Late-cycle Momentum Continues into 2017

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Global Market Perspective

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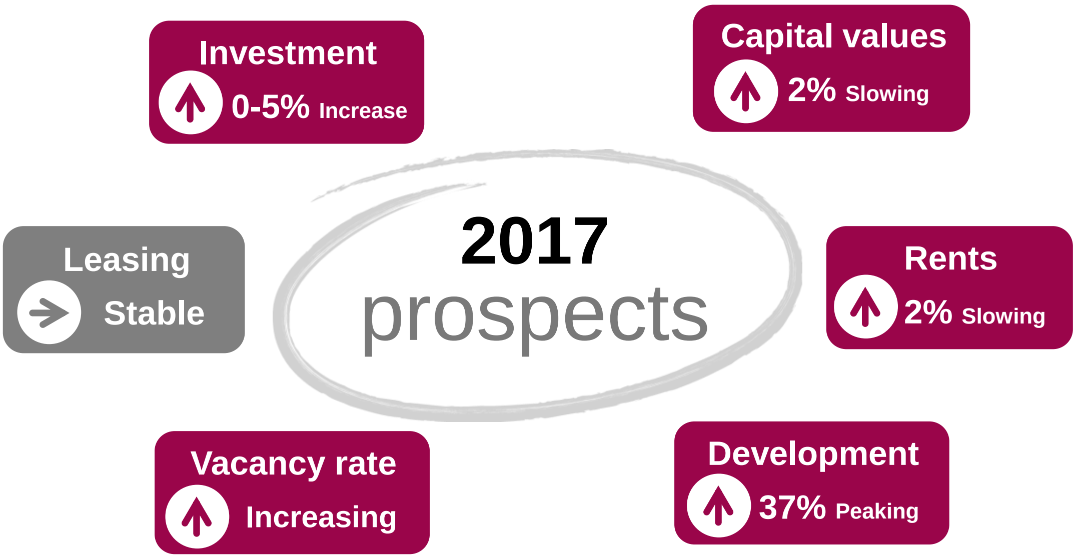
Late-cycle Momentum Continues into 2017

Volumes hold steady; rental and capital value growth slows

Political upheaval and various election cycles are dominating the headlines, affecting sentiment in global real estate markets and creating uncertainty in the outlook. Global investment and leasing volumes are nonetheless proving resilient and are expected to remain robust during 2017, with a considerable weight of capital seeking real estate exposure. The main impact of uncertainty is on real estate prices, and rental and capital value growth is slowly decelerating. More leasing markets will move into balance during 2017 as the construction cycle peaks, providing renewed opportunities for tenants.

Global Commercial Real Estate Market Prospects 2017



Leasing, vacancy, development, rents and capital values relate to the office sector.
Source: JLL, January 2017

Investor activity maintains positive momentum into 2017

2016 investment transaction volumes have come in ahead of our initial expectations at US$661 billion, 6% below 2015 which was the third most active year on record. The final quarter of the year was highlighted by additional political turbulence in the **U.S.** on the heels of the Brexit vote in the **UK**. However, despite these distractions transactional volumes of US$206 billion in Q4 were only 2% below the final quarter of 2015.

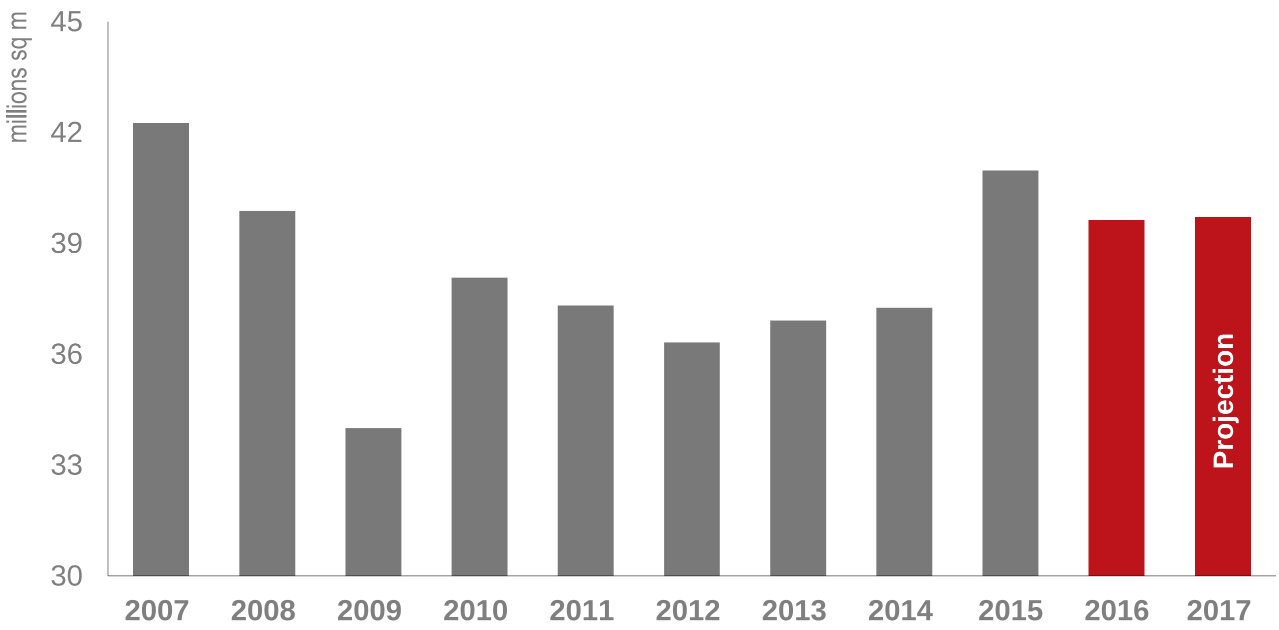
The year ended at the top of our latest forecast range and the market seems to be maintaining this positive momentum into the first quarter of 2017. At this stage we see a substantial pipeline of real estate opportunities and for 2017 we are forecasting volumes will slightly exceed the US$660 billion of 2016 with the possibility of a return towards US$700 billion on the back of stronger global growth.

Global office market fundamentals resilient

Leasing markets maintained a healthy pace in the fourth quarter of 2016, with global volumes (across 96 cities) registering the highest level of the year, 6% up on the third quarter. For the full year, leasing volumes were down modestly by only 3% on the robust levels of 2015. The full-year outcome confirms our view that leasing activity continues to be resilient in the face of political and economic uncertainty. Asia Pacific and Europe had their strongest quarter of 2016, and leasing volumes in both regions finished the year only marginally (i.e. -2%) below the levels of 2015. Meanwhile, the **United States** saw a disappointing final quarter due to the lack of 'mega leasing' deals and its full-year volumes were down by 5% year-on-year.

JLL forecasts global leasing volumes in 2017 to be broadly stable on 2016 levels. The U.S. offers the greatest upside potential (of up to 5%), where overall macro-market dynamics support solid growth prospects. With lingering economic and political uncertainty, we expect gross leasing volumes in Europe and Asia Pacific to be generally in line with 2016, with a modest downside risk of up to 5% in Asia Pacific.

Global Office Demand – Gross Leasing Trends, 2007-2017



24 markets in Europe; 50 markets in the U.S; 22 markets in Asia Pacific
Source: JLL, January 2017

Office rental momentum weakens

At year-end the global office vacancy rate fell below 12% (to 11.9%) for the first time in this cycle, reaching its lowest level since Q3 2008. Vacancies continued their downward trend in the Americas, but we also witnessed surprise falls in Europe and Asia Pacific. Nonetheless, Q4 2016 is likely to mark the low point in global office vacancies, which are set to move slowly upwards during 2017 to reach 12.3% by year-end as new deliveries accelerate. Office completions are projected to be 37% higher in 2017 than in 2016, with this year marking the peak in the development cycle.

Annual rental growth for prime offices (across 26 major markets) slowed to 2.5% in the final quarter of 2016, with a further softening anticipated in 2017 to about 2% as many markets seek to absorb a larger volume of new deliveries and occupiers keep an eye on costs. Nonetheless, the bulk of major office markets are expected to remain in positive territory in 2017, with only **Shanghai**, **Beijing**, **London**, **Mexico City**, **Sao Paulo** and **Singapore** likely to experience a correction in prime rents over the next 12 months. **Sydney** is predicted to be the top performer among the major markets, with growth of 10%-15% this year on top of the 22.5% seen in 2016.

Retailer demand focused on prime locations

Retailer demand remains focused on high footfall locations able to offer strong sales as well as a place for consumers to interact with brands. Consistently robust leasing momentum and cautious development activity in the **U.S.** retail market have continued to push down the national vacancy rate, while rents are anticipated to approach their pre-recession peak over the next year. Meanwhile, double-digit annual rental growth was experienced in prime locations across Europe, led by London's New Bond Street where rents rose over 30% in 2016. Prime high street rents in **London**, **Dublin**, **Paris**, **Stockholm**, **Madrid** and **Hamburg** are expected to see the healthiest growth in 2017. In Asia Pacific, F&B operators remained active in several markets during Q4 although rental growth is still subdued, with limited increases recorded in **Sydney** and **Melbourne**.

Logistics markets continue to strengthen

The growing digitisation of retail and realignment of logistics networks to support omni-channel fulfilment and bespoke final mile delivery is continuing to drive robust activity in occupational markets. Following a strong 2016, demand for space in the **U.S.** continued to push down the national vacancy rate to a new record low. The European average vacancy rate also continued to edge lower on rising occupier activity, with the majority of regional markets anticipated to record rental increases in 2017. In Asia Pacific, third-party logistics and e-commerce firms boosted demand.

China becomes largest source of outbound hotel investment in 2016

A combination of lower confidence around income growth and geopolitical events caused hotel investors to adopt a more conservative strategy in their investment decisions in 2016. Global hotel transaction volumes in 2016 returned to levels similar to 2014 at US$60.1 billion, a 35% drop from the stellar levels experienced in 2015. Cross-border investment remains an important source of capital, with mainland **China** becoming the largest source of outbound capital, accounting for around half of total outbound hotel investment in 2016.

Rental growth decelerating in U.S. rental apartments

Rental growth is gradually decelerating in the **U.S.** multifamily market as the national vacancy rate edged up slightly in Q4 2016 on the back of a significant development pipeline, although demand remains resilient. Institutional investment markets finished the year strongly in Europe, with record sales activity in **Poland** and robust transaction volumes in **Germany** and **Sweden**. Meanwhile, **UK** residential markets continued to see growth in investment volumes, with further healthy increases expected in 2017. In Asia Pacific, stricter policy restrictions dented sales volumes in **China** and **Hong Kong**, while **Singapore** saw sustained sales growth on positive market sentiment.

Global Economy

Sentiment finely balanced at the start of 2017

The year starts with an uneasy mix of sentiment globally. On one hand, the political disruptions of 2016 and impending elections in 2017 have caused more trepidation about the outlook than normal, given the uncertain economic implications of these changes. On the other, stock markets are experiencing their strongest run in several years in the wake of the U.S. elections and despite another Fed rate hike late last year. The so-called 'Trump rally' in part reflects a rebound in earnings and a robust finish to 2016 in the United States. But given uncertainty about the scale of the new administration's promised reflation and at the anti-globalisation rhetoric, investor optimism may be tested later on.

This current situation is almost a reverse of last year when business sentiment was solid but equity markets were in freefall. So it is interesting to look at underlying economic forecasts, as these provided a more reliable benchmark of the position 12 months ago. The global picture is broadly positive. The most encouraging developments have been in the largest economies, notably upward revisions to the growth outlook in the U.S. and a stabilisation in the China figure. The U.S. upgrade, although growth continues to look unimpressive by historic standards, is in part a re-assessment based on an expectation of more policy stimulus from the incoming administration.

In the developed markets of Europe and Japan too, the latest news is broadly positive. A further upward revision is seen in the UK, where strong consumption and exports have averted the dire consequences that some anticipated after the EU referendum. A slowdown is still in prospect this year and next, but growth remains in line with the main Eurozone economies where forecasts are largely unchanged.

GDP Projections for 2017 in Major Economies – Recent Movements

	Australia	China	France	Germany	India	Japan	UK	U.S.
October 2016	2.7	6.3	1.4	1.5	7.2	0.6	1.2	2.0
January 2017 (Latest)	1.8	6.3	1.5	1.5	6.7	1.0	1.5	2.3
Change (bps)	-80	0	+10	0	-50	+40	+30	+30

Source: Oxford Economics, January 2017

Fed rate hike causes few ripples

The decision to raise the Fed Funds rate in mid-December was so well signalled that it was barely noted. Much will still depend on the fiscal path the new U.S. administration takes, though the consensus is that monetary tightening will continue during 2017 and beyond. However, the U.S. remains an outlier and the cycle will remain decoupled elsewhere, temporarily. Last year, much of the rest of the developing world was facing negative interest rates and any upward movement in Eurozone, Japanese and now even UK policy rates still looks two-three years away.

Nonetheless, the election of President Trump has led to a re-assessment of inflation risks across financial markets. This has been seen both in rising implied inflation and higher nominal bond rates, most notably in the U.S. and the UK but also in parts of the Eurozone. While most expect a revival in inflation rates during 2017, a reflection of increasing oil prices, there is disagreement about how persistent this will be. The key is likely to be labour markets. Wages have picked up in some economies, such as the U.S., but remain weak in most others. Until real wage growth returns to pre-crisis norms, any upturn in inflation is likely to be temporary and 'lower for longer' will continue to be the outlook for interest rates.

Global economy remains sluggish

Despite a co-ordinated expansion across most of the globe over the last year, the pace of recovery remains disappointing. World GDP is estimated to have risen by only 3.0% in 2016, which is the weakest performance since 2010. This continues the post-GFC trend of low activity by historic standards, as both developed and emerging markets struggle to work through the challenges created by the crisis.

This year and beyond, an incremental improvement is in prospect, with world GDP creeping back up to 3.3%, still relatively weak by past standards. With Europe and Asia slowing modestly, the Americas is expected fill the gap. In the wake of the presidential election, anticipation is high in the **U.S.** and data released towards the end of last year were more encouraging. But the direction of policy under Trump remains highly uncertain and, as yet, forecasts are for at best a cautious acceleration. This implies continued activity below the long-term average over the next two years, with potential for downside from the strong dollar and further Fed rate hikes.

Asia Pacific will continue to be the most robust region in terms of output growth, but there remain significant risks both in finance and trade. Much of the recent slowdown has been due to **China,** where maturity is slowly reducing growth potential as the economy diversifies. More recent concerns about an abrupt deceleration are looking over-done, at least after an active policy response, but annual growth rates are still forecast to ease. **India** has faltered in recent quarters as de-monetisation impacted on consumers and concerns about inflation re-emerged. While maintaining a slender growth lead over other regional economies, India's projections has been revised lower into the medium term. By contrast, **Japan's** fortunes have improved since the autumn, though this is mainly the result of a technical adjustment to the data and it remains Asia's weakest large economy.

The European recovery has been maintained in the face of ongoing political disruption, most recently the Italian referendum, and more in prospect over the next 12 months. The Eurozone expansion has been durable, but faces more headwinds. In the core, growth is sustained by solid domestic demand, though with growth rates slightly eroded by rising inflation. **Germany** and **France** will see a convergence in growth over the next 24 months at an unspectacular annual rate of 1.5%. The **UK** economy is expected to slow, as the post-vote boost to consumption fades and the realities of Brexit erode sentiment. UK growth rates are set to dip to a five-year low in 2017-18, but provided there is orderly progress towards a new settlement with the EU, prospects should improve further out, although uncertainty will remain high.

Global Outlook, GDP Change, 2016-2018

	2016	2017	2018
Global	**3.0**	**3.3**	**3.6**
Asia Pacific	**5.3**	**5.1**	**5.1**
Australia	2.2	1.8	2.9
China	6.7	6.3	5.9
India	7.0	6.7	7.2
Japan	1.0	1.0	0.9
Americas	**0.7**	**1.9**	**2.5**
U.S.	1.6	2.3	2.5
MENA	**2.7**	**2.7**	**3.4**
Europe	**1.9**	**1.8**	**1.7**
France	1.2	1.5	1.5
Germany	1.8	1.5	1.4
UK	2.1	1.5	1.3

Source: Oxford Economics, January 2017

Real Estate Capital Markets

Investment Volumes

Investors' desire for real estate exposure eclipses political doubt

2016 investment transaction volumes have come in ahead of our initial expectations at US$661 billion, 6% below 2015 which was the third most active year on record. The final quarter of the year was highlighted by additional political turbulence in the **U.S.** on the heels of the Brexit vote in the **UK**. However, despite these distractions, transactional volumes of US$206 billion are only 2% below the final quarter of 2015.

Despite 10-year bond yield increase, investors continue to value real estate

The most noticeable impact on the real estate investment environment of Donald Trump's election has been the significant rise in the U.S. 10-year bond yield. Given the yield compression we have witnessed across core real estate markets in the **U.S.** in recent years, this rapid adjustment could well have seen a pullback by investors. However, in the final quarter of the year real estate transactional volumes of US$78 billion were only 8% below the same quarter of 2015, while the full-year activity of US$285 billion was down 9% on 2015. All markets in the Americas were behind 2015's pace in 2016 with **Canada** the best performer, showing just a 5% decline.

Brexit already a reality as Germany takes top spot for second half of 2016

The European investment landscape has seen many seismic shifts over the last few years, with ever increasing flows of global capital and a transformation in debt markets. However, 2016 may well be remembered as providing one of the most notable changes with **Germany** surpassing the **UK** as the region's largest investment market for the second half of the year. Regionally the final quarter of 2016 saw US$85 billion of activity, 5% below Q4 2015 which brought full-year volumes to US$246 billion, an 8% annual decline. While Germany saw a 10% rise in full-year activity, the UK dropped by 36% and **France** by 8%. While Germany closed in on the UK for top spot in the final quarter it is now double the size of the French market. Elsewhere it was Central and Eastern Europe that experienced the biggest increase in the region with a 70% uplift on a year ago.

Record quarter for China keeps Asia Pacific volumes moving forward

Asia Pacific was the only region to see an increase in activity compared to a year ago, with the US$43 billion recorded in 2016's final quarter 21% higher than the same quarter of 2015. This means full-year activity is 5% higher than 2015 at US$130 billion. Compared to a year ago the biggest markets of **Australia** (-13%) and **Japan** (-3%) are lower while **China** (+24%) is significantly higher on the back of a record final quarter. The real outperformance in the region in 2016 came from **Singapore** (+35%) and **South Korea**, where volumes were almost double that of the previous year.

Politics set to Trump economics in 2017

The final quarter of the year marked the height of the political volatility for 2016 and, as with Brexit, many commentators' forecasts of market activity post the **U.S.** election were completely wrong. Despite the shock outcome, markets have rallied and this has fed through into commercial property investment activity. The year ended at the top of our latest forecast range and the market seems to be maintaining this positive momentum into the first quarter of 2017. The political environment is no less challenging in 2017 with President Trump taking office, on-going Brexit negotiations, and Dutch, French and German elections all due before October. What remains constant is the amount of capital targeting real estate although the relative value with other asset classes is narrowing and the on-going supply of investment grade product could be an issue. However, at this stage we see a substantial pipeline of real estate opportunities and for 2017 we are forecasting volumes will slightly exceed the US$660 billion of 2016 with the possibility of a return towards US$700 billion on the back of stronger global growth.

Direct Commercial Real Estate Investment – Regional Volumes, 2015-2016

US$ billions	Q3 2016	Q4 2016	% change Q3 16-Q4 16	Q4 2015	% change Q4 15-Q4 16	2015	2016	% change 2015-2016
Americas	77	78	**1%**	85	**-8%**	314	285	**-9%**
EMEA	55	85	**54%**	90	**-5%**	267	246	**-8%**
Asia Pacific	33	43	**31%**	36	**21%**	123	130	**5%**
Total	**165**	**206**	**24%**	**210**	**-2%**	**704**	**661**	**-6%**

Source: JLL, January 2017

Direct Commercial Real Estate Investment – Largest Markets, 2015-2016

US$ billions	Q3 2016	Q4 2016	% change Q3 16-Q4 16	Q4 2015	% change Q4 15-Q4 16	2015	2016	% change 2015-2016
U.S.	71.5	72.8	**2%**	77.8	**-6%**	293.7	266.2	**-9%**
Germany	15.3	20.8	**36%**	14.9	**39%**	50.0	55.0	**10%**
UK	11.2	16.1	**43%**	26.6	**-39%**	91.9	59.0	**-36%**
China	9.8	15.5	**59%**	10.5	**48%**	27.7	34.4	**24%**
France	8.4	9.8	**16%**	13.0	**-25%**	31.5	28.9	**-8%**
South Korea	2.8	7.4	**168%**	2.3	**224%**	8.0	16.0	**99%**
Japan	8.7	7.2	**-17%**	5.8	**25%**	34.0	32.9	**-3%**
Australia	5.7	5.2	**-10%**	6.5	**-20%**	21.4	18.7	**-13%**
Netherlands	1.5	5.1	**230%**	4.1	**25%**	9.4	11.0	**17%**
Sweden	2.7	5.0	**89%**	3.4	**47%**	11.1	12.9	**17%**
Italy	1.6	3.6	**122%**	2.5	**42%**	8.2	9.9	**21%**
Spain	3.1	3.4	**10%**	2.3	**44%**	9.7	10.3	**6%**
Canada	4.2	3.2	**-23%**	4.6	**-30%**	14.9	14.1	**-5%**
Hong Kong	2.5	2.7	**10%**	4.5	**-39%**	12.0	10.3	**-14%**
Czech Republic	0.5	2.4	**345%**	0.3	**624%**	2.3	4.2	**85%**
Singapore	2.1	2.1	**0%**	1.9	**15%**	7.0	9.4	**35%**
Denmark	0.4	2.0	**411%**	0.5	**286%**	3.7	4.0	**8%**
Norway	1.5	1.8	**21%**	6.3	**-71%**	11.4	6.7	**-41%**
Poland	0.6	1.8	**211%**	1.9	**-4%**	3.7	4.7	**29%**
Finland	0.8	1.7	**114%**	1.4	**18%**	3.9	4.8	**24%**
Ireland	0.3	1.7	**391%**	1.4	**22%**	4.1	5.3	**30%**
Austria	0.1	1.5	**1251%**	2.0	**-25%**	2.5	3.4	**36%**
Switzerland	1.8	1.5	**-20%**	2.0	**-28%**	4.6	5.1	**11%**
India	0.2	1.4	**492%**	0.2	**487%**	2.1	2.3	**11%**
Brazil	0.1	1.2	**1206%**	1.1	**13%**	2.5	1.5	**-40%**
Belgium	0.9	1.1	**23%**	1.3	**-15%**	4.8	4.0	**-17%**
Russia	1.8	1.1	**-38%**	0.6	**77%**	2.4	4.5	**84%**

Source: JLL, January 2017

REGIONS IN FOCUS

Americas' investment activity remains strong

Investment volumes in Americas' real estate finished 2016 on a robust note with combined transaction volumes reaching US$78 billion, the highest quarterly level of 2016, although down 8% from Q4 2015. For 2016 overall, investment volumes were US$285 billion, a decrease of 9% from the record levels of the previous year. Within the **U.S.**, investment volumes in the fourth quarter were US$73 billion, a decline of 6% year-over-year. Total transaction activity during 2016 was US$266 billion, down 9% for the year.

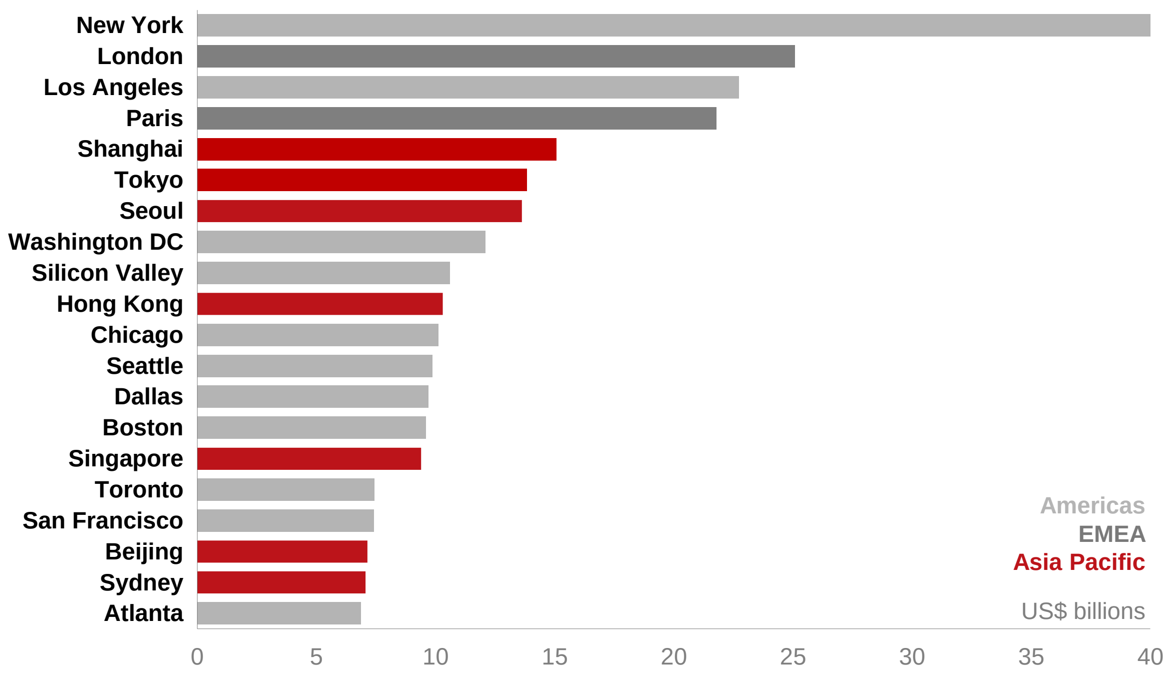
Outside of the U.S., investment activity in **Brazil** rebounded smartly from the historically low levels seen in the first three quarters of 2016, with volumes for Q4 reaching US$1.2 billion and representing over 75% of activity for the full year. The trend of more energetic Brazilian markets may hold into 2017 as investors begin to anticipate better economic fundamentals developing by late in the year. Meanwhile, fourth quarter investment volumes were down on a year-on-year basis in **Canada** and **Mexico**, although full-year transaction activity was nearly even with 2015's levels.

Entering 2017, stronger economic growth prospects and continuing keen investor interest will provide a boost to activity. However, higher interest rates in the context of a maturing cycle will likely keep renewed growth in transaction volumes modest, although at near-record levels, with a projected 0%-5% increase for the year in the Americas region.

Shanghai tops global rankings in Q4 for first time

Shanghai took top position in the ranking of global investment destinations for the first time in Q4 2016 with transactional activity of US$8.8 billion for the quarter, and finished among the top five markets overall in 2016 on the back of record investment activity. However, the **U.S.** continued to account for the majority of leading cities with **New York** maintaining its premier position for a second year as it registered annual transaction volumes of US$40.0 billion, although this was down 17% on a record 2015. In **London**, volumes fell by 40% to US$25.1 billion in 2016, the lowest level since 2011 as Brexit concerns continued to impact transactional activity. In addition to Shanghai, several other Asia Pacific markets also witnessed an increase in activity, including **Seoul**, where levels doubled over 2015, **Singapore** and **Beijing**.

Direct Commercial Real Estate Investment, Top 20 Cities, 2016



Source: JLL, January 2017

EMEA investment volumes lower in 2016 due to fall in UK

EMEA investment volumes in Q4 2016 came in at US$85 billion, which represents a 5% decline year-on-year. The main driver was the **UK** where transaction levels were down 39% year-on-year in US dollar terms (-26% in sterling), causing it to fall into second place behind **Germany** in terms of market size. Excluding the UK, Europe saw volumes increase by 9% in the fourth quarter.

For the full year the EMEA region as a whole witnessed investment volumes fall 8% to US$246 billion. However, excluding the UK, volumes increased 7% year-on-year. Although the UK fell behind Germany in terms of overall investment volumes in the final quarter it remained Europe's largest investment market over the full-year 2016, with US$59 billion of transactions, while Germany recorded investment volumes of US$55 billion, a 10% gain on the year before. **France**, Europe's third largest market, saw a decline in transaction volumes of 8% over the year, recording US$29 billion of transactions.

European volumes helped by increased activity in CEE, Russia and Greece

In Continental Europe, transaction volumes were propped up by Central and Eastern Europe (CEE) which saw investment activity rise by 75% year-on-year for the full-year 2016. **Poland**, the largest country in the sub-region, the **Czech Republic** and **Hungary** were responsible for the largest transaction volumes (US$4.7 billion, US$4.2 billion and US$1.9 billion respectively). Many of the smaller countries in the region also registered strong increases. Interestingly **Greece** registered a huge improvement in volumes, with US$554 million of transactions. **Russia** too recorded positive growth with US$4.5 billion (up 84% on 2015).

The Nordics saw overall 2016 volumes fall by 5%, although this was largely due to a -41% decline in **Norway**. The remaining Nordic countries recorded positive growth. Full-year transactional activity in the Benelux was up 7%, mainly due to a strong performance in the **Netherlands** with a gain of 17%, although there was a decrease in **Belgium** by the same amount. Southern Europe's volumes grew by 11% year-on-year, driven by increases in **Greece**, **Italy** (+7%) and **Spain** (+6%).

Transaction activity ends 2016 on a strong note in the Asia Pacific region

Asia Pacific's real estate investment market ended 2016 on a strong note with full-year transactions totalling US$130 billion, up 5% against 2015. The annual performance was lifted by robust growth in core markets such as **China**, **Singapore** and **South Korea**. However, **Australia** and **Hong Kong** dragged down overall regional performance, primarily due to a lack of investable product as well as relatively high valuations. **Japan's** performance was largely stable for the full year, as a low interest rate environment supported investor demand. Cross-border investment in the region remained active over the full-year 2016, accounting for one-third of total transaction volumes.

We expect largely stable investment volumes across the region in 2017, as institutional investors look to allocate more capital to real assets to meet benchmark total returns. However, there is still a risk factor that lies in the process of adjustment from the current environment of low interest rates and low inflation rates to a world of higher interest rates and higher inflation rates.

Cross-border investor interest remains high in Australia and Hong Kong

Investment volumes in **Australia** came to US$5.2 billion in the final quarter of 2016, down 20% year-on-year as owners held on to stock given limited reinvestment opportunities. Full-year 2016 activity was down 13% on 2015 to US$18.7 billion, with cross-border transactions accounting for over half of annual volumes. We expect stable transactional activity over the next 6-12 months, as relatively high spreads and the prospect of above-trend office rental growth should continue to attract buyers, while some owners will likely capitalise on tight pricings to realise gains.

Transaction levels were also lower in **Hong Kong,** down 39% year-on-year to US$2.7 billion in Q4 2016 due to a very strong base of comparison in Q4 2015. Overall 2016 volumes were down 14% year-on-year to US$10.3 billion, but this does not taken into account very strong activity by mainland **Chinese** developers in acquiring residential land and development sites. Going forward, investors and end-users will continue to favour office properties for long-term investment as Chinese demand supports rents.

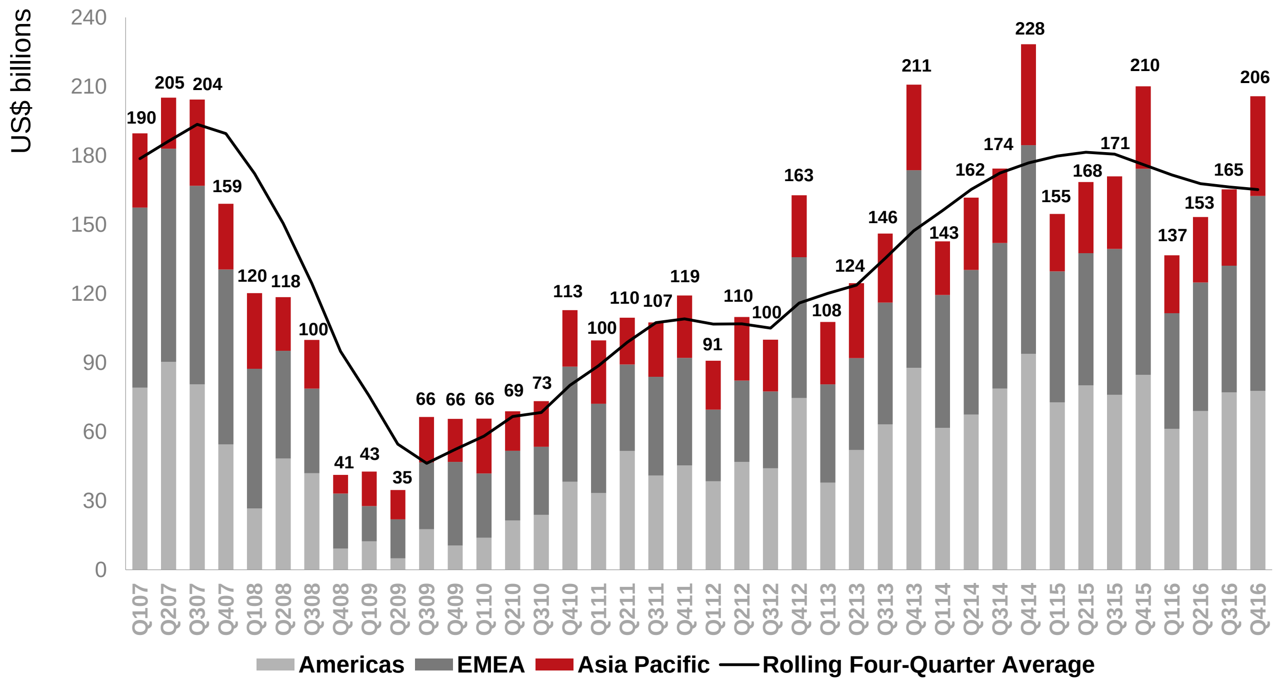
China closes 2016 with record quarter

China's real estate investment market outperformed in 2016 with full-year transaction volumes up 24% year-on-year, setting a new record of US$34.4 billion. The year finished on a high note with Q4 volumes of US$15.5 billion, up 48% year-on-year due to robust trading in Tier 1 cities such as **Shanghai** and **Beijing**. Investment activity for the quarter was boosted by a few portfolio deals such as the SCPG Holdings Properties portfolio, which was purchased by China Vanke from Blackstone Group for US$1.9 billion. Looking ahead, we expect the investment market in 2017 to remain stable as domestic money aims to invest locally following more capital outflow restrictions.

South Korea, Singapore and India register increases

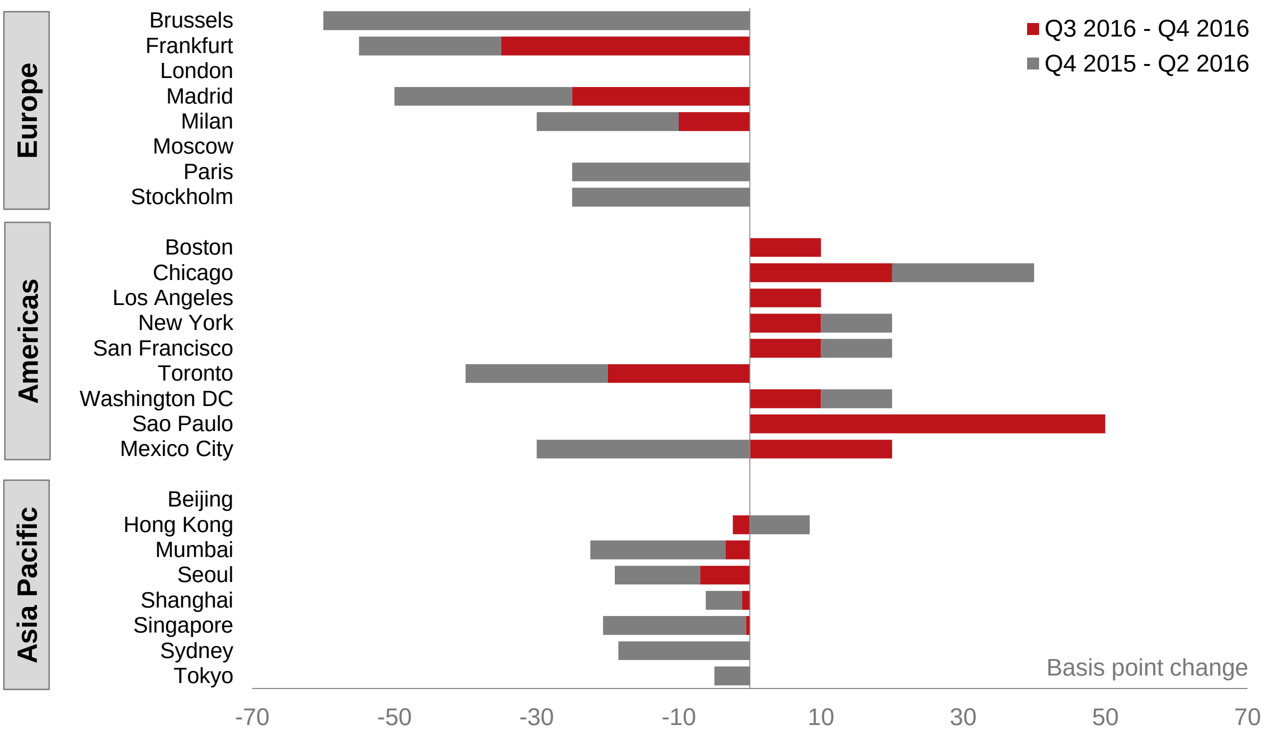
South Korea witnessed a record US$7.4 billion of transactional activity in Q4, more than tripling from the same quarter in 2015, while investment volumes for the full-year 2016 also hit a record high of US$15.9 billion. **Seoul** has scored a few high-profile purchases over the past few months as some Korean corporates are selling non-core buildings with long-term leasebacks in order to improve their financial position. **Singapore's** investment activity rose by 15% year-on-year to US$2.1 billion in the final quarter of the year. This brought its overall 2016 volumes to US$9.4 billion, up 35% on 2015, supported by a string of mega deals such as Asia Square Tower 1 and Straits Trading Building. Meanwhile, **India's** deal volumes increased by 487% year-on-year to US$1.4 billion in Q4, also backed by a handful of mega deals. Stronger transaction volumes are expected in the next 12 months as more international capital enters the Indian market and equity platforms created over the past year start to deploy capital.

Direct Commercial Real Estate Investment – Quarterly Trends, 2007-2016



Source: JLL, January 2017

Prime Office Yield Shift, Q4 2015-Q4 2016



Source: JLL, January 2017

Capital Values and Yields

Yield compression stabilising

Despite a slowdown in investment sales growth over 2016, the weight of capital is still putting downward pressure on yields for prime offices in select markets including **Frankfurt** (-35 bps), **Madrid** (-25 bps) and **Toronto** (-20 bps). However, Q4 2016 saw aggregate yield compression continue to stabilise with the mean prime office yield (across 21 major markets) remaining at 4.7% for a third consecutive quarter.

U.S. yields reach cyclical trough

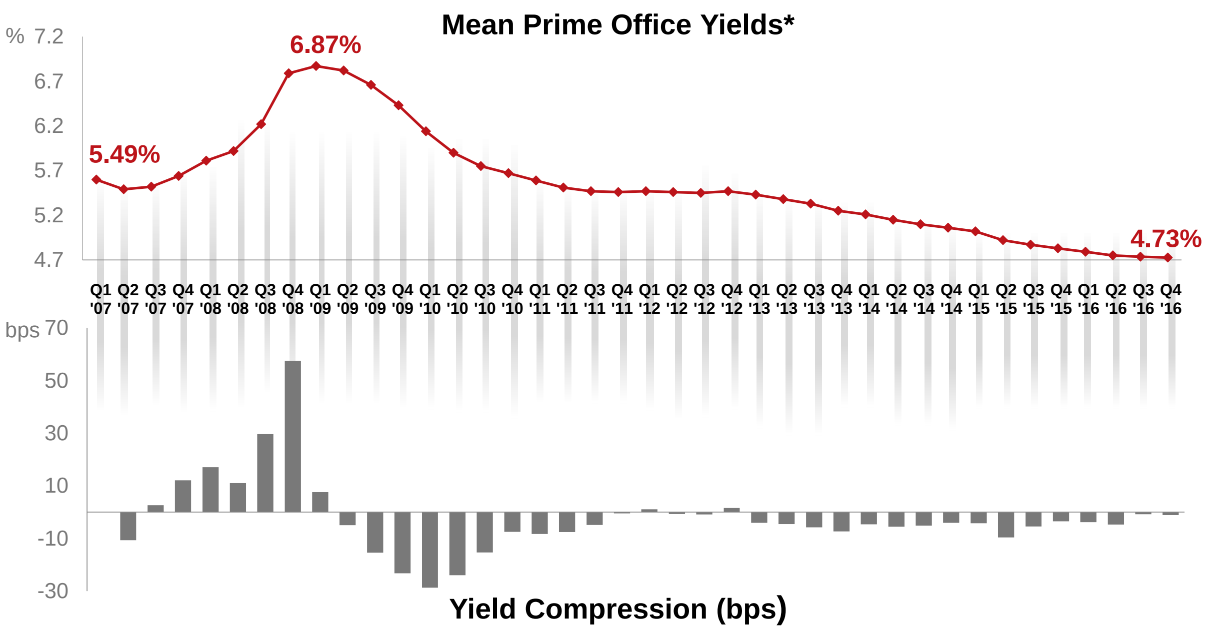
Initial yields for core office product in the **United States** have reached their trough for this cycle at current record-low levels, and in select cases have nudged modestly upwards as 2017 dawns, but in aggregate are overwhelmingly stable. With interest rates still low from a historical perspective, property yield spreads remain fairly wide, with room for compression should risk-free rates continue to increase. We believe there is likely to be moderate compression in spreads and gradual, modest yield expansion over the next two years.

Further deceleration in capital value growth expected

Capital values for prime assets in 26 major office markets rose by 4.3% over the full-year 2016, marking a continued slowing over 2016 from the stable 8% to 9% annual growth seen in the previous two years. Core European markets are currently registering particularly strong capital appreciation, with annual growth over 2016 led by **Stockholm** (+27.2%), **Madrid** (+20.6%) and **Frankfurt** (+19.3%).

Annual capital appreciation is expected to decelerate further to around 2% by year-end 2017, with **Moscow** and **Sydney** likely to top the global rankings for capital value growth.

Prime Office Yields, 2007-2016



*Across 21 major office markets
Source: JLL, January 2017

Corporate Occupiers

Continued growth in an uncertain environment

Occupier activity remained robust in 2016 across a number of global markets, despite much uncertainty and change in the macro and operating environments.

Asia Pacific saw a significantly stronger Q4 with locally driven demand for offices rising across a range of industries and markets such as **India** and **Australia**. Having seen up to double-digit declines in leasing volumes in Q2 and Q3, gross leasing activity in the region bounced back in the final quarter, increasing by 23% year-on-year and leaving full-year leasing volumes down only 2% on 2015.

Sentiment also continued to be positive in Europe, with aggregate leasing activity only slightly lower on a very strong 2015. Markets such as **Paris**, **Frankfurt**, **Amsterdam** and **Madrid** all saw high levels of activity in Q4. More surprisingly, London experienced the highest quarterly level of activity since 2009 in Q4 as a number of companies proceeded with leasing transactions that had slowed as a result of the EU referendum.

The primary theme of the **U.S.** occupier markets at the end of 2016 was continued growth, but notably slower growth. The final quarter saw both a deceleration in leasing velocity and a notable drop-off of 'mega deals' or very large leases, as some companies held back on major headquarters decisions around the time of the election. The slowdown in leasing growth was most prominent in primary markets, with **New York**, **Washington DC** and **San Francisco** seeing leasing growth and total absorption reduced in 2016 from the previous year. On the contrary, secondary and tertiary markets continued their trend of occupier interest. Cities like **Austin**, **Seattle**, **Salt Lake City**, and **Nashville** experienced unprecedented levels of corporate leasing activity in 2016, driven by lower costs and a rapidly growing base of millennial talent.

Transformation and change in retail and industrial

Occupier activity also remained robust in retail and industrial real estate. Consumer confidence is increasing in Europe and the **U.S.**, with strengthening jobs markets and real wage growth acting as a catalyst in the prime retail markets. While these premium resilient retail locations see continued strong performance and high footfall, the retail revolution and shift to e-commerce is evident in any city you visit. Consumer buying is increasingly focused on experiential retail, not on standard stores. In the U.S., 6,000 stores close every year and, in their place, it seems that a new distribution centre opens.

The level of industrial leasing and development in the U.S. is now beyond historical norms, while in Europe demand continues to outstrip supply. This transformation in retail and industrial occupational requirements is certain to carry on in 2017.

Volatility and portfolio optimisation in 2017

As we look to 2017, corporate occupiers will continue to face a volatile operating environment. Politics will continue to lead economics and shape corporate real estate decisions with the new administration in the **U.S.**, European elections in **France**, **Germany** and the **Netherlands**, and continuing negotiations on Brexit. Such a turbulent operating environment will feed into a process of location optimisation among corporate occupiers. Every international corporate that has a portfolio in Europe will be looking at what it needs to do as a result of some of the changing relationships within the **U.K.** and the EU. Headcount will be redeployed due to some of the new dynamics, and in North America signs of alterations to operations and supply chains are already evident.

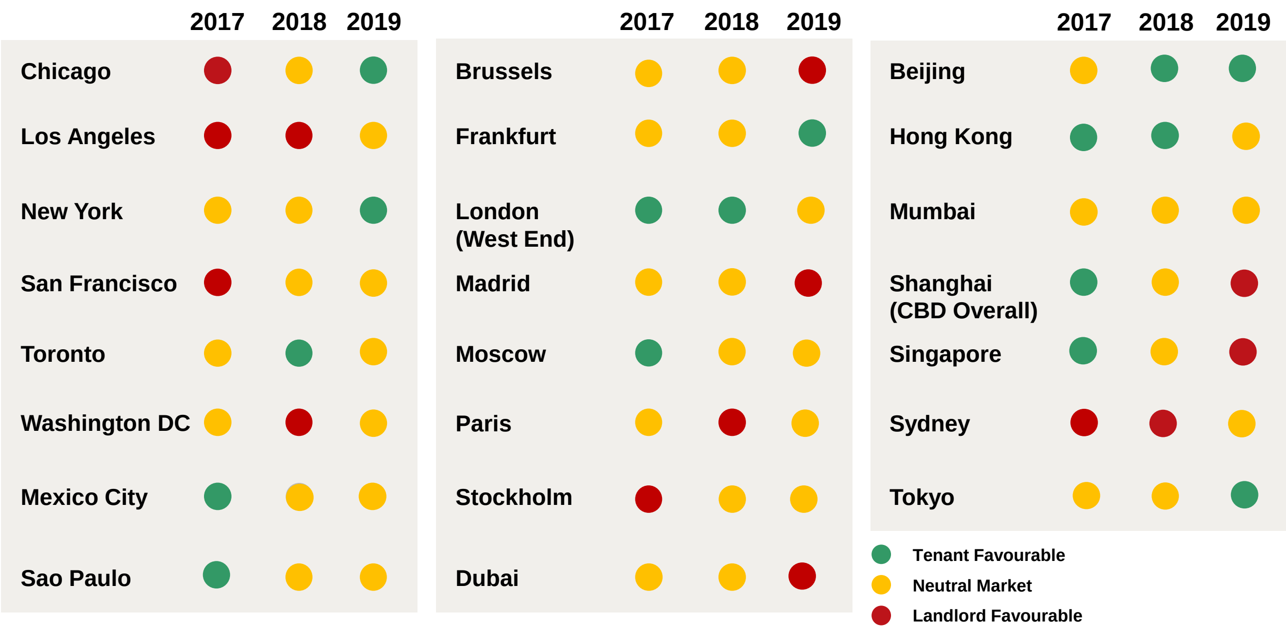
Experiential real estate

A focus on the user experience within the office environment will be a crucial change driver this year, ensuring that office environments are really centred on the needs and requirements of the individuals within them in a range of different ways. So we expect offices to take a leaf from the book of retail, with a big spotlight of attention on experiential real estate in 2017.

Automation and algorithmic business

Finally, automation and digital disruption will continue to reshape existing business models and real estate portfolios. We expect automation to continue to impact how organisations are structuring their real estate. Already well-established in manufacturing, automation and the advent of algorithmic businesses will increasingly affect the shape, size and specification of wider real estate assets and portfolios.

Global Office Market Conditions Matrix*, 2017-2019



*Relates to conditions in the overall office market of a city. Conditions for prime CBD space may differ from the above.
Source: JLL, January 2017

Global Real Estate Health Monitor

	Economy		Real Estate Investment Markets				Real Estate Occupier Markets			
	Metro Area GDP	OECD Leading Indicator	City Investment Volumes	Capital Value Change	Prime Yield	Yield Gap	Rental Change	Net Absorption	Vacancy Rate	Supply Pipeline
Beijing	7.6%	0.3	11%	0.5%	6.3%	334	0.5%	7.8%	3.9%	13.7%
Boston	2.6%	0.1	-26%	-2.7%	3.9%	145	-0.1%	1.5%	13.6%	2.2%
Chicago	2.2%	0.1	-29%	-2.3%	5.0%	255	6.1%	1.3%	14.0%	1.8%
Dubai	2.2%	na	70%	5.2%	7.5%	na	5.2%	na	15.0%	4.5%
Frankfurt	1.5%	0.2	-2%	19.3%	3.8%	369	4.2%	-0.9%	9.1%	2.7%
Hong Kong	1.9%	na	-14%	7.6%	3.2%	131	9.7%	-0.1%	4.5%	4.2%
London	2.0%	0.2	-40%	-8.3%	3.5%	226	-8.3%	1.3%	4.1%	6.6%
Los Angeles	2.4%	0.1	20%	4.8%	4.3%	185	7.3%	0.9%	14.6%	1.3%
Madrid	2.9%	0.0	2%	20.6%	3.8%	236	6.4%	0.8%	10.1%	1.5%
Mexico City	2.9%	-0.4	386%	-5.8%	7.4%	-5	-7.1%	6.0%	14.0%	16.5%
Milan	0.9%	0.0	-16%	15.0%	4.2%	237	7.3%	-0.5%	13.9%	3.4%
Moscow	1.5%	0.2	110%	-6.3%	10.5%	212	-6.3%	1.9%	15.5%	10.2%
Mumbai	7.2%	-0.1	34%	2.7%	9.7%	275	0.4%	6.9%	18.2%	16.2%
New York	2.3%	0.1	-17%	-4.0%	3.5%	105	1.8%	-0.4%	10.4%	1.5%
Paris	1.4%	0.1	-9%	12.8%	3.0%	232	4.1%	1.2%	6.7%	4.5%
San Francisco	2.6%	0.1	-21%	-0.7%	3.6%	115	5.1%	1.1%	8.2%	6.3%
Sao Paulo	0.0%	0.1	365%	-11.1%	10.3%	496	-6.5%	-0.2%	25.2%	9.7%
Seoul	2.2%	0.0	107%	3.8%	4.4%	233	-0.5%	1.6%	11.8%	4.1%
Shanghai	6.7%	0.3	8%	1.9%	5.7%	272	0.9%	7.9%	12.6%	44.0%
Singapore	1.9%	na	35%	-5.9%	3.6%	114	-11.0%	1.3%	6.7%	10.2%
Stockholm	2.8%	0.1	11%	27.2%	3.8%	320	19.2%	0.4%	7.4%	2.2%
Sydney	1.3%	-0.2	-2%	12.8%	5.3%	254	22.5%	1.4%	7.5%	2.5%
Tokyo	0.8%	0.1	-12%	3.4%	3.0%	290	1.7%	6.0%	1.9%	10.0%
Toronto	2.4%	0.1	9%	14.5%	4.3%	259	4.8%	1.5%	9.7%	1.6%
Washington DC	2.3%	0.1	-5%	-5.9%	4.3%	185	-1.3%	0.3%	16.9%	2.7%

Real estate data as at end Q4 2016.

Definitions and Sources

Metro Area GDP: Change in Real GDP. Metropolitan Area Projection, 2017. Source: Oxford Economics
OECD Leading Indicator: Composite Leading Indicator. Change in Index. Latest Month. Source: OECD
City Investment Volumes: Direct Commercial Real Estate Volumes. Metro Area Data. Rolling Annual Change. Source: JLL
Capital Value Change: Notional Prime Office Capital Values. Year-on-Year Change. Latest Quarter. Source: JLL
Prime Yield: Indicative Yield on Prime/Grade-A Offices. Latest Quarter. Source: JLL
Yield Gap: Basis Points that Prime Office Yields are above or below 10-year Government Bond Yields. Latest Quarter. Source: JLL, Datastream
Rental Change: Prime Office Rents. Year-on-Year Change. Latest Quarter. Source: JLL
Net Absorption: Annual Net Absorption as % of Occupied Office Stock. Rolling Annual. Source: JLL
Vacancy Rate: Metro Area Office Vacancy Rate. Latest Quarter. Source: JLL
Supply Pipeline: Metro Area Office Completions (2017-2018) as % of Existing Stock. Source: JLL

Office Markets

Office Demand Dynamics

Office Demand

Global leasing markets prove resilient

Leasing markets maintained a healthy pace in the fourth quarter of 2016, with global volumes (across 96 cities) registering the highest level of the year, 6% up on the third quarter. For the 2016 overall, leasing volumes were down modestly by only 3% on the robust levels of 2015. The full-year outcome confirms our view that leasing activity continues to be resilient in the face of political and economic uncertainty.

Asia Pacific and Europe had their strongest quarter of 2016 in Q4, and leasing volumes in both regions finished the year only marginally (i.e. -2%) below the levels of 2015. Meanwhile, the United States saw a disappointing final quarter due to the lack of 'mega leasing' deals, and its full-year volumes were down by 5% year-on-year.

Stable leasing volumes in 2017

JLL forecasts global leasing volumes in 2017 to be broadly stable on 2016 levels. The United States continues to offer the greatest upside potential (of up to 5%), where overall macro-market dynamics support solid growth prospects. With lingering economic and political uncertainty, we expect gross leasing volumes in Europe and Asia Pacific to be broadly in line with 2016, with a modest downside risk of up to 5% in Asia Pacific.

United States pauses in the final quarter…

A combination of decelerating leasing velocity (with volumes down 7% quarter-on-quarter) and a lower number of 'mega leasing' deals in Q4 2016 resulted in the lowest level of occupancy growth in the U.S. office market in two years. Near-full employment and a shortage of skilled talent has restricted expansion activity in several major technology hubs, while political uncertainty associated with the November election caused some tenants to adopt a wait-and-see mentality.

…but is set for incremental growth in 2017

Looking to the year ahead in the U.S., a shift in public policy that favours deregulation and lower taxation may serve as a catalyst for growth in select industries that have faced increased regulatory pressures over the past eight years and for the U.S. financial markets in general. Although a rising interest rate environment will create both challenges and opportunities, overall macro-economic conditions support solid growth in 2017.

In terms of sectors and geography across the United States:

- The technology sector remained the office market's primary demand driver in 2016, representing 24% of national leasing activity, despite growing workforce constraints. **San Francisco** continued its steady growth, although the pace of expansion slowed year-on-year as high labour and living costs combined with low office vacancy rates and escalating rents. Meanwhile, robust expansion continued in other tech hubs, such as **Austin**, **Seattle** and **Silicon Valley**, which each recorded annual occupancy growth of 2% or greater.

- Suppressed tenant demand in the legal and financial services sectors was most apparent in **New York** and **Washington DC**, where net absorption was negative in 2016.

- There are signs that employers are targeting expansion activity in lower-cost locations. Mid-sized markets such as **Salt Lake City**, **Nashville** and **San Antonio** each registered 12-month occupancy gains in excess of 3% in 2016.

Divergence in tenant demand continues in Canada

Demand rebounded in the final three months of the year in **Canada**, bringing full-year 2016 absorption into modestly positive territory. There continues to be a strong divergence between oil-producing and oil-consuming markets however. **Calgary** in particular continues to grapple with the prolonged oil downturn, while oil consuming markets such as **Vancouver** and **Toronto** are faring much better with vigorous demand for office space and downward pressure on vacancy rates.

Robust Q4 activity keeps European office take-up ahead of 10-year average

Strong occupier demand continued across most of Europe during the fourth quarter, with take-up reaching 3.4 million square metres. While this was down 9% on Q4 2015, annual comparisons with that particularly robust quarter (the strongest Q4 since 2006) were always going to be unflattering.

Full-year 2016 take-up in the region reached 12.1 million square metres, a marginal 2% decrease on 2015, but in line with expectations. We forecast European take-up to be around 11.7 million square metres in 2017, broadly flat on 2016 levels as expansionary drive on the continent keeps demand levels above the 10-year average.

In the key European markets:

- **Paris** continued its stellar performance in Q4, pushing annual take-up to 2.4 million square metres, up 6% on 2015. Notably, La Défense recorded its most buoyant year since 2001, as occupiers looking for large-scale requirements and modern floor plates targeted this submarket.

- More surprisingly, **London** recorded its strongest Q4 since 2009 with take-up reaching 296,000 square metres, up 13% year-on-year. Both the City and West End markets saw a significant boost in transactions as requirements that were temporarily postponed on the back of the EU referendum were converted.

- Activity in the German office market continued apace. The outperformer in Q4 was **Frankfurt**, where take-up reached its highest final quarter volume since 2007, resulting in full-year volumes being up 34% year-on-year. **Berlin** (+4%), **Munich** (+2%) and **Hamburg** (+2%) also managed to exceed the robust levels of 2015. Leasing activity across Germany is likely to remain strong in 2017, although some markets might see a slight decrease on exceptionally high 2015 and 2016 levels.

- Other noteworthy performances in Q4 included **Amsterdam** (+56% year-on-year), **Brussels** (+29%) and **Stockholm** (+15%).

Occupiers rationalise and consolidate in the Gulf States

Demand in the **UAE** has generally fallen as governments seek to rationalise departments and reduce headcounts and spending levels. This has been most evident in **Abu Dhabi**, where a number of mergers have occurred between government-controlled entities. Private sector demand in **Dubai** remains focused on high-quality single-ownership office space. With a limited availability of space in high quality offices in key central locations, more major corporates have turned to ‘build-to-suit’ options.

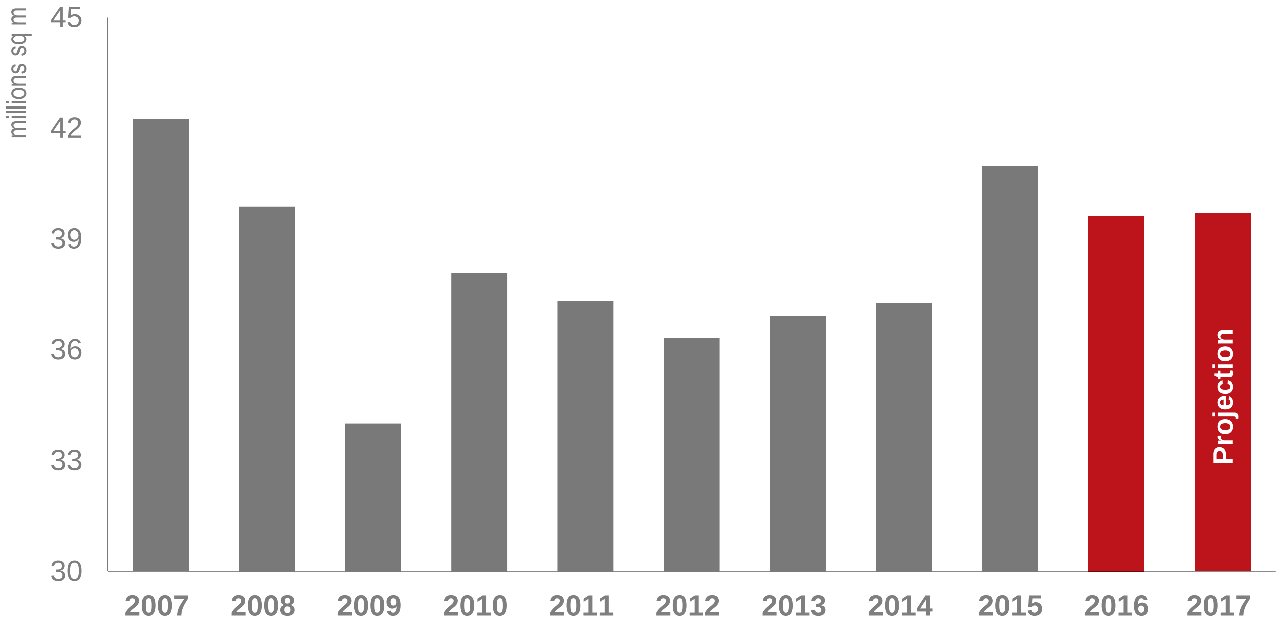
Asia Pacific finishes the year on a strong note

Asia Pacific's gross leasing activity increased by 23% year-on-year in Q4 2016, leaving full-year volumes down just 2% on 2015 levels. Financials and tech firms remained the most active sectors although demand trends were mixed across many Asian markets:

- In **Australia**, leasing levels in Q4 rose by a healthy 19% year-on-year, driven mostly by **Sydney** which saw the second highest volumes in the region. On an annual basis, **Melbourne** was the outperformer, with activity up 64% on 2015 levels.
- Volumes in **India** surged 82% year-on-year, improving in all four Tier I markets. The largest rise (and volume) was witnessed in **Delhi** where big ticket transactions were made, largely in recent completions.
- Volumes also moved up in **Tokyo** on pre-commitments for 2018 projects and sub-lease space in recent completions, supported by a 'flight to quality'.
- The **Hong Kong** leasing market was relatively subdued in Q4 though requirements from mainland Chinese firms remained as the pillar of demand growth, while **Singapore** experienced a seasonal slowdown. Even so, both markets saw year-on-year increases in volumes of around 25%.
- Q4 take-up dropped year-on-year in all three **China** Tier 1 cities. High CBD rentals, a ban on the registration of new P2P (peer-to-peer) companies, and more companies becoming cost cautious, impacted 2016 volumes in **Shanghai**. Tenants opted to renew in **Beijing** in anticipation of new supply in the CBD over the next 10 years, while fewer units available in the core areas of **Guangzhou** impacted activity.

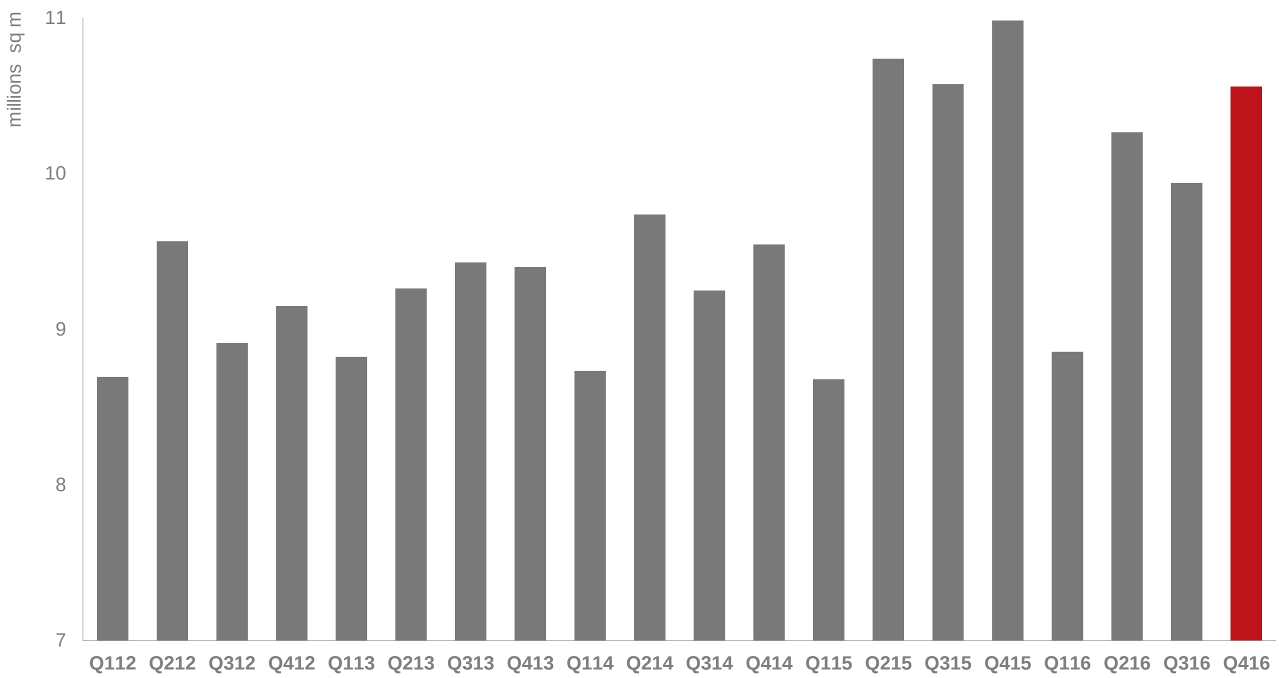
With lingering uncertainty surrounding the economic and political backdrop, we expect 2017 gross leasing volumes in Asia Pacific to be relatively in line with 2016 (with a modest downside of up to 5%). Although aggregate conditions are likely to be generally stable, the performance will continue to be varied as local market drivers diverge.

Global Office Demand – Annual Gross Leasing Volumes, 2007-2017



24 markets in Europe; 50 markets in the U.S.; 22 markets in Asia Pacific
Source: JLL, January 2017

Global Office Demand – Quarterly Gross Leasing Volumes, 2012-2016



24 markets in Europe; 50 markets in the U.S.; 22 markets in Asia Pacific
Source: JLL, January 2017

Office Supply Trends

Global office vacancy rate falls below 12% for the first time in this cycle…

At year-end 2016 the global office vacancy rate fell below 12% (to 11.9%) for the first time in this cycle, reaching its lowest level since Q3 2008. Vacancies continued their downward trend in the Americas (to 14.5%), but we also saw surprise falls in Europe (down 20 bps to 8.1%) and Asia Pacific (down 10 bps to 10.9%).

…but is set to trend upwards in 2017

Nonetheless, Q4 2016 is likely to mark the low point in global office vacancies, which are set to trend slowly upwards during 2017 to reach 12.3% by year-end as new deliveries accelerate. Office completions are expected to be 37% higher in 2017 than in 2016, with this year marking the peak in the development cycle. About one-third of completions slated for 2017 have already been pre-leased. New development completions are projected to tail off during 2018 and 2019.

U.S. construction activity nears cyclical peak

Construction activity in the U.S. continued to rise in the fourth quarter and now stands at a cyclical high of 10.4 million square metres. However, vacancy remained stable at 14.5% during the quarter and pre-leasing rates increased to over 50% on the back of major anchor tenancies in **New York** and **Silicon Valley**.

The risk of future oversupply is most acute in major gateway markets, including **New York** and **Washington DC**, where a surplus of high-quality new space or challenging prospects for backfilling second-generation space may materialise over the next 24 months.

Mid-sized and tech-focused markets continue to be the tightest nationally with vacancy in single digits, led by **Nashville** (6.2%), **Salt Lake City** (7.7%), **San Francisco** (8.2%), **Seattle** (9.2%) and **Portland** (9.4%).

Projected completions for 2017 will likely exceed demand, with vacancy rates expected to edge higher as the market moves into equilibrium, and it is anticipated that construction activity will peak and new ground-breakings will ratchet back over the course of 2017.

Vacancy edges up in Canada

Despite a rebound in demand in **Canada** in Q4 2016, new supply outpaced occupancy growth with national vacancy ending the year at 12.1%, up 100 basis points for the year.

Upward pressure on vacancy in Mexico City; construction cycle at late phase in Brazil

Tenant demand and vacancy rates kept steady in the **Mexico City** office market during Q4, although leasing activity was modestly impacted by exchange rate volatility in the second half of 2016. However, the magnitude of new supply projected to complete in 2017 is expected to place upward pressure on vacancy rates.

The vacancy rate in **Sao Paulo** ended 2016 at roughly 25%, while in **Rio de Janeiro** it was even higher at 31%. Nevertheless, the current construction cycle is at a late phase, with the overwhelming majority of new office projects likely to finally have been delivered by late 2017.

European office vacancy drops to 8.1%

The European office vacancy rate dropped by an impressive 20bp in Q4 2016 to 8.1%, the lowest since Q4 2008. The decline in vacancy during 2016 was far stronger than anticipated. The robust bounce in leasing activity had a particularly pronounced impact on vacancy in Western Europe including **Amsterdam** (-540bp), **Barcelona** (-210bp) and **Berlin** (-110bp). The development response has so far been limited to some of the tightest European city markets, pushing vacancy rates up in **London** (70bp to 4.1%) and **Dublin** (20bp to 7.8%).

Space constraints at the prime end of the market continue to intensify. Even markets which had previously been touted as oversupplied such as **Amsterdam**, **Milan** and **Frankfurt** (Q4 vacancy rates of 9.8%, 13.9% and 9.1% respectively) recorded significantly lower Grade A availability.

In some cities, space constraints in prime CBD pitches have meant that well-connected fringe / second-best locations are in high demand. This increased occupier mobility and spill-over into secondary areas, often supporting rental growth in these submarkets.

In most European markets 2016 completions were up on a year earlier, although **Paris** and **Moscow** pulled down the European aggregate. The 2017 and 2018 development pipeline will be more significant (up 58% on 2016), although around half of this space has been taken, limiting the new amount of speculative space entering the market. The majority of the increase is concentrated in **London**, **Paris**, **Dublin**, **Berlin** and **Munich**.

European office vacancy is expected to edge up modestly to 8.4% in 2017, as higher completion levels are offset by solid leasing activity. Expansionary demand will keep vacancy rates on a downward trajectory across most of Western Europe, though **London** and **Dublin** will experience a further increase as new schemes come on stream. In Central Europe, **Warsaw** and **Prague** are also projected to see a further rise in vacancy during 2017.

Vacancies trending downwards in Dubai

With limited levels of new supply entering the **Dubai** market, vacancies have generally trended down, with the vacancy rate in the CBD ending 2016 at 15%, the lowest level for a number of years.

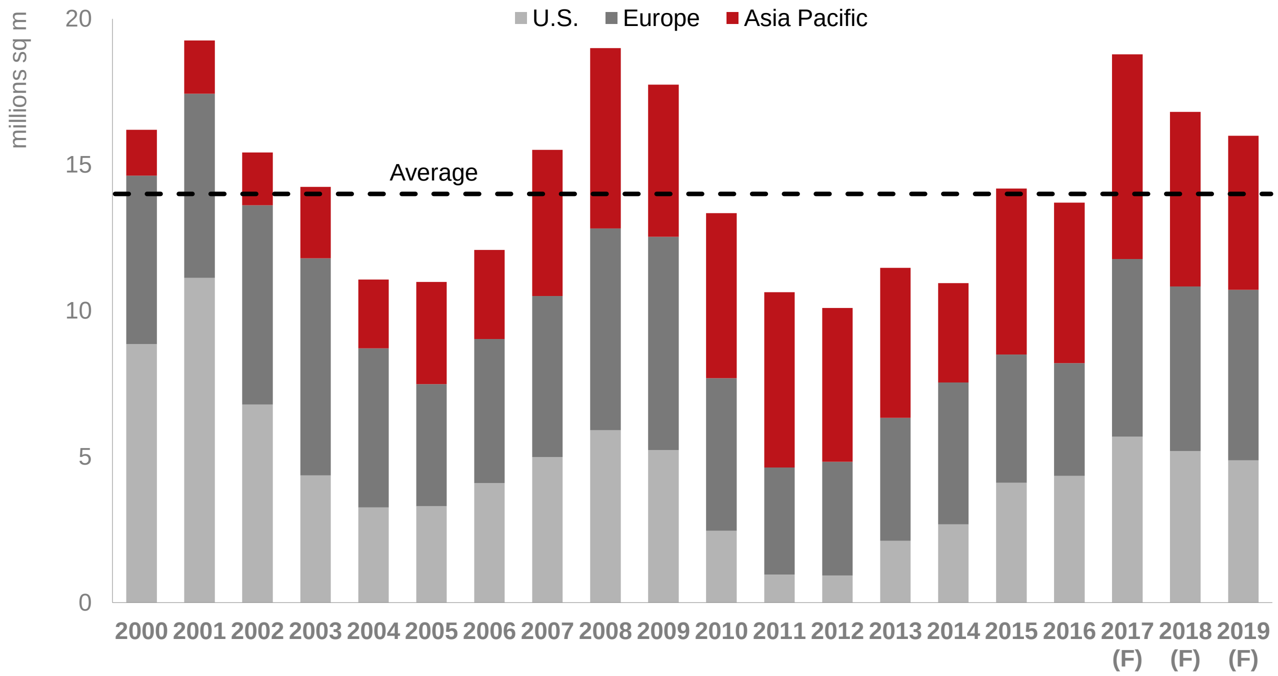
Office supply additions down slightly in Asia Pacific from a year ago

More than half of all Asia Pacific markets saw new completions in Q4 2016, but volumes were down slightly by 5% year-on-year. There was a high level of new supply in **Shanghai** as two buildings completed construction, while **Beijing** saw the completion of two self-use buildings. For 2016 overall, completions across the region totalled 5.5 million square metres, down 3% on 2015, with **China** and **India** accounting for around 60% of new supply.

Vacancy rates dropped in many Asia Pacific markets during Q4 2016:

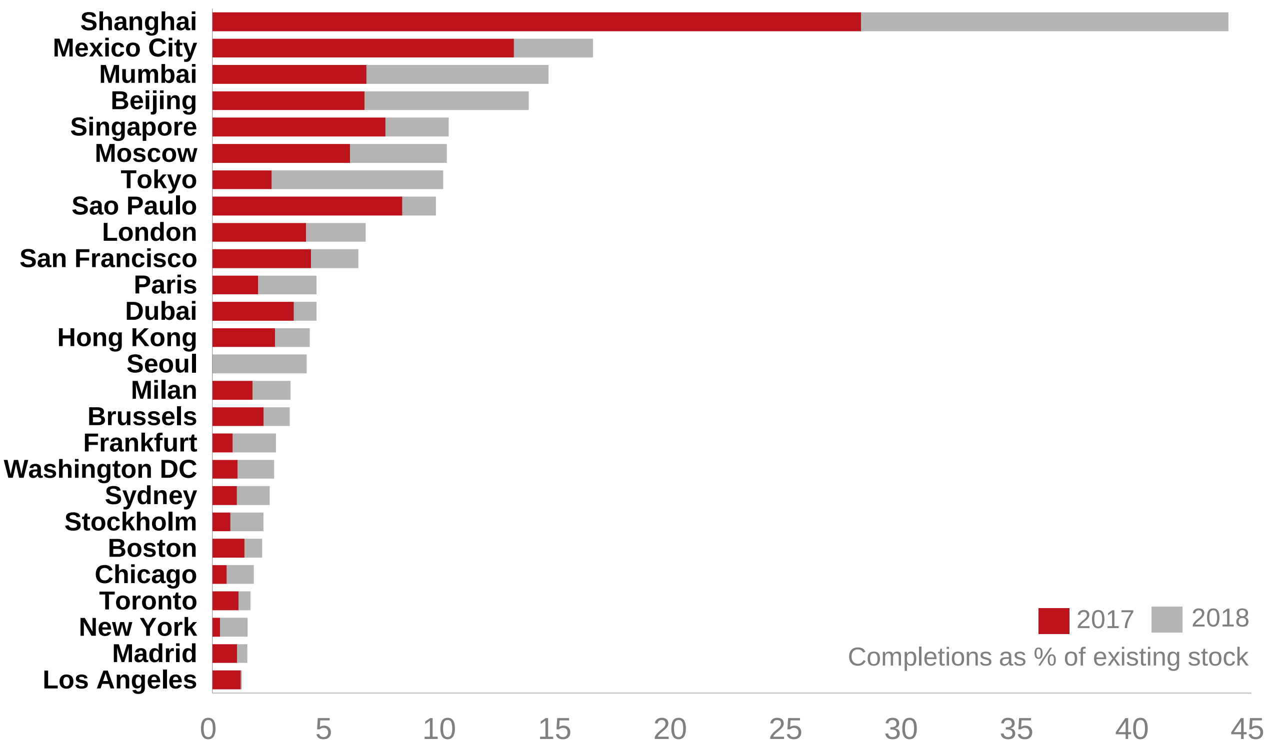
- **Seoul** saw the largest quarterly fall in vacancy, boosted by the relocations of several large domestic tenants and the expansion of WeWork in the CBD.
- **Jakarta** also experienced a modest decrease over the quarter but, nonetheless, vacancy (at 27.5%) remains elevated after rising sharply following a supply boom which began in early 2015.
- Low vacancy environments have beset many of the region's major markets over the past year, with vacancy keeping below 5% in markets such as **Bangalore**, **Beijing**, **Hong Kong** and **Tokyo**.

Global Office Completions, 2000-2019



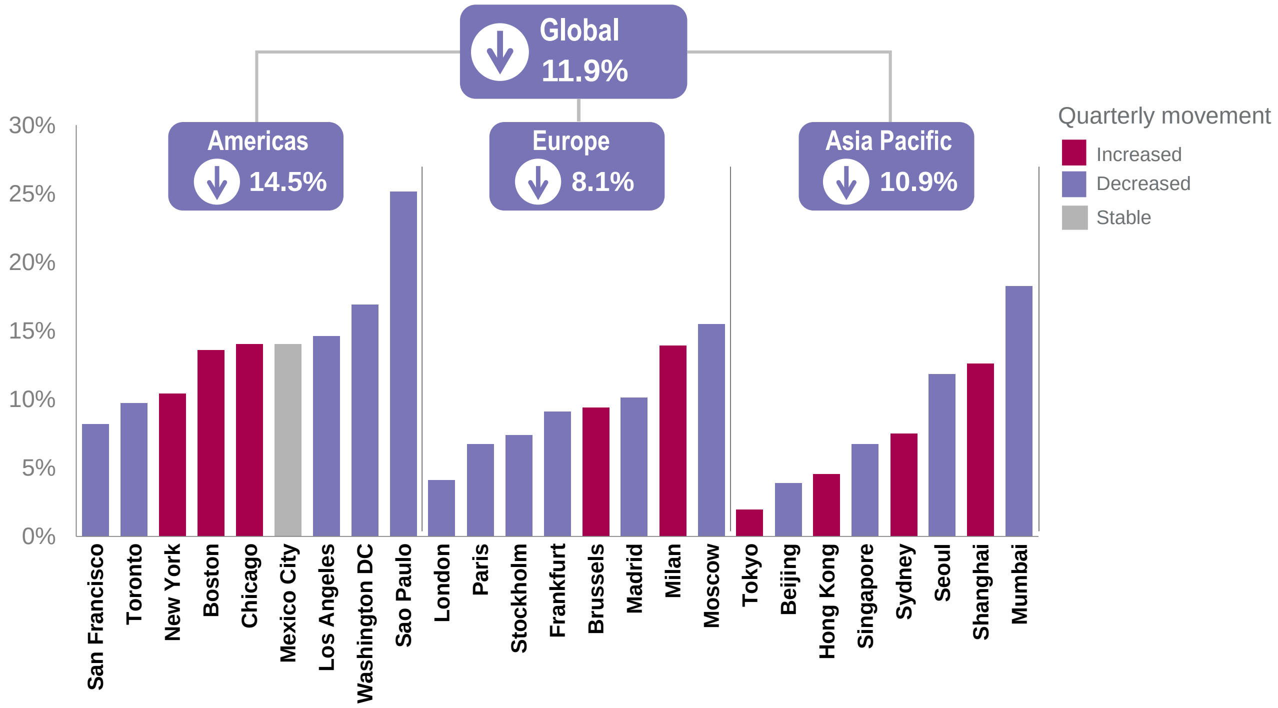
24 markets in Europe; 25 markets in Asia Pacific; 50 markets in the U.S. Asia relates to Grade A only.
Source: JLL, January 2017

Office Supply Pipeline – Major Markets, 2017-2018



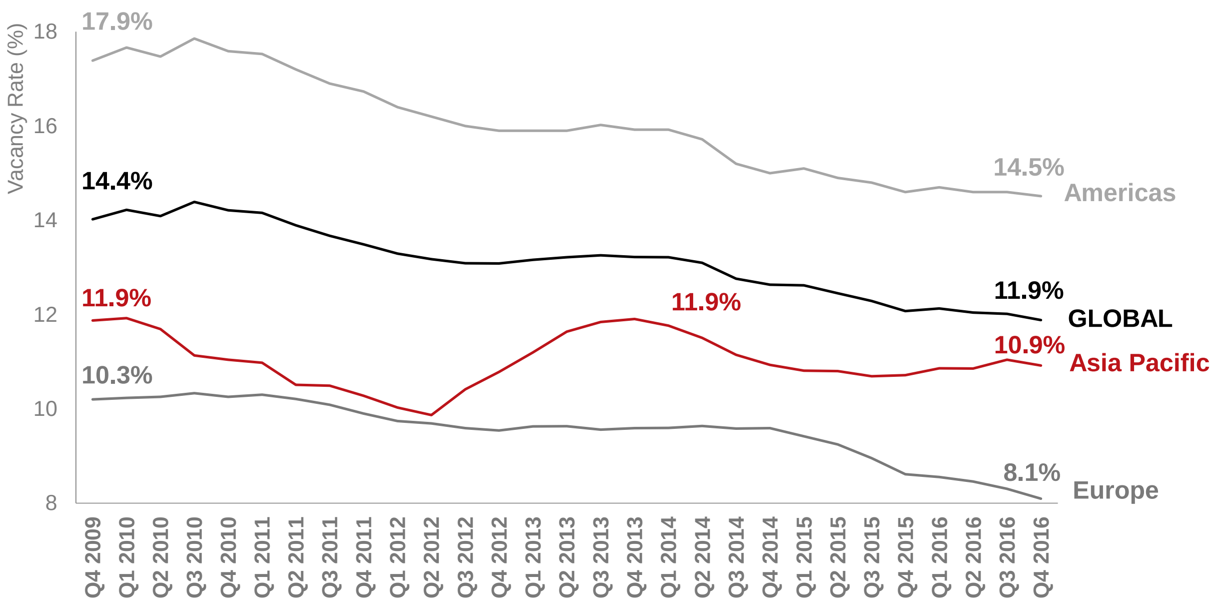
Covers all office submarkets in each city. Tokyo – CBD - 5 kus
Source: JLL, January 2017

Office Vacancy Rates in Major Markets, Q4 2016



Regional vacancy rates based on 62 markets in the Americas, 24 markets in Europe and 25 markets in Asia Pacific.
Covers all office submarkets in each city. All grades except Asia and Latin America (Grade A only). Tokyo relates to CBD – 5 kus.
Source: JLL, January 2017

Global and Regional Office Vacancy Rates, 2009-2016



62 markets in the Americas, 24 markets in Europe, 25 markets in Asia Pacific. All grades except Asia and Latin America (Grade A only).
Source: JLL, January 2017

Office Rental Trends

Rental momentum weakens

Annual rental growth for prime offices (across 26 major markets) slowed to 2.5% in the final quarter, with a further softening anticipated in 2017 to about 2% (on average). Leasing conditions are expected to become more balanced in 2017 as many markets seek to absorb a greater volume of new deliveries and occupiers keep an eye on costs.

Even so, the bulk of major office markets are projected to remain in positive territory in 2017, with only **Shanghai**, **Beijing**, **London**, **Mexico City**, **Sao Paulo** and **Singapore** likely to see a correction in prime rents over the next 12 months. **Sydney** is predicted to be the top performer, with growth of 10%-15% this year on top of the 22.5% seen in 2016.

Some U.S. markets move towards peak pricing

Primary U.S. markets that are welcoming new supply are nearing an inflection point as supply begins to catch up with demand. Leasing conditions will become much more balanced by 2018, with a shift to more tenant-favourable conditions by 2019.

Both high tenant demand and high development markets are nearing their peak in rents, with limited rental growth anticipated over the next 12 months, except where new, premium-priced supply is expected to be delivered (such as **Washington DC**) or where supply constraints persist (like **Salt Lake City**).

Mainland Europe records strong rental growth in Q4

The European Office Rental Index rose by 0.2% quarter-on-quarter and 2.7% year-on-year in Q4 2016. While eight of the 24 Index markets saw quarterly increases, this growth was largely offset by a drop in **London** prime rents. Excluding London, Europe recorded a year-on-year increase of 4.2% in Q4, well above the Q4 10-year average (of 1.4%).

In **London**, prime rents fell by 4.3% quarter-on-quarter, as fewer deals were signed at the premium end of the market. In **Paris**, prime rents failed to match the levels recorded in Q3 at €760/ square metres per annum (-0.7% quarter-on-quarter).

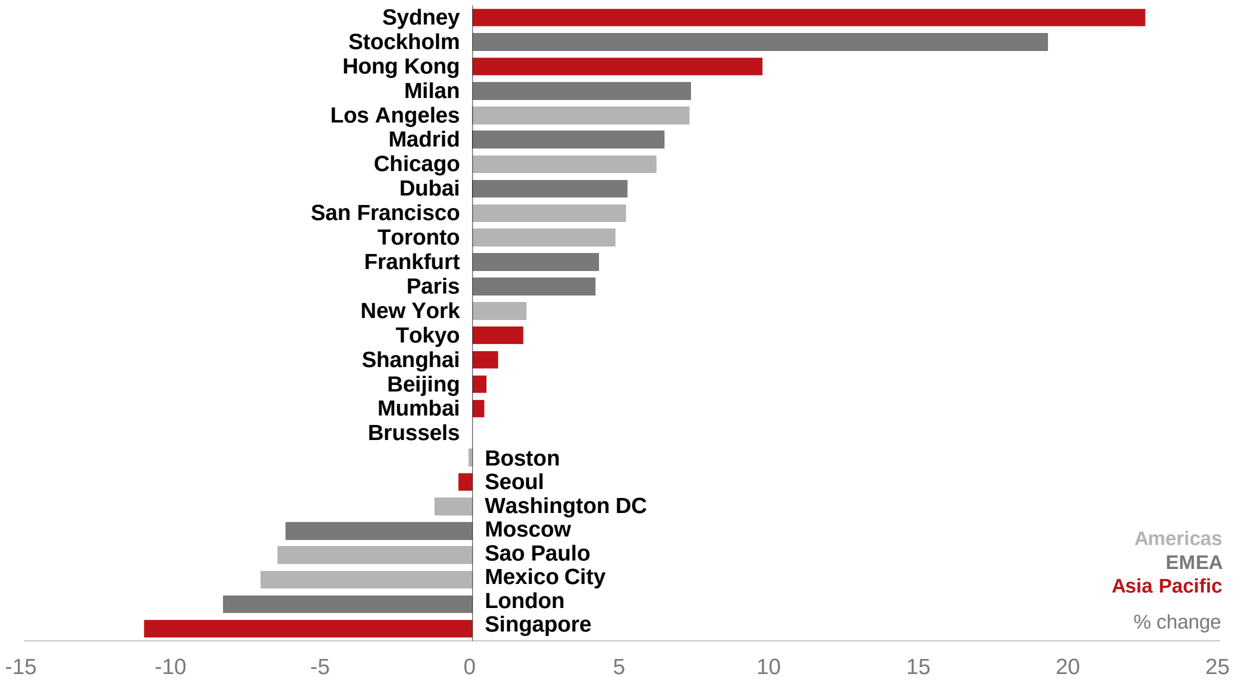
Berlin outperformed in 2016, with prime rents moving up by 1.9% quarter-on-quarter in Q4. This was the third consecutive quarterly rise on the back of limited vacant space, subdued development and record leasing. The occupier market registered a very strong end of 2016 in **Frankfurt** (+1.4%), where rental growth had been lacklustre in recent years due to relatively plentiful supply. In Spain, **Madrid** (+3.6%) and **Barcelona** (+1.2%) saw another quarter of rental uplifts. As both markets look to tighten further, rents are likely to continue along this steady upward trajectory. At 5.7% quarter-on-quarter, **Amsterdam** tops the rental growth rankings in Q4, as the robust demand recovery translates into rental increases.

Buoyant leasing activity and limited speculative development will continue to limit the high-quality space on offer in the region, pushing rents up in the process. Rental growth for European offices is expected to come in at around 1.5%-2.0% for 2017.

Average rental growth remains moderate in Asia Pacific

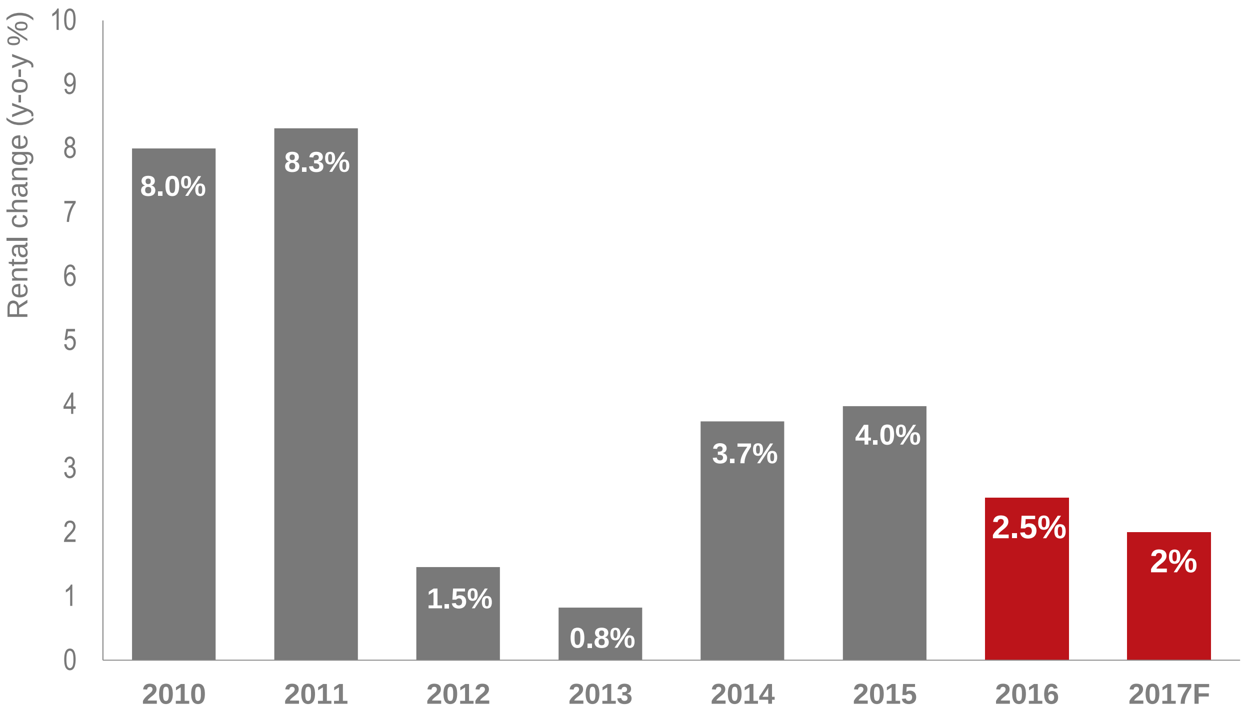
Asia Pacific rents grew 0.8% quarter-on-quarter and 2.6% year-on-year on average in Q4 2016. The strongest performers over the last year were **Sydney** (+23%), due to a lack of contiguous space, and **Melbourne** (+13%), supported by positive leasing activity and evidence of competition for space. Meanwhile, **Hong Kong** (+10%) recorded the healthiest growth in Asia. The weakest annual results were seen in **Perth** (-18%), despite benefitting from higher commodity prices in Q4, and **Singapore** (-11%), although its decline slowed partly due to seasonal factors and a brief stabilisation as current low rents attracted some relocations.

Prime Offices – Rental Change, Q4 2015-Q4 2016



Based on rents for Grade A space in CBD or equivalent. In local currency.
Source: JLL, January 2017

Prime Offices – Rental Change, 2010-2017



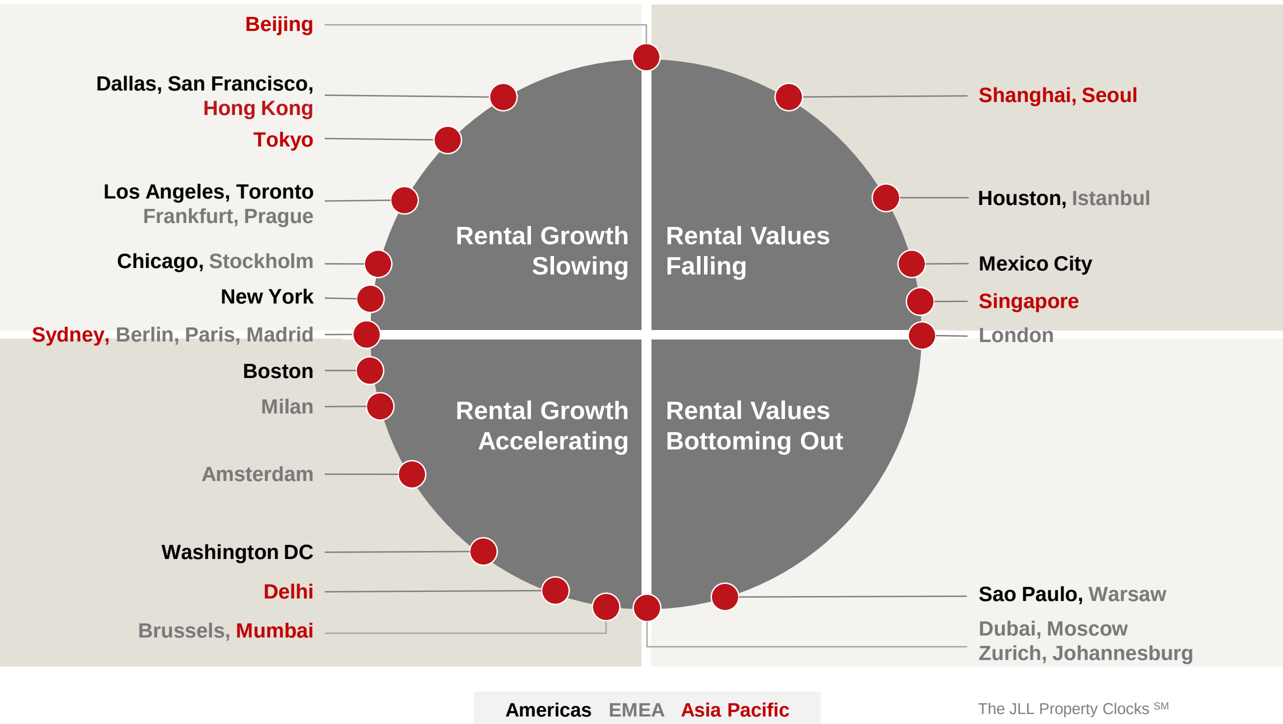
Prime office rental growth: unweighted average of 26 major markets.
Source: JLL, January 2017

Prime Offices – Projected Changes in Values, 2017

	Rental Values	Capital Values
↑ 10 - 20%	Sydney	Sydney, Moscow
↑ 5 - 10%	Dubai*, Los Angeles San Francisco, Moscow	Brussels, Hong Kong Frankfurt, Milan
↑ 0 - 5%	Hong Kong, Milan, Brussels, Madrid Stockholm, Boston, Chicago, New York* Toronto, Washington DC, Mumbai Frankfurt, Paris*, Tokyo, Seoul	Madrid, Stockholm, Mumbai, Dubai* Boston, Los Angeles, Chicago San Francisco, New York*, Toronto Washington DC, Tokyo, Paris*
↓ 0 - 5%	Shanghai, Beijing, Sao Paulo Mexico City, London*	Shanghai, Seoul, Beijing, Sao Paulo Mexico City, Singapore, London*
↓ 5 - 10%	Singapore	

*New York – Midtown, London – West End, Paris – CBD, Dubai – DIFC. Nominal rates in local currency.
Source: JLL, January 2017

Prime Offices – Rental Clock, Q4 2016



Based on rents for Grade A space in CBD or equivalent.
U.S. positions relate to the overall market.
Source: JLL, January 2017

Retail Markets

Limited new supply boosting U.S. retail market

Cautious development activity and consistent leasing momentum in the **U.S.** retail market assisted in pushing the national vacancy rate down to 5.1% in Q4 2016, a fall of 20 basis points on the previous quarter and 100 basis points below its level of 10 years ago, which was at the height of the last cycle's market performance. Rental rates are still generally lagging the pace of improvement that vacancy has seen, with current rents still 5% below the last cycle's peak; however, given that income and household growth will continue to outpace retail development in the near-term, rents should approach their pre-recession levels over the next year. More major markets are approaching their cyclical peaks, a trend that should continue for the next year before demand begins to see some softening.

High footfall locations remain in demand across Europe

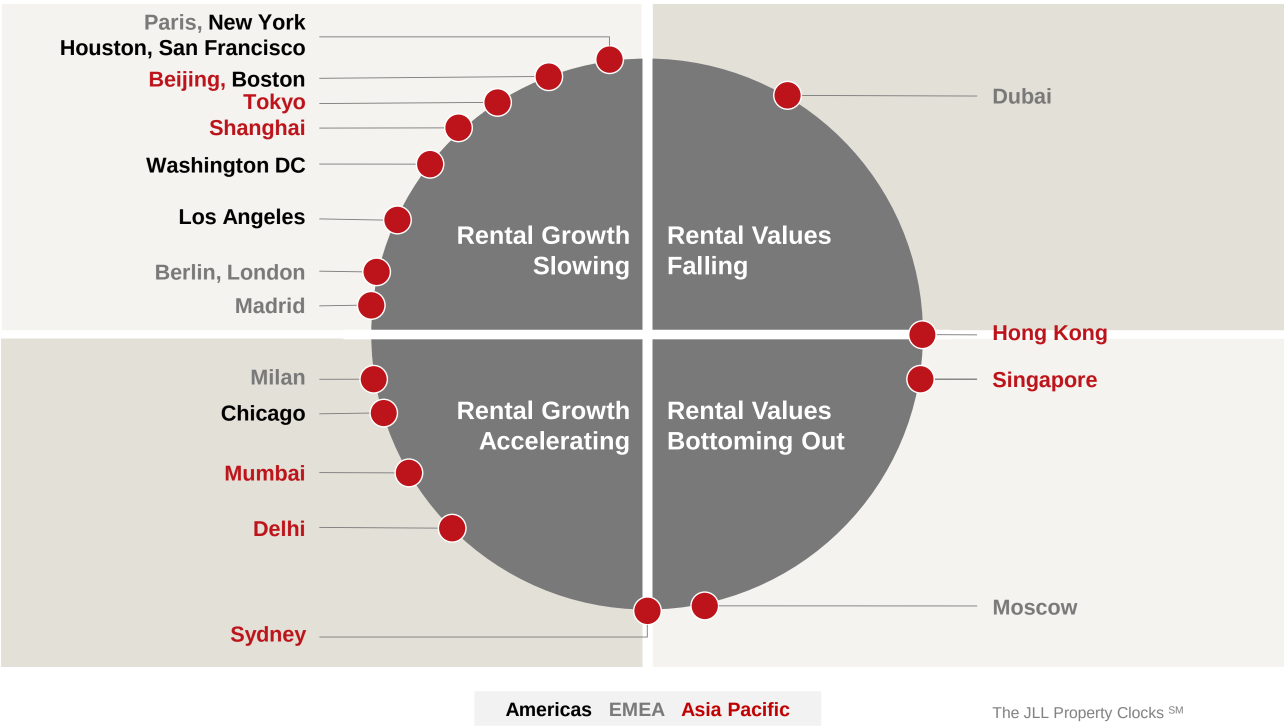
As the pace of technological change increases, the role of physical retail space is evolving. With the growth of e-commerce across Europe, the high street and shopping centre sectors have become significantly more attractive as high footfall locations are able to offer strong retail sales as well as a place for consumers to interact with brands. Prime rents on London's New Bond Street rose over 30% year-on-year over 2016, with the city the most attractive destination for international retailers in the world according to JLL's Destination Retail 2016 survey. Double-digit year-on-year growth was also seen in a number of other high street locations including **Dublin** (27.2%), **Paris** (22.2%), **St. Petersburg** (20.5%), **Stockholm** (13.6%) and **Edinburgh** (11.9%), while similarly strong growth was seen in shopping centres in **Stockholm** (15.3%) and **Hamburg** (10%). In 2017, prime high street rents in **London**, **Dublin**, **Paris**, **Stockholm**, **Madrid** and **Hamburg** are expected to experience the most robust growth; along with **Stuttgart**, **Berlin** and **Munich** these are projected to be the top performers until 2020.

F&B driving demand in Asia

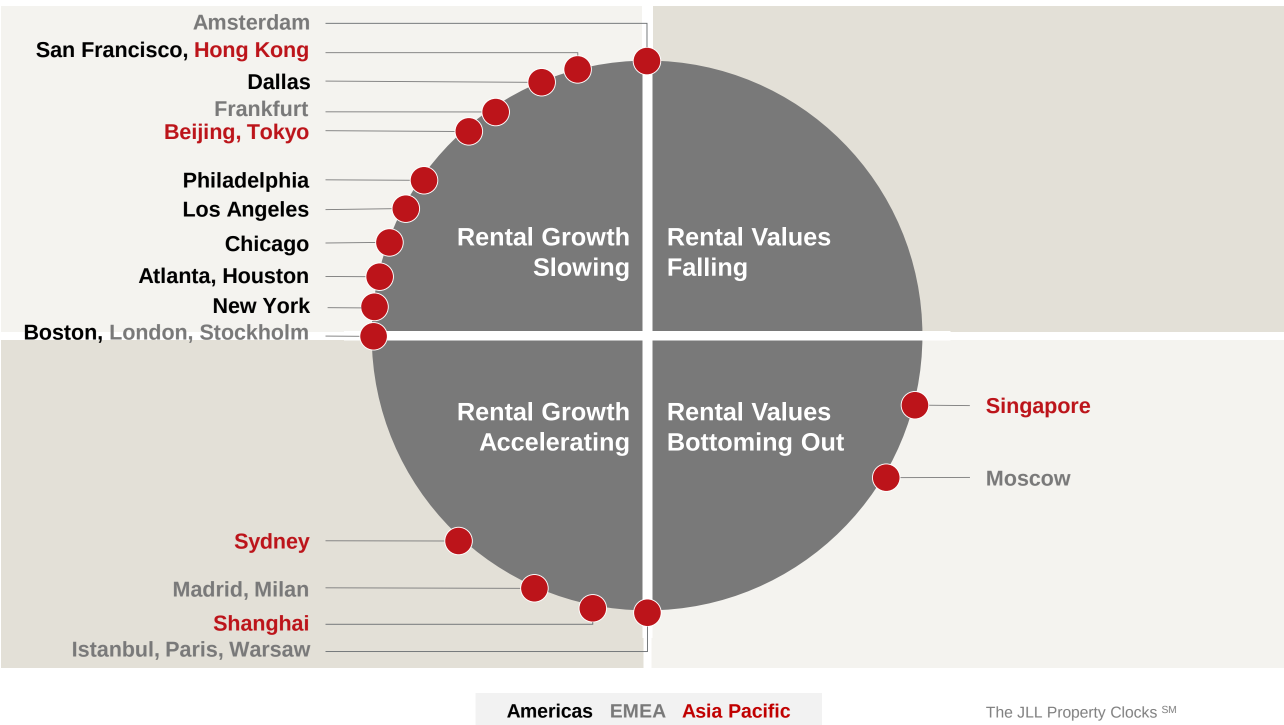
Landlords in **China's** major markets are looking to gain a competitive edge and improve footfall by utilising on-trend retailers or pop-up stores. Nonetheless, F&B operators remained active while sports brands also expanded in Q4 2016. Demand in **Hong Kong** was underpinned by cosmetics and active-wear retailers taking advantage of declining rents to lock in leases, while retailers in **Singapore** continued to consolidate and also focused on their online presence, targeting consumers who prefer to buy online while using their physical stores as pick-up points. Conditions in the **Australian** leasing market softened slightly in the quarter with a number of retailers entering into administration.

Rental growth remained limited across the region in Q4 2016, with trends generally in line with the previous quarter. Intensifying competition continued to exert pressure on rents in **China's Tier 1** markets. Rents at **Hong Kong's** prime shopping centres trended down, given tenant adjustments to increase the presence of F&B and to reduce vacancy pressures. **Singapore** rents moved lower across all submarkets, but this was more pronounced in the Marina submarket as weaker-performing tenants sought pre-termination. The **Sydney** and **Melbourne** markets continued to record low positive rental growth, predominantly across the CBD and bulky goods categories.

Prime Retail – Rental Clock, Q4 2016



Prime Industrial – Rental Clock, Q4 2016



Relates to prime space. U.S. positions relate to the overall market
Source: JLL, January 2017

Industrial Warehousing Markets

North American industrial markets continue to strengthen

Following a strong 2016, demand for space in the **U.S.** industrial market is not expected to slow any time soon. Despite a wave of new development projects in many cities, major markets like **Chicago**, **Atlanta** and **Dallas** alone contributed nearly one-third of total new deliveries, helping to push the national vacancy rate to a new record low of 5.6% at year-end. While most large metropolitan markets are trying to strike a timing balance to avoid the appearance of over-building, demand continues to rise and land values soar, and major urban areas are thus running low on options for Class A warehouse space. A further 18 million square metres still in the construction pipeline is likely to put upward pressure on rental rates and provide tenants with new supply options in 2017.

In **Canada** the national vacancy rate recorded a sixth consecutive quarterly drop during Q4 2016, declining another 20 basis points to reach a mere 2.7%. Industrial landlords are responding by raising rents at a rapid pace, with national rental growth of 8.5% registered for 2016. Meanwhile, **Mexico City** headed to a record year in 2016 as surging demand prompted the vacancy rate to fall to a low 2.2%. Conditions are projected to remain favourable for industrial landlords and developers, although the market will be closely tuned to developments in U.S. trade and related exchange rate movements.

No sign of slowing logistics market demand in Europe

The European occupational warehouse market maintained its upward trajectory in 2016, driven by robust activity across most markets but, in particular, strongly rising demand in **Germany** and the **UK**. Demand was underpinned by e-commerce, with specifically dedicated e-commerce warehouse space the most vigorous rising segment, a trend that we anticipate to continue in 2017. Over the next 12 months we expect to see further strong demand for warehouses exceeding 50,000 square metres as well as for smaller units close to large cities, fuelled by the growing digitisation of retail and continuing alignment to omni-channel fulfilment and bespoke final-mile delivery.

Development activity in 2016 reached a new peak in the current cycle, although the majority of new supply remained focused on build-to-suit. This helped push the European aggregate vacancy rate to below 6% at the end of 2016 and we do not foresee any meaningful increase in vacancy levels in 2017. Combined with shrinking land availability around major cities, we predict that this will lead to lead to growing intensification of land usage around the largest European cities, in particular **London** and **Paris** (including select development of multi-storey warehouses).

Despite rising demand levels, competitive rents in the build-to-suit market constrained rental growth in Q4 2016 with only **Berlin** (+6.4%), **Birmingham** (+3.8%) and **Dublin** (+3.2%) recording rental movement and all other markets remaining flat. Looking ahead, we forecast rising upward pressure on rents, with the majority of European markets anticipated to register rental increases in 2017. However, growth will continue to be contained in most markets, with the highest growth potential likely in major markets in **Belgium**, **Ireland**, **Italy**, **Spain** and **Sweden**.

Third-party logistics and e-commerce firms continue to bolster demand in Asia Pacific

Third-party logistics (3PL) firms servicing the e-commerce market continued to drive demand in Asia Pacific's logistics market in Q4. They were particularly active in **Beijing**, committing to much of the space that became available in the previous quarter, while take-up in **Shanghai** was boosted by 3PLs' demand for non-bonded space. In **Singapore**, an e-commerce firm took up 9,300 square metres but leasing demand remained otherwise subdued because of the challenging trade environment. Occupier take-up was robust in **Australia** in 4Q; in a change to the prevailing trend, 60% of take-up was of existing stock (mostly in **Sydney** and **Melbourne**).

In aggregate, rents were down slightly from the previous quarter in the region. Only two markets showed growth in spot rates, with rents edging up in **Shanghai,** while growth in **Hong Kong** was largely driven by supply-constrained cargo lift-access facilities. Prime grade rents were generally flat across **Australia** with pockets of growth in **Sydney.**

Hotel Markets

2016 – A year of uncertainties

2016 was a year of accelerated global change marked by a series of geopolitical and economic events. The year started with turbulence in the Asian stock market, followed by terrorist attacks in Europe, the Brexit vote in June and the U.S. presidential election in November.

Nevertheless, the travel and tourism industry has shown resilience. According to UNWTO, the number of international arrivals reached nearly one billion during the first nine months of 2016, a still-strong 4% increase relative to the same period last year. Countries such as **Japan, South Korea, Vietnam, Spain, Portugal** and **Ireland** recorded double-digit growth. Conversely, tourist arrivals in **France, Belgium** and **Turkey** were impacted due to terrorist attacks.

Hotel performance and its impact on the investment market

Changes in tourist numbers are largely reflected in hotel operating performance. Over the November year-to-date 2016, Europe posted a 2.6% drop in revenue per available room (RevPAR) compared to the same period in 2015. **Ireland** reported continuous RevPAR growth over the past 12 months mainly due to an undersupply of hotels in **Dublin**, while **Spain** and **Portugal** both posted double-digit RevPAR increases, partly caused by travellers choosing these two countries over other regional destinations due to security concerns. However, these impressive results were offset by **France** and **Belgium** with RevPAR declines of 10.5% and 13.9% respectively. **Turkey** saw a much steeper fall, down 40.4% compared to the prior year.

Asia Pacific experienced a minimal decline of 1.5% in RevPAR year-on-year, largely due to a 2.6% decrease in average rate. RevPAR in **Japan's** major cities (**Tokyo** and **Osaka**) rose by about 15% year-on-year, as the devaluation of the yen attracted more international visitors, notably from China.

The Americas was the only region that reported RevPAR growth, up 2.8% against 2015. In the **U.S.** the hotel industry has enjoyed RevPAR growth for 81 consecutive months, albeit at a slowing pace. The latest forecast from STR reflects a 2.3% RevPAR increase for 2017. This, together with the recent increase in interest rates, has lowered investors' outlook on future hotel income growth, which is expected to narrow the gap between seller and buyer expectations.

Geopolitical factors affecting the hotel transaction market

The combination of lower confidence around income growth and geopolitical events put pressure on the hotel transaction market in 2016, although the impact from the EU referendum and the U.S. presidential election was lower than expected. In the **UK**, a weaker currency has attracted greater international interest in the hotel market. However, the level of investment in 2016 was lower than 2015, largely due to a slowdown in portfolio sales.

At the same time, the U.S. market has shown signs of optimism following Donald Trump's victory in the presidential election. It is expected that 'Trumponomics' will involve business-friendly policies such as lower tax rates and large infrastructure projects to stimulate economic growth which could stand to benefit the hospitality industry. This optimism is reflected through the recent uplift in hotel REITs' share prices.

2016 global hotel volumes in review

In light of the uncertain outlook, investors adopted a more conservative strategy in their investment decisions in 2016. Global hotel transaction volumes in 2016 returned to levels similar to 2014 at US$60.1 billion, a 35% drop from the stellar levels experienced in 2015.

Global Hotel Investment Volumes, 2015-2016

US$ billions	2015	2016	% Change
Americas	47.6	31.0	-35%
Asia Pacific	10.1	8.5	-16%
EMEA	34.2	20.6	-40%
Total	**91.9**	**60.1**	**-35%**

Source: JLL, January 2017

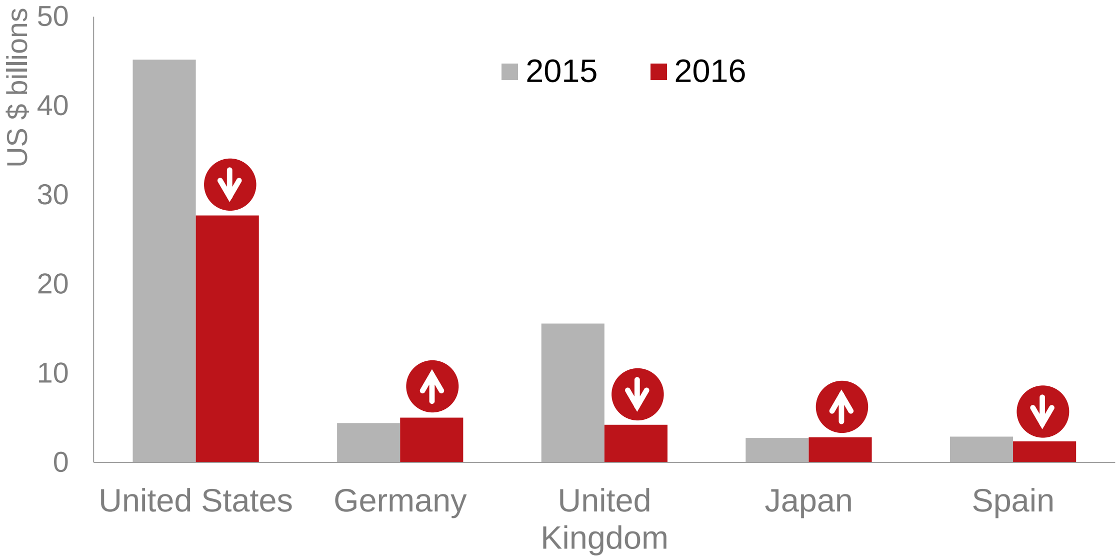
The **United States** continued to be the most liquid market in 2016, despite deal volumes falling 35% short of 2015. International investors remain active buyers of U.S. hotel assets despite the strong currency and global economic uncertainty. In fact, the aforementioned factors are potential tailwinds rather than headwinds with respect to offshore capital investment. We expect that the U.S. hotel sector will carry on attracting significant international investment given the ongoing financial instability abroad, relatively attractive yields and the country's continued status as a financial safe haven.

Germany overtook the **UK** as the second most liquid global market in 2016. A number of high-profile portfolio deals transacted over the year, such as the Interhotel portfolio, consisting of nine hotels across Germany which was bought by Foncière des Murs from Starwood Capital. An additional example was Blackstone's purchase of the Office First portfolio (four hotels) under lease agreement from IVG Immobilien AG.

The **UK** saw a 73% drop in hotel investment transactions, with much of the decline attributed to the decrease in portfolio transactions. While **London** is still the most desired investment destination nationally, the lack of available product for sale and the gap between buyer and seller expectations has drawn investors to key regional markets. This is evident through the significant increase in transaction activity in **Birmingham** and **Manchester**. In addition, hotel transactions in **Ireland** rose 73% year-on-year to US$776 million in 2016. The Irish market is attracting not only European investors but also buyers from the Far East, such as Singapore-listed Ascott Limited who bought the Temple Bar Hotel in Dublin for US$58 million.

In **Japan** the booming tourism industry has attracted a growing interest from Chinese investors evaluating purchases in the hotel market. In January 2016, for example, Shanghai's Greenland Group purchased the Candeo Hotel in Chiba, near **Tokyo**.

Hotel Transactions: Top 5 Countries, 2015-2016



*Excludes multijurisdictional portfolio transactions
Source: JLL, January 2017

Increased buying activities from institutional investors

Institutional investors saw the largest uplift in buying activity in 2016. Transaction volumes by this group doubled to approximately US$11 billion, taking up 20% of market share, compared to 6% in 2015. Around 70% of transactions took place in the Americas, largely a result of the approximately US$5.5 billion sale of Strategic Hotels & Resorts to Anbang Insurance Group. In addition, China Life announced its purchase of a US$2 billion stake in Starwood Capital Group's U.S. Hotel Portfolio in October 2016. Meanwhile, Germany's Union Investment recently confirmed its US$200 million purchase of the 317-room Courtyard by Marriott World Trade Center from developer Hidrock Properties. The company also bought the Curio Collection LondonHouse in **Chicago** earlier in the year for US$315 million.

Cross-border investments - China behind the steering wheel

Cross-border investments continue to play an important role in the global hotel transaction market, accounting for one-third of all deal volumes. In 2016, **Chinese** investors overtook the Middle East as the largest source of outbound capital, with investment levels reaching a new high at US$9.8 billion, a 75% uplift from 2015, driven by Anbang's purchase of Strategic. Mainland Chinese investment now accounts for around half of total outbound hotel investments. With only slow upward movement in oil prices, outbound hotel investment from Middle Eastern investors is expected to hold largely flat in 2017.

Chinese investors – where next?

In light of the Chinese government recently announcing tighter measures on outbound capital controls, mainland Chinese investors are likely to focus on acquisitions which form part of an established core business. Investors are keen to acquire properties in locations popular among Chinese travellers, with China now the world's top travel source market. According to UNWTO, Chinese travellers spent US$292 billion in outbound travel in 2015, up 25% from the previous year. Chinese investors are looking to gain a share of this booming market, as evidenced by Hainan Airlines' addition of a direct flight from **Beijing** to **Manchester** in the UK in June 2016. The economic impact of this flight route is estimated to be worth US$600 million over 10 years. The hotel sector in Manchester is already feeling the positive effect as transaction volumes rose 63% to US$113 million in 2016.

More M&A activity anticipated

Slowing income growth is leading to a focus on cost savings and operating synergies. Marriott International's purchase of Starwood Hotels & Resorts Worldwide was finalised in the third quarter of 2016. Collectively, Marriott International now owns 30 brands and over 5,700 hotels worldwide. The company's enhanced scale should allow it to gain booking power while enhancing its leverage when negotiating fees with online travel agencies. Anbang Insurance Group's purchase of Strategic Hotels & Resorts was another prominent acquisition in the industry. At the same time, Hilton Worldwide Holdings has split its lodging, timeshare and real estate business into three different entities, in order to separate its management and real estate ownership companies. In addition, HNA's purchase of Carlson officially completed in December 2016. These dynamics suggest that key players in the industry are looking to remain competitive in the marketplace through efforts that align to their specific growth strategies.

Residential Markets

Rental growth decelerating in U.S. rental apartments as vacancy rates edge up

The significant development pipeline that has been building for several years in the **U.S.** multifamily market has finally begun to impact some markets with weakening conditions as the national vacancy rate increased 10 basis points to a still very low 4.4% in the fourth quarter. However, demand from renters remains resilient and fundamental drivers, including employment and income growth, will ensure interest for apartment units continues apace in 2017.

Meanwhile, rental growth stayed strong in 2016 at 3.8%, though down from the 5.2% gain enjoyed by landlords in 2015. This will remain the peak for the current cycle, as rental growth will continue to remain positive but decelerate going forward as vacancy rates edge upwards in 2017. By region, six Western markets recorded rental growth increases in Q4, with **Salt Lake City**, **Phoenix** and **Seattle-Bellevue** each experiencing year-on-year gains of at least 130 basis points.

UK residential markets resilient

UK residential markets showed surprising resilience during the second half of 2016 following the EU referendum. According to Halifax (a UK bank), prices finished up 4.5%, although this represents a deceleration from mid-year rates of 7%-8%. **London** fared worse, with high-value properties already plagued by lower demand due to higher stamp duty costs imposed in April and the year prior. JLL forecasts broadly flat performances for national and London markets, with some regional city centres such as **Manchester** still displaying signs of good momentum that will support further price growth.

Investment markets have continued their strong growth from previous years, now underpinned by more formal acknowledgment of the role that purpose-built rented product can add to the vexing problem of expanding new build activity. New proposed planning guidance in **London** will explicitly define the asset class, offering clarity for local authorities, developers and investors. A total of £2 billion of activity took place across institutional investment in 2016, with expectations of further robust growth for 2017.

Above-average investment activity in Germany

The residential transaction market in **Germany** registered above-average investment volumes in 2016, although there was no repeat of the record performance of 2015. The volume of €13.7 billion and 137,000 apartments sold was actually only 54% of 2015's volume and included just two deals in excess of €500 million.

More than one quarter of all capital invested in German residential property came from abroad in 2016, compared to 15% in 2015. For the first time the majority of foreign capital originated in China with, notably, a €1.2 billion fund backed by Chinese capital purchasing a German residential portfolio belonging to the Australian BGP Investments group. The second largest amount of foreign capital came from the UK with more than €430 million of residential investment, ahead of Israel with around €400 million.

Investment volumes climb in the Netherlands despite tight supply

Both the owner-occupier and investment markets experienced a positive end to 2016 in the **Netherlands**, with the number of sales transactions rising from 2015 levels. There were also significant price increases in the largest cities throughout the year as a result of the increasing scarcity of available residential product. Given this scarcity, a growing number of consumers and investors are now beginning to look outside **Amsterdam**, with a marked rise in the number of investors targeting residential properties in **Rotterdam**, **The Hague** and **Utrecht**. As investment opportunities in Amsterdam are still few and far between, investors have now started considering 'alternative' residential space, with the largest transactions of Q4 2016 being two student housing acquisitions by IC Netherlands.

Q4 transaction volumes double in Sweden

The **Swedish** residential market ended 2016 strongly with an almost 100% increase in investment volumes in Q4 2016 from the same period in 2015. A number of large deals completed during the quarter, with Blackstone's US$900 million acquisition of a majority of shares in the listed company D Carnegie being the biggest. Akelius also completed two transactions in the fourth quarter, including the sale of its Halmstad and Eskilstuna portfolios which represented a total of 1,800 apartments and a cost of approximately US$200 million to Willhem.

Further price increases expected in Spain

The recovery of the **Spanish** housing market is continuing to drive up prices, backed by solid economic fundamentals combined with political stability after months of uncertainty. The institutional residential investment market recorded volumes of €1.4 billion in 2016 versus €738 million in 2015 and is now dominated by international investors, either through indirect investment in Spanish investment vehicles or by direct transactions.

The lack of developable land in the most in-demand cities, such as **Madrid** and **Barcelona,** will propel further price increases in 2017 with our expectation of positive capital value growth of at least 6% in the main cities.

Poland registers record sales activity

Another sales record was broken in the primary residential market in Poland in Q4 2016 with a total of more than 18,000 apartments sold in the six largest cities, an increase of 27% quarter-on-quarter and the best result ever on the market. Over the full-year 2016, developers sold almost 62,000 units in residential development projects in these cities, almost exclusively to private households and small-scale investors. Average price levels remained stable overall, with slight regional variances depending on the city. While no significant large-scale residential transactions took place in the final quarter of 2016, we are likely to witness some positive activity in the first few months of 2017.

UAE residential markets diverging

Dubai's residential market saw only minimal change in prices and rents during Q4 2016 and appears close to the bottom of its current cycle. While we expect prices and rents to recover in 2017, the pace of this recovery is likely to be limited by economic uncertainty and the volume of potential supply. **Abu Dhabi** remains some way behind Dubai in its cycle, with prices and rentals still falling. Sale prices in Abu Dhabi declined by around 11% in 2016 and further softening is anticipated in 2017.

Leasing conditions varied across Asia Pacific

Stricter policy restrictions were imposed in **China** and **Hong Kong** in Q4 2016, denting sales volumes. Hong Kong raised stamp duties on purchases (except for first-time homebuyers and upgraders) in November, while many Chinese cities introduced a range of cooling measures including higher down payments for non-commodity homes. Lower levels of new supply also contributed to slower sales momentum, as there was speculation that local governments withheld pre-sales permits to control prices. Sustained sales growth was witnessed in **Singapore's** prime districts with volumes increasing on a year-on-year basis as market sentiment remained positive; investors and developers perceive that the market may be closer to the bottom. Leasing conditions in the region were generally in line with recent quarters as reduced housing allowances and fewer expat employees continued to impact demand in many markets, and most saw flat or modest rental growth.

Key Investment Transactions in Q4 2016

Europe, Middle East and Africa

Country	City	Property	Sector	Sales price US$m	Comments
Croatia	Zagreb	Arena Centar	Retail	223	Heitman has sold the shopping centre to New Europe Property Investments (NEPI). The 60,100 sq m property has 215 units and is considered Croatia's dominant retail and entertainment hub.
Czech Republic	Prague	The Park	Office	390	Deka Immobilien has acquired the office campus from Starwood Capital Group. The Park comprises 12 office buildings completed between 2003 and 2008 in a campus-style formation with a central plaza, over an area of c.7.5 ha. It offers 116,000 sq m of leasable space, mainly occupied by international companies such as DHL, Honeywell, CA Technologies and IBM.
Czech Republic	Prague	Florentinum	Office	305	Penta Investments has sold the Florentinum office building to Chinese investment group CEFC. The property, located in the CBD, totals 63,000 sq m of leasable area (including 50,000 sq m of offices and 8,000 sq m of retail). Tenants include consultants EY and Havel, Holásek & Partners and financial firms HSBC, Bank of China and RSJ Investments.
France	Paris	Vendôme/ Saint-Honoré	Mixed	1,078	Norges Bank Real Estate Management has acquired the property located in central Paris from Trajan Luxembourg and Trajan Luxembourg II, both controlled by private investors John Magnier and JP McManus. The property comprises 26,800 sq m and includes 80% offices and 20% retail.
France	Paris	Le Méridien Etoile	Hotel	383	The 1,025-room hotel has been sold to Henderson Park Capital Partners by Mount Kellett Capital Management Group.
Germany	Various	Office First Portfolio	Office	3,556	Blackstone purchased the €3.3 billion portfolio from IVG in the largest European property transaction of 2016. The acquisition came after a failed attempt to float the portfolio in October. With this transaction IVG, which had been one of Germany's largest property owners, will have disposed of its core assets, helping to provide a resolution for the group of hedge funds that have owned the company since 2014.
Ireland	Dublin	DoubleTree by Hilton Dublin - Burlington Road	Hotel	202	The four-star hotel has been sold to Deka Immobilien Investment by the Blackstone Group and will be rebranded as the Clayton Hotel Burlington Road.
Italy	Various	UNA Hotels Portfolio (43 hotels)	Hotel	302	Insurance company UnipolSai Assicurazioni has announced the acquisition of the 43-hotel portfolio.
Italy	Various	Royal Demeure Hotels (4 hotels)	Hotel	198	Starhotels, an Italian hotel group, has bought the portfolio of 4 five-star hotels located across Italy from investment fund TDA Capital.
Multiple	Various	Pandox Portfolio (7 Hotels)	Hotel	444	Pandox has entered into an agreement with Invesco Real Estate to acquire seven hotel properties with a total of 1,744 rooms.
Poland	Warsaw	Gdanski Business Center	Office	200	Developer HB Reavis has sold two buildings within the business centre to a pension fund client of Savills Investment Management. The two properties provide 48,000 sq m of Grade A office space.
Spain	Madrid	Adequa Business Park	Office	410	Merlin Properties has purchased the business park, located in the Las Tablas area in the north east of Madrid, from Lone Star. JLL and Knight Frank advised the seller. Adequa covers more than 107,000 sq m spread across several buildings. Tenants include Técnicas Reunidas and Renault. In addition there is a plot of land for the development of two other buildings.
Sweden	Gothenburg	Portfolio	Industrial	309	Platzer Fastigheter has completed the acquisition of 338,000 sq m of leasable industrial space and land from Volvo Group Real Estate. The acquisition increases Platzer Fastigheter's portfolio by 26%.
UK	London	The Peak	Office	180	Middle Eastern investor Wolfe Asset Management Limited (WAML) has bought the freehold of The Peak, an office building in the Victoria submarket. The eight-storey 9,300 sq m building was bought from the Cityhold Office Partnership, managed by TH Real Estate, in an off-market transaction.
UK	Various	Alecta Portfolio	Mixed	434	Goldman Sachs has acquired the portfolio from the Swedish pension fund manager Alecta. It includes 26 industrial, office, big box retail and high street assets spread across 150,000 sq m, concentrated in London and the South East.

Asia Pacific

Country	City	Property	Sector	Sales price US$m	Comments
Australia	Canberra	Westfield Woden	Retail	251	GPT Wholesale Shopping Centre Fund has sold a 50% equity stake in the mall to Perron Investments. The transaction is the largest ever shopping centre sale in Canberra. Westfield Woden has a total gross lettable area of 74,400 sq m and is home to major brands such as David Jones, Coles, Woolworths and Hoyts.
Australia	Sydney	33 Alfred Street	Office	322	AMP Capital has divested the office property to its fund vehicles AMP Capital Diversified Property Fund and AMP Capital Wholesale Office Fund. The move is part of a plan to simplify ownership of the Quay Quarter project and gives the funds complete control and greater flexibility to work on the overall precinct at Circular Quay.
Australia	Various	Goodman Portfolio 2	Industrial	487	Blackstone has bought a second portfolio of 21 prime logistic properties from Goodman Group. Following the completion, Blackstone has become one of the largest players in Australian logistics.
China	Beijing	Kaiyuan Mingdu Hotel	Hotel	278	New Century Hotels & Resorts, one of the largest private hotel chain groups in China, has purchased the hotel from Z-River Private Equity (Zhongrong Trust).
China	Shanghai	Shanghai Century Link	Mixed	2,927	ARA Asset Management has acquired the property through ARA Harmony VI fund from Cheung Kong Property Holdings. The transaction was the largest single-asset deal across the Asia Pacific market for 2016. The complex in Shanghai's Pudong district includes 139,000 sq m of retail and 130,000 sq m of office space across two high-rise towers.
China	Shanghai	Shanghai International Shipping Institute Building	Office	774	State Development & Investment Corporation (SDIC), a Chinese state-owned investment holding company, has purchased the building from China Jinmao Holdings Group.
China	Shanghai	Central Plaza	Office	348	China Vanke, a Chinese real estate developer, has purchased the 19-storey office tower, which has a total gross floor area of about 47,200 sq m, from Carlyle Group.
China	Various	SCPG Holdings Properties Portfolio	Mixed	1,903	China Vanke has also acquired a 97% equity stake in SCPG Holdings Properties from Blackstone. The remaining 3% equity stake will collectively be held by SCPG and Blackstone. The deal is aimed at rapidly improving the company's commercial property capabilities.
Hong Kong	Hong Kong	Swire Properties Kowloon Bay Project	Office	842	Swire Properties has sold the office tower turnkey project to a Hong Kong HNWI. As part of the condition of the sale and purchase agreement, Swire Properties is to complete construction of the project on behalf of the buyer, with the sale contingent on the development receiving all government approvals by 31 December 2018.
India	Mumbai	Hiranandani Group Portfolio	Office	994	Brookfield Asset Management has acquired Hiranandani Group's entire portfolio of 418,060 sq m of office and retail space in the Powai suburb. The transaction is one of India's largest ever office deals. The offices are fully leased with tenants including Tata Consultancy Services, Nomura Group and Deloitte Consulting India.
Japan	Tokyo	Shinagawa Seaside Park Tower	Office	292	Mirae Corporation has purchased the office asset from Higashishinagawa 2 TMK. The transaction was completed on an estimated net yield of 4.4%.
Japan	Tokyo	Tradepia Odaiba	Office	274	Ichigo has bought the building from Mitsubishi Jisho Investment Advisors. The property, located in Chiyoda-ku, has a total gross lettable area of 76,580 sq m.
Malaysia	Kuala Lumpur	Renaissance Kuala Lumpur Hotel	Hotel	191	IGB Corporation Berhad, controlled by the Tan family, has announced the sale of the five-star hotel to Canali Logistics Sdn Bhd, a private limited company.
Singapore	Singapore	77 Robinson Road	Office	376	CLSA Capital Partners has completed the acquisition of the office asset from SEB ImmoInvest Fund. The deal marks the second time CLSA has bought the building, having sold it to SEB in 2007. The building has reached its maximum development potential but there is scope for asset enhancement by converting the 180 car parking lots to commercial use.
Singapore	Singapore	Capital Square	Office	337	ARA Asset Management has purchased a 50% equity stake in the building from Alpha Investment Partners. The 16-storey office building, completed in 1998, has a total lettable area of 36,066 sq m and tenants include Morgan Stanley, Bloomberg and Citigroup.

Country	City	Property	Sector	Sales price US$m	Comments
Singapore	Singapore	DSO National Laboratories Buildings & DNV GL Technology Centre	Industrial	298	Ascendas REIT has acquired three built-to-suit Science Park buildings (12, 14 & 16 Science Park Drive) from a related entity, Ascendas Land. The buildings are leased to DSO National Laboratories and DNV GL Singapore with a WALE of 16.5 years and weighted average built-in rental escalation of 2.2%-2.5% per annum.
South Korea	Seoul	G-Square City Retail Complex	Retail	393	GIC has acquired the shopping mall from GS Retail. G-Square is located in the centre of Anyang city, a metropolitan area of southern Seoul. It has more than 200,000 sq m of retail space, and also includes an office tower of about 34,000 sq m. The mall is operated by Lotte Shopping and will be managed by IGIS Asset Management.
South Korea	Seoul	IFC Seoul	Mixed	2,551	Brookfield Asset Management has acquired the International Finance Centre from AIG Global Real Estate. The deal is said to be backed by funds from Chinese sovereign wealth fund China Investment Corporation. The mixed-used complex located in Yeouido features three high-rise office towers, a three-level retail mall and the five-star Conrad Seoul hotel.
South Korea	Seoul	Capital Tower	Office	387	Blackstone has bought the office building from Mirae Asset Global Investments. The deal marks the first investment by the U.S. private equity firm in Korean real estate. The transaction was completed on an estimated net yield of 4.6%.
South Korea	Seoul	Conrad Seoul	Hotel	268	Brookfield Asset Management has purchased the hotel as part of a multi-property transaction including office towers and a shopping mall.
South Korea	Various	MBK Partners Homeplus Portfolio	Retail	556	MBK Partners has sold five Homeplus superstore and grocery outlets to Ryukyung PSG Asset Management. The net proceeds are expected to be used for debt repayment and remodelling of the Homeplus stores.
Thailand	Bangkok	Swissôtel Nai Lert Park	Retail	305	Bangkok Dusit Medical Services has acquired the property from the holding company Nai Lert Park Hotel. The old five-star hotel is to cease operations and the building and land will be developed into a service medical centre.

Americas

Country	City	Property	Sector	Sales price US$m	Comments
Brazil	Multiple	Passeio Corporate Portfolio	Office	217	Opportunity Fundo de Investimento Imobiliário has sold this multi-city office portfolio to Brazilian REIT BR Properties.
Brazil	Sao Paulo	Shopping Metro Tucuruvi	Retail	127	Hemisfério Sul Investimentos has acquired the circa 33,000 sq m shopping centre from JHSF.
Canada	Montreal	E Commerce Phase I and II	Office	311	A joint venture of GWL Realty Advisors and Investors Group has purchased the roughly 89,000 sq m CBD office asset from German investor KanAm Group.
Canada	Vancouver	3585 Grandview Highway	Retail	72	Anthem Properties has acquired the approximately 27,000 sq m shopping centre.
Canada	Toronto	3755 Laird Road	Industrial	66	GWL Realty Advisors has purchased this nearly 47,000 sq m warehouse property located in Mississauga from Erin Mills Development Corporation.
Mexico	San Juan del Rio	ABC Group Mexico Industrial	Industrial	41	WP Carey has acquired the distribution centre from ABC Group.
U.S.	Austin	Riata Crossing North	Office	107	DivcoWest has sold the 31,000 sq m suburban office property to Karlin Real Estate.
U.S.	Boston	One Kendall Square	Office	725	Alexandria Real Estate Equities has purchased the roughly 63,000 sq m Cambridge office property from DivcoWest at a reported 4.0% initial yield.

Country	City	Property	Sector	Sales price US$m	Comments
U.S.	Chicago	3M Warehouse	Industrial	69	Griffin Capital Essential Asset REIT II has acquired the nearly 92,000 sq m warehouse property located in DeKalb from developer Clayco.
U.S.	Fort Lauderdale	Shopper's Haven Shopping Center	Retail	50	Brixmor has sold the 19,000 sq m Pompano Beach shopping centre to developer Christopher Partridge.
U.S.	Honolulu - Oahu	Outrigger Reef Waikiki Beach Resort	Hotel	185	American private equity group KSL Capital Partners has purchased the 184-room resort.
U.S.	Las Vegas	Miracle Mile Shops	Retail	1,100	Miller Capital Advisory and CalPERS have purchased this nearly 46,000 sq m Las Vegas Strip retail asset from RFR Realty.
U.S.	Los Angeles	Lantana Media Campus	Office	403	German investor Jamestown has sold this over 44,000 sq m office asset located in Santa Monica to Artisan Realty Advisors.
U.S.	New York	RLJ NYC Hotel Portfolio (2 hotels)	Hotel	286	RLJ Lodging Trust has sold the properties to private equity firm HX Decker Capital Management.
U.S.	New York	Affinia Hotel New York	Hotel	218	The 610-room hotel has been sold to Pebblebrook Hotel Trust by Highgate Holdings.
U.S.	San Francisco	555 Ninth Street	Retail	141	REIT Acadia Realty Trust has acquired this nearly 14,000 sq m downtown retail asset from SPI Holdings.
U.S.	Washington DC	National Cancer Institute HQ	Office	260	USAA Real Estate has purchased the approximately 55,000 sq m office property located in suburban Rockville, Maryland from The JBG Companies
U.S.	Various	Morgans Hotel Group Portfolio (3 Hotels)	Hotel	630	Hotel operator Morgans Hotel Group has sold the portfolio to SBE Entertainment Group.

Illustrative Office Occupational Transactions in Q4 2016

Europe

Country	City	Property	Tenant	Industry Sector	Floorspace sq m
Germany	Berlin	Quartier Bundesallee	Berliner Volksbank	Banking & Financial Services	15,000
Germany	Dusseldorf	Project	Unfallkasse NRW	Banking & Financial Services	14,000
Germany	Frankfurt	Grand Central	DB Netz	Transport	45,000
Germany	Frankfurt	Japan Center	ECB	Banking & Financial Services	17,800
Germany	Munich	Business Campus	BMW	Automotive	32,200
Germany	Stuttgart	Borsigstrasse	Bosch	Manufacturing	23,000
France	Paris	'Smart Side' building, Northern Inner Suburb	EDF	Energy	39,000
France	Paris	'Qu4drans' building, 15th Arrondissement	Altice Media	Media	20,000
France	Paris	D2 Tower, La Défense -	Crédit Mutuel CIC	Banking & Financial Services	19,800
France	Paris	'Uptown' building, 19th Arrondissement	Fondation Médicins Sans Frontierès	Charity	11,000
UK	London City	Bracken House	Financial Times	Media	17,373
UK	London City	Cannon Bridge House	Deliveroo	ITES	4,785
UK	London West End	1 Lyric Square	The Office Group	Real Estate	5,162
UK	London West End	Lacon London	Argus Media	Media	4,946
Russia	Moscow	Comcity	PPF Life Insurance	Banking & Financial Services	1,887
Russia	Moscow	Light Tower	Mir Reklamy	Business Services	600
Russia	Moscow	Citydel	Beiersdorf	Manufacturing	1,800
Russia	Moscow	Avrora	Yandex	Business Services	10,000

Asia Pacific

Country	City	Property	Tenant	Industry Sector	Floorspace sq m
Australia	Sydney	Parramatta Square - Stage 4. Church Street, Parramatta	Government Property NSW	Public Administration	62,000
Australia	Sydney	Quay Quarter. 50 Bridge Street, Sydney CBD	AMP Limited	Banking & Financial Services	36,500
Australia	Sydney	Parramatta Square - Stage 3. 153 Macquarie Street, Parramatta	NAB	Banking & Financial Services	35,069
China	Beijing	Tianrun Fortune Centre	AIA Group	Banking & Financial Services	8,160
China	Shanghai	HSBC Building	GF Securities	Banking & Financial Services	2,045
China	Shanghai	Bund Finance Center S2	Sina	ITES	3,196
Hong Kong	Hong Kong	77 Hoi Bun Road	JPMorgan	Banking & Financial Services	15,050
Hong Kong	Hong Kong	Two Pacific Place	Huarong	Banking & Financial Services	1,737
India	Delhi	Oxygen Business Park	GlobalLogic	ITES	20,854
India	Mumbai	Phase 1, Mindspace Juinagar	Foxconn	Manufacturing	15,794
Japan	Tokyo	Marunouchi 3-2 Project	Mitsubishi Heavy Industries	Manufacturing	18,900*
Japan	Tokyo	Jingumae Project	BEAMS	Retail	5,610*
Malaysia	Kuala Lumpur	UOA Vertical Corporate Tower A	Honeywell	Engineering	8,640
South Korea	Seoul	Daishin Group HQ Building	WeWork	Business Services	20,000
Singapore	Singapore	Fragrance Empire Building	BMT Asia Pacific	Business Services	383
Singapore	Singapore	3 Pickering Street	AKA Asia	Business Services	198

*JLL estimate

Americas

Country	City	Property	Tenant	Industry Sector	Floorspace sq m
Canada	Montreal	Le Nordelec	Yellow Pages	Publishing	13,935
Canada	Montreal	Scotia Tower	Scotiabank	Banking & Financial Services	12,934
Canada	Toronto	101 McNabb Street	General Motors	Automotive	13,935
Canada	Toronto	EY Centre	Norton Rose Fulbright	Legal Services	12,811
Canada	Toronto	1 Concorde Gate	Home Depot	Retail	11,891
Mexico	Mexico City	Toreo B and C Towers	Zurich	Banking & Financial Services	6,800
U.S.	Boston	145 Broadway	Akamai	ITES	45,155
U.S.	Boston	500 Kendall Street	Shire	Pharmaceuticals	31,866
U.S.	Denver	6370 S Fiddlers Green Circle	Charter Communications	ITES	28,433
U.S.	Los Angeles	777 S Santa Fe Avenue	Warner Music Group	Media	23,879
U.S.	Los Angeles	350 S Grand Avenue	City National Bank	Banking & Financial Services	22,483
U.S.	New York	1271 Avenue of the Americas	Major League Baseball	Professional Sports and Entertainment	37,161
U.S.	New York	390 Madison Avenue	Hogan Lovells	Legal Services	22,260
U.S.	Phoenix	N Pima Road	McKesson	Heathcare Services	25,177
U.S.	San Diego	101 Ash Street	City of San Diego	Public Administration	29,264
U.S.	Seattle	300-333 8th Avenue N	Facebook	ITES	36,131