

A CUSHMAN & WAKEFIELD CAPITAL MARKETS RESEARCH PUBLICATION

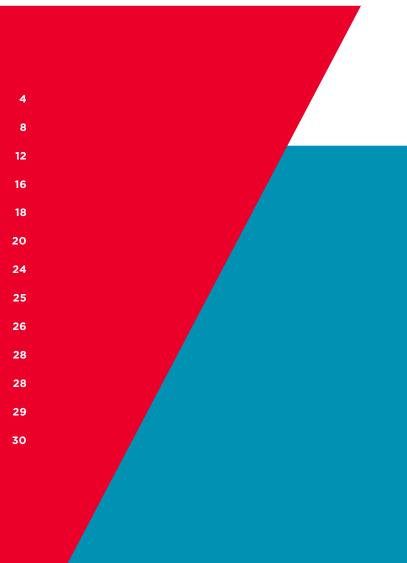
WINNING IN GROWTH CITIES

2016 / 2017



Welcome to the 6th edition of our Winning in Growth Cities report

CONTENTS





EXECUTIVE SUMMARY:

TODAY'S MARKET

Global property investment rose 0.5% in the year to June but volumes for income producing assets fell and the market has clearly paused for breath after a busy 2015. Indeed, with the scale of change underway in the macro environment, (from war to disease to Brexit to Trump), many investors are now struggling to decide what comes next and where they should look for value.

While the year started with fear over a hard landing in China, Europe and the UK have taken over as a bigger cause of uncertainty while concerns over the US election also now loom large. Nonetheless, in such a volatile environment, more investors are turning to the stable cash flow and inflation hedging merits of real estate, particularly given that the fundamentals of the market on the occupier side are generally holding up well.

The globalisation of the market has continued meanwhile with cross border capital gaining market share and more investment also going direct into local platforms. The top five global investors have been the USA, China, Singapore, Canada and Qatar. Other key groups include South Korea, Hong Kong, the UAE and Germany. Targets for foreign investment have shifted somewhat, with cross border flows growing faster in the Americas and Asia than Europe and the ranking of cities also changing. The most notable shift has been London losing its global crown to New York, but a range of other gateway markets are also down, such as Tokyo, Washington and Frankfurt, due to a combination of limited supply and local competition. By city, 10 of the top 25 targets were in EMEA, 6 in Asia and 9 in North America and while Asia and America saw greater global interest, cross border market share still varies significantly, from 16% in the Americas, to 30% in Asia and 47% in Europe.

While London lost out as Brexit concerns and high pricing hit even before the referendum, the make-up of the top 25 overall is little changed, with New York ahead of LA, London, San Francisco and Paris. New York increased its market share while Philadelphia, Denver, San Diego and Phoenix all saw strong increases. Outside of the US, Toronto had the best growth and Amsterdam and Paris saw strong increases.

The greater appeal of the US clearly comes through the data, with its cities dominating in all sectors, New York top for cross border buyers and Tier 2 markets also in favour. Overall, 24 of the 50 fastest growing, larger cities (volume over \$1bn excluding development) were in North America, whilst 18 were in Europe and 8 in Asia.

In Europe, Tier 1 cities Paris, Amsterdam and Milan are in the top growth list but Tier 2 cities also feature heavily, led by Copenhagen, Rome and Helsinki together with regional UK and German markets. Asian representation was led by Chongqing, Shenzhen, Shanghai and Beijing in China, as well as Fukuoka, Singapore, Mumbai and Taipei.



are still evident and change, if anything, is accelerating thanks to a combination of new technology as well as environmental, social and demographic pressure. As a result, occupier requirements will continue to evolve and the strength of different cities will change. To understand these patterns, we have reviewed a range of factors and looked at how cities compare:

TARGETS FOR THE FUTURE

- Brexit is one of the most potentially significant factors currently in play and on page 12 we've considered whether it could signal a significant change in the hierarchy of global cities.
- Until we know more about the shape of Brexit that question can't be answered of course but our initial view is that any advantage is likely to accrue across a range of cities, not just one. New York for example may feel its influence grow as its chief rival is distracted. Asia may see increased trade and investment, benefiting larger centres such as Tokyo, Shanghai and Hong Kong but also potential regional HQ locations, Singapore and Sydney. In Europe, the fight for supremacy may be most notable but gains are likely to be spread across a number of cities including Amsterdam, Berlin and Dublin as well as Paris and Frankfurt, given their scale and business environment relative to London.
- Our analysis also suggests that global, rather than regional or national appeal may be a stronger draw for businesses and Brexit may free UK cities to build on the comparative advantages they already have and compete globally.
- Centres such as Manchester, Edinburgh and Cambridge could gain but London in particular could emerge as an even more important global centre. Hence not only will the battle for global leadership with New York continue, but the world in general will become more multi-nodal as key cities with specific skills, resources and specialisations operate within a global network.

- We have also looked at the drivers for city success on page 16 and, while a global elite exists, capable of sustaining and reinventing their hold on a top position, in general we have an increasingly competitive landscape. In broad terms, cities need to be connected, mixed-use, walkable and transit rich. Increasingly, however, they also need smart design in buildings and infrastructure as well as a strong focus on their target audience of talent and businesses, particularly for second tier cities. But how is this best achieved?
 - Technology is key to answering many of the problems cities face eg tackling demographic change with robotics and congestion via data analytics. However, talent is the answer to the need for innovation in technology in the first place.
 - The importance of governance is clearly growing; be that to create the right backdrop for growth and innovation or to reduce risk and promote change and a sharing of data.
 - Construction is a key battleground for affordability and hence is important in other issues such as efficiency, inclusivity and innovation. This includes cost savings, improving sustainability and increasing space flexibility through materials used, construction techniques and process management.
 - Health and healthy living are increasingly important from a cost and a quality of life perspective and this stretches across access to health services, exposure to health risks and the degree to which a city supports or encourages healthy living.
- On page 18 we have compared a range of variables that help determine market power including size, hub status, connectivity and quality of life. Scale remains an important driver of opportunity- not least in its influence on liquidity and diversity - but size is not everything and qualities that help to build, attract and retain a talented and creative workforce will be increasingly key. Cities are also now more independent of the countries they sit in and their resources, image and influence count for more. Above all perhaps, the access they give to information and ideas, as well as capital and talent, must be considered.
- Cities have part of their destiny in their own hands if they can capture the best of being "smart" and position themselves to draw in talent at all levels. However, the building blocks that make them more likely to succeed are the same as ever – centred on the existing economic and cultural resources of the city and how they come together in terms of the quality of the working and living environment.

Across the areas analysed in table 2, only a handful of markets take a global leading position in most, with only London and New York dominant in most categories, followed by Paris and San Francisco. However, while the established megacity elite dominate the upper reaches of the global ranking for most variables, quality of life is one exception where issues such as cost, security and environmental quality are often harder to deliver in a large city. Alongside the changes seen in rankings for tech hubs and air transport, this clearly points to areas of specialisation where second tier cities can compete.

WHAT LIES AHEAD?

While global uncertainty will continue to affect investors, corporate confidence has held up well and allied to the changes in demand being wrought by new technology, living and working practices, this underpins a robust medium term outlook for good quality real estate.

Indeed, the role of real estate in portfolio diversification is underpinned by sustained low interest rates, expectations of higher inflation and volatility in all asset classes.

What is more, with changes to society and business only accelerating, the importance of the right property is increasing – suggesting profit potential will be enhanced for the best, even as it falls for weaker property.

As a result, a focus on core markets should be maintained, where the fundamentals are right across a range of variables and the city can adapt and appeal to different users and sustain a vibrant, growing economy.

With still rising liquidity and demand alongside lower for longer interest rates, prime yields will be pushed lower but activity may be tempered by a lack of willing sellers given the shortage of alternate opportunities available. However, it is likely that more profit taking will be seen, helped by the diversity in opinions which are emerging with respect to issues such as Brexit and monetary policy.

> Believe in the longer flatter cycle – but not for ever

Target cities over countries – they are the key building block of a portfolio

'2.5-3.0% global GDP growth forecast in 2017, alongside modest but increased inflation and low interest rates'.



In identifying the winning cities for 2017, a number are set to deliver steady rental growth thanks to constrained pipelines and firming demand. As a result, there are still clear fair-value opportunities in a range of core markets in the Americas, Europe and Asia. A number of these markets also offer value-add opportunities via taking leasing risk, redevelopment or outright new development.

The expectation of higher US interest rates and a stronger economy will continue to encourage a flow of investment towards dollar assets meanwhile but the negative impact this has had on emerging markets may be fading, with forecasts stabilising. Selectively more city risk in general can in fact be taken, both as rising costs and limited supply in core markets causes occupiers to look further afield but also as economic activity spreads.

Opportunities can be seen in all sectors, with offices linked to the supply cycle and retail and logistics enjoying a structural shift due most notably to e-commerce but also other lifestyle changes. These traditional sectors will not have it all their own way however, with demand to continue to grow for new sectors, typically those reliant on real estate – such as student accommodation, hospitality and health care – and where long leases and public sector or other institutional backing is available.

WINNING CITIES FOR INVESTMENT

THE HEADLINES FROM 2015/16

The global investment market stabilised over the year to June, with volumes rising 0.5% to US\$1.35tn (including development). For the first time since 2013 however, growth in the market was driven more by domestic than foreign investment. What is more, much of this growth took place in Asia, focusing in particular on development land in China, as investment in this sector accelerated once more. Excluding development land, the global market actually saw its first slip in volumes for 7 years, with activity down 5.7% to US\$919.7bn.

Falls were broadly spread in all regions and sectors as investors have reacted to tight supply and high pricing on the one hand but also greater volatility and a seemingly unending flow of uncertainty on the other. With risk still elevated but demand high, the question is being asked whether this is a temporary pause or has the market peaked?

The largest gateway cities increased their share of the market, with the top 25 drawing in 53.3% of all spending in the year to June (from 52.7% in the previous year). However, volumes still fell in many large cities and, with 10 of the top 25 down, overall volumes into the top 25 were down 4.6% versus a 7% drop in the rest of the market (excluding land). This was particularly notable for cross border players, as they pursued more opportunities in Tier 2 cities.

New York again tops the ranking of cities, with Toronto, Philadelphia and San Diego moving into the top grouping at the expense of Frankfurt, Munich and Austin – where demand is high but supply has held back the market. Other placings were also quite fluid last year, notably with London and Tokyo slipping down from second and third place respectively and LA and San Francisco moving up. Overall in fact the US has increased its hold on the list, with 16 of the top 25 being in North America, up from 14 last year, with Europe dropping from 6 to 4 and Asia stable with 5 placing cities.

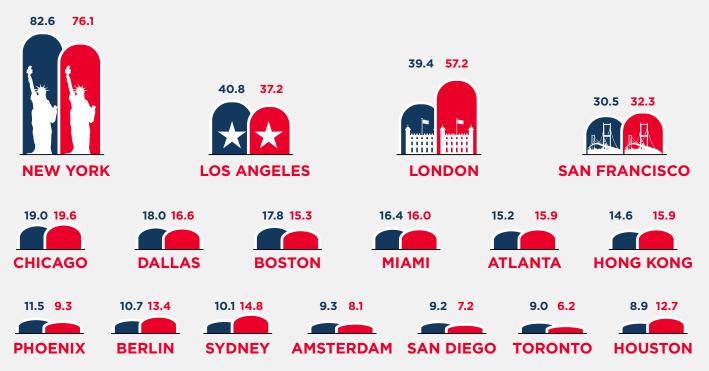
New York increased its global market share from 7.8% to 9% and US cities overall had the best of the growth, with Philadelphia a particular winner (with volumes rising 50.5% to push it into the top 25), but Denver, San Diego and Phoenix all showing very strong increases. Elsewhere, Toronto had the best growth (45%) while Amsterdam and Paris also saw strong relative increases.

Across all larger markets (those generating over US\$1bn in sales pa excluding development land), the biggest gains were in 2 Chinese markets, Chongqing and Shenzhen, which posted gains of 866% and 243% respectively, followed by Johannesburg (up 157%). However, most of the top growth list is dominated by the US or other mature markets, with the only other emerging market in the top 50 being Mumbai.

In Europe, Tier 1 cities such as Paris, Amsterdam and Milan all feature in the top growth list but Tier 2 cities also feature heavily. This was led by Rome, Copenhagen and Helsinki, together with regional UK markets such as Liverpool, Newcastle and Birmingham which have held up well since the Brexit vote and also German markets such as Nuremburg and Stuttgart. Other Asian representation was limited to China's Tier 1 cities, Shanghai and Beijing, as well as Fukuoka, Singapore and Taipei. Overall, 24 of the fastest growing 50 cities were in North America, 18 were in Europe (5 in the UK) and 8 were in Asia (4 in China).

FIG 1: TOP CITIES FOR INVESTMENT (EX DEVELOPMENT)

Annual volume to June (USD bn)



Source: Cushman & Wakefield, RCA

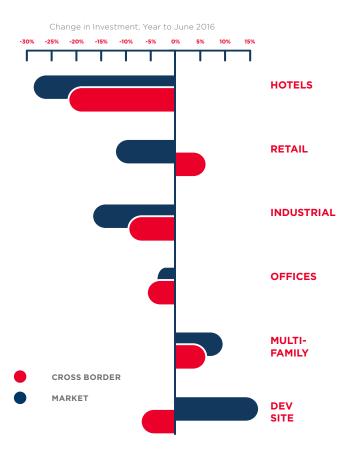
TRENDS BY SECTOR

Investment trends by sector favoured apartments and land, with volumes down in all other sectors, most notably for hotels. Relative preferences differed for cross border players however, with less interest in development land, a more notable fall in foreign buying in the hotel and industrial sectors and a more favourable attitude toward retail.

Domestic buyers favoured apartments and land while cross border buyers looked towards residential as well as office and retail. Trends in the land market were dominated by China, where sales rose 32.4%. Across domestic buyers, apartments and industrial have been most favoured in the Americas, land, hotels in Asia, hotels, and offices in EMEA. Among cross border players meanwhile, residential, land, retail and offices saw growing volumes in the Americas, while office and retail were up in Asia and, in Europe, no sector saw growth although retail was the least negative.

Sector concentration, meanwhile, is highest for office and multi-family where 63% of investment in the past year took place in the top 25 cities. In comparison, 54% of hotel deals took place in the top 25 cities, 48% of industrial and just 44% of retail trades. Interestingly, the degree of concentration increased in nearly all sectors, even where investment was falling – with the top targets tending to at least fall at a slower rate. The exception was offices where the share of the top markets stood still as the next tier of centres - outperformed, led by cities such as San Diego, Philadelphia, Toronto, Vancouver as well as Shenzhen, Vienna and Johannesburg.

FIG 2: SECTORS OF ACTIVITY



Source: Cushman & Wakefield, RCA



2015

2016

The top cities continue to be popular across multiple sectors but New York has cemented its dominance, overtaking London in the office rankings and now claiming top spot in 4 out of 6 sectors. US cities overall have in fact increased their dominance, taking all ten of the top spots for multi-family, eight for industrial, seven for retail and hospitality and five for offices. Away from the USA, the most popular markets across multiple sectors were Tokyo, London, Hong Kong, Sydney and Berlin.

INTERNATIONAL CAPITAL FLOWS The cross border share of the global market (excluding development land) rose to 28.3% in the year to June from 27.7%

in 2014/15, with international investment flows slowing but to a lesser degree than domestic investment (-3.8% vs -6.3%). Regional investors meanwhile took on more importance than global players, with region to region flows slowing by 9.8% while intraregional investment rose 9.1%.

The biggest source of cross border capital was again the Americas, with US\$86.7bn invested non-domestically, 35.3% of the total but 9.2% down on 2015. Europeans are the number two international buyer, but a significant share of this is targeted within the region, and Asia is the number two capital source investing outside the home region.

The fastest growing stream of international investment last year was from Africa (up 135%) thanks to increased demand from South African buyers. Asian investment also rose – by 13.8% - but cross border buying from Europe (-12.7%) and the Americas (-9.2%) fell, while Middle Eastern flows were broadly stable with a market share of just over 10%.

Part of this pattern reflects changing investment within each region, rather than globally. Regional appetites in fact proved stronger or easier to satisfy than global demand for buyers from all regions. North American global activity fell on the year (by 7.6%) but regional spending rose 33% as more Canadian demand flowed into the US in particular. Asian demand rose for both – but, with regional growth of 42%, this was far ahead of the global volume growth of 7.6%. In Europe, meanwhile, both fell – but regional



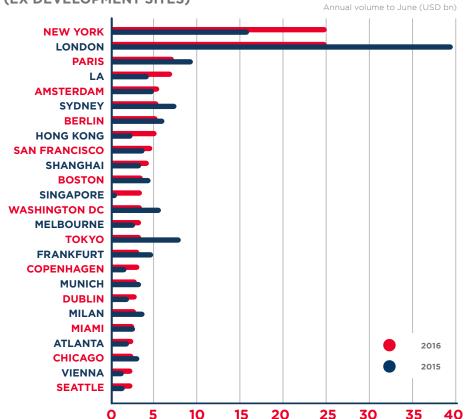


FIG 3: TOP CITIES FOR GLOBAL INVESTORS (EX DEVELOPMENT SITES)

spending was down 2% versus a 37% cut in global buying.

The top 5 global investors were the USA at \$51bn, followed by China (\$16.8bn), Singapore (\$16.3bn), Canada (\$14.7bn) and Qatar (\$10.3bn). Other key investors included South Korea and Hong Kong- who lifted investment by 66% and 76% respectively - as well as the UAE and Germany.

Looking forward, regional and, in some cases, domestic investors have outpaced global buyers so far in 2016 but players from all corners of the globe remain keen to invest in international real estate. North America will continue to be a key source of capital but may be overtaken in the year ahead by Asia as domestic opportunities attract some US buyers and higher interest rates influence asset allocators. Canadian buyers will remain strong in core markets globally however, while for US investors strong competition at

FIG 4: SOURCES OF INTERNATIONAL CAPITAL

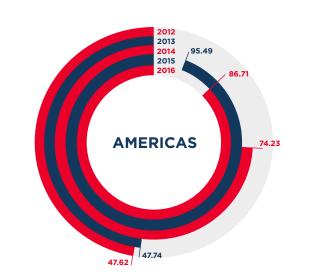
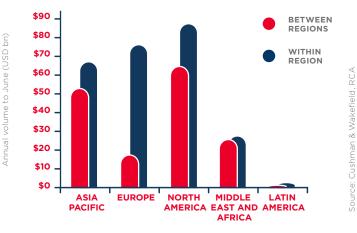






FIG 5: REGIONAL VERSUS GLOBAL INVESTMENT

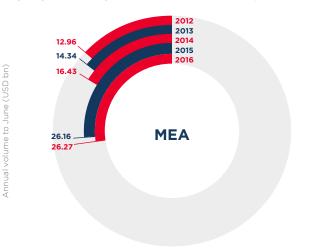


home and political uncertainty mean regional outflows will remain high overall.

Asian buyers are in any respect likely to make up any slack left by the USA, increasing activity notably over the coming 12 months led by China, Singapore and South Korea but with rapid growth possible from others such as Australian and Japan. This will result in activity spreading further into new sectors and cities as well as demand broadening as new players emerge.

In the Middle East, lower oil prices are still impacting investment policies - in some cases diverting capital to home markets and in other cases, promoting higher risk strategies to boost overall returns. However, with oil prices seemingly stabilising and forecast to rise next year, but uncertainty and volatility persisting within parts of the region, an increased outward flow of investment towards gateway cities is expected as well as interest in emerging markets as some investors continue to loosen their risk tolerances. African buying is also set to carry on rising with South Africa the most notable source of capital but rising private and in some cases institutional wealth also emerging from other high growth countries in the region which will steadily put Africa on the map as a source of capital and a target for investment.

Many European players meanwhile pulled back from global markets in the past year to focus on domestic or regional targets and, with currencies weakened, this will remain the case in the short term. At the same time however, a growing number of European investors are looking further afield for growth but also for diversification, given the ongoing risks facing the EU and the wider European area.



Annual volume to June (USD bn)

Source: Cushman & Wakefield, RCA

BREXIT & GLOBAL CITIES

Brexit has the potential to change the global city hierarchy as London seeks to maintain its dominant position in the wake of the UK's exit from Europe. Challenged by new trade deals and the possible loss of passporting rights, some companies may choose to relocate and others to review their corporate structures.

Whilst many eyes are focussed upon winners across Europe, other leading global cities will see the opportunity to make gains, but which have most potential?

Across Europe there are many contenders to benefit. Frankfurt and Paris will feel they are in the best position given their size and financial sector strengths but smaller competitors such as Dublin and Amsterdam will think their strengths will allow them to pick up new demand as well. However, the stock of space is much smaller in these cities and, with availability declining, companies seeking to relocate may find securing quality space a challenge.

Further afield, New York could benefit from its dominant market position whilst cities such as Dubai and Toronto may also gain. Across Asia, leading financial centres Singapore and Hong Kong together with Tokyo, Sydney and Shanghai could be positively impacted. For Asia, time zones do not always permit easy communication across the globe however, and changing trade links to the UK may be the chief factor benefiting the region. Overall do we see a new world order?

Dublin may be a surprise contender to some, given that its stock of offices is little more than a tenth of London, but its population is greater than Frankfurt, it hosts a number of European technology companies HQs – a reflection of its favourable tax regime – and it is well regarded for economic freedom. It's also home to the highest proportion of EU talent within its workforce, it is English speaking and in the same time zone as the UK. For investors, the market is relatively small and liquidity has been volatile but prime yields are 4.25% and rental growth prospects are currently attractive.

PARIS

Paris benefits from a sizable population and office stock, comparable to London, and is the second largest financial centre in Europe but also a diverse global hub, leading for example in luxury and fashion. It has strong connectivity by air and other transport links, including a direct rail service to London. Overall occupational costs are less than in London but its complex and inflexible labour laws and the influence of public sector unions do not make a business friendly environment. Prime yields are on a par with London, though liquidity is somewhat less.

NEW YORK

DUBLIN

New York competes with London on all levels and more than matches it for size. Its open and transparent economy and innovative technology scene means it is an attractive city in which to do business and it will also be eager to grow its financial services base at London's expense. From an investor perspective, yields are comparable to London and vacancy is below average despite an increase in development. As a result, ongoing employment growth will lead to solid rental growth, estimated in excess of 2% per annum over the next three vears.

FRANKFURT



OUTLOOK

We are some way from knowing the likely form of any UK exit from the EU but it is clear there will be a range of contenders to gain from the process, including those benefiting from a shift in trade and investment as well as those that see demand diverted and grow in influence as a result.

In particular, the loss of passporting rights could see a shift of some financial service business functions to cities such as Dublin, Frankfurt or Paris - although at present it looks likely that any such moves will be on the margins of overall headcount.

Whatever happens however, London is likely to continue to reinvent itself as a leading global city, just as it has in the past, and to vie with New York as the leading global city. In fact while London could lose some of its European importance, it could become even more global in the years to come.



AMSTERDAM

With a strong occupier base in the banking and financial services sector, and an office stock double that of Dublin, Amsterdam may feel a worthy contender to gain market share from London. The city's population has strong language skills and high proficiency in English. Rents and occupancy costs are favourable for occupiers and it is generally a business friendly environment. A relatively high vacancy rate will keep rental growth in check despite there being little construction. Prime yields at 5% are favourable to investors seeking opportunities in this liquid market.

SINGAPORE

Singapore benefits from a strong education system, leading universities and strong language skills. The country also sits alongside Hong Kong for its high level of economic freedom. Prime yields are on a par with London and, despite being roughly a tenth the size of London, it competes to be one of the most liquid investment markets globally. The economy continues to perform well, especially for office-based sectors, and despite increased development, vacancy is

τοκγο

ŧ

can rival the size of London. Japan also enjoys strong ties with the UK and could benefit from strong ties with the UK and could benefit from longer-term trade deals. Risks in Japan are also relatively low but language and education can be an issue for incoming businesses and this could hold the country back. The city is also seen as a more domestic market and this is reflected in market activity with liquidity relatively weak for a market of this size. Prime yields are below 4%, though this is partially offset by rental growth projected at over 3% per annum for the next five years.

HEI





HONG KONG

UK and is a major financial centre in the region. It also benefits from strong transparency and legal framework which have made it attractive to many Chinese companies listing and using the city as a springboard to the rest of the world. In the short-term Hong Kong is likely to maintain a lead over Shanghai but this could be weakened over the learn term as transparence in the longer term as transparency improves in mainland China. Investors might be dissuaded by prime yields at sub 3%, but rental growth is forecast to average 3% pa over the next five years

SYDNEY

stock roughly one-fifth that of London. While volumes over the past year were roughly a quarter of the UK capital, the city does benefit from strong liquidity over the cycle and with prime yields above 5%, it is an attractive proposition for investors. The city has a high degree of economic freedom, strong language skills and proficiency in English. With Australia supportive of an early new trade acreement with

RIVAL COMPARED

TABLE 1: RIVALS COMPARED

MARKET SIZE		VALUES & COST B		BUSINESS E	BUSINESS ENVIRONMENT:	
OFFICE STOCK	REAL ESTATE INV, EX DEV	PRIME YIELD	COST OF LIVING, Rank 1 is high	ECONOMIC FREEDOM, High score best	EASE OF DOING BUSINESS, Rank 1 is best	
C&W - Mn sqm	RCA, USD bn, yr to June	C&W	Mercer	Heritage Foundation	World Bank	
25.5	39.38	3.25	17	76.4	6	
36.8	82.56	4.35	11	75.4	7	
24.2	25.5	3.89	5	73.1	34	
20.1	25.74	3.25	44	62.3	27	
18.3	10.71	3.9	100	74.4	15	
16.3	8.99	4.5	143	78	14	
13.3	2.19	5.5	86	68.4	43	
12.1	7.44	4.35	88	74.4	15	
11.6	5.23	4	105	68.5	33	
9.3	0.31	7.25	21	72.6	31	
8	12.75	5.42	7	52	84	
6	9.26	5	64	74.6	28	
5.5	14.62	2.77	1	88.6	5	
5.1	10.09	5.34	42	80.3	13	
3.3	4.21	4.25	47	77.3	17	
2.1	7.5	3.33	4	87.8	1	
	OFFICE STOCK C&W - Mn sqm 25.5 36.8 24.2 20.1 18.3 16.3 11.6 9.3 8 6 5.5 5.1 3.3	Best of the series of	OFFICE STOCKREAL ESTATE INV, EX DEVPRIME YIELD INV, EX DEVC&W - Mn sqmRCA, USD bn, yr to JuneC&W25.539.383.2536.882.564.3536.882.564.3524.225.53.8920.125.743.2518.310.713.916.38.994.513.32.195.512.17.444.3513.69.30.319.30.317.2569.2655.514.622.775.110.095.343.34.214.25	OFFICE STOCKREAL ESTATE INV, EX DEVPRIME YIELDCOST OF Shank 1 is highC&W - Mn sqmRCA, USD bn, yr to JuneC&WMercer25.539.383.251736.882.564.351124.225.53.89520.125.743.254418.310.713.910016.38.994.514313.32.195.58612.17.444.358811.65.2341059.30.317.25219.312.755.42769.265645.514.622.7715.110.095.34423.34.214.2547	OFFICE STOCKREAL ESTATE INV, EX DEVPRIME YIELDCOST OF LIVING, Rank 1 is highECONOMIC FREEDOM, High score bestC&W - Mn sqmRCA, USD bn, yr to JuneC&WMercerHeritage Foundation25.539.383.251776.436.882.564.351175.424.225.53.89573.120.125.743.254462.318.310.713.910074.416.38.994.51437813.32.195.58668.411.65.23410568.511.65.23410568.59.30.317.252172.69.30.317.252172.669.2656474.65.514.622.77188.65.514.622.7718.65.110.095.344280.33.34.214.25477.3	



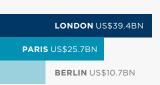
LARGEST INVESTMENT MARKET IN THE WORLD





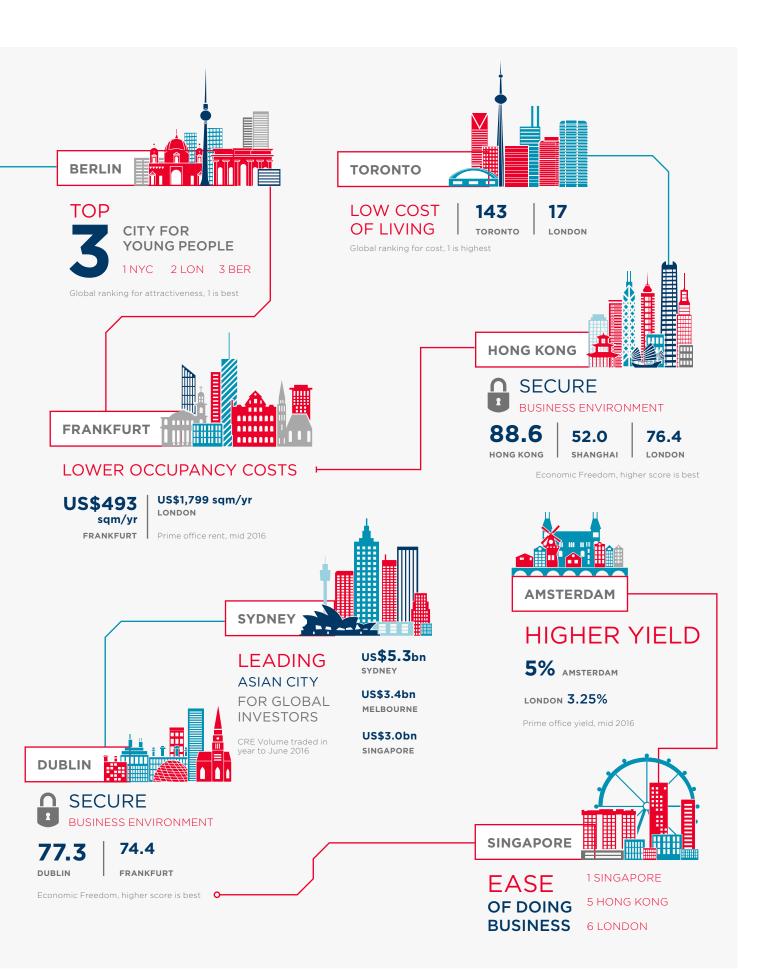


LIQUID INVESTMENT MARKET



CRE Volume traded in year to June 2016

CRE Volume traded in year to June 2016



DRIVERS OF CITY CHANGE

THE NEED FOR MORE SECURE, HEALTHIER URBAN ENVIRONMENTS IS GROWING

SECURITY

- The need for more secure urban environments is growing in the face of crime, terrorism and social unrest. In a risk averse economy, social and institutional risk also come more to the fore.
- All segments of society feel the impact, with safety the top concern among younger people for example (Youthfulcities 2016). This stretches across crime, clean streets and access to public areas. It is also an area where the survey identifies the biggest gap between what people want and what they get - and as such should be a real priority.
- Technology of course has a clear role to play in this - through hardware such as drones, sensors and cameras, on to software and systems to analyse and make use of the data.
- Increasing inequality is also an issue to be addressed.
 Concentrations of the super-rich can be a threat, as well as an opportunity, and cities must be seen to serve all segments of the community. However high-skilled a city becomes, it still needs a mix of workers and must accommodate their needs for housing, transportation and services.

AFFORDABILITY

- Affordability to live, work and play will increasingly define winning cities as the talent they need becomes yet more discerning and mobile.
- One aspect of this is how to make buildings both more productive but also more affordable through construction standards, materials and techniques. Some building providers already find they can attract the same demand and rents with a lower cost fit out through the overall quality and value-add of the space they offer.
- Well-connected, safe public transport is a vital aspect of affordability and an area where government policy can have a rapid impact.
- Spreading demand to best effect is critical in tackling affordability and will continue to be influenced by advancing technology but may also demand a rethink on issues such as what is a suburb. Is it a location for lower cost but accessible functions or is it a mixeduse, integrated alternative submarket? For example, a refocusing on public rather than private transport in the USA and Europe is opening up more viable alternatives to expensive CBDs while delivering new submarkets with scale and critical mass is dramatically changing the choices occupiers face in many global cities, notably Hong Kong and Singapore at present.
- To make cities work they will still need to be denser than today so they can deliver accessibility and proximity at an affordable cost. Smart buildings make this possible but making denser living and working more desirable also requires creative planning and design.



• All of the ingredients for success usually rely on effective infrastructure.

- Infrastructure needs go way beyond transportation of course, including utilities, waste, information and public space. These are all needed to boost safety and efficiency and to raise a city's profile and confidence in its governance, but with public investment under pressure, partnerships and incentivising private sector investment will be critical.
- Transport planning needs to embrace pedestrians and cyclists as well as vehicles, often a particular challenge in emerging markets, and connections across all transport forms need to be integrated, effective, safe and affordable.
- In terms of specific changes, assisted driving is already here and fully automated vehicles may be closer than many think. However, public acceptance lags behind and applications such as public transport and delivery may be first to see wide scale uptake. Indeed, car sharing rather than automation could be the most revolutionary short-term aspect of the changes to come.

TRANSPORT PLANNING NEEDS TO EMBRACE

0000000

PEDESTRIANS & CYCLISTS

П

16

TECHNOLOGY

- Technology is moving at an accelerating pace once more and promises innovations in a range of areas that will revolutionize city environments and the living/working experience they offer. In particular, technologies such as 3D printing and those that increase sustainability make it physically possible for more businesses to actually be in the city in the first place.
- Power supply may be one of the most dramatic areas of change, with the smart grid and wireless charging for example. However, smart materials could be more significant still, with concrete that repairs itself or building materials that collect energy and filter pollution.
- Smart cities will use new technology to generate and process data, connecting infrastructure, resources and people into an intelligent city fabric. Backed by more data openness, tech-based business models will be key to making a city work and delivering choice to the people.
- Innovative new uses of data and apps will in particular improve connectivity in a cost-effective way that will help emerging market cities catch up with global competitors.





GOVERNANCE

- The fairness and effectiveness of government are increasingly important as a differentiator to bring the ingredients of success together to create the environment that talent wants to be in.
- Supporting the growth of key technologies and their use, for example in waste management, and smart buildings, creates new jobs while also improving the existing urban environment.
- Oversight and regulation is also important. The risk of strangling innovation through over-regulation is clear but, equally, businesses want a level playing field. Governments can also help to kick-start some industries through the role they take, with the growth of Fintech in markets like London one example, and uptake of automated vehicles likely to be another.
- The vision government creates, will influence business and individual decision-making and attitudes towards issues such as densification, public:private collaboration and experimentation will be reflected in a city attractiveness.
- Governments tend to be a gatekeeper for a lot of market data and intelligence and opening up access and hence encouraging data sharing and analysis is another area where the public sector can kick start innovation and growth.

TECHNOLOGY IS MOVING

AT AN ACCELERATING PACE

REAL ESTATE WILL PLAY A KEY ROLE

- Health is increasingly important from a cost and a quality of life perspective, stretching across access to services, exposure to risks and the degree to which a city encourages healthy living.
- This is not just an issue for older residents either. According to the Youthfulcities survey, it ranks second to safety as a key concern for younger residents and is again an area where there is big gap between what people want and what cities are delivering.
- There are many strands to creating healthy cities of course but a sensible starting point is promoting walking and cycling through both infrastructure and public spaces but also via more mixed-use facilities. A second priority must be in providing common space where residents can meet and relax to provide a lower stress environment, be that on the grand scale of an urban park or at a more local level in areas with seating, wi-fi and good lighting.
- Cities are also increasingly at the forefront of the battle on environmental change, with Presidential hopeful Hilary Clinton planning a \$60bn Clean Energy Challenge to partner with states and cities to fight climate change.

• Real estate itself will play a key role, with more flexible buildings needed as well as a strong impact from the building materials used and features to integrate buildings with the city, collecting rainwater on the roof for example to reduce flooding risk in the city at large.

MEASURING MARKET POWER

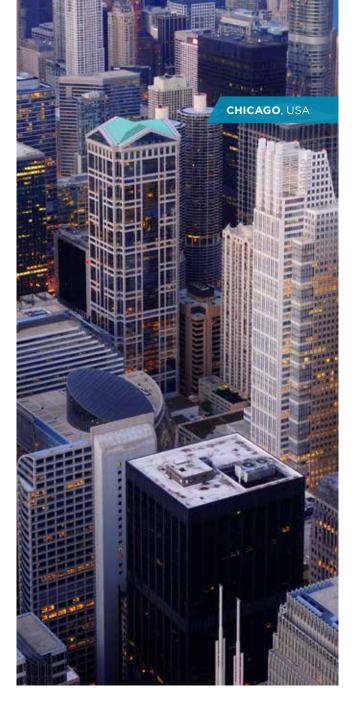
Table 2 shows some of the key indicators for city success today. Across these variables, only a handful of markets take a global leading position: New York, Chicago, Boston, San Francisco and Montreal in North America, Tokyo, Hong Kong, Singapore, Sydney, Shanghai and Seoul in Asia and London, Paris, Munich and Amsterdam in Europe. In general, these will come as little surprise but if we focus on the top 10 rather than the top 50, the group rapidly whittles down, with only London and New York having a dominant position in most categories, followed by Paris and San Francisco.

While this wider group dominates the upper reaches of the global ranking for most variables, quality of life is one exception where issues such as cost, security and environmental quality are harder to deliver in a large city. Indeed, the highest ranked tend to be mid-sized cities in wealthier countries with a relatively low population density, which boast increased recreational activities, but without high crime levels and overburdened infrastructure. However, while the high quality and liveable environments of markets such as Vienna, Auckland, Copenhagen, Zurich, Vancouver and Frankfurt are pushing them ahead as global targets, this "liveability" needs to be appealing to the young; the talent businesses are looking to recruit and serve. On this measure, it is interesting to note that the larger dominant cities re-assert themselves at the top of the hierarchy, with cool, dynamic and fast changing social and cultural environments appealing to younger workers and students.

Air connectivity is another variable where the largest cities do not have it all their own way – and where Europe has a more dominant position at present. Only 4 of the top 10 air hubs are listed among our most featured cities – London, Paris, Amsterdam and Munich. Alongside quality of life, this is clearly a niche of city attractiveness where smaller cities can make a mark.

The growing degree of competition between cities, and the need for them to continue to evolve to meet the changing demands placed upon them, underlines the potential for different winners and losers to emerge. This is particularly so in the second tier of what we might consider supporting regional or specialist city hubs, standing behind the global powerhouses New York and London.

Competition for these two is particularly strong in Asia, given the range of strong cities there such as Singapore, Hong Kong, Sydney, Shanghai, Beijing and Tokyo. Europe also has a wide range of competing markets but, Paris aide, these tend to be more regional, from Berlin down to Rome, Hamburg and Madrid and a number of high quality but yet smaller markets, such as Stockholm, Copenhagen, Munich, Zurich and Vienna.



In North America, outside New York, significant debate will continue on which constitute the major global cities, where scale (LA), diversity (Chicago or Toronto), politics (Washington) or industry specialisation (San Francisco) will take you to different answers. However, more attention is now focussed on the next tier down, on cities such as Dallas, Houston, Seattle, Miami and Austin, which are gaining influence for their industry specialisations, affordability and quality of life.

At the same time, new regional hubs are developing among the more emerging markets, with the leading cities from table 2 being Dubai, Sao Paolo and Beijing as well as Moscow and Istanbul. Next in line come Shenzhen, Kuala Lumpur, Mumbai, Santiago and Mexico.

From a property investment perspective this all points to the value of diversification but also the need to focus on gateway markets where the fundamentals are right, across a range of variables, and the drivers of growth are understood and catered for.

ТА	BLE 2: MARKET P	OWER				
	ECONOMIC SCALE	FINANCIAL CENTRE	TECHNOLOGY HUB	AIR CONNECTIVITY	QUALITY OF LIFE	TALENT - APPEAL TO YOUNG PEOPLE
1	Tokyo	London	London	London	Vienna	New York
2	New York	New York	San Francisco	Paris	Zurich	London
3	Los Angeles	Singapore	New York	Frankfurt	Auckland	Berlin
4	Seoul	Hong Kong	Stockholm	Amsterdam	Munich	San Francisco
5	London	Токуо	Berlin	Istanbul	Vancouver	Paris
6	Paris	Zurich	Tel Aviv	Munich	Dusseldorf	Toronto
7	Osaka	Washington DC	Singapore	Brussels	Frankfurt	Chicago
8	Shanghai	San Francisco	Boston	Dubai	Geneva	Los Angeles
9	Chicago	Boston	Bangalore	Rome	Copenhagen	Mexico City
10	Moscow	Toronto	Seoul	Dusseldorf	Sydney	Amsterdam
11	Beijing	Chicago	Toronto	Vienna	Amsterdam	Washington DC
12	Cologne-Dusseldorf	Seoul	Beijing	Milan	Wellington	Tokyo
13	Houston	Dubai	Austin	Zurich	Berlin	Boston
14	Washington DC	Luxembourg	Hong Kong	Manchester	Bern	Tel Aviv
15	Sao Paulo	Geneva	Los Angeles	Moscow	Toronto	Warsaw
16	Hong Kong	Shanghai	Amsterdam	Barcelona	Melbourne	Sydney
17	Dallas	Sydney	Dublin	Toronto	Ottawa	Vancouver
18	Mexico City	Frankfurt	Copenhagen	Berlin	Hamburg	Montreal
19	Guangzhou	Shenzhen	Paris	Dublin	Luxembourg	Hong Kong
20	Tianjin	Osaka	Sydney	Hong Kong	Stockholm	Santiago
21	Singapore	Montreal	Melbourne	Madrid	Brussels	Seoul
22	Nagoya	Vancouver	Moscow	Doha	Perth	Madrid
23	Shenzhen	Beijing	Washington DC	Copenhagen	Montreal	Dallas
24	Boston	Taipei	Seattle	Seoul	Stuttgart	Rome
25	Istanbul	Tel Aviv	Chicago	New York	Nurnberg	Detroit
26	Philadelphia	Abu Dhabi	Houston	Prague	Singapore	Rio De Janeiro
27	Suzhou	Munich	Dallas	Stockholm	Adelaide	Buenos Aires
28	San Francisco	Calgary	Zurich	Bangkok	San Francisco	Osaka
29	Taipei	Melbourne	Mumbai	Singapore	Canberra	Bogota
30	Jakarta	Dalian	Munich	Geneva	Helsinki	Moscow
31	Amsterdam- Rotterdam	Paris	Santiago	Oslo	Oslo	Sao Paulo
32	Buenos Aires	Casablanca	Eindhoven	Palma	Calgary	Lima
33	Chongqing	Amsterdam	Vienna	Cologne	Dublin	Miami
34	Milan	Doha	Oulu	Taipei	Boston	Quito
35	Busan	Kuala Lumpur	Vancouver	Beijing	Honolulu	Johannesburg
36	Atlanta	Stockholm	Токуо	Helsinki	Brisbane	Tehran
37	Toronto	Busan	Auckland	Abu Dhabi	Paris	Shanghai
38	Seattle	Dublin	Delhi	Birmingham	Lyon	Karachi
39	Miami	Vienna	Sao Paulo	Lisbon	Barcelona	Singapore
40	Madrid	Mumbai	Kuala Lumpur	Kuala Lumpur	London	Mumbai
41	Brussels	Sao Paulo	Dubai	Токуо	Milan	Jakarta
42	Chengdu	Rio de Janeiro	Barcelona	Hamburg	Lisbon	Delhi
43	Wuhan	Istanbul	Shenzhen	Jeddah	Chicago	Istanbul
44	Frankfurt	Bangkok	Manchester	Mami	New York City	Casablanca
45	Sydney	Johannesburg	Denver	Warsaw	Tokyo	Bangkok
46	Munich	Mexico City	Montreal	Stuttgart	Edinburgh	Manila
47	Hangzhou	Bahrain	Shanghai	Shanghai	Kobe	Durban
48	Wuxi	Riyadh	Helsinki	Montreal	Seattle	Cairo
49	Minneapolis	Almaty	Prague	Malaga	Los Angeles	Lagos
50	Qingdao GDP 2014 PPP Brookings	Santiago Z/Yen 2016 GFCI	Miami Composite based on various studies - C&W	Bristol Rome2rio, 2016, global connectivity ranking	Yokohama Mercer 2016	Dubai Youthfulcities, 2016, most attractive for young people
						,

STRATEGY & OUTLOOK

Economic growth and inflation are forecast to slowly improve in 2017 but as fast as any of the market risks can fade, new factors are tending to emerge and hence it is clear that volatility and global uncertainties are set to persist – and in some cases intensify.

For occupiers or investors however, there is actually less stress in most global markets than many expect and growth drivers are improving in some cases. At the same time, high spreads between bonds and property will continue to push investors towards real estate and encourage more to reduce their performance targets or take on more risk.

As a result, while investors will remain focussed on the threats around them, more are also likely to be asking whether the time is right to take more risk in the strongest core cities or, indeed, whether they should expand their horizons to other markets in search of higher returns. Their conclusions will of course depend on their experience, need for liquidity and short-term returns and their investment timeframe, but a steady increase in interest in the better Tier 2 cities and emerging markets is likely. Clearly, therefore, there is a need to fully understand the dynamics of each local market so investors can underwrite, where necessary, the growth potential offered through active management, development or repositioning.



AMERICAS:

The US economy remains on solid ground relative to most, with labour and consumer markets well positioned and leasing fundamentals continuing to tighten and support rental growth. Investment volume growth has slowed but generally to what might be considered a more sustainable rate in the face of a lack of motivated sellers and a more selective lending market. The upcoming election is clearly a cause for some uncertainty, but the downside on most people's scenarios seems a period of deadlock between a new President and Congress – suggesting slower growth but also a delay in interest rate rises.

For real estate, with development increasing, investors will be more cautious about where to invest but availability is not likely to catch up with demand in the short term. Nonetheless, demand trends are changing, with a lot of the recent employment growth focussed on smaller firms for example, creating more demand for flexible smaller office suites and reinforcing growth in the co-working market. Potential in reworking and repositioning existing schemes is increased as a result. More investment will continue to flow towards second tier or 18 hour cities due to pricing and competition in Tier 1 markets with Austin, Atlanta, Charlotte, Dallas, Denver, Miami, Nashville, Oregon, Portland, San Diego, and Seattle most in demand. More interest in Tier 1 and Tier 2 cities is also flowing towards suburban markets, but only those that can offer the right accessibility, density and mixed-use draw. At the same time, core assets in primary markets are still well placed for risk averse buyers and continue to prove their liquidity. Boston, New York and Washington DC are favoured, although the election may impact on demand in the capital over the coming months. Long-term demand in San Francisco is high although there are concerns over pricing in the short term while Chicago remains popular, driven by it's pricing relative to other gateway cities.

Canada meanwhile continues to see mixed trends, with low oil prices and weak economic growth impacting on demand in markets such as Calgary but defensive and more diverse markets such as Toronto and Vancouver moving higher up the rankings. Affordability is an issue here however, notably in Toronto, both for residential and businesses in the city and for investors, shining a light for some on more second tier assets to access higher yields.

In Latin America, investment interest is cautious but up in some quarters, typically from those seeking opportunistic acquisitions, with Brazil and Chile the top targets. Most economies in the region have of course been heavily affected by the weakness of commodity prices. Brazil's situation was aggravated by the political crises affecting the country since 2014, which hopefully is now coming to a close following President Rousseff's impeachment. The economic difficulties the country has suffered, together with record inventory deliveries over the past two years, has led to increased vacancy in all segments, reducing rental incomes by around 30%. Deliveries are expected to continue for the next two years but practically cease by 2019. This presents an opportunistic window for real estate investors to acquire properties or property companies at a depreciated value ahead of the recovery that will come when supply falls. However, investors have to bear in mind that these are equity-based markets with limited leverage, keeping sales values at a less discounted level than the leasing market may suggest. Elsewhere, Chile is an additional target, led by Santiago, and again demonstrating a more mature, if reduced, growth profile, with economic reforms as well as firming commodity prices set to help the market in 2017. Mexico is also set to see reforms boost performance although investors will remain cautious until the US election result is known.

EUROPE

Economic headwinds have increased in Europe, with Brexit adding to a subdued outlook. However, conditions generally are stable rather than declining, with labour demand and low interest rates supporting domestic demand, in particular, and suggesting retail, residential and logistics growth will continue.

Indeed, the real estate market in general has become more balanced over the past year, with investment markets strong but stabilizing. Meanwhile, occupier markets have steadily improved, with take-up overall generally rising and positive rental growth evident. However, the growth story is strongly linked to prime space and to the strongest cities, with recovery still far from evident in secondary markets.

Germany is performing steadily and set to benefit from Brexit as Europe's next most liquid and stable market. However, finding stock is very difficult, forcing more investors to look further afield and hence, while core is in favour, buyers are being displaced from the core and this will set up a ripple effect of greater demand filtering to other markets. The Nordics are already benefiting from this – offering high quality city markets but also strong growth dynamics. Despite political uncertainty, Paris will also be a beneficiary, with low vacancy and improving labour markets suggesting rental pressures will mount and long-term potential arising from infrastructure development. Madrid and Barcelona are similarly positive while Dublin is also in a growth phase that has further to run.

Other core markets such as Amsterdam appeal to investors thanks to their ongoing recovery potential and relative yield levels, while some such as Lisbon are gaining favour as an occupational target and hence are on the radar for more investors as well. Central and some eastern markets are in recovery mode with good relative medium term potential while for higher risk takers, the Russian market is judged close to stabilising, setting the scene for an upturn in demand in Moscow as banks restructure bad loans.



ASIA

Despite global concerns, macro conditions in Asia have generally been healthy in 2016 to date, with growth stable in China and rising in markets such as India, Indonesia and Australia, while central bank and government support continues to stimulate the market. Occupier markets are more mixed, with generally good tenant activity but some caution, and also some markets starting to cope with higher supply. Nonetheless, with ultra-low vacancy in many markets and sectors of strong growth such as services in Australia and Tier 1 China, technology in Indian markets like Bengaluru and Hyderabad and the buoyant BPO market in Manila, many markets are landlord friendly.

For core players, Australia and Japan will remain in demand despite the increasingly crowded nature of their markets but this may lead to more diversification into new markets and sectors as well as more joint ventures or takeovers. In more emerging markets meanwhile, new supply may blunt rental growth but will also be a catalyst for new occupiers to arrive, reinforcing the emergence of these cities over the medium term. The key areas of activity are expected to be core cities in China, Singapore and South Korea, as well as markets such as Taipei, Auckland and secondary cities in core countries.

OPPORTUNITIES BY SECTOR:

Office market growth will be subdued by slower corporate investment in many regions but supported by supply dynamics, notably in core markets. CBD markets are still favoured, mirroring demand trends among corporate occupiers, although interest will strengthen from both groups in suburban and decentralised markets where there is strong access and a more diverse, mixed-use environment.

Macro trends are more favourable for retail than office property in many areas of the US and Europe. Key centres in Asia are also more buoyant as foreign demand and interest in new flagship stores drives interest, particularly in tourist-linked cities. However, while the overall turnover position is healthier, retail real estate is still being affected negatively by e-commerce and new retailing patterns, with the gap between winners and losers widening. Nonetheless, these changes are at the same time delivering new patterns of demand, focused on key centres and high streets.

Structural growth drivers are also changing the industrial market, be that in e-commerce impacting on logistics or 3D printing and similar changes to production. These factors are continuing to revolutionize the market around the world, opening up core and higher risk opportunities including ground up development as faster delivery times are demanded. Urban facilities for the "last mile" offer the greatest potential gains and security, although out of centre big box logistic facilities are also seeing strong growth in well accessible locations to service these cities. Growth is broad based at present with major cities in all regions enjoying increased rents. Trends are mixed in residential markets but typically positive for rental and affordable space in terms of the balance of occupational supply and demand. Supply for investors will, however, remain constrained in many areas. The US will continue to be the dominant market, but new development is also pushing up vacancy and reducing growth potential and hence investors need to be selective. Elsewhere, with markets less mature, sector niches such as student, senior or micro housing offer most potential. Asia has higher risks for incoming investors but Europe will be a target, with Germany continuing to provide core potential. However, with opportunities limited, markets such as the Netherlands and Sweden will see higher demand. The UK, in particular, may be an area of opportunity for those able to see through short-term volatility, with construction falling behind demand.

For hospitality, long-term investor demand will remain high, with increasing Chinese demand joining Middle Eastern and private global buyers. For portfolios and mass-market hospitality, where PE funds dominate, changing financing costs may lead to a pause in activity as pricing adjusts in some markets. New York and London will continue to lead, with the cheaper Pound offsetting Brexit concerns for the latter, while Tokyo will also remain in high demand and Tier 1 Chinese and German cities are likely to see increased activity.



Tab	le 3: CITY TARGETS FOR INVESTME		
	AMERICAS	ASIA PACIFIC	EMEA
CORE	 Offices: US CBD gateway cities led by NYC, Washington DC and Boston followed by core Canadian cities (Toronto, Vancouver) Retail: Infill strips, plus core 24 hr gateway cities in USA and Canada Apartments: Multi-family in top US cities eg NY, Boston, SF, LA plus build-to core strategies in the above plus the southeast and southwest Logistics: Core assets: South California, New Jersey 	 Offices: Sydney, Melbourne, Tokyo, Singapore, Seoul Retail and Hospitality: Tokyo, Sydney, Osaka, Singapore Residential: Japan Logistics: Singapore, Sydney, Hong Kong, Tokyo, Osaka 	 Office: London, Paris, Stockholm, Copenhagen, Munich, Frankfurt, Berlin, Madrid Retail: Dominant centres and flagship high streets in core German and Nordic cities plus Paris London, Milan, Madrid, Barcelona, Lisbon, Dublin, Amsterdam and Brussels Logistics: London, Paris, Hamburg, Munich, Berlin, Rotterdam, Antwerg
CORE-PLUS	 Offices: Repositioning strategies in gateway cities, plus growth markets (Miami, Atlanta, Seattle, Denver and other tech or lifestyle cities) Transit rich secondary markets and near in suburbs of primary markets Logistics: Development in space constrained top 10 markets 	 Offices: Hong Kong, Seoul, key Indian cities: NCR, Mumbai and Bangalore, plus Shanghai, Beijing and potentially stronger tier 2 Chinese cities Retail: Growth markets such as Singapore, Jakarta, Kuala Lumpur and Seoul Retail centres in core areas of Shanghai and Beijing Residential: Singapore 	 Offices: Amsterdam, tier 2 German and select UK cities, Budapest, Barcelona, Vienna, Milan, Lisbon, plus repositioning in core cities in West and Central Europe. Retail: Refurbishment in core cities in northern Europe. Core space in larger cities in Italy, Spain and Central Europe. Logistics: German tier 2, Dublin, Madrid, Warsaw, Prague and Budapest
OPPORTUNISTIC	 Logistics: Markets servicing key Brazilian and Mexican cities Retail and residential: Santiago, Mexican and Colombian cities Assets or platforms in Brazil where current over supply is leading to discounted prices. Tier 1 shopping centres a particular long term target Repositioning/redeveloping suburban office product in the US and core assets in tertiary US markets 	 Offices: In emerging growth markets: Manila, Jakarta, Kuala Lumpur Retail: Emerging markets: Hanoi, Bangkok, New Delhi and other top Indian cities Logistics: Gateway China cities: Shanghai, Beijing, Guangdong and India hubs China: Targeting over-leveraged or distressed developers, via investment in local platforms 	 Offices: Spec development and repositioning in core west and Nordic cities plus let property in the EU east and potentially Moscow Retail: Repositioning eastern markets of the EU and active management/development in larger western cities and long term infrastructure gains in Istanbul Logistics: Development and units serving large CEE cities and peripheral western cities: eg Oporto, Barcelona and Milan

Source: Cushman & Wakefield, Global Capital Markets

Increasing competition in the core will push pricing higher and also deflect more demand towards new city targets.

GLOBAL YIELDS

The following figures indicate the views of Cushman & Wakefield's Capital Markets team and relate to the top investment city and very best prime property in each market rather than an historic or sample average

Table 3:	GLOBAL YIEL	DS JUNE 2	016	
REGION	COUNTRY	OFFICES	SHOPS	INDUSTRIAL
Americas	Argentina	9.30%	8.00%	12.00%
Asia Pacific	Australia	4.75%	4.50%	5.75%
EMEA	Austria	4.00%	3.00%	6.25%
EMEA	Belgium	5.50%	3.50%	6.50%
Americas	Brazil	9.65%	7.95%*	9.75%
EMEA	Bulgaria	8.50%	8.50%	10.00%
Americas	Canada	4.50%	4.00%	4.25%
EMEA	Channel Islands	6.50%	6.50%	-
Asia Pacific	China	4.50%	4.50%*	7.10%
Americas	Colombia	7.00%	15.50%*	17.85%
EMEA	Croatia	8.25%	8.00%	9.00%
EMEA	Czech Republic	5.00%	4.50%*	6.50%
EMEA	Denmark	4.25%	3.50%	7.00%
EMEA	Estonia	7.00%	6.90%	8.00%
EMEA	Finland	4.40%	4.50%	6.40%
EMEA	France	3.25%	2.75%	6.00%
EMEA	Germany	3.70%	3.30%	5.40%
EMEA	Greece	8.00%	7.00%	11.50%
Asia Pacific	Hong Kong	2.70%	2.30%	-
EMEA	Hungary	6.75%	6.25%*	8.25%
Asia Pacific	India	7.00%	7.00%	8.00% - 10.00%
Asia Pacific	Indonesia	7.00%	10.00%	10.00%
EMEA	Ireland	4.25%	4.00%	5.75%
EMEA	Israel	7.00%	6.00%	7.25%
EMEA	Italy	4.25%	3.25%	7.00%
Asia Pacific	Japan	3.40%	3.50%	4.60%
EMEA	Latvia	7.00%	6.75%	8.60%
EMEA	Lithuania	7.00%	7.00%	8.50%
EMEA	Luxembourg	5.00%	4.20%	8.00%

Table 3:	GLOBAL YIEI	DS JUNE	2016	
REGION	COUNTRY	OFFICES	SHOPS	INDUSTRIAL
Asia Pacific	Malaysia	6.00%	5.25% - 7.00%	7.00%
Americas	Mexico	10.75%	10.75%	12.00%
EMEA	Netherlands	5.00%	4.00%	5.75%
Asia Pacific	New Zealand	6.00%	5.00%	5.50%
EMEA	Norway	4.00%	4.00%	5.75%
Americas	Peru	9.40%	15.00%*	12.00%
Asia Pacific	Philippines	8.50%	-	-
EMEA	Poland	5.50%	5.00%*	6.75%
EMEA	Portugal	5.25%	5.00%	7.00%
Asia Pacific	Republic of Korea	4.90%	5.50%*	-
EMEA	Romania	7.50%	7.00%*	9.00%
EMEA	Russia	10.50%	11.00%*	12.75%
EMEA	Serbia	9.25%	7.75%	11.25%
Asia Pacific	Singapore	3.55%	5.50%	6.30%
EMEA	Slovakia	7.00%	5.25%*	7.75%
EMEA	Slovenia	8.50%	7.00%	10.00%
EMEA	Spain	4.00%	3.65%	7.00%
EMEA	Sweden	3.70%	3.80%	6.15%
EMEA	Switzerland	3.70%	3.20%	5.70%
Asia Pacific	Taiwan	2.65%	2.10%	2.65%
Asia Pacific	Thailand	7.00%	8.00%*	8.00%
EMEA	Turkey	6.80%	5.80%	8.75%
EMEA	Ukraine	13.25%	10.00%	14.50%
EMEA	United Arab Emirates	7.25%	7.50%*	8.50%
EMEA	United Kingdom	3.25%	2.25%	4.25%
Americas	USA	3.50%	4.20%	4.75%
Asia Pacific	Vietnam	9.00%	9.50%*	10.00%
EMEA	South Africa	8.75%	7.25%	9.25%

*Shopping Centres

Note: Yields marked in red are calculated on a net basis to include transfer costs, tax and legal fees.

Source: Cushman & Wakefield



INVESTMENT VOLUMES

Tab	Table 4: TOTAL INVESTMENT VOLUMES (EX DEV. SITES)			
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*	
1	New York	82,559,282,874	8.5%	
2	Los Angeles	40,822,502,305	9.8%	
3	London	39,383,187,467	-31.2%	
4	San Francisco	30,477,557,789	-5.7%	
5	Paris	25,738,313,208	9.0%	
6	Tokyo	25,495,688,217	-35.8%	
7	Washington DC	20,470,498,882	9.1%	
8	Chicago	19,012,618,389	-2.9%	
9	Dallas	18,003,479,053	8.7%	
10	Boston	17,826,844,812	16.3%	
11	Miami	16,384,296,340	2.3%	
12	Atlanta	15,158,021,871	-4.6%	
13	Hong Kong	14,615,688,210	-8.1%	
14	Seattle	13,546,261,016	18.2%	
15	Shanghai	12,753,321,460	10.0%	
16	Denver	12,107,255,817	32.8%	
17	Phoenix	11,464,900,404	23.2%	
18	Berlin	10,711,658,495	-20.0%	
19	Sydney	10,086,509,612	-32.0%	
20	Amsterdam/Randstad	9,264,872,444	14.3%	
21	San Diego	9,216,588,315	27.6%	
22	Toronto	8,990,738,720	45.3%	
23	Houston	8,861,110,781	-30.1%	
24	Philadelphia	8,048,771,142	50.5%	
25	Melbourne	7,672,286,287	-33.3%	

Tab	le 4: TOTAL INVESTM (EX DEV. SITES)	ENT VOLUMES	
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*
26	Singapore	7,500,118,491	12.9%
27	Austin	7,492,611,579	-8.1%
28	Frankfurt	7,438,942,384	-27.2%
29	Stockholm	6,138,456,758	-5.7%
30	Beijing	5,912,113,508	7.4%
31	Tampa	5,718,005,535	18.0%
32	Munich	5,557,642,473	-25.3%
33	Baltimore	5,472,071,958	70.3%
34	Portland	5,456,528,434	22.5%
35	Hamburg	5,276,571,952	-9.1%
36	Madrid	5,229,721,059	-26.2%
37	Orlando	5,214,806,401	-25.1%
38	Las Vegas	5,152,899,318	69.4%
39	Milan	5,001,713,801	7.8%
40	Johannesburg	4,749,910,200	157.4%
41	Vancouver	4,702,007,839	84.7%
42	Charlotte	4,685,115,441	-2.1%
43	Osaka	4,583,056,915	-25.8%
44	Seoul	4,528,145,471	-18.0%
45	Raleigh/Durham	4,525,101,347	-10.3%
46	Birmingham	4,505,147,328	18.3%
47	Minneapolis	4,219,766,193	-15.3%
48	Dublin	4,214,226,053	-4.9%
49	Vienna	4,052,452,825	12.7%
50	Copenhagen	3,917,729,495	32.9%

Source: Cushman & Wakefield, Real Capital Analytics. Growth compared to previous 12 months.



TOP 10 CITIES FOR INVESTMENT BY SECTOR

Tab	Table 5a: RETAIL INVESTMENT				
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*		
1	New York	10,622,251,837	-19.0%		
2	Los Angeles	7,597,422,721	-3.1%		
3	London	4,981,938,823	-29.4%		
4	Токуо	4,520,873,693	-20.4%		
5	Chicago	3,969,097,985	42.6%		
6	Miami	3,620,871,911	-19.4%		
7	Hong Kong	2,957,222,804	-38.8%		
8	San Francisco	2,799,847,177	-4.7%		
9	Dallas	2,394,553,421	13.3%		
10	Las Vegas	2,312,291,400	94.1%		

Tab	Table 5c: INDUSTRIAL INVESTMENT				
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*		
1	Los Angeles	8,029,401,347	-4.5%		
2	San Francisco	5,810,001,817	27.5%		
3	New York	5,374,348,267	10.5%		
4	Chicago	3,275,864,292	-2.8%		
5	Dallas	2,747,233,282	-0.6%		
6	Atlanta	2,468,372,985	9.1%		
7	Boston	2,200,150,050	124.0%		
8	Hong Kong	2,032,488,492	-6.3%		
9	Sydney	1,937,649,064	-33.1%		
10	Seattle	1,921,099,732	18.4%		

	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*
1	New York	25,389,380,730	32.3%
2	Los Angeles	9,655,967,615	11.1%
3	Dallas	8,281,404,333	20.3%
4	Washington DC	7,791,566,745	47.2%
5	Atlanta	6,721,337,839	-1.0%
6	Denver	6,240,981,188	47.3%
7	Miami	6,233,230,742	103.3%
8	San Francisco	5,811,067,147	5.6%
9	Phoenix	4,826,654,268	50.8%
10	Seattle	4,725,966,213	17.2%

Source: Cushman & Wakefield, Real Capital Analytics. Growth compared to previous 12 months.

Table 5b: OFFICE INVESTMENT

	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*
1	New York	35,276,952,359	10.7%
2	London	27,750,119,403	-26.9%
3	Paris	20,827,594,461	17.2%
4	Tokyo	14,463,579,210	-41.0%
5	Los Angeles	12,919,843,315	40.3%
6	San Francisco	12,770,315,028	-24.3%
7	Shanghai	10,706,830,941	24.8%
8	Boston	9,688,005,239	0.8%
9	Washington DC	7,722,273,412	-8.6%
10	Hong Kong	7,621,893,718	23.2%

Tab	Table 5d: DEVELOPMENT SITES INVESTMENT				
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*		
1	Beijing	32,868,837,354	40.5%		
2	Shanghai	25,066,698,779	-14.7%		
3	Nanjing	22,757,664,704	111.0%		
4	Hangzhou	20,599,095,247	108.6%		
5	Chongqing	14,076,181,049	-7.7%		
6	Hefei	13,753,079,218	149.4%		
7	Tianjin	13,393,051,715	54.2%		
8	Guangzhou	13,389,645,838	3.3%		
9	Shenzhen	11,066,769,996	118.6%		
10	Wuhan	10,778,937,244	0.5%		

Tab	Table 5f: HOTEL INVESTMENT					
	METRO	Q3 2015 - Q2 2016 (US\$)	GROWTH*			
1	New York	5,896,349,682	-16.2%			
2	London	3,425,275,137	-34.6%			
3	San Francisco	3,286,326,621	33.9%			
4	Los Angeles	2,619,867,307	-13.9%			
5	Chicago	2,001,122,994	102.5%			
6	Tokyo	1,755,387,969	1.7%			
7	Miami	1,450,256,115	-57.2%			
8	Washington DC	1,430,824,156	43.8%			
9	Boston	1,384,866,092	14.6%			
10	Paris	1,357,189,870	-35.5%			

TORONTO, CANADA

24.201 24.801 18.81

Π

THE CONTRACTOR OF STREET, STRE

ABOUT THE REPORT

THE REPORT

This report has been written by David Hutchings in our Capital Markets Investment Strategy team with support from Emily Tonkin, the global research group and Nigel Almond, author of "Brexit & Global Cities". The report has been prepared using data collected through our own research as well as information available to us from public and other external sources. The transaction information used relates to non-confidential reported market deals, excluding indirect investment and future commitments. All investment volumes are guoted pertaining to deals of USD 5 million and above. Alongside Cushman & Wakefield information, data has been used from Real Capital Analytics (RCA). Where the data was sourced from RCA, it is as at 18 August 2016.

In respect of all external information, the sources are believed to be reliable and have been used in good faith. However, Cushman & Wakefield cannot accept responsibility for their accuracy and completeness, nor for any undisclosed matters that would affect the conclusions drawn. Certain assumptions and definitions used in this research work are given within the body of the text. Information on any other matters can be obtained from Cushman & Wakefield.

A number of the rankings contained within this Winning in Growth Cities 2016/2017 report are Cushman & Wakefield composite rankings, collated using a variety of in-house proprietary data, reliable secondary sources and a range of data indicators.

SOURCES

INVESTMENT DATA Cushman & Wakefield, Real Capital Analytics

OTHER SOURCES AND MARKET POWER RANKINGS

Cushman & Wakefield, Oxford Economics Forecasts, Brookings, Economist Intelligence Unit (EIU), Mercer, Youthfulcities. Z/Yen Group, Rome2rio, Heritage Foundation.

For more information, please contact:



David Hutchings EMEA Investment Strategy david.hutchings@cushwake.com +44 20 7152 5029



Emily Tonkin EMEA Investment Strategy emily.tonkin@cushwake.com +44 20 7152 5877

RESEARCH SERVICES

Cushman & Wakefield is known the worldover as an industry knowledge leader. Through the delivery of timely, accurate, high-quality research reports on the leading trends, markets around the world and business issues of the day, we aim to assist our clients in making property decisions that meet their objectives and enhance their competitive position.

For more information, please contact:



Elisabeth Troni Head of EMEA Research & Insight elisabeth.troni@cushwake.com +44 20 3296 2121



Nigel Almond Capital Markets Research nigel.almond@cushwake.com +44 20 3296 2328



Joanna Tano Head of Operations EMEA Research joanna.tano@cushwake.com +44 20 7152 5944

CAPITAL MARKETS SERVICES

Capital Markets provides comprehensive advice and execution services to clients engaged in buying, selling, investing in, financing or developing real estate and real estate-related assets across the globe. Our solutions are tailored to meet the objectives of private and institutional owners and investors, as well as corporate owners and occupiers.

Whether you are seeking to dispose of an asset in Hong Kong, finance the purchase of a hotel in New York, or structure a complex cross border portfolio deal in Europe, Cushman & Wakefield's expertise in capital markets is the gold standard. Located in major markets around the world, our professionals execute customised acquisition and disposal strategies across all major property types. Additionally, we provide our clients with unique access to opportunities and capital sources worldwide. As a global leader in investment transactions, we have an unsurpassed network of buyers and sellers, access to international capital and superior market data.

Our services include but are not limited to:

- Investment Sales & Acquisitions
- Investment Advisory Services
- Investment Strategy and Market Analysis
- Investment Management
- Equity, Debt & Structured Finance
- Corporate Finance & Investment Banking

For more information, please contact:

GLOBAL



Carlo Barel di Sant'Albano Chief Executive Global Capital Markets & Investor Services carlo.santalbano@cushwake.com +44 20 7152 5846

INVESTMENT STRATEGY



David Hutchings EMEA Investment Strategy david.hutchings@cushwake.com +44 20 7152 5029

CAPITAL MARKETS



THE AMERICAS Janice Stanton Global Capital Advisory janice.stanton@cushwake.com +1 212 841 5025



ASIA PACIFIC Sigrid Zialcita Asia Pacific Research sigrid.zialcita@cushwake.com +65 6232 0875



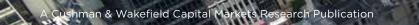
EMEA Jan-Willem Bastijn EMEA Capital Markets janwillem.bastijn@cushwake.com +31 20 800 2081



THE AMERICAS Noble Carpenter Americas Capital Markets noble.carpenter@cushwake.com +1 212-318-9745



ASIA PACIFIC James Quigley Asia Pacific Capital Markets james.quigley@cushwake.com +612 8243 9999



ABOUT CUSHMAN & WAKEFIELD

Cushman & Wakefield is a leading global real estate services firm that helps clients transform the way people work, shop, and live. The firm's 43,000 employees in more than 60 countries provide deep local and global insights that create significant value for occupiers and investors around the world. Cushman & Wakefield is among the largest commercial real estate services firms with revenue of \$5 billion across core services of agency leasing, asset services, capital markets, facility services (C&W Services), global occupier services, investment & asset management (DTZ Investors), project & development services, tenant representation, and valuation & advisory.

To learn more, visit **cushmanwakefield.com**

Follow us on social channels: Twitter: <u>@Cushwake</u> LinkedIn: <u>linkedin.com/company/cushman-&-wakefield</u> Facebook: <u>facebook.com/cushmanwakefield</u>

Or download My C&W Research App: cushwk.co/myresearch

Copyright © 2016 Cushman & Wakefield. All rights reserved. The information contained within this report is gathered from multiple sources considered to be reliable. The information may contain errors or omissions and is presented without any warranty or representations as to its accuracy.

10/2

6 Billionnan



a a fi

ø

1

R

A MARIA

đ

0,00

-

1

