a premium of 10% or less.

Demand for sustainable buildings is rising on all fronts. The survey indicates that the largest source of demand for green buildings is coming from investors, followed by demand from within their own company. Respondents indicated that this increased demand comes from a drive for sustainability certifications, a need to reduce resources used in operations and development, and increased corporate commitments to sustainability.

> “It is clear that the real estate environment is already adapting to the “new normal””

Where is the demand for green buildings coming from?

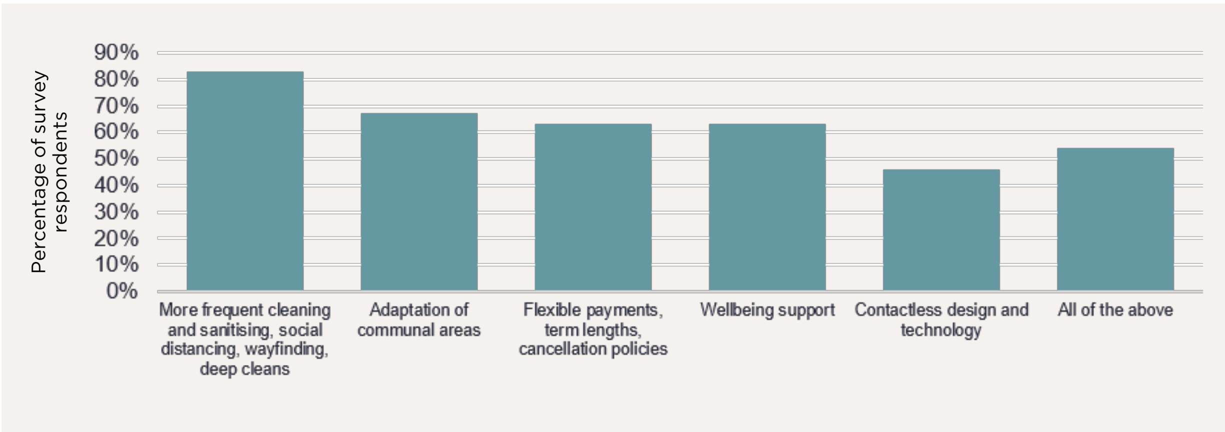


Source Savills Research

Continuing Covid-19 changes

The coronavirus pandemic has affected nearly all aspects of everyday life for building occupiers, managers, developers, and investors. As such, changes have had to be made. From 83% of respondents stating that they have increased their cleaning regimes, to 46% of respondents who introduced contactless design and technology into their spaces, it is clear that the real estate environment is already adapting to the “new normal” - and will continue to do so going forward.

Which of the following measures have you introduced since the start of Covid-19?



Source Savills Research

A brighter, greener future

The green revolution and an increased emphasis on creating a better society are here to stay for the long term. The pandemic has proven that the public, industry, and governments are capable of instituting seismic changes when confronted with pressing needs. As humanity has adapted to and faced the realities of Covid-19, so too must we continue to change how we live and work – in order to incorporate sustainability into everyday life.

About the survey:

Savills Research surveyed approximately 50 people from investment, operations, and development across all operational residential investment classes.

Respondents operated in 20 countries: Albania, Australia, Austria, Czech Republic, Denmark, France, Germany, Ireland, Italy, Moldova, Netherlands, Poland, Portugal, San Marino, Spain, Sweden, Uganda, Ukraine, United Kingdom, and United States, though many respondents had continental or global remits.

Savills World Research

We monitor global real estate markets and the forces that shape them. Working with our teams across the globe, and drawing on market intelligence and published data, we produce a range of market-leading publications, as well as providing bespoke research to our clients.

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Savills Operational Capital Markets

We provide our clients with valuation, consultancy, transactional and financing advice in the residential (PRS), student accommodation, senior living and healthcare sectors - across the UK and Europe. Our track record is unrivalled, having advised our clients on over £20bn of investment in the last three years alone.

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