

■ **World city status**
How the cost of live/work accommodation has changed since Brexit. **p6**

■ **Population density**
Comparing the effect of visitor numbers on global city populations **p8**

■ **The visitor city**
How international visitors affect cities' real estate and hospitality industries **p10**

SAVILLS WORLD RESEARCH
H2/2016

12 Cities

Occupying and investing in world city real estate

VISITOR CITIES

Why visitor numbers reflect the success of global cities



Savills global presence

30,000 EMPLOYEES ACROSS A NETWORK OF OVER 700 OFFICES IN MORE THAN 60 COUNTRIES



RESEARCH METHODOLOGY

In order to truly compare the cost of residential and commercial real estate across global cities, we use the Savills Executive Unit (SEU), which measures the cost of housing an identical group of people living and working in different countries.

Each live in different types of household and each member of the group chooses different types of locations and different types of property in which to live.

To measure office costs, we place the same seven people in an office of a small financial services firm and again in a creative start-up – each located in the most appropriate district for their industry type.

SAVILLS WORLD RESEARCH TEAM



Yolande Barnes
Director
+44 (0) 20 7409 8899
ybarnes@savills.com



Paul Tostevin
Associate Director
+44 (0) 20 7016 3883
ptostevin@savills.com



Vladimir Tikhnenko
Research Analyst
+44 (0) 20 7299 3043
vtikhnenko@savills.com



Nina Burley
PA to Yolande Barnes
+44 (0) 20 7299 3038
nburley@savills.com

For more information, please visit:
www.savills.com/12cities

- | | | |
|----|----------------------------------|--|
| 4 | COMPASS POINTS | Four new directions for the global real estate market in the coming year |
| 5 | | |
| 6 | LIVE/WORK INDEX | How our live/work index has changed since the UK's vote to leave the EU |
| 7 | | |
| 8 | DENSITY MAPS | How overnight visitor numbers impact population density in each of our 12 cities |
| 9 | | |
| 10 | THE VISITOR CITY | An in-depth look at visitors in cities and their effect on the real estate market |
| 13 | | |
| 14 | BUSINESS & TOURISM | How tourist numbers correlate to the attractiveness of cities |
| 15 | | |
| 16 | AIR TRAVEL AND INVESTMENT | How our 12 cities compare in terms of air traffic |
| 17 | | |
| 18 | STUDENT HOUSING | Visitors to the education sector may offer the future-proof income investors need |
| 19 | | |
| 20 | FUTURE ACCOMMODATION | How the 'fifth age of cities' will focus more on human capital as a measure of success |
| 21 | | |
| 22 | CITY INDEX | An overview of the key statistics from each of our 12 global cities |
| 27 | | |



For additional content, Please visit:
www.savills.com/12cities

This report is published on behalf of Savills plc by Seven, seven.co.uk. This report is for general informative purposes only. It may not be published, reproduced or quoted in part or in whole, nor may it be used as a basis for any contract, prospectus, agreement or other document without prior consent. While every effort has been made to ensure its accuracy, neither Savills plc nor the publisher assume responsibility for effects arising from this publication. Savills and the publisher accept no liability whatsoever for any direct or consequential loss arising from its use. The content is strictly copyright and reproduction of the whole or in part in any form is prohibited without written permission from Savills research. Investment advice: The information and opinions contained in this magazine do not constitute professional advice and should not be relied upon. Specific advice relating to your individual circumstances should be obtained.

OUTLOOK

↑ THE VISITOR VIRTUOUS-CYCLE

Cities that are economically, environmentally and socially successful not only attract the best workers to live and play there, they also attract a large number of visitors. Visitors to a city experience a wide range of human activities and, in doing so, create demand for different types of accommodation. This boosts the provision of amenities for workers and residents, which makes the city more attractive to newcomers and visitors, thus encouraging a virtuous cycle of growth. As well as feeding the city economy by spending money on accommodation, shopping, food and drink, culture, entertainment, education and a host of other experiences, visitors can have a big impact on real estate markets too by creating

increased demand for space and competition for scarce land. Every night, the 12 world cities in this report have to accommodate another city of visitors. On average, this adds 3.4% to the size of the resident population.

‘Visitors can have a big impact on real estate markets too by creating increased demand for space’

← THE SIZE OF THE VISITOR CITY

New York has a visitor population every night equivalent to an extra 640,000 people (when factoring in hotel vacancy rates). This is a ‘Visitor City’ nearly the size of Washington DC. London has a ‘Visitor City’ size equivalent to an extra population of 515,000 people. This is bigger than the size of Manchester. These visitor cities are important to the city economy. A total of \$123 billion a

year is spent in the 12 cities by international overnight visitors alone. In addition, there is evidence that a high visitor profile is not only the result of business travel but that it can result in higher levels of inward investment. First-hand knowledge of a city can help to reduce perceived investment risk so the fame of our world cities helps to enable investment in them. Those cities most open to visitors tend to be the most economically successful too.

N

→ A NEW CITY AGE

Global gateway cities have seen strong rental growth, as well as capital growth, due to high demand from occupiers and a limited supply of both living space and workspace. New York is now the most

expensive city for a worker to pay accommodation costs for both their home and office. The second most expensive is Hong Kong. As a consequence, city occupiers are looking for alternative locations, both for living and working, either in their own city or, increasingly, in alternative connected towns and cities – some of which are quite small. Savills calls this ‘urban dispersal’, a characteristic of the fifth age of cities which goes hand in hand with the dawning of the digital age, new working practices and looser ties to corporations and workplaces. In the fifth age, it is proximity to people and access to human capital that matters more than access to markets or access to capital. It means cities will increasingly operate as clusters within a connected region rather than single, stand-alone dominant cities.

‘In the fifth age, it is proximity to people and access to human capital that matters’

E

W

Compass points

This issue of *12 Cities* looks at the impact of different types of visitors on our world cities. Overall, it shows how both domestic and overseas visitors contribute to the life and vitality of a city

S

‘A total of \$123bn a year is spent in the 12 cities by international overnight visitors’

‘Capital will need to be deployed with an eye on whole place incomes’

↓ PAYING ATTENTION TO WHAT OCCUPIERS WANT

In building the cities of the fifth age, the complex needs and wants of all occupiers will increasingly have to be considered. At the same time, the digital age brings unprecedented change and uncertainty as to who these occupiers will be or what they will want in future. This is likely to result in a need for fine-grain, mixed-use and flexible accommodation for a great

variety of uses, some as yet unknown. The distinctions between different uses may become increasingly blurred with single buildings fulfilling a range of functions – like student accommodation, hotel use and co-working space all over the course of a single year, for example. Complex streetscapes and flexible buildings will need a new approach to investment. Capital will need to be deployed with an eye on whole place incomes rather than single use, stand-alone buildings.

Overnight visitor populations



All change since Brexit

The cost of living and work accommodation has changed in World cities and New York City now has the highest global occupier costs

NEW YORK TAKES TOP SPOT

For the past two and a half years, London has had the dubious honour of being the most expensive world city to rent accommodation. This has reflected the strength of its economy and high demand for space from a wide variety of occupiers. Last December, New York rents were snapping at London's heels, but now New York's live-work accommodation costs are the highest of Savills World Cities, ahead of Hong Kong and well ahead of London.

Falling financial sector office rents are behind a 0.5% fall in London's overall live-work costs in sterling terms but the impact of currency falls post Brexit has made London much more competitive on the world stage. Continued uncertainty

surrounding the EU exit terms has depreciated sterling to levels not seen in 168 years. After collecting the rental data in June, the EU referendum vote further reduced London's occupation costs dramatically. Live-work costs have fallen, in dollar terms, by 19% since December 2015 (see fig.1). This puts London's costs much closer to those of Tokyo and Paris.

\$114,010

The live/work accommodation costs per employee in New York City

Of the cities we track, only Lagos observed a larger deflation in rental costs over the same period, at -30%. Singapore, Dubai, Moscow and Shanghai saw smaller falls in their space costs, ranging from -2% to -9%.

Meanwhile, rents for both residential and office properties in New York rose between December and June 2016 while the greenback strengthened. Even though nominal office rental growth is slowing, overall accommodation costs rose by 2%. The annual cost of living and work space in New York is now \$114,010 per employee. Hong Kong is now way ahead of London's \$90,857 at \$100,996. The biggest cost growth in dollar terms was seen in Tokyo where a combination of the strong yen and nominal prices pushed them up by 21%.

1

\$114,010
(\$114,010) 2%
New York

FIG. 1 October 2016 Living and Working Space Costs

Rank	City	Total live-work accommodation costs per employee in US\$ exchange rate October 2016 (July 2015)	Change since Dec 2015
1	New York	\$114,010 (\$114,010) 2%	
2	Hong Kong	\$100,996 (\$100,984)	1%
3	London	\$90,857 (\$100,141)	-19%
4	Tokyo	\$84,167 (\$85,332)	21%
5	Paris	\$79,970 (\$80,734)	5%
6	San Francisco	\$66,269 (\$66,269)	0%
7	Singapore	\$59,660 (\$61,335)	-2%
8	Dubai	\$53,906 (\$53,913)	-7%
9	Sydney	\$51,625 (\$50,768)	4%
10	Los Angeles	\$50,215 (\$50,215)	3%
11	Miami	\$49,947 (\$49,947)	2%
12	Chicago	\$45,457 (\$45,457)	2%
13	Dublin	\$44,720 (\$45,147)	10%
14	Lagos	\$44,048 (\$45,818)	-30%
15	Moscow	\$43,966 (\$43,966)	-9%
16	Shanghai	\$42,121 (\$42,578)	-4%
17	Berlin	\$29,650 (\$29,933)	6%
18	Mumbai	\$28,915 (\$28,592)	2%
19	Johannesburg	\$21,477 (\$20,905)	2%
20	Rio de Janeiro	\$19,225 (\$19,189)	14%

LIVE /
WORK
INDEX

more expensive in dollar terms. The exception is Dublin, with an overall live-work increase of 6% in euro terms, fuelled primarily by a big bounce in office rents from low post-GFC levels, and especially in the creative/tech sector. This compares to Berlin's overall 3% rent rise in local currency and Paris's 1%. Despite being small, Berlin and Dublin look very good value to business occupiers wanting to locate in a large, prosperous economic region. Annual accommodation costs are among the lowest in the ranking, comparable to Mumbai and Lagos.

OIL PRICES' IMPACT

Dubai, Lagos and Moscow have all seen rent falls in office and residential accommodation due to falling occupier demand in economies closely affected by oil price and businesses related to oil. Moscow accommodation costs fell by 9% overall (financial office rents were down by 18%) while Dubai's fell by 7%, mainly in the residential sector. Both real estate markets are denominated in US dollars or related currencies, so have not been affected by currency movements against the dollar.

Falling rents in prime residential, and especially offices, in Lagos have been amplified by weak currency but are helping make the city look more affordable for international occupiers.

ACCOMMODATION COSTS

We estimate that businesses operating in world cities will spend around one-third of their total operating costs on accommodation: a combination of commercial rents, paid directly to landlords, and demands on salaries created by the cost of employees' living accommodation.

The British Council for Offices (BCO) estimates that, for most companies, office accommodation costs account for around 15% of their total costs, compared to 50% salary costs. In world cities, a large proportion of employees' salaries (often between 25% to 33%) will be spent on residential accommodation, so this will have a significant bearing on how competitive a city is to employers.

Savills unique measurement of both residential and commercial property costs captures this overall cost of accommodation like-for-like to show the impact of real estate on businesses across world cities. ■

CURRENCY SWING EFFECTS

The swing in world currencies since Britain's Brexit vote has helped change an already dynamic range of market movements across cities to an extremely varied one. The biggest increases in dollar costs have been in Tokyo where growing rents, particularly in prime residential and creative office sectors, have been amplified by significant strengthening in the yen.

Even greater amplification has been seen in Rio de Janeiro, where challenging economic conditions have damaged real estate occupier demand and rent levels but been accompanied, perhaps surprisingly, by strength in the real. This means live-work costs have fallen by -5% in local currency but increased by 14% in dollar terms.

At the other extreme, Lagos has seen a downward movement in office rents (-20%) and the effect of a falling currency (-35%). As oil prices have fallen, oil-dependent industries have withdrawn demand for accommodation, and the naira has fallen significantly. Amplification here significantly improves the affordability of accommodation in Lagos for dollar-denominated companies.

SOME OLD TIGERS RE-EMERGE

Further down the league table of costs, the European cities have shown mostly modest rental growth in local currencies – symptomatic of cyclical post-GFC recovery, but the strengthening of the euro since December has made them slightly

Cities feeling the squeeze

Comparing how different global cities' population density swells each day due to the influx of visitors

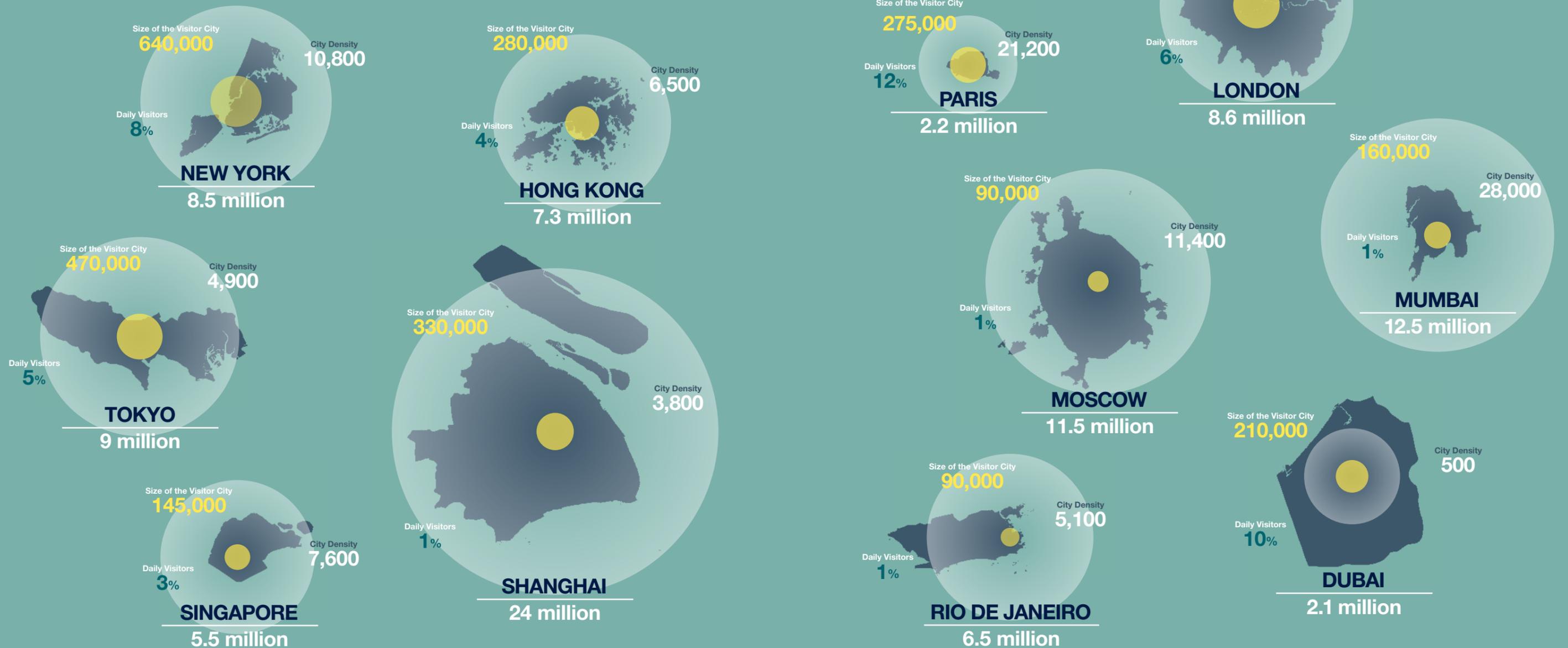


FIG. 1 City populations, density and number of visitors

KEY

SIZE OF VISITOR CITY (OVERNIGHT VISITORS + NUMBER OF VACANT BEDS)

CITY DENSITY (PEOPLE/SQ KM)

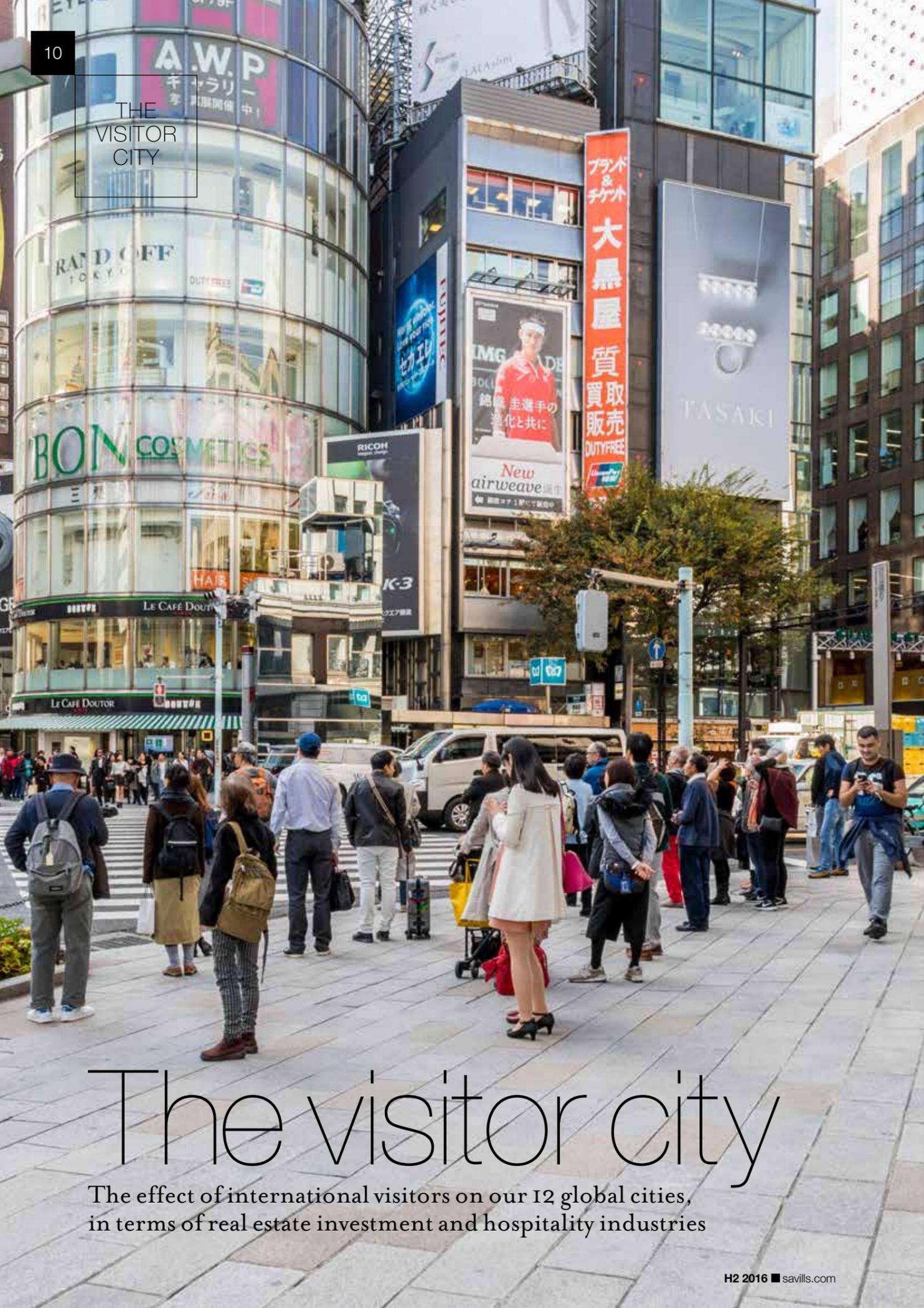
CITY POPULATION

DAILY VISITORS (% OF CITY POPULATION)

VISITOR POPULATION

Source: Savills World Research

THE VISITOR CITY



The visitor city

The effect of international visitors on our 12 global cities, in terms of real estate investment and hospitality industries

FIG. 1 International visitors

	International overnight visitors (millions) 2016	Average spend per international overnight visitor
LONDON	19.88	\$994
PARIS	18.03	\$714
DUBAI	15.27	\$2,050
NEW YORK	12.75	\$1,453
SINGAPORE	12.11	\$1,036
TOKYO	11.70	\$1,152
HONG KONG	8.37	\$817
SHANGHAI	6.12	\$817
MUMBAI	4.86	\$741
SYDNEY	3.75	\$1,707
MOSCOW	1.83	\$514
RIO DE JANEIRO	1.37	\$730
12 CITY TOTAL	116.04	\$1,060

*Measures GaWC Global connectedness; Kearney Performance & Potential; Mori Power; EIU Global Competitiveness

Source: MasterCard, Savills World Research

The global cities that we feature are not necessarily the biggest in the world, nor are they the biggest city economies, nor the most powerful cities on the planet (although some are all of these). But they are some of the more famous and high-profile cities within their global regions.

High-profile cities attract visitors. This has a knock-on effect by attracting investment as well, including real estate investment. They are high-profile cities able to tell some compelling stories for those trying to read the runes of the global real estate markets.

We have already taken a close look at city populations and densities. The rate of growth in these populations and the amount of land and buildings in a city determine future trends in real estate markets. A big, growing population in a small space will create demand pressures resulting in rent rises, while a shrinking population and large land supply create an entirely different real estate market.

But in all the global cities, there is a significant but uncounted population which rarely features in discussions of land use. It tends to be sidelined in planning discussions which focused on housing and workspace needs. There are around 901 million visitors a year, domestic and

overseas, across our 12 cities. They spend a total of 1.05 billion nights in varying types of guest accommodation, mainly hotels.

This means that around 2.9 million people every day are competing for accommodation with local residents, creating demand for what we call a 'Visitor City'. On average, 3% is added to the population of cities by visitors every night. The largest overnight visitor populations are found in New York (0.57 million) and London (0.42 million).

THE SIZE OF THE VISITOR CITY

Visitors create demand for land in the same way as the residents and workers do. This is a force to be reckoned with, particularly in central areas.

Hospitality space has to be provided at a higher rate per person than residential

accommodation. Occupancy rates fluctuate over the year and hotels need to house visitors at peak periods.

Taking occupancy rates into account, we estimate that our cities need to house visitors totalling over 3.5 million. In some cities, notably Paris and Dubai, visitors swell the population by over 10%, creating demand for guest accommodation. It is also notable that the biggest visitor cities are also the most expensive for living and workspace. All this demand puts pressure on scarce land supply (see fig. 2, below).

CITY QUALITY

World cities are not only great places to live in, work in, do business in and play in, they are also great places to visit. Premier world cities score well in Savills World City Ranking, not only on economics but

FIG. 2 The size of the visitor city

Source: Savills World Research

	Total overnight visitors per day	Visitor city (capacity needed: no. guests)	Visitor city as % of city population	Office & residential accomm. cost ranking	Visitor city population equivalent
NEW YORK	573,699	640,000	7.5%	1	WASHINGTON DC
LONDON	416,193	515,000	6.0%	3	MANCHESTER
TOKYO	390,411	470,000	5.2%	4	FUKUYAMA
SHANGHAI	220,728	330,000	1.4%	10	TIELING
SYDNEY	286,096	325,000	6.7%	8	WOLLONGONG
HONG KONG	241,271	280,000	3.9%	2	LHASA (CHINESE TIBET)
PARIS	209,075	275,000	12.3%	5	STRASBOURG
DUBAI	160,649	210,000	10.0%	7	ASWAN
MUMBAI	114,612	160,000	1.3%	11	JAUNPUR
SINGAPORE	122,759	145,000	2.7%	6	ISLE OF WIGHT (UK)
MOSCOW	54,918	90,000	0.8%	9	DOLGOPRUDNY
RIO DE JANEIRO	75,438	90,000	1.4%	12	COPACABANA DISTRICT
12 CITY TOTAL	2,865,849	3,530,000	3.4%		

286,096 Total number of overnight visitors per day to Sydney

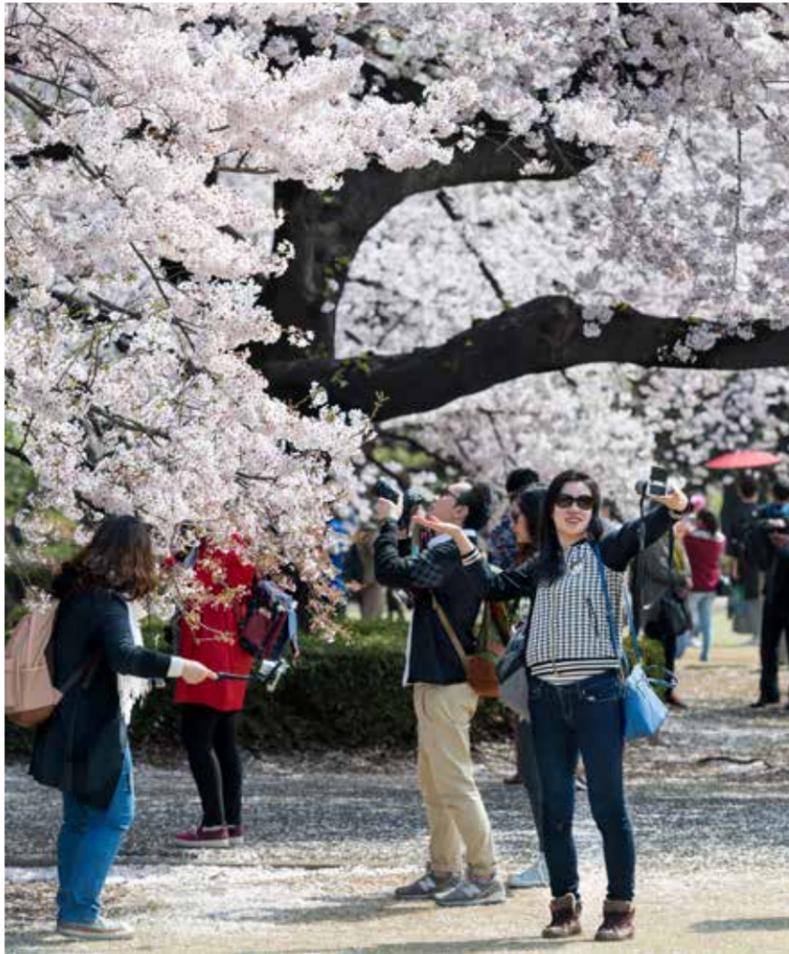
12.3% Percentage of Paris population who are visitors

also on culture, education, quality of life, safety, rule of law and a whole host of attractions. This draws people from all over the world to live, work and play (see fig. 1, previous page, top).

INTERNATIONAL VISITORS

The most globalised cities have the most international overnight visitors, particularly business visitors. These visitors can have a big impact on a city's economy because they tend to stay longer and spend more than domestic visitors. Across the 12 cities, international overnight visitors spend a total of US\$132.6 billion a year when they visit, 30% of it on accommodation. In this way, city visitors are participating in the real estate markets of cities every time they pay their hotel bill. This is also true of retail and food and beverage spend, which helps create demand for space and to pay the rent on these premises. They also support industries outside of the hospitality sector, such as airports.

London has the highest number of international overnight visitors, followed by Paris. The highest spending visitors by far are Dubai's who spend nearly twice the average of our 12 cities. The next most lucrative international visitor market is Sydney where visitors also stay longer. New York, Tokyo and Singapore are the only other cities where international visitors spend more than US\$1,000 per head. Moscow and Rio have the fewest visitors and the lowest average spend of our cities.



DOMESTIC VISITORS

Not all visitors to world cities come from overseas. In most, especially those with vast hinterlands such as USA, China and Russia, more visitors come from the home country. A large proportion of these are not overnight visitors, so we have measured or estimated their numbers but left them out of the 'Visitor City'. Native overnight visitors stay for shorter periods than overseas ones

but still contribute to demand for bed spaces, so they have been included in our estimates of the size of the Visitor City.

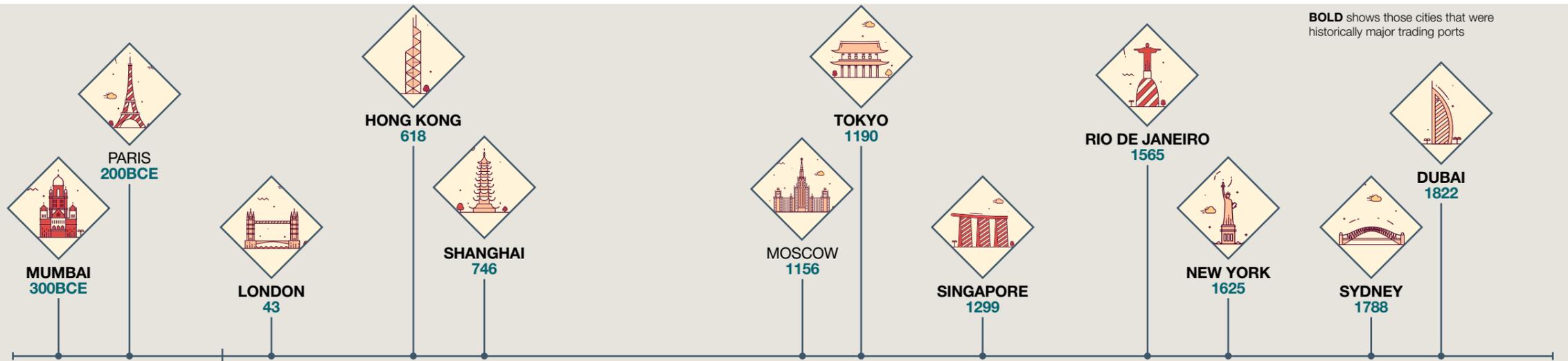
Both types of visitor, day trippers and overnighters create demand for other types of real estate. Retail spend, food & beverage and leisure attractions all involve real estate of various types.

London, with a relatively small UK hinterland, has the highest number of overseas overnight visitors (20 million)

FIG. 3 Old cosmopolitan cities

World cities have been welcoming and accommodating visitors for centuries. Nine of our 12 cities are historic trading ports, so have seen a wide range of nationalities come and go, and their global standing is very well established and long-lived.

All 12 have been settled for a very long time. Even the youngest, Dubai, was a (small) urban area nearly 200 years ago. The age of these cities can be a very important visitor attraction. Their historical and archaeological artefacts and urban character, in those places that have been preserved, are a significant tourist draw.



BOLD shows those cities that were historically major trading ports

THE VISITOR CITY

FIG. 4 Which visitor cities are the most global?

	International overnight visitors (m)	Domestic overnight visitors (m)	% domestic
DUBAI	15.27	-	0%
SINGAPORE	12.11	-	0%
LONDON	19.88	13.02	40%
PARIS	18.03	16.94	48%
HONG KONG	8.37	18.32	69%
SYDNEY	3.75	9.20	71%
NEW YORK	12.75	44.50	78%
MUMBAI	4.86	30.00	86%
TOKYO	11.70	(est) 62.21	84%
RIO DE JANEIRO	1.37	(est) 10.00	88%
MOSCOW	1.83	15.47	89%
SHANGHAI	6.12	(est) 20.00	77%

Source: MasterCard, Savills World Research

but fewer domestic visitors (13 million). Paris, with the second highest number of international visitors (18 million) has a slightly bigger French population to draw from but sees a similar proportion (40%) of domestic visitors to London (40%). Singapore, being a city state, can have no domestic visitors as they are all already resident. Dubai records no visitors from within its own emirate (see fig. 4, top).

THE HOSPITALITY REAL ESTATE EFFECT

Every year, US\$36.75 billion of revenue flows into the accommodation sector of just nine cities from international visitors alone. The biggest recipients of this revenue is Dubai, followed by London, Paris and New York. These fundamentals point to where the healthiest revenue levels and growth might be found in cities where supply is limited (see fig. 5, top right).

THE AIRBNB EFFECT

In many world cities, visitors are also starting to compete more directly in the residential market. As householders open up their homes for guests using apps like

Airbnb, they are increasingly competing with hotel operators and, when they are achieving above-residential-market rents for the same space they can out-compete ordinary residential household in the housing market.

This is starting to be recognised as a housing supply issue, especially in low supply residential markets, and is being increasingly scrutinised and regulated in many of them. This shows the way that different uses compete for space in the city and how visitor accommodation is part of the challenge of housing the city.

THE RETAIL & F&B EFFECT

It is not just the market for hotels and hotel land upon which international visitors have an impact. Their retail spend and spending on food and beverage add significantly to revenue in those sectors too. Across the nine cities where data is available, annual F&B spend by international visitors totals at least US\$21 billion a year and shopping accounts for US\$38 billion. Restaurant, bar, café and shop rents, especially in tourist districts, will be significantly impacted by these revenue inflows (see fig. 6, right). ■

FIG. 5 The hospitality real estate effect

	International overnight visitors accommodation spend (billions)	Accommodation as percentage of total spend
DUBAI	\$8.5	27%
LONDON	\$5.9	30%
PARIS	\$5.8	45%
NEW YORK	\$5.4	29%
TOKYO	\$3.8	28%
SINGAPORE	\$3.6	29%
HONG KONG	\$2.4	35%
SHANGHAI	\$1.1	21%
RIO DE JANEIRO	\$0.3	28%
9 CITY TOTAL	\$36.75	

Source: MasterCard, Savills World Research

FIG. 6 International overnight visitor spend

	F&B (bn)	Retail (bn)
NEW YORK	\$3.50	\$4.57
LONDON	\$3.26	\$9.23
PARIS	\$3.04	\$2.15
DUBAI	\$4.70	\$9.70
SINGAPORE	\$1.54	\$2.82
HONG KONG	\$1.33	\$2.11
SHANGHAI	\$0.50	\$1.43
TOKYO	\$2.74	\$5.81
RIO DE JANEIRO	\$0.28	\$0.12
9 CITY TOTAL	\$20.89	\$37.95

Source: MasterCard, Savills World Research

The city with the largest annual number of international business visitors is Paris, at **5.4 million**, followed by London with **4.2 million**.

International business visitors

Cities that are successful in attracting a large number of tourists are often equally as capable of attracting talent to live and work there

It's easy to assume that the attraction of global cities is all the history, buildings, culture, entertainment, lifestyle and leisure that they offer, and that it is tourists who make up most of their visitors. On average, 77% of international visitors to the cities in this report are there for leisure, tourism and reasons other than business, such as meeting up with friends and relatives.

What this means may be a little more complex than it appears at first glance. We often find that the cities that are the most successful at attracting business are also those that are the most effective at attracting human beings, full stop. Because human talent is so valuable to modern industries, particularly the creative, tech and advanced financial sectors, cities that are able to attract

human capital have a distinctive business edge over those that are not. This ability is likely to be reflected in tourist numbers, as well as investors and workers flocking to the city (see fig. 1).

It is becoming harder in some of the hippest city locations to distinguish between workspace, leisure space and hospitality, or even residential space as the co-working, co-living, blended lifestyle of generation Y blurs traditional distinctions. In the same way, it is becoming difficult to distinguish between all the reasons for visiting a city. Even the most conservative executive would find it difficult not to take a walk and have a peek at just a few of the cultural and other attractions available in world cities – even if they are there on business. It is likely they will be shown some of them by business hosts.

Even more difficult to distinguish is the visit that might combine conventional business with private investments, shopping, leisure activities, educational activities and socialising.

The size of the international business visitor market in a city can be seen as just one indicator of how globally connected its economy is. Visitor numbers can be a good indicator of how attractive the city is likely to be to investors and businesses

seeking to locate there. The city with the largest annual number of international business visitors is Paris (5.4 million), followed by London (4.2 million).

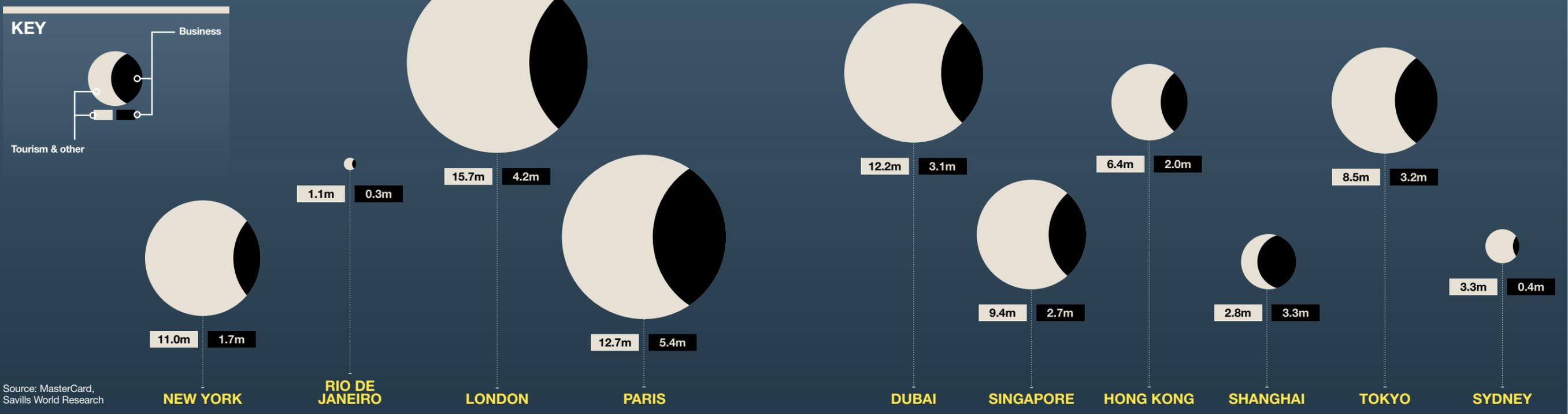
Shanghai has a large percentage of international business visitors (55%) as it is not a prominent international leisure destination, especially compared to cities such as Rio de Janeiro and Sydney, which have a large proportion of tourists and other types of visitor seeking sunshine and lifestyle experiences. International visitors total just 400,000 and 300,000 in Sydney and Rio respectively.

For some cities, like New York, a low proportion of international overnight business visitors may indicate that there is a high proportion of domestic business visitors connected globally through other international hubs in the same country. ■

5.4m

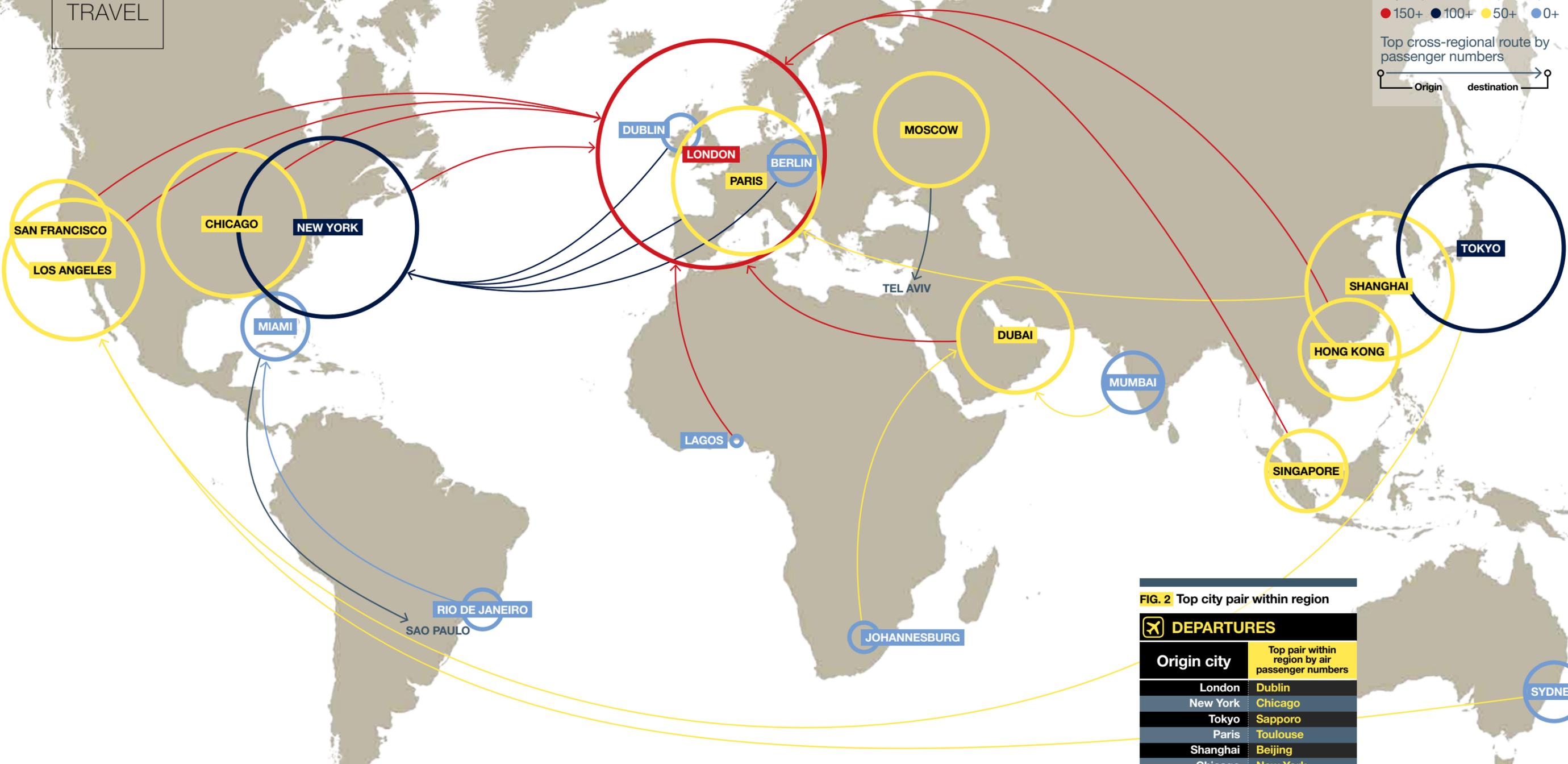
The number of international business visitors to Paris each year – the world's highest

FIG. 1 International overnight visitors



Source: MasterCard, Savills World Research

FIG. 1 Busiest cross-continent air routes by passenger traffic in selected global cities



KEY
 Total passengers across world city airports, 2015 (million)
 ● 150+ ● 100+ ● 50+ ● 0+

Top cross-regional route by passenger numbers
 — Origin — destination —>

FIG. 2 Top city pair within region

✈️ DEPARTURES	
Origin city	Top pair within region by air passenger numbers
London	Dublin
New York	Chicago
Tokyo	Sapporo
Paris	Toulouse
Shanghai	Beijing
Chicago	New York
Los Angeles	San Francisco
Dubai	Doha
Moscow	St Petersburg
Hong Kong	Taipei
San Francisco	Los Angeles
Singapore	Jakarta
Miami	New York
Mumbai	Delhi
Sydney	Melbourne
Berlin	Frankfurt
Rio de Janeiro	Sao Paulo
Dublin	London
Johannesburg	Cape Town
Lagos	Abuja

Source: Savills World Research

Airport: world city air passenger traffic

The busiest cross-continent air routes in selected world cities

London has the world's busiest airport system by passenger count (155 million in 2015), served by six commercial airports (Heathrow, Gatwick, Stansted, Luton, City, Southend).

New York is second with 121 million passengers in 2015. The two global mega cities host the world's busiest long-haul route: London to NYC. They also have the world's largest and most invested real estate markets, a combined \$200 billion in 2015/16.

While London accounts for eight of the 20 top cross-regional pairs assessed here, in the case of Shanghai, Paris is the best served destination (followed by Frankfurt). Dubai is now the busiest cross-continent route for travellers from Johannesburg and Mumbai.

For Tokyo and Sydney, and Asian cities on the Pacific rim, Los Angeles is the number one cross-regional destination. Miami, gateway to Latin America, finds its busiest route to Sao Paulo, and from Rio, Miami. ■

Housing students: the future of city accommodation?

Vibrant global cities are attractive places for young people to live and study in. These 'long stay' visitors need accommodation, and specialist providers are making inroads into meeting that need

BACK TO SCHOOL

The need to accommodate students has been driven by rapid growth in higher education enrolment worldwide. Student numbers were boosted in the wake of the global financial crisis as a weaker job market meant more people sought to improve their skills. The number of students studying outside their home country has grown even faster. More than four million students did so in 2013, compared to just two million in 2000. Their numbers are forecast to reach eight million by 2025.

The drive to accommodate these students has failed to keep pace so the supply of purpose-built student housing, even in mature markets, remains low. Provision rates range from 24% in the UK to just 6% in Spain and Australia.

A HOTEL FOR STUDENTS

For students, secure, well managed, quality accommodation from a trusted provider is appealing. Providers have sought out cities with high proportions of international students and adapted models from the US and UK to suit local context, laws and customs.

In new markets, hybrid products have helped to spread risk. The Student Hotel, first developed in the Netherlands, offers quality accommodation on a short-term

26%

The proportion of international students studying in Australia

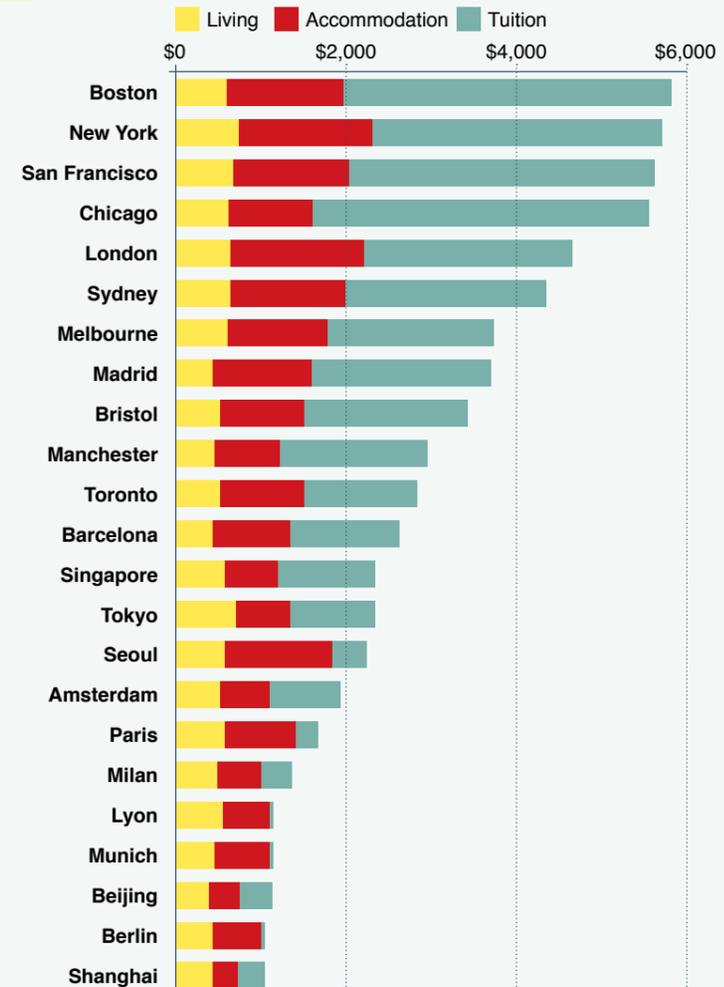
basis, aimed at students but open to everyone. In Germany, private, purpose-built student accommodation comes mainly in the form of studios.

Far from being a 'noisy nuisance', students are being used as a tool in some cities to regenerate entire neighbourhoods. The first occupiers at London's King's Cross redevelopment were 5,000 university students and staff from Central Saint Martins college, supported by on-site purpose-built accommodation. These students helped to establish a cultural and creative heart by ensuring, from the outset, that the area was busy and vibrant at all times of day for a host of uses.

LOW-COST HUBS

First-tier world cities such as London, Sydney and New York are characterised by high land values and competing

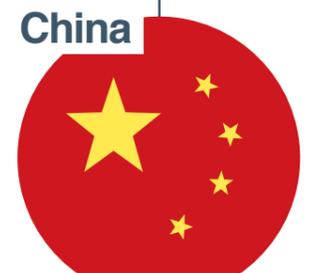
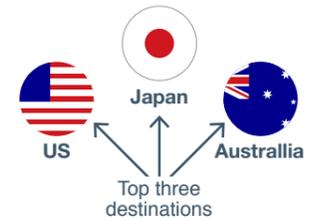
FIG. 1 Monthly cost of international student living and study



Source: Savills World Research

Non EU international student on non-specialist STEM undergraduate degree (e.g. mathematics) course at a top institution, residing in purpose-built student accommodation.

World's largest source market for international students:



712,200
outbound students

Almost four times the size of India – the next largest

India
182,000
outbound students

demand for the development of other asset classes. It is no coincidence that most purpose-built accommodation to date has focused on the premium market. When combined with tuition fees and living costs, study in these markets can be extremely expensive (see fig. 1).

With the fastest growth in student numbers due to come from emerging markets, there is huge untapped demand for accommodation at lower price points.

Cities such as Dubai and Kuala Lumpur are establishing themselves as regional, low-cost education hubs. Branch campuses of established institutions in these markets have been effective in raising the quality of the local higher education offer. They allow students from the host country and surrounding region to study at a respected foreign university without

having to move abroad – a cost-effective option, particularly for students from emerging economies. Purpose-built accommodation is an important element of this. It brings new housing designed to international standards for students to these new markets.

TOMORROW'S OCCUPIERS

The sector may offer a glimpse into the future for approaches to city development

London is home to

360,000

higher education students, more than the entire population of Nottingham

generally. Not only are innovations in student housing challenging traditional residential typologies, accommodation for students is also being used as a catalyst to shape city neighbourhoods and entire cities.

Buildings and neighbourhoods need to be flexible to respond to changing demographics and occupier requirements. Time has shown that the most successful and enduring city districts are those that have the sort of stock that allow multiple uses and are easily changed from residential, to workspace, to retail to hospitality and back again.

Accommodating students also gives a glimpse into the role of young people and their housing preferences. Reliable, high-speed internet has proved an essential feature of any scheme, but location remains important too. ■

The fifth age of cities

The evolution of cities has turned full circle. The latest age involves attracting people to generate ideas and nurture human capital

FUTURE OF THE WORLD CITY

In the late 20th century, many world cities were characterised by single-use asset classes in zones and on big grids. But there are significant demographic and technological changes happening now that are likely to change this in the future. New generations in the digital age are creating conditions for what we are calling the 'fifth age of cities', which looks surprisingly like the first age.

THE FIVE AGES OF CITIES

The first age was about the economic, social, political and cultural advantages of humans being in proximity. The second – the early industrial era – was about proximity to raw materials. As

New generations in the digital age are creating conditions for what we are calling the 'fifth age of cities', which looks surprisingly like the first

trade and markets developed, proximity to markets and ports started to matter for the mercantile cities of the third age. The third age overlapped with the fourth, which was about proximity to capital and the concentration of financial capital in certain cities. The post-war 20th-century city coincided with the age of the internal combustion engine and private transport. Cities in this age were characterised by roads carrying vehicles between the concentrations of capital, not just in cities but in individual, single-use buildings.

We are now entering the fifth age, where the purpose of the successful city is similar to the first age: to attract people, not traffic; to facilitate the flow of ideas,

not just money; and to nurture human capital, not just financial capital.

Evidence is emerging that this age involves 'urban dispersal'. Worldwide, we've observed that towns and cities linked to, but not part of, the main city are growing in importance. Where city dwellers are dispersing to other urban centres (often as a result of high real estate prices) then city clusters start to form, so big-city planning means acknowledging the role of these outlying neighbourhoods, towns and small cities as well, crossing political, sometimes even national, boundaries. The 'idea of the city' may be becoming more important than the geopolitical boundaries of an administrative area.

THE IMPACT OF CAPITAL ON THE BUILT ENVIRONMENT

The way that institutional capital has been deployed over recent decades can help to explain why and how construction happens in ways that Saskia Sassen (the academic and author who came up with the term 'global city') asserts "can de-urbanise cities if... large corporate complex[es]... erase streets and squares... with a large footprint". There is a strong link between the nature of finance and investment, and the resulting built environment. 'Big capital' deployed by large investors leads to different results compared with 'bottom up', smaller-scale funding coupled with long-term land stewardship. ■

FIG. 1 The five ages of the city

■ Built environment ■ Economy ■ Poverty ■ Wealth



Agrarian
Small villages and towns, one capital city
Subsistence
Rural house
Big country house

1

Early industrial
Proximity to raw materials; Factory cities
Take off
Old rural house
New inner city tenement

2

Mercantile
Proximity to markets; Rail towns, ports & Model cities
Growth
Inner city apartment
New suburban house

3

Capital
Proximity to capital; Urban renaissance
Maturity
Dated suburban house
Big country house or big inner city apartment

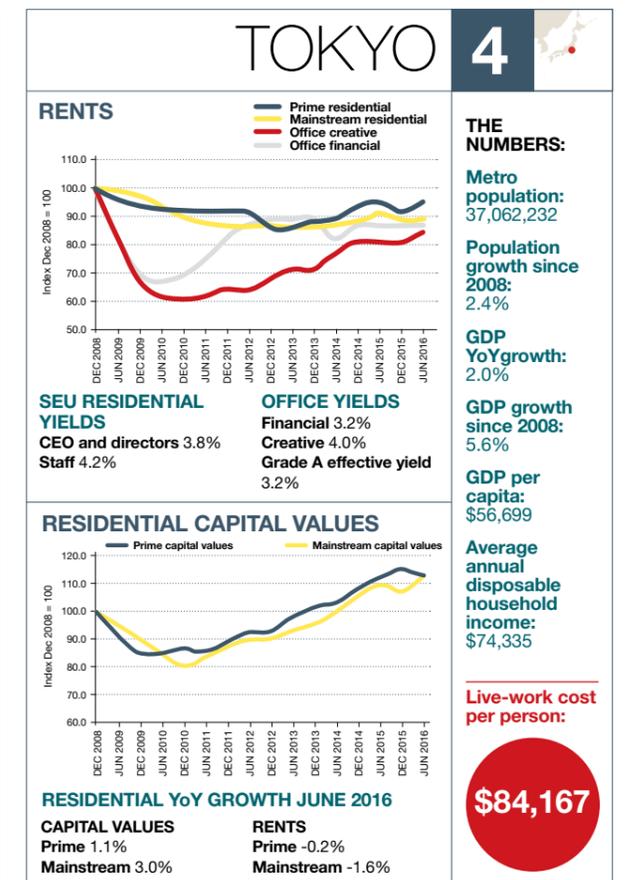
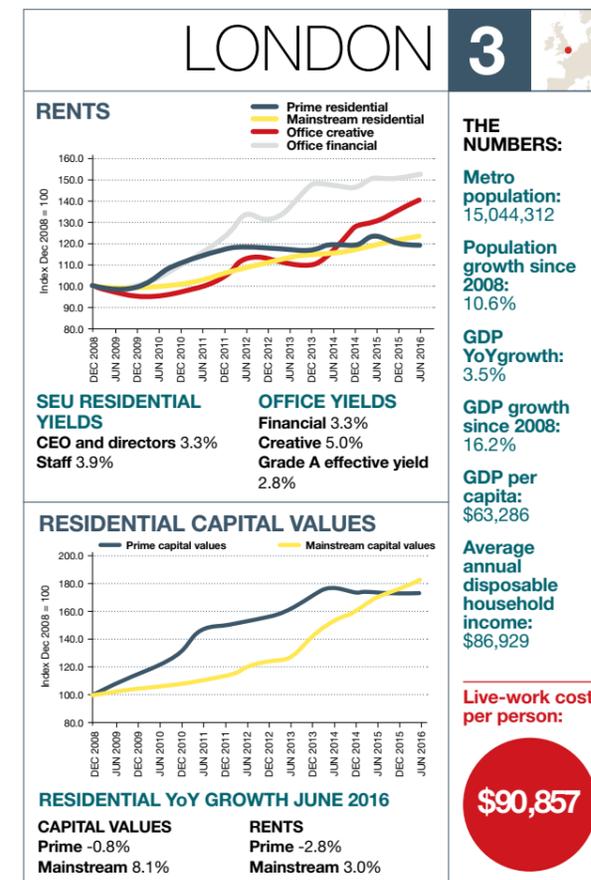
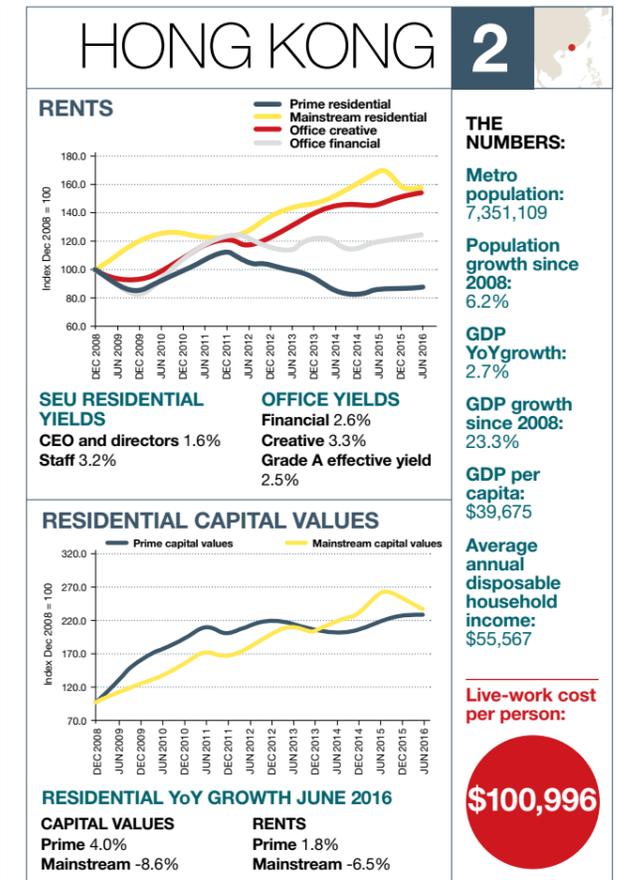
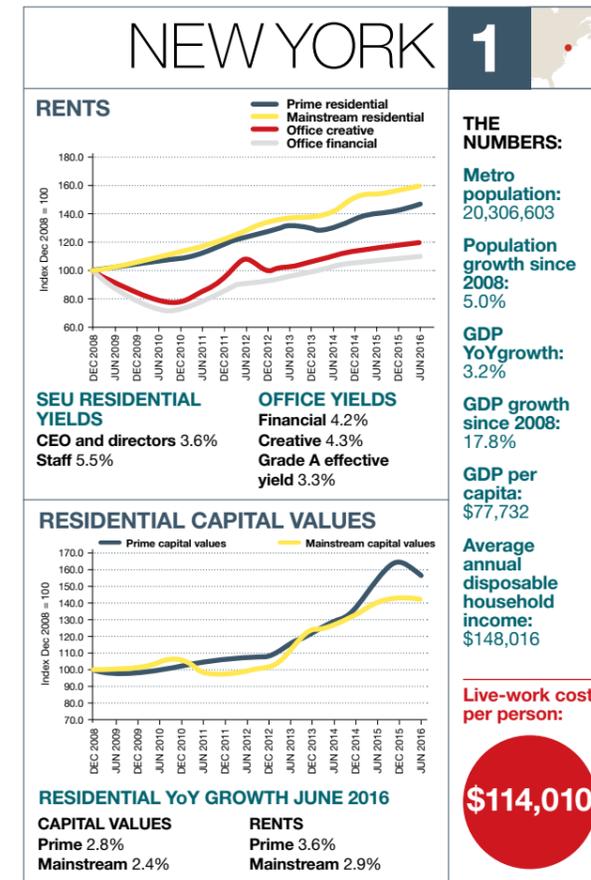
4

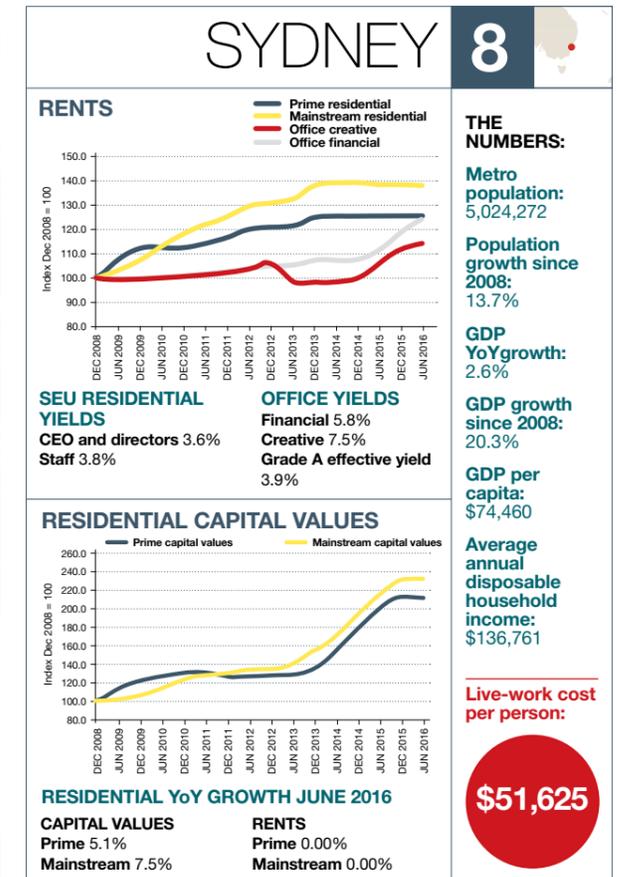
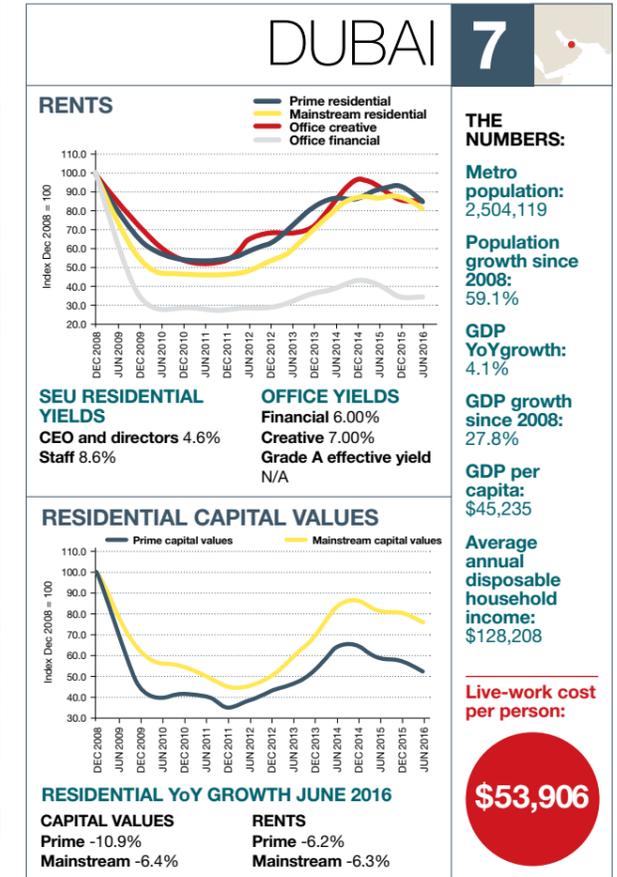
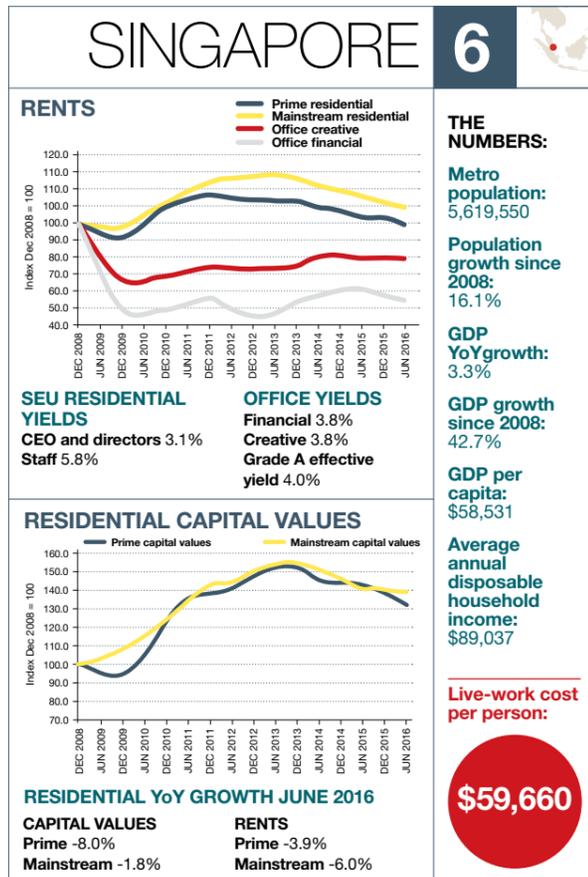
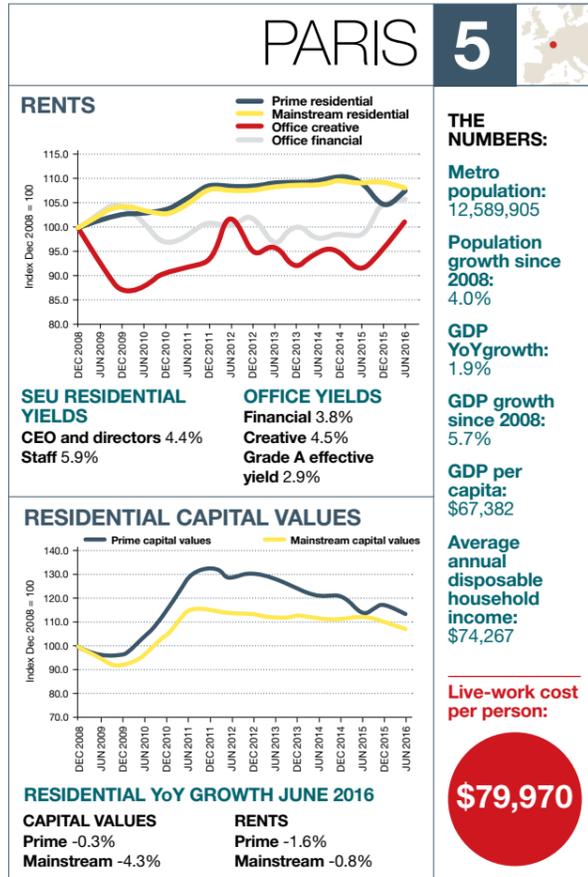
Digital
Proximity of human capital; Urban dispersal?
Ultra-maturity?
Failing suburb?
Townhouse & workspace in a small city?

5

Working space

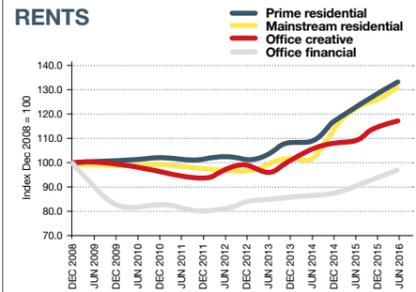
All the key facts and figures behind the performance of the real estate markets in each of our 12 cities





LOS ANGELES

9

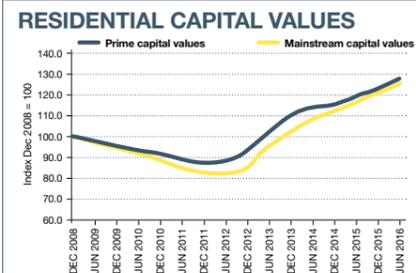


THE NUMBERS:

Metro population: 13,377,240
Population growth since 2008: 5.6%
GDP YoY growth: 3.3%
GDP growth since 2008: 7.1%
GDP per capita: \$66,865

SEU RESIDENTIAL YIELDS
 CEO and directors 5.0%
 Staff 5.4%

OFFICE YIELDS
 Financial 4.7%
 Creative 6.0%
 Grade A effective yield 3.8%



Average annual disposable household income: \$137,007

Live-work cost per person:

\$50,215

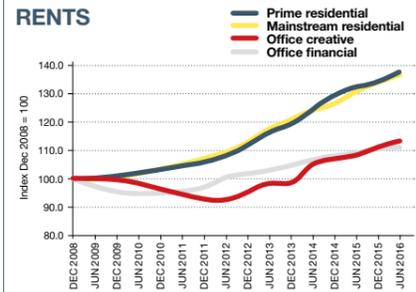
RESIDENTIAL YoY GROWTH JUNE 2016

CAPITAL VALUES
 Prime 7.1%
 Mainstream 7.3%

RENTS
 Prime 8.4%
 Mainstream 7.5%

MIAMI

10

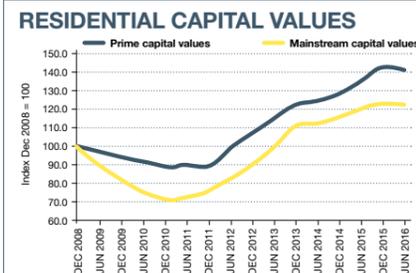


THE NUMBERS:

Metro population: 6,026,688
Population growth since 2008: 10.6%
GDP YoY growth: 3.5%
GDP growth since 2008: 8.4%
GDP per capita: \$50,878

SEU RESIDENTIAL YIELDS
 CEO and directors 5.4%
 Staff 6.0%

OFFICE YIELDS
 Financial 5.8%
 Creative 6.5%
 Grade A effective yield 4.4%



Average annual disposable household income: \$123,537

Live-work cost per person:

\$49,947

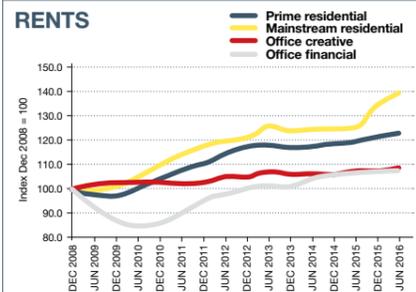
RESIDENTIAL YoY GROWTH JUNE 2016

CAPITAL VALUES
 Prime 4.0%
 Mainstream 2.5%

RENTS
 Prime 4.1%
 Mainstream 5.1%

SHANGHAI

11

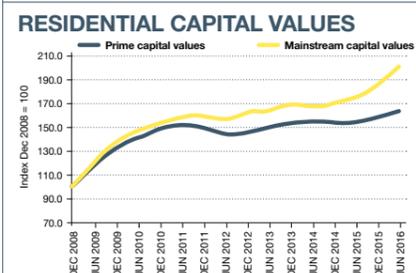


THE NUMBERS:

Metro population: 25,231,630
Population growth since 2008: 17.6%
GDP YoY growth: 5.5%
GDP growth since 2008: 78.2%
GDP per capita: \$17,432

SEU RESIDENTIAL YIELDS
 CEO and directors 2.2%
 Staff 2.3%

OFFICE YIELDS
 Financial 4.9%
 Creative 5.3%
 Grade A effective yield 4.0%



Average annual disposable household income: \$21,287

Live-work cost per person:

\$42,121

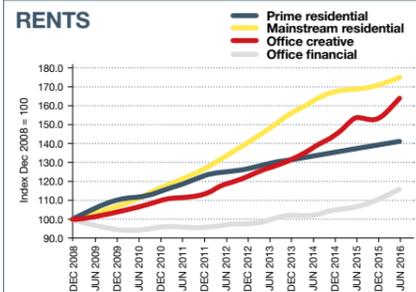
RESIDENTIAL YoY GROWTH JUNE 2016

CAPITAL VALUES
 Prime 5.5%
 Mainstream 15.2%

RENTS
 Prime 3.0%
 Mainstream 11.3%

BERLIN

12

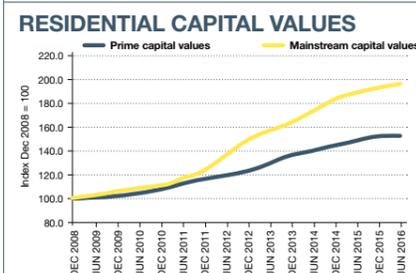


THE NUMBERS:

Metro population: 4,300,120
Population growth since 2008: 4.7%
GDP YoY growth: 2.3%
GDP growth since 2008: 12.4%
GDP per capita: \$41,418

SEU RESIDENTIAL YIELDS
 CEO and directors 3.7%
 Staff 4.1%

OFFICE YIELDS
 Financial 3.8%
 Creative 5.0%
 Grade A effective yield 3.6%



Average annual disposable household income: \$44,587

Live-work cost per person:

\$29,650

RESIDENTIAL YoY GROWTH JUNE 2016

CAPITAL VALUES
 Prime 2.8%
 Mainstream 4.4%

RENTS
 Prime 2.7%
 Mainstream 3.4%



GETTY IMAGES

