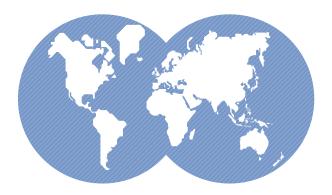


SPOTLIGHT | 2017 - 2018

WORLD STUDENT HOUSING

Investment | Demand | Supply | Country Overviews





The global search for scale

Records were broken once again in 2016, when global investment into Student Housing topped \$16bn. Institutional investors, sovereign wealth and pension funds snapped up portfolios in a global search for scale and income producing investments in a low yield environment.

Activity was focused on the US and UK; the most mature global markets where the majority of investable stock is found. Viewed by investors as a residential asset, the sector is maturing fast in mainland Europe.

Investment in Germany is expected to reach €1bn this year and the frontiers are expanding: Poland, Hungary, Portugal and the Czech Republic are now attracting attention too. In these markets new build PBSA is meeting the demands of students while expanding the investable product available.

The development of the sector has gone hand in hand with the globalisation of higher education. As migration and international student numbers become hot topics in the UK and US, other markets have recognised their importance as a tool to fuel domestic economic growth. They have instigated national internationalisation programmes and improved the marketing of their universities in concerted efforts to catch up with the frontrunners.

The availability of convenient, modern Purpose Built Student Housing (PBSA) that plays an active role in the student experience, and could be a catalyst for such catch up. In all markets though, PBSA remains undersupplied so there are huge opportunities for those who can successfully navigate local markets to deliver new stock.

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Summary

INVESTMENT

Global investment into student housing reached \$16.4bn in 2016, a new annual record

Cross border investors undertook 37% of all global student housing investment deals

Annual investment in the sector increased 245% in France and some 380% in Germany

DEMAND

Student numbers continue to rise in France, Germany the Netherlands and Australia

Internationalisation strategies for higher education are in place in most major markets

Uncertainty around Brexit and Trump has done little to alter the sector's appeal in the UK and US

SUPPLY

Provision of student housing is low, ranging 6% to 24% in the major national markets

International providers have emerged, bringing international expertise to new markets.

New provision is replacing older, outdated stock no longer fit for purpose

Cover: Student housing at Utrecht University

New record levels of investment are being set

The cross-border search for scale has seen record investment volumes with significant increases witnessed in Germany and France

lobal investment into student housing reached \$16.4bn in 2016, setting another annual record. Total volumes by dollar value increased by 5.4% globally, double 2014 levels.

The US was the stand-out market in 2016 with \$9.8bn total investment. Cross border activity accounted for 39% of total investment here, up from 21% in 2016, and just 1% in 2015. But the biggest deal was domestic: Harrison Street's buy-out of the Campus Crest REIT for a record \$1.9bn. Second largest was the Scion Group's purchase of the InvProperties University House portfolio for \$1.4bn, in a venture with Canada's CPP and Singapore's GIC.

UK volumes fell back slightly from a high in 2015, a year that saw several large portfolios trade (most notably CPPIB's purchase of the Liberty Living Portfolio for \$1.1bn), but remained strong in the wake of the Brexit vote. Across the rest of Western Europe, investment volumes were up an average 26% in the year to Q2 2017. At a country level, Savills data showed volumes in Germany up 380% in 2016, and up 245% in France (see Figure 5).

Student housing REITs have continued to perform well. Between January 2016 and August 2017, the major student housing REITs of the UK and US outperformed their all-REIT benchmarks by 10.6% and 4.4% respectively.





Global investors seek scale

Global cross border investment into student housing stood at 37% of all investment, a higher sector proportion than for offices (34%) and retail (29%). Major players invested across multiple countries in order to achieve scale Singapore's GIC was the largest single investor in 2016/17, and active in two of the biggest deals globally. It now has interests in the US, UK, Germany and Australia.

Recognising the sector's secure, income generating qualities, it is no coincidence that today's largest investors are sovereign wealth and pension funds. Canada Pension Plan Investment Board (CPP IB), was the second largest global investor in 2016/17. Another major UK investment from CPP IB was the \$580m purchase of the Union State Portfolio in April 2017.

Singaporean real estate investor Mapletree was the third biggest investor in the period. Large portfolio purchases in North America and the UK instantly made it one of the biggest global players in the sector.

Pioneer owner / operators are selling assets to older, more diverse and established entities. First to take over have been the sovereign wealth funds and private investors with a bigger appetite for the 'alternatives' and niche sectors. Now the funds and an increasing number of institutions, the pension funds and insurance companies are participating in the sector.

We expect this to continue as student housing, alongside other new asset classes, takes its place in mainstream portfolios.

FIGURE 2 Most active global investors

RANK 2016/17 (Aug to Aug)	RANK 2015/16 (Aug to Aug)	Investor	Туре	Origin
1	4	GIC	Sovereign Wealth Fund	Singapore
2	2	CPP Investment Board	Pension Fund	Canada
3	5	Mapletree Investments	Investor	Singapore
4	3	Scion Group	Owner / Operator	US
5	27	GSA Group	Developer / Owner / Operator	UAE

Source: Savills World Research using RCA

FIGURE 3 Largest individual global student housing investment deals 2016/17

	What	Buyer	Seller	Price (USD)	Date	Origin	Destination
1	Campus Crest Buyout	Harrison Street	Campus Crest	\$1.9bn	Mar-16	US	US
2	InvenTrust Student Housing Portfolio	Scion Group, CPPIB, GIC	InvenTrust	\$1.4bn	Jun-16	US / Canada / Singapore	US
3	Oaktree UK Student Accommodation	GSA, GIC	Oaktree	\$900m	Sep-16	UAE / Singapore	UK
4	Rose Portfolio	Brookfield AM	Avenue Capital Group	\$580m	Mar-16	Canada	UK
5	Union State Portfolio	CPPIB	Blackstone	\$580m	Apr-17	Canada	UK

Source: Savills World Research, Jan 2016 to Aug 2017

Europe on the rise

The US and UK are the most mature student housing markets, and continue to dominate global investment deals. But PBSA investment in Germany, the Netherlands and France has seen rapid expansion in recent years and global players seek new opportunities.

Investment volumes in France are still closely tied to development activity

FIGURE 4 Rapid expansion in European markets

	2016 volumes	Annual change	
Germany	€750m	+380%	Transaction volumes grew five-fold in 2016 and are expected to surpass €1bn in 2017, driven by portfolio sales. Cross border investors are of growing importance. Four 'The Fizz' properties were purchased by Allianz and CBRE Global investors, while UAE-based GSA acquired the Headquarters Portfolio.
Netherlands	€425m	+24%	2016 was a record year for investment, with volumes up 24% from 2015, more than double 2014 volumes. Dutch and foreign investors led in a market previously dominated by specialist housing associations like DUWO and SSH. A notable new entrant is Xior Student Housing, investing circa €138m, accounting for roughly a third of the total investment activity.
France	€170m	+245%	Investment volumes in France are still closely tied to development activity. Volumes were up 245% in 2016, and are expected to reach €250m in 2017, exceeding their 2013 peak for the first time. Asset manager Swiss Life is one of the largest single investors and has continued to expand in the sector.

Source: Savills World Research (including funding and development)

FIGURE 5 Student Housing (SH) yields and sector comparisons

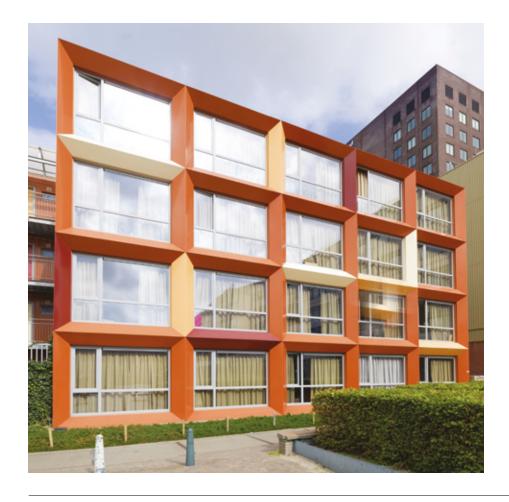
	SH prime net initial yield (lease)	10 year government bonds	SH yield net of bonds	Residential (PRS)	Office Grade A
Australia	6.00%	2.6%	3.4%	N/A	6.3%
USA	5.90%	2.1%	3.8%	5.6%	5.2%
Spain	5.75%	1.5%	4.2%	4.4%	3.5%
Netherlands	4.75%	0.5%	4.3%	3.4%	3.4%
France	4.50%	0.7%	3.8%	3.3%	3.1%
UK (excl. London)	4.50%	1.0%	3.5%	4.9%	5.0%
Germany	4.00%	0.4%	3.7%	3.1%	3.3%
UK (London)	3.75%	1.0%	2.7%	3.9%	4.0%

Source: Savills World Research

Yields

The US market stands out as particularly high-yielding for such a mature market. We expect yields to move in as institutional involvement increases, the sector matures and perceived risk diminishes. Although they are less developed markets, there is also potential for further downward yield shift in Australia and Spain over coming years. Whether Germany, the UK and France are fully valued at 3.75%-4.5% will depend on how much scope there is for rental growth in their main university cities. The gap between residential and student housing yields remain, although we expect it to narrow.





Investment outlook

Reflecting its popularity with income funds, student housing continues to offer significant potential as a stable, income producing asset class with counter cyclical qualities.

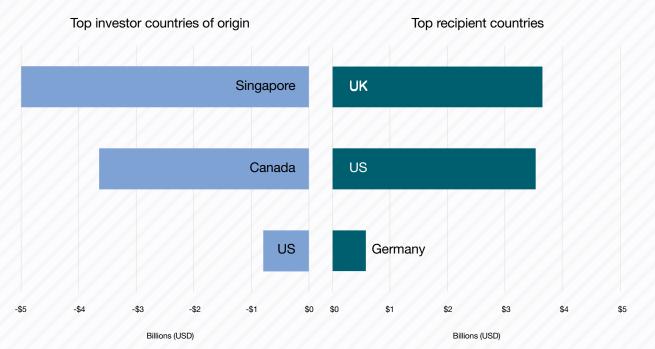
We expect to see more international investment into the US, by far the largest global market and one dominated by domestic investment to date.

There remains further potential for consolidation in the UK, with weak sterling bringing advantages for international investors.

We anticipate that the global cap rate in the sector will remain high as volumes shift toward a higher proportion of high-yielding new and expanding markets.

New stock developed now in Europe and Australia paves the way for institutional investment in the future. Macro conditions hide local dynamics, and investors do need to consider supply and demand at local level, as the following sections explore.





Source: Savills World Research using RCA, 2016/17 (Jan 16 to Aug 17)

Following national student trends

Trends in higher education student enrolment have continued to diverge among the most globally important markets

rends in higher education student enrolment have continued to diverge among the most globally-important markets. In the EU, total student numbers in France and Germany grew by 3.2% and 2.2% respectively in 2015/16.

Numbers increased by 0.7% in Spain and fell by 1.4% in Italy and over the same period. UK numbers are largely flat, partly in response to rising tuition fees and declining part-time study (although first year undergraduate numbers are up 2.4% since 2014/15). Growth in Australia continues to be driven by overseas students, total numbers growing 2.7% in the most recent annual period.

International student trends

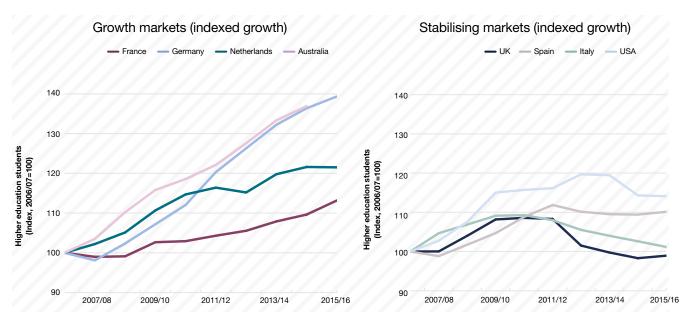
Rapid growth in international student numbers has underpinned demand for high quality PBSA across the globe. Some 4.6 million students studied abroad in 2015, an increase of 130% since 1999. This figure is forecast to reach 8 million by 2025.

China, by far the largest outbound market, accounts for 17% of all international students globally (in 1999 they only comprised 6%). A forecast decline in the number of university aged students from China over the next decade will be offset by further growth in the middle class. China's outbound mobility rate is 18.5 students in every 1,000, compared to the mature markets of France (33 per 1,000) and Germany (39 per 1,000), implying room for growth.

Many countries recognise that the internationalisation of the student sector brings benefits to the domestic economy and have adopted strategies to attract more. Among European countries, the introduction of Englishtaught programmes (ETPs) have been central to this. The Netherlands offers the most, followed by Germany, Sweden, Denmark and Spain.

International students deepen the pool of talent for business, offering newly acquired (but overseas paid-for) skills. Australia, France and Canada all have ambitious international student recruitment targets (see Figure 8).

FIGURE 7 Trends in student numbers



Source: Savills World Research using national statistics



FIGURE 8 Selected international student recruitment targets

	Australia	France	Canada	Japan
Target or projection	720,000 by 2025*	470,000 by 2025	450,000 by 2022	300,000 by 2020
	(50% increase over	(36% increase over	(22% increase over	(20% increase over
	2015 levels)	2016 levels)	2015 levels)	2016 levels)

Source: Savills World Research, British Council

*projection

Beyond the country rankings

For many university students, particularly those from overseas, university rankings are a first port of call in choosing a place to study. The UK and US dominate the top QS 500 (see Fig. 9). Highly-ranked institutions therefore benefit from a broad and sustained demand base if they maintain this mark of quality. This is important to providers of PBSA. But other countries are making their mark. Seven Chinese universities feature in the 2018 Times top 200 ranking, up from just two in 2014. This is at the expense of the US, with 62 in the top 200 (still the most globally), down from 77 in 2014.

PBSA in uncertain political times

PBSA's income producing qualities, stable demand base and counter cyclical qualities have supported its massive expansion as an asset class. But the sector is not immune from the impact of world events. The internationalisation of education, so important to raising standards, has also raised political concerns, often around immigration. The reaction of politicians and policy makers to these concerns

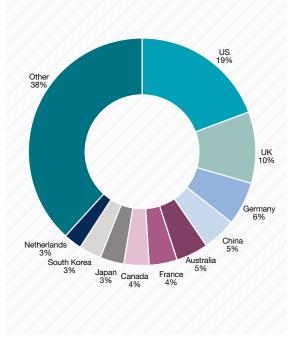
can create headwinds for the sector. What will Trump, Brexit and other global political events mean for PBSA?

Brexit: Some international investors saw the drop in the value of sterling following the EU-referendum result as a buying opportunity. Investment in UK PBSA continued unabated after June 2016, despite falling volumes in other sectors. International students, too, found themselves with a cost advantage.

The UK's higher education sector enjoys an exceptionally strong international standing, built upon hundreds of years of university heritage. This will not be eroded overnight, but Brexit does bring some uncertainty, particularly around EU research funding, as well as the treatment of academic staff from the EU and the treatment of student immigration.

International student numbers remain a political hot topic in the UK, and in particular the way they are counted in migration figures. New exit check figures suggest that 97% of foreign students leave at the end of their studies. A migration advisory committee, tasked with examining the effect that international students have on the labour market and economy, could be a step towards better recognition of the cultural and economic

FIGURE 9 QS World University Rankings top 500 by country



Source: Savills World Research using QS



▲ Simmons Hall at MIT

The UK's higher education sector enjoys an exceptionally strong international standing, built on hundreds of years of university heritage

contribution that international students make to the UK.

More UK branch campuses in the EU post-Brexit? The number of international branch campuses has risen by 57% since 2010, and today there are 311 globally, according to C-BERT. China is host to the most of these (39), a tripling in seven years.

The majority of branch campuses are linked to US institutions (109), followed by the UK (45). To date, most of these have been established in Asia, tapping into fast-growing markets. Only four are located in mainland Europe, but a year on from the EU referendum, Kings College London is considering deepening its existing collaboration with Technische Universität Dresden to establish a new site for the UK institution in Germany. The plan would maintain access to European research funding post-Brexit, while giving TU Dresden better ties to London.

Trump: Trump's rhetoric on immigration has been a concern for the sector. Greater oversight of the H-1B visa could impact universities' ability to hire skilled staff from abroad. It would also make it harder for students to get jobs in the US on completion of their studies, thus impairing the country's appeal as a place to study. We expect the impact on overall enrolment to be limited, however. Despite being the world's number one destination for international students by number, foreign students make up just 5% of the total student body.

Macron: Emmanuel Macron's victory looked like it would change the higher education landscape in France, with proposed policies to support higher education funding, improve student mobility and make accommodation more accessible. But the overarching need to cut the deficit (and commitment to do so without raising taxes) means that extra budget for the sector now looks unlikely.





WHAT STUDENTS WANT The view from Student.com

■ PRIVATE SPACE, COMMUNAL OPTIONS:

As long as their budgets allow, students will always opt for a private space, whether that's a private room in a shared flat or a studio apartment, as opposed to a shared room. But even in properties that offer mainly studio rooms, students still value communal spaces.

■ EVERYTHING UNDER ONE ROOF: There's significant demand for onsite social spaces, gyms and entertainment areas

■ ALL-IN COSTS: students are increasingly

factoring in total costs for accommodation, not just the rent. Extra costs for amenities are recognised as a saving elsewhere (e.g. gym membership).

■ STUDY SPACE: a comfortable study space away from the bedroom is a must. These facilities are now among the most used.

■ LOCATION REIGNS SUPREME: The majority of students would still prefer to live somewhere closer to campus, as opposed to a property with impressive facilities that is not conveniently located.

Occupancy trends among students studying abroad

Data from Student.com shows that students from the Middle East and China typically take the longest tenancies, 90% and 87% respectively for a full academic year. Those from the US and Pacific Asia (including Australia) are most likely to rent for shorter periods. When it comes to room type preferences, there is relative uniformity across the globe. Students from the Middle East are slightly more likely to rent an entire place or studio, however, echoing larger average budgets.



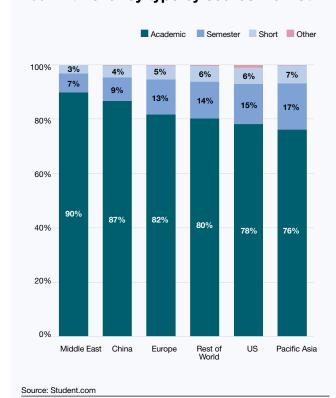
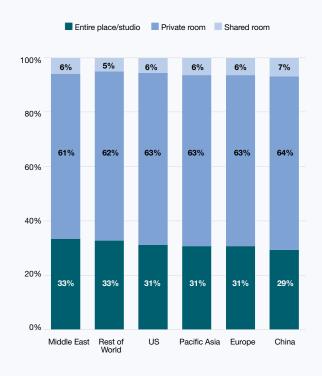


FIGURE 11 Room type by source market



Source: Student.com

Cost of living and study: London becomes (slightly) more affordable

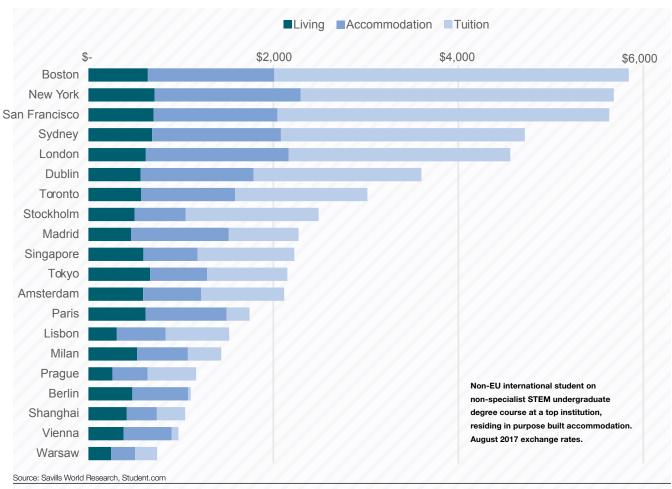
Weak sterling has improved London's affordability for international students, slipping behind Sydney in our cost of living and study league for the first time. It now stands fifth in our global cost of living, accommodation and tuition ranking.

The US remains by far the most expensive market for students to live and study in. High tuition fees coupled with high accommodation costs make Boston, New York and San Francisco the most expensive markets globally, 20% above Sydney, the next dearest.

Mainland European cities stand apart for their affordability and are well positioned to attract cost-conscious globally mobile students. Prague, Berlin, Vienna and Warsaw are the cheapest cities in which to study, on par with Shanghai. Tuition in these cities is low (or even free), accommodation costs are half our sample average, while quality is improving thanks to growing PBSA development.



FIGURE 12 Monthly cost of international student living, accommodation and study



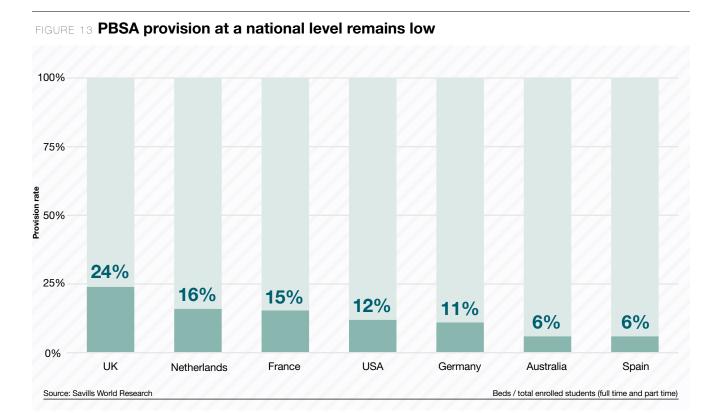
Student mobility reinforces need for quality

As the market matures students have come to demand higher quality from their living accommodation

t the national level, provision of PBSA remains very low, even in mature markets (see Fig.13). Cultural trends, such as prevalence for students to live at home during study (particularly in Italy and Spain, for example), a preference for a certain type of accommodation (such as a desire for individual apartments and studios in Germany) impacts the nature of these markets.

The optimum ratio for accommodation varies not only by country, but by town or city. Many universities supply their own accommodation, but lack the funds or expertise to bring to modern standards. This opens up opportunities for JVs and partnering arrangements with private sector operators. In some markets private and residential local landlords meet the gap in supply.

Growing global student mobility has reinforced the need for quality, well managed student accommodation. Unfamiliarity with the local housing markets makes quality PBSA from a trusted provider particularly appealing. As the market has matured, students have come to demand more from their accommodation, and will pay a premium for amenities and services on site.



WHO ARE THE GLOBAL PROVIDERS?

As the sector has matured, global players have emerged that provide and manage PBSA in multiple countries. This brings international expertise into new markets, portfolio diversification and operator economies of scale.

Provider	Countries active	
Global Student Accommodation Group (GSA)	UK, Australia, Japan, UAE, Germany, Spain, Ireland, China	UAE-based GSA has wide global reach. It operates the Student Housing Company, Uninest and Nexo brands.
Greystar Student Living	US, UK, Netherlands	A major player in the US multifamily market, Greystar invests in but and also operates PBSA.
Campus Living Villages	US, UK, Australia, New Zealand	Australia's CLV was established in 2003 and now has interests in Australasia, the US and UK.
The Student Hotel	Netherlands, France, Spain, Italy and Germany	Expanding across Europe, a hybrid model for both students and other short stay occupiers.
International Campus	Germany, Netherlands, Austria	Operating as 'The Fizz', provides micro apartments for students and young professionals.
Milestone	Austria, Hungary	Austrian developer / operator active in Austria and Hungary.
Xior	Netherlands, Belgium	Xior operates 2,500 units across Belgium and the Netherlands.

How is PBSA viewed by local authorities around the world?

The treatment of PBSA in local planning and regulation varies significantly around the world. As an emerging asset class it has not seen the same level and type of regulations, so policies around it are very varied and still developing. Here are some examples of different approaches in Europe:

Netherlands	Rent restrictions apply to most student accommodation (as with all types of residential property). Providers such as the Student Hotel operate for both students and tourists or other short lets to bypass these constraints.
France	There are favourable tax incentives for individuals investing in student accommodation privately. Historically much private stock has been sold on a unit-by-unit basis to private investors. An ambitious plan by public operator CROUS to add 40,000 student units by 2017 is on track.
Germany	Student halls of residence are classified as residential, but are exempt from various sections of German tenancy law. To qualify for these exemptions, the property must focus on students and have a high tenant turnover. Residential use-class provides flexibility in who it can be rented to.

US

- Student population 20,264,000Growth (year to 15/16) -0.2%
- International students 1,044,000 (5% of total)
- Top countries of origin China (328,500) India (166,000) Saudi Arabia (61,300)
- PBSA rental range \$200 to \$2,200+ per month
- Top ranked universities (QS 2018)

Massachusetts Institute of Technology (MIT) (1) Stanford University (2) Harvard University (3)

Source: Savills World Research, UNESCO, QS, national statistics

The United States has the third largest student population in the world behind China and India. Of the 20.3 million attending students college or university last year, 12.5 million were in full-time education. The US is the top destination for international students, hosting over a million in 2016.

Shared rooms are common in US PBSA, particularly among older stock. Most stock delivered by the private sector is as ensuite rooms in small cluster flats, usually located off campus. Private providers have pioneered premium, resort style properties offering swimming pools, barbeque areas, gyms and games facilities.

A large and mature market, the US attracts the lion's share of PBSA investment. The two largest deals of 2016 were in the US (see page 5). Cross border activity rose to 39% of total US PBSA investment in 2017 to August.



▲ Harvard University

Germany

- Student population 2,758,000 Growth (year to 15/16) 2.2%
- International students 340,000 (12% of total)
- Top countries of origin China (23,600) Russia (9,950) India (9,900)
- PBSA rental range €200 to €850 per month
- Top ranked universities (QS 2018)
 Technical University of Munich (64)
 Ludwig-Maximilians-Universität

Ludwig-Maximilians-Universität München (66) Ruprecht-Karls-Universität Heidelberg (68)

Source: Savills World Research, UNESCO, QS, national statistics

Following its ninth successive year of growth, the student population in Germany reached 2.8 million students in 2016/17. Low cost of study and more English-taught courses has seen international enrolment increase by 35% in the past five years.

Studentenwerk is the largest provider of accommodation, offering around 183,000 places, mainly in the lower price segment (up to $\mbox{\ensuremath{\&}}250$ per month). Private supply is growing rapidly though, particularly among studios in the upper price segment (from $\mbox{\ensuremath{\&}}500$ per month). As a consequence, there is a shortage of supply in the mid-price segment ($\mbox{\ensuremath{\&}}350-\mbox{\ensuremath{\&}}400$ per month).

Investment transaction volumes reached $\[mathebox{\ensuremath{$\epsilon$}}\]$ 750m in 2016 and are expected to surpass one billion in 2017. Almost all existing properties sold were no older than five years, with a majority of investment from foreign players. Net initial yields, averaging 4%, are hardening, but still remain significantly higher than traditional apartment buildings, at 3.1%.



▲ LMU, Munich

France

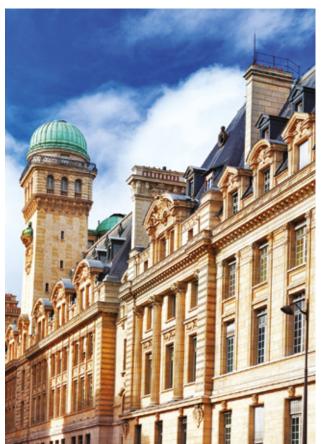
- Student population 2,551,000Growth (year to 15/16) 3.2%
- International students 310,000 (12% of total)
- Top countries of origin China (25,400) Morocco (25,200) Algeria (16,600)
- PBSA rental range €200 to €1,200 per month
- Top ranked universities (QS 2018)

Ecole normale supérieure, Paris (43) Ecole Polytechnique (59) Université Pierre et Marie Curie (UPMC) (131)

Source: Savills World Research, UNESCO, QS, national statistics

France is home to over 2.5 million students, Europe's second largest higher education population. MENESR predict it to rise by 16.4% in the next ten years, exceeding 2.9 million by 2025. Paris is home to the biggest student market, with over 185,000 studying in the capital.

About half of PBSA is provided by public student body CROUS, which has been undertaking an ambitious programme to deliver 40,000 new student beds by 2017. In the private sector there are now more than 50 managers. Nexity (Studéa) and Réside Etudes (Les Estudines) now account for 30% of total private stock. Despite a growing PBSA provision rate (up to 15.4% in 2017) a shortage of around 850,000 units still remains. Future supply looks limited, too, with pipeline concentrated in Paris. SwissLife has expanded its portfolio following the $\mathfrak{e}15.5$ million acquisition of two student residences and is considering diversifying in neighbouring countries.



▲ University of Paris

UK

- Student population 2,281,000 Growth (year to 15/16) 0.7%
- International students 439,000 (19% of total)
- Top countries of origin China (91,200) Malaysia (17,400) United States (17,100)
- PBSA rental range £200 to £2,000+ per month
- Top ranked universities (QS 2018)
 University of Cambridge (5)
 University of Oxford (6)
 UCL (University College London)

Source: Savills World Research, UNESCO, QS, national statistics

Just under 2.3m students are enrolled in higher education in the UK, most of which are studying full-time first degrees. Although this figure is below the 2010-11 peak of 2.5m, the proportion of international students has grown by 5% over the past decade.

Approximately half of full-time students live in the private rented sector, and a fifth in university-owned PBSA. The UK accommodation sector is fragmented with the top ten providers currently owning around 30% of supply. Approximately 37,200 student housing units are under construction, with a further 91,400 units to be delivered over next five years.

UK PBSA is highly attractive to international investment. Singapore was the largest source of investment in 2016 (£1.2 billion for over 13,000 beds) with North America second. Investors are willing to pay premiums for larger portfolios, driven by their need to allocate their investment capital and build scale quickly.



▲ All Souls, Oxford

Italy

- Student population 1,668,000Growth (year to 15/16) -1.4%
- International students 73,700 (4% of total)
- Top countries of origin China (12,580) Albania (11,460) Romania (7,630)
- PBSA rental range €200 to €1,200 per month
- Top ranked universities (QS 2018)

Politecnico di Milano (170) Alma Mater Studiorum -University of Bologna (=188) Scuola Normale Superiore di Pisa (=192)

Source: Savills World Research, UNESCO, QS, national statistics

Over the past decade, the number of higher education students in Italy has remained fairly flat at around 1.7 million. Student halls are typically provided by the university (almost a quarter of these are located in Lombardy) and is in very short supply. Around three quarters of students live with parents and study in their home region – one of the highest proportions in Europe – but the growing supply of international students is significant given this trend.

Real estate funds aim to alleviate the housing problem in Italy in conjunction with recent government support. Funds such as FIA, managed by Real Estate Group CDP, seek to create government-subsidised social housing. A follow-up, FIA2, was launched last year. CDP have also collaborated with The Student Hotel; their first will open in Florence in September, with additional residences in Bologna, Rome and Florence due in the next two years.



▲ Bologna University

Spain

- Student population 1,548,000Growth (year to 15/16) 0.7%
- International students 102,000 (7% of total)
- Top countries of origin Colombia (5,750) Italy (4,750) Peru (3,500)
- PBSA rental range €350 to €1,300 per month
- Top ranked universities (QS 2018)
 Universitat de Barcelona (156)
 Universidad Autónoma de

Madrid (187) Universitat Autònoma de Barcelona (=195)

Source: Savills World Research, UNESCO, QS, national statistics

Spain has a large higher education sector. International student numbers have doubled in the last decade, while the number of private universities has increased by 90% since the turn of the century.

Almost 90% of university halls of residence belong to the private sector (including public universities managed by private operators via a temporary administrative concession). There are a number of large firms that control the majority of student accommodation in the market, but smaller scale operators, many of which are religious organisations that manage just one asset, are the most common.

Interest from a number of European investors is growing. Swiss fund Corestate entered the market at the start of the year. ThreeSixty Developments sold their portfolio to GSA. The Student Hotel is now active in Barcelona.



▲ University building in Barcelona

Australia

- Student population 1,410,000Growth (year to 15/16) 2.7%
- International students 363,000 (26% of total)
- Top countries of origin China (97,400) India (36,900) Malaysia (15,000)
- PBSA rental range AU\$360 to \$1,800 per month
- Top ranked universities (QS 2018)

Australian National University (20) University of Melbourne (=41) University of New South Wales (UNSW Sydney) (45)

Source: Savills World Research, UNESCO, QS, national statistics

Australia's higher education sector has enjoyed a sustained period of growth. It has among the highest proportion of international students of the major markets (26%), mostly originating from Asian countries.

Fast-growing demand is set against a general shortage of supply. Of the eight state and territory capital cities, all have an existing supply of less than 11% of full-time students, with the exception of Canberra (28.2%). Sydney is the most attractive market with just over 5,000 beds in the development pipeline in a city that currently houses just 9% of its student population in PBSA.

At the national level, leading providers UniLodge and Campus Living Villages have approximately 13,600 and 10,400 beds respectively. The top 10 providers currently own a total of 23,639 beds an increase of 52.5% of operational beds since February 2016.



▲ University of New South Wales

Poland

- Student population 1,349,000 Growth (year to 16/17) -4.0%
- International students 57,100 (4% of total)
- Top countries of origin Ukraine (35,500) Belarus (5,100) India (2,100)
- PBSA rental range
- PLN270 to PLN1,900 per month
- Top ranked universities (QS 2018) University of Warsaw (411-420) Jagiellonian University (461-470) Warsaw University of

Technology (601-650)

Source: Savills World Research, UNESCO, QS, national statistics

Domestic student numbers in Poland have been declining, but there has been a rapid increase in international students, up 652% since 2005, supported by promotional campaigns such as "Study in Poland". These students make up a mere 4% of the student population, suggesting room for growth.

The majority of student housing is publicly owned and consists of shared rooms of poor quality, while the private market is made up of individuals rather than investment funds or institutions. National bed provision is low at 9%, and refurbishment of existing dwellings has led to a 10% decrease in availability.

Growing international numbers are driving demand for private student housing. Griffin Real Estate has been the front runner in investment. Under the brand Student Depot, the group plans to operate 7,000-8,000 student rooms across the major Polish university cities within the next three years. Triton Academicus has developments in Lodz and Rzeszow in the pipeline.



▲ Warsaw University of Technology

Netherlands

- Student population 677,600Growth (year to 16/17) -0.5%
- International students 75,000 (12% of total)
- Top countries of origin Germany (22,200) China (4,300) Italy (3,300)
- PBSA rental range €300 to €800 per month
- Top ranked universities (QS 2018)

Delft University of Technology (54) University of Amsterdam (58)

University of Amsterdam (58) Eindhoven University of Technology (104)

Source: Savills World Research, UNESCO, QS, national statistics

The Netherlands introduced student loans in 2015, impacting domestic enrolment, down 0.5% in the 2016/17 academic year, and the new system has impacted demand for accommodation. The number of first-year students living at home rose by 20% in 2016.

The Netherlands was an early pioneer in English-taught programmes and is still the largest provider of them. This, combined with competitive tuition fees has seen international student numbers almost double over the past 10 years.

Approximately 21,400 PBSA units are due to be delivered in the 2017-2019 period. A raft of international and domestic players have committed to more stock in the coming years, including The Student Hotel, Camelot, International Campus and Xior.

Investment volumes reached a record &425m in 2016, a figure that Savills forecast to be equalled in 2017.

Austria

- Student population 381,000 Growth (year to 15/16) 1.4%
- International students 92,400 (24% of total)
- Top countries of origin Germany (27,150) Italy (8,100) Turkey (2,500)
- PBSA rental range €200 to €500 per month
- Top ranked universities

University of Vienna (154) Vienna University of Technology (=182) Universität Innsbruck (286)

Source: Savills World Research, UNESCO, QS, national statistics

Almost a quarter of Austria's rising student population are international, originating mainly from neighbouring countries. Tuition free for domestic and EU students, and only around &1,500 for those outside.

Accommodation is provided privately or by student housing in the form of dormitories, flat-shares and student apartments, but rarely through the universities directly. OeAD, for example, provides around 6,000 beds across the country, but principally for international or visiting students.

PBSA investment is growing, mostly focused on Vienna. German pension fund, BVK, acquired Linked Living for €93m in 2016, one of the biggest deals in Europe. Corestate Capital, Milestone, and International Campus are all active in the market.

Sweden

- Student population 403,000
- Growth (year to 15/16) -0.3%
- International students 35,100 (9% of total)
- Top countries of origin China (2,340) Finland (1,900) Germany (1,800)
- BBSA rental range
- SEK2,500 to SEK6,500 per month
- Top ranked universities (QS 2018)

Lund University (=78) KTH Royal Institute of Technology (=98) Uppsala University (112)

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Source: Savills World Research, UNESCO, QS, national statistics

Although HE numbers have continued to drop in Sweden, the number of new entrants has remained steady. Tuition is free of charge for domestic and EU students, but in 2011 tuition fees were introduced for foreign students. Several student housing companies operate, such as Akademiska Foreningen (AF) Bostader, and SSSBs aid students in finding

a room, although it can take up to a semester to find one.

PBSA is in short supply, a situation exasperated by a lack of open market residential accommodation. In response, the Swedish government is subsidising the construction of small rental units until 2019, which includes student accommodation. Separate programmes have been set up at a city level, bringing together stakeholders in the PBSA sector to speed up the delivery process.

Portugal

- Student population 358,000
- Growth (year to 15/16) -0.1%
- International students 38,000 (11% of total)
- Top countries of origin Brazil (5,440) Angola (2,360) Cabo Verde (1,900)
- PBSA rental range €150 to €650 per month
- Top ranked universities (QS 2018)

University of Porto (=301) University of Lisbon (=305) Universidade Nova de Lisboa (=361)

Source: Savills World Research, UNESCO, QS, national statistics

Student numbers have declined by 11.2% since their peak in 2010-11, but are now stabilising. An eighth of the student population resides in the capital. The government-run Study in Lisbon project aims to improve its exposure to international students. The Portuguese language makes the country attractive to Brazilian students, already the number one international student group.

University tuition fees are low, ranging from €950 to €3,900. Major universities only provide a small amount of their own accommodation, so most students rent in the open market. SPRU 'Sociedade Promotora de Residências Universitárias S.A' is a private student housing provider offering two properties, one in Lisbon, and another in Porto. PBSA investment is starting to emerge through development led activity. Key players include MPC Capital, Milestone and WP Carey /Temprano.

Czech Republic

- Student population 311,000
 Growth (year to 15/16) -4.7%
- International students 43,600 (14% of total)
- Top countries of origin Slovakia (22,900) Russia (5,300) Ukraine (2,300)
- PBSA rental range CZK3,500 to CZK13,500
- Top ranked universities

Charles University (=314) Czech Technical University in Prague (491-500) Masaryk University (551-600)

Source: Savills World Research, UNESCO, QS, national statistics

Over the last decade the number of international students in the Czech Republic has nearly doubled, representing 14% of the current student population. More than half of these come from Slovakia due to proximity and cultural and language similarities. Domestic numbers are expected to rise over the next few years as a result of demographic changes.

The two largest Czech cities, Prague and Brno, hold most of these students, 38% and 21% respectively, with student accommodation housing one fifth of the capital's population (25,500 beds). Housing stock is dominated by substandard university-owned residences, while private sector options only account for 4% of stock.

The country is beginning to see a wave of international-standard PBSA delivered, with typical developments between 100-300 beds.

Ireland

- Student population 229,000
- Growth (year to 15/16) 3.7%
- International students 15,800 (7% of total)
- Top countries of origin China (1,670) UK (1,580) Malaysia (1,470)
- PBSA rental range €400 to €1,200 per month
- Top ranked universities (QS 2018)

Trinity College Dublin, The University of Dublin (88) University College Dublin (168) National University of Ireland Galway (=243)

Source: Savills World Research, UNESCO, QS, national statistics

Both domestic and international enrolments have grown steadily. Domestic and EU students are exempt from paying tuition fees, only a $\mathfrak{S}3,000$ 'student contribution' is required. Fees for non-EU students as are much higher (around $\mathfrak{E}23,000$ for a STEM degree).

A shortage of suitable accommodation has both driven up rents of PBSA and attracted private operators. The development market for PBSA is buoyant, particularly in Dublin. GSA and Harrison Street have committed to invest €250m in Dublin PBSA by 2020. Hines has entered the Irish market, acquiring a portfolio from ThreeSixty Developments.

In July 2017, the Irish Government launched the National Student Accommodation Strategy which plans to increase the PBSA stock by 21,000 by 2024. This aims to help attract more international students while freeing up the private rented residential sector.





World Student Housing Outlook

- The under-served middle tier: developers expanding into new territories typically target the 'low-hanging-fruit' of the upper market segment. This leaves the middle tier, between lower-quality university stock and the new, premium product, unserved. Partnerships with universities or social providers to upgrade existing properties may be a means to serve the middle tier.
- Complementing the student model: the co-living model mixes students with other occupiers. This broadens the demand base as well as supporting a wider range of services and amenities, in turn enhancing the appeal to occupiers. Examples include the Collective in the UK, and The Fizz in Germany. We expect this model to expand, particularly in major cities that see demand from young professionals as well as students (where planning permits).
- Study abroad, but close to home: as the globally mobile student population deepens beyond the most affluent, there is a growing trend to study abroad, but close to home. International student numbers in the UAE grew 15% in 2015, while numbers have increased 462% in Saudi Arabia in the last decade. Regional hubs will continue to grow in importance, particularly those which host branch campuses of established institutions.

- Diversification and growth: we expect to see more diversification of portfolios to include both residential and PBSA. Investment growth will continue as pioneers sell and recapitalise, fuelling investment activity with more trading stock.
- Responding to the skill-shift: 65% of children entering primary school today will end up working in job that doesn't yet exist. The most successful institutions will be those that can innovate to meet the changing needs of the workforce. There has been a shift to STEM subjects in recent years, but a premium may yet be placed on creative skills to balance the rise of automation in the workplace. Real estate investors would do well to watch for universities that are 'rising stars' and teaching the courses that the new workforce wants.

Investment growth will continue as pioneers sell and recapitalise, fuelling investment activity with more trading stock

Savills 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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