

Cities & Universities: A Powerful Growth Dynamic

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Introduction

- I would like, first of all, to welcome all of you to the UCL campus, where I have had the honour of chairing the Council for the past 5 years. I found UCL to be full of brilliant, dynamic and diverse faculty and students. It's the largest resident university in London – 42,000 students > nearly twice the size of Oxford or Cambridge. But more about that later.
- It's also a great honour to present this 6th annual lecture in honour of Honor Chapman, a UCL alumna, the first female partner of Jones Lang Wooten (which has since become Jones Lang LaSalle) and a founding member and Chair of the London Development Agency, among many other roles. She was, by all accounts, an inspirational leader, a role model for professional women and a visionary for the great global city that London has become.
- I am sorry I never knew Honor (as others on today's panel did). But I've walked in some of her footsteps – here at UCL and at Jones Lang LaSalle. She loved London – as I do, my adopted home – and she believed that advice and policy should be based on solid research – as do all good academics.

So, what I'd like to do today is to explore the 2-way relationship between global cities and world-class universities – what I've called a 'powerful growth dynamic'.

To develop the argument, I will focus on 3 questions:

1. What are the attributes of a successful global city – where does London rank?
2. What are the attributes of a successful global university – where do London's universities rank?
3. What are the policy implications – for both governments and university leaders – to enhance and sustain their mutually beneficial relationships? This last question I'll introduce only briefly as we have an excellent panel with varied expertise to discuss it.

But first, a bit of context:

According to figures from 2012 calculated by London Higher, the universities located in London supported 172,000 jobs and produced over £17 billion/year of GDP, including £2.9 billion in export earnings. Those figures are probably double that today. London's universities directly employ almost 100,000 academic and other staff, and produce 130,000 skilled graduates every year, nearly 70% of whom stay and work in London. In other words, in purely economic terms, universities make a significant contribution to London's economy and work force.

Looking to the future, and in a broader context than just London – or indeed the UK - there are 2 powerful trends that we need to recognise:

- The first is urbanisation: people are moving from rural to urban areas
 - o UN data: 55% of world's population live in urban areas > 68% by 2050
 - In EU already over 70%; in UK 83% > 92% by 2030. Thinking about London traffic, this may be bad news. However, from an environmental perspective,

studies from around the world have shown that city dwellers have smaller carbon footprints than their countries' national averages. This is because of denser housing and greater use of public transport. (Annie Hampson may have more to say about that.)

- The second underlying trend I'd like to highlight is digital innovation & the disruption it is bringing to traditional ways of working, playing and living. There will be both winners and losers as some jobs disappear while new jobs requiring new skills are created. Most of those new jobs are in cities, which is where new businesses are being hatched. At the same time the demand for traditional office spaces and big retail outlets is falling. Companies are moving to 'agile' working and consumers are shopping on-line rather than on the High Street. People are also shifting their discretionary spending away from goods in favour of entertainment (where cities excel) and travel (mostly to other cities).

These 2 underlying trends – urbanisation and digital disruption – affect the choices that students, employers, investors and top-tier researchers make about where they want to study, work, invest and live. That is why successful cities enhance the prospects of the universities located there – AND – the presence of good universities in a city, attracts the kind of investment and jobs for the future, that make for a thriving, successful city.

So, now let's have a look at my first question: What are the attributes of a successful global city?

- I first did some work in this general area when I was Chief Economist at British Airways (1990s). We needed to decide where to increase our flight frequencies and where to buy slots – in short we needed to predict which cities would see the strongest growth in demand by business and leisure travellers. I remember that my top 3 choices were the 'Three B's': Barcelona, Boston, Berlin.
- As I began to prepare for this lecture, I was delighted to learn that the research staff at JLL (perhaps the successor group to that led by Honor Chapman) embarked upon a long-running project nearly a decade ago - called Urban Futures – to look at just this issue from the perspective of commercial property demand. The Lead Director of the JLL research team is **Jeremy Kelly**, who is in the audience today and who can answer any questions you may have about it. They have developed a database on over 100 cities around the world with over 500 data series. They aggregated these into 12 different characteristics for each city. These are things like: Infrastructure, Employment Growth, Quality & ease of living, Sustainability & the natural environment, Affordability, Innovation & technology, etc. (I will be quoting some of the figures from their report – and copies will be available if you would like to take one as you leave or at the reception)
- There is lots more detail than I can cover here, but suffice it to say that by pulling all these measures together they produced an overall ranking of global cities. The top 7 cities were, to some extent, in a class of their own – which they called 'the Big Seven' . You will be happy to know that in 2019 London came out top of that list, followed by New York, Paris, Singapore, Tokyo, Seoul and Hong Kong. Five other European cities made it into the top 20: Berlin, Amsterdam, Munich, Madrid and Stockholm.
- With this as backdrop, the JLL research team looked more closely at the drivers of Innovation and Talent Concentration in these cities. This touches directly on the role of universities, both

as sources of Innovation and trainers of Talent. The Innovation measure, for example, included R&D expenditure, Patents awarded, Venture capital and FDI in high-tech industries. On this measure, London came 5th, preceded by San Francisco, Tokyo, Singapore and Beijing.

- The Talent measure included 4 components: the proportion of 20-40 year olds in the city's population; employment in high tech industries, the average education level and the quality of higher education. On this measure London was number One, followed by San Francisco, Washington DC, San Jose CA (which is close to LA), Seattle and Boston.
- Looking even deeper into the data, the higher education component was broken down into STEM subjects (where London ranked 5th) and Social Science subjects (where London was 3rd). It was the combination of London's relative strength in both that put London in the top slot for the overall quality of Higher Education. UCL's size and clearly differentiated strategy as a multi-disciplinary university – aiming to be strong across both arts and sciences – is supported by these results.
 - So, with thanks to JLL for their research into what makes a City successful – let's move on to my second question:

What are the attributes of a successful global university?

I'd like to start by looking at one of the global rankings of universities, similar to the approach used by JLL in ranking global cities. I will then use UCL as an example of how important its location in London is to its success as a global university.

First, the university rankings. There are many different sources of university rankings, each with slightly different components and weights. I've decided to focus on the QS World University Rankings because it is the most widely cited and tries to capture excellence in both research and teaching.

- According to the QS rankings, the US and UK dominate the Top 20 list of global universities. US universities account for half of the Top 20, and they capture the top 3 slots overall with MIT, Stanford and Harvard.
- British universities comprise 5 of the Top 20 and 4 of the Top 10 – clearly punching 'above our weight' compared to the population or economic size of the UK. Oxford ranks 4th in the world, Cambridge 7th, UCL 8th, Imperial 9th and Edinburgh 20th. The rest of the top 20 slots are gained by universities in Switzerland, Singapore and China.

Of course these rankings depend wholly on the components that go into them and the robustness of the data that is used to measure those components. The QS rankings use 6 metrics: Academic Reputation, Employer Reputation, Faculty/Student Ratio (a proxy for teaching quality), Citations per Faculty member (a proxy for research) and Diversity in terms of the percentage of international faculty and students. These 6 metrics are meant to capture the aspects that students and faculty consider most important when deciding where to study or work. Of course, for any particular student or professor, there will be many additional considerations – financial, cultural, family links, even (especially in the US) the performance of a university's sports teams. But, imperfect as they are, these rankings show the strength of UK universities from a global perspective.

A correlation between the QS top 10 universities and the JLL top 10 cities for Innovation and Talent shows that the clusters around San Francisco, London and Boston significantly out-perform any other

city/university pairings. This out-performance is based on a complex set of network effects. Universities spawn spin-out companies which need professional support services (law, finance, accounting, labs, IT) which in turn require highly trained people, many of whom have families, which need good schools and job opportunities for spouses (if recruited international). One hears, again and again, that recruiting the right talent is the biggest challenge that business leaders cite. For example, when Amazon launched the competition in the US for its second HQ city, it specified that the criteria were a population of >1 million and the ability to attract and keep strong technical talent. And where better to find that talent than at local universities?

Let me use UCL as an example. While we are clearly a globally successful university, we are very much grounded in London. We currently have over 42,000 students, about half of whom are undergraduates. Of those undergraduates, half come from London. Because London is such an ethnically diverse city with so many international residents, this enables us to attract an international intake almost on our doorstep. In fact, we also have a strong focus on Diversity and Inclusion (D&I). We make a special effort to encourage applicants from black, Asian and minority ethnic (BAME) communities in London. Over the past 5 years the BAME share of our undergraduate intake has grown from 40 to 50%.

We have now broken ground on our second campus – UCL East – on the Olympic Park site in Stratford. We are the anchor investor in the so-called Culture Quarter of London’s East Bank, along with the V&A, the BBC, Sadlers Wells and the London College of Fashion. When our buildings are completed we will be bringing around 4000 students to what is already a lively young community based around Olympic Village. (Margaret Ford – former chair of the Olympic Park Legacy Co - may have more to say about this)

As well as students, our research faculty have strong links to many London partners – ranging from the NHS where many of our medical faculty have joint clinical appointments in London’s hospitals, to the Institute for Fiscal Studies which grew out of our Economics Department and provides analysis to the Treasury on fiscal policy. Some of our researchers have also created spin-out companies, such as Autolus Therapeutics which raised \$160 million on NASDAQ last year. So our location in London is core to our research and teaching success, as well as our social and entrepreneurial ambitions.

That brings me to my 3rd and final question: What are the policy implications – for governments and university leaders – to enhance and sustain their mutually beneficial relationships?

- First, City leaders and universities need to work together on transport and student housing solutions that are compatible with the city’s overall development goals. Students are heavy users of buses and bicycle lanes, rather than cars and taxis. On student housing, there is private funding available, but planning permission in appropriate locations is necessary to get it built. Modern research facilities for engineering and medical staff, and incubator space for spin-out companies generally require larger buildings and labs than can be found at inner city locations. This kind of high-tech development can become an anchor for fringe areas of a city if good transport is provided. (UCL/Olympic Park and Imperial/White City are great examples.)
- At the national level, a financially sustainable system of tuition fees is essential for home students. The system needs to make university education available to all qualified students regardless of their family income level. There are many ways to do this, but free tuition is not a sustainable one. In the UK we have a cap on tuition fees (£9,250) in exchange for guaranteed loans available to all, with income-contingent repayment. This means that debt is forgiven for

those whose subsequent income is below a level that is roughly 75% of the national average. It annoys me that the media tends to treat student debt that is never repaid as a failure of the system. It was designed that way to ensure repayment from those who could afford it and provide an indirect taxpayer subsidy for those who could not. In the US, the universities in the top 10 are all private. They charge very high fees, but have generous bursaries to offer 'needs blind' admission to students from low income families. The money comes from their very large private endowments [Harvard's endowment = \$38b] which also cover between 10 – 40% of their operating costs. Private philanthropy is what enables them to be financially sustainable while constraining student numbers to around 20,000 (roughly half the size of UCL).

And finally, a welcoming attitude, visa regime and post-graduation work permits for international students are essential to attract the best candidates. The restrictive regimes of recent years have been a real problem for British universities, which are in competition with countries like Canada and Australia where the welcome for international students is much warmer. In Britain, the Brexit referendum compounded the difficulties we already had with student visas from outside the EU. Brexit uncertainty continues to take its toll, but there was good news recently that the government has reinstated the right of international students to stay to work (or look for work) for 2 years after graduation. Bright, young graduates are a key part of the talent pool that attracts tomorrow's businesses to London.

I'm sure our Panel will have more to say about these aspects, so I'd like finish here. I hope I've persuaded you that there is indeed a Powerful, 2-way, Growth Dynamic between Successful Cities and their Universities.

Thank you very much.