WORDS PAUL TOSTEVIN

Businesses want to be where brains congregate. With clear links between cities' university rankings and demand for commercial real estate, we take a view of the global markets

here are now around 236 million students in higher education globally, which is 136 per cent more than at the start of the millennium. Asia – which has seven times more students than North America – has seen a 237 per cent rise in numbers in that time. And growth in the sector is set to continue, with UNESCO forecasting the world's tertiary student population will hit 594 million by 2040. The world's best universities are the sources of the most highly skilled workers of the future. Running in tandem, and at some speed, with the increasing demand for higher education is the explosion in specialist 'clever' tech sectors – the likes of AI, ClimateTech, Deep Tech and CleanTech – whose sharpest minds are tackling the biggest environmental, scientific, engineering and humanitarian issues the world faces.

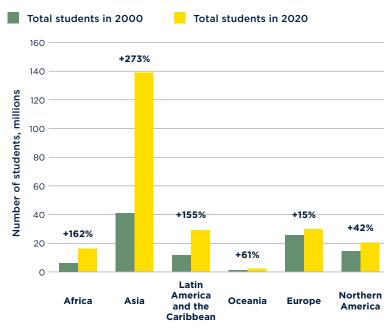
Businesses want to be where mighty brains congregate. Whether that is through direct links to universities or by recruiting the most skilled graduates, we are seeing a fast-evolving synergy between education and the knowledge economy.

There is inherent and considerable

value for businesses to be part of it, resulting in high demand for best-inclass offices and laboratory space near top-ranking universities.

There is a clear link between any given city's university rankings and the demand for, and value of, its commercial real estate.

Analysis of office capital values in top global cities shows that those that have a QS Top 200 university have higher capital values (\$672 per sq ft on average) than those that do not (\$425 per sq ft). The distribution of cities with higher capital values is strongly skewed to those that are also home to top ranked institutions.



# GLOBAL GROWTH IN HIGHER EDUCATION NUMBER OF STUDENTS

NUMBER OF STUDENTS

Businesses in search of top talent have a balancing act to perform. The cost of hiring and retaining the best graduates takes on a different hue if you are seeking to base yourself in San Francisco, Silicon Valley or Boston where the average salary of a scientist comfortably exceeds \$100,000 – rather than Bengaluru, where it's less than \$10,000. Naturally, the most in-demand individuals will gravitate to cities with high-performing businesses and prestigious tech clusters that, in turn, push up office rents and capital values. Good news for investors, but a challenge for small and growing companies that need to minimise their costs.

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Tech hubs also have a proven track record of beginning in relatively fringe locations – think Shoreditch in London, Kreuzberg in Berlin and Brooklyn in New York – before, arguably, becoming victims of their own success, as prices rise and long-established local enterprises move out to more affordable areas. Another factor to consider with embryonic tech hubs is how meshed they are into the fabric of the local community. These innovation ecosystems rarely thrive if they exist in isolation – and those that are mindful of their environment, in both eco and community senses, are likely to provide the best return on investment.

Build it and they will come – but only if it is in the right place. Investors, and employers in search of the next generation of top talent: take note.

### **United States**

The US is a higher education powerhouse and, as Savills Tech Cities explores, the leader in global tech. With more top-tier higher education institutions than any other country, the nation is particularly adept at attracting and retaining the best and brightest individuals.

In Boston, the top-ranked city for Life Sciences, Harvard- and MITincubated spinouts drive demand for lab space. The proliferation of RNAbased discovery platforms, following the success of BioNTech and Moderna, as well as the growth in firms focusing on the intersection of AI and drug discovery and delivery, is key to this.

"Although lab demand is down on the peak of 12-18 months ago, it's holding steadiest in the biotech hubs of Kendall and Seaport, as well as Watertown, Waltham, and Lexington," says Chris Gorczyca, Managing Director at Savills Boston.

He adds that in the Kendall Square area, where the ready availability of Harvard and MIT talent has historically kept lab space at a premium, vacancy rates have risen. In the broader Cambridge, Massachusetts area, "vacancies are running at about 5-6%," says Gorcyza. "This is actually a much healthier level for the overall market and for emerging companies to find the space they need to grow."

#### China

China has invested heavily in its universities.

When it comes to the pulling power of universities for industry, quality is not the only measure; quantity also counts. London beats all other world cities for the number of QS top 100 universities, but Beijing isn't far behind, in fourth place, after Hong Kong and Boston.

China is investing heavily in its higher-education sector, in both infrastructure and resources, leading to 824 per cent growth in university and college enrolment since 1997.

"Most universities are designed with a particular economic, business or political objective in mind," says James Macdonald, Senior Director and Head of Research at Savills China. "Although this is slowly changing, with more time being spent on primary research, universities are not necessarily built purely for the pursuit of knowledge."

The US may still be the world leader for science research output, but China's output has more than doubled in the

Source: Savills Research using UNESCO

past five years (see chart). And it is simultaneously building up a tech ecosystem that is changing the face of many Chinese cities.

"The geography of the Chinese tech sector reflects the country's large and diverse economy," says Macdonald. "Innovation and entrepreneurship is spread across a variety of regions and industries."

He notes that Beijing is home to many of China's top universities, research institutions, and government agencies: "That makes it a centre for research and development in areas such as artificial intelligence, robotics and biotechnology." The capital is also the headquarters of tech giants such as Baidu, Tencent, ByteDance and JD.com.

Shanghai has a thriving e-commerce industry, plus one of the largest stock exchanges in the world, and Shenzhen is a mecca for electronics manufacturing. "It's also home to a vibrant start-up scene," says Macdonald. "Favourable government policies encourage entrepreneurship in Shenzhen."

With globalisation comes mobilisation and while China's domestic student population has rocketed, so has the number of Chinese students attending overseas universities, which increased by 509 per cent from 2006 to 2021.

#### India

India's tech cities also illustrate the strong interplay between university excellence and tech success. An educated and fluent English-speaking labour force is key to the decades-old 'tech town' reputation of Bengaluru in southern India, which has 150 universities, a strong IT/business process management sector and a good stock of Grade A office space.

"Human capital indeed is one of the most important criteria for tech occupiers critically analysing locations to set up offices or expand their operations," says Suryaneel Das at Savills India. "Tier I cities (Delhi-NCR, Bengaluru, Mumbai, Hyderabad, Chennai and Pune) with excellent higher educational facilities act as talent magnets for the whole country. Tech talent tends to have a strong preference for cities with ample educational and technical opportunities."

At the same time, far smaller

# OFFICE CAPITAL VALUES IN CITIES WITH AND WITHOUT TOP 200 UNIVERSITIES

Cities without a university in QS Top 200 global ranking
Cities with universities in QS Top 200 global ranking



COLLEEN O'CONNOR SENIOR VICE PRESIDENT, LEASING, EAST COAST AND UK MARKETS, BIOMED REALTY



Proximity to worldleading research institutions is the key ingredient to creating

innovation ecosystems. For life science companies, access to skilled talent with the right qualifications and experience is a critical factor when deciding on a location. Ground-breaking research and development relies on a three-way partnership between academia, the government and private enterprise, but also relies on having access to mission-critical life science infrastructure.

Access to talent remains one of the major barriers to scaling up life sciences companies, meaning location is often considered just as important as building specification. Our developments are anchored by some of the world's leading institutions - whether that's the Massachusetts Institute of Technology in Cambridge, MA or the University of Cambridge in the UK. With recent data revealing that Britain has had significant growth in life science patent applications across all of the main European markets in the past decade, we can expect the growth of life sciences to continue on its positive trajectory - meaning a highly skilled workforce is more important

than ever for commercialisation ambitions.





Visit the Impacts website to see where individual cities sit

Source: Savills Research using QS and MSCI Global Intel Digest: Property Index

MATT FLOOD

OFFICE LEAD - BRENT CROSS TOWN, RELATED ARGENT



# Education drives demand for real estate

At Related Argent we see a huge amount of value in educational uses and their role in creating innovation and knowledge

clusters. Businesses see advantages of co-locating and partnering with these institutions. At Brent Cross Town, we're in conversation with Sheffield Hallam University on what courses they will offer at their new campus, to bring relevant talent and content that align with the values of the wider knowledge community we are creating.

By doing this we hope to attract talent, provide a district that nurtures university spin-out businesses and encourage a research capability which aligns with our target commercial occupiers – all of which breathe life into a new town district.

As we learnt from UAL at King's Cross, educational uses are a catalyst for creating vibrant mixed-use places, attracting office occupiers, bringing footfall that boosts the daytime economy, driving residential demand and drawing students that come to learn and choose to stay to live. We want to provide for all stages in

life that brings a genuine authenticity to community living.



# THE COST OF TALENT TO BUSINESSES

SCIENTIST SALARIES COMPARED TO THE SAVILLS TECH CITIES RANK

City	Scientist salary USD	Savills Tech Cities Rank	Premium or discount to all-city average
SAN FRANCISCO	\$121,000	1	69%
SILICON VALLEY	\$113,400	3	59%
BOSTON	\$107,700	8	51%
SEATTLE	\$103,800	15	45%
LOS ANGELES	\$102,000	6	43%
WASHINGTON, DC	\$99,000	18	39%
SAN DIEGO	\$97,600	20	37%
HOUSTON	\$91,900	29	29%
NEW YORK	\$90,000	2	26%
CHICAGO	\$86,300	28	21%
DENVER	\$85,900	23	20%
DALLAS	\$83,700	24	17%
RALEIGH-DURHAM	\$82,700	21	16%
AUSTIN	\$77,300	11	8%
ATLANTA	\$72,800	27	2%
BERLIN	\$65,500	19	-8%
TORONTO	\$62,500	25	-12%
ΤΟΚΥΟ	\$60,400	10	-15%
CHENGDU	\$57,000	30	-20%
SYDNEY	\$56,200	26	-21%
PARIS	\$55,500	9	-22%
SINGAPORE	\$48,800	12	-32%
LONDON	\$46,200	5	-35%
SEOUL	\$43,000	16	-40%
SHANGHAI	\$35,100	7	-51%
BEIJING	\$28,900	4	-60%
GUANGZHOU	\$15,000	22	-79%
BENGALURU	\$9,800	17	-86%

Source: Savills Research, Glassdoor

Bhubaneswar, in the east of the country, is a challenger city with 35 technical colleges, excellent quality of life and far lower office rents than the region's leading city of Kolkata. These smaller cities have increasingly attracted flex space providers. "The co-working segment in recent years has become a significant demand generator," Das notes. "Flex space operators have been making a conscious effort to expand in tier II & III cities of the country. We expect 15-25 million square feet of office space take-up by the IT-BPM sector in 'Challenger' and 'Emerging' tech cities over the next five years. Almost 50% of this anticipated demand is likely to be met by flex space operators."

# UK

Where education meets business meets funding, it leads to local regeneration and economic growth. "This isn't a new trend," says Sadie Janes, Director of Development at Savills Birmingham and Co-Lead of the UK Education sector group. "London's King's Cross redevelopment was anchored by an education tenant. But more recently the desire for universities to have a more open collaborative setting for key sectoral focus (and to assist student recruitment) is playing a major part in growing clusters."

Steamhouse in Birmingham, an old factory-turned-incubator for big thinkers in a variety of spheres, provides workspaces, social areas and learning opportunities for the community. In

2022

2017

London, King's Cross – whose Knowledge Quarter, a major life-sciences and tech hub, is home to Google, Meta and AstraZeneca – and White City, an emerging new tech cluster anchored by Imperial College, education has catalysed the transformation of the surrounding area.

Oxford and Cambridge illustrate how scientific excellence honed in their universities gives rise to significant tech clusters. The University of Cambridge alone contributes £30 billion a year to the UK economy and supports 86,000 jobs through its research and commercial activities.

They are illustrative too, though, of the huge need for fully-fitted, ready-touse laboratories, which are timeconsuming and complex to build and fit out to the appropriate standards. Such is the lack in Cambridge that there are plans to repurpose part of a shopping centre as lab space.

# **COUNT OF NATURAL SCIENCE JOURNAL ARTICLES PUBLISHED**

Count of natural science journal articles published								
	0	5,000	10,000	15,000	20,000	25,000	30,000	
UNITED STATES							-6.3% GROWTH 2017-22	
CHINA						107.7%		
GERMANY			1.5%					
UNITED KINGDOM			-0.1%					
JAPAN	10 10 10 10 10	-5.4%						
FRANCE	1010 1010	-7.6%					O	
CANADA	10 10 10 10	2.6%						
SWITZERLAND	10 10 10 10 10	4.3/0						
AUSTRALIA		7.2%						
SPAIN		3.1%						
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Source: Savills Research using Nature