JLL Research Report

Global Capital Flows

Broad-based growth lifts global activity to new cyclical high

Contents

Executive summary

- Global commercial real estate markets built on their strong early 2018 performance as transactional volumes in the second quarter of 2018 reached US$173 billion. This brings H1 volumes to US$341 billion, 13% higher than 2017 and the best first-half performance since 2007.

- While investment activity for the second quarter in the Americas was flat, the vigorous start to the year boosted first-half volumes by 9% to US$132 billion, with the U.S. market underpinning growth. In EMEA, core markets such as the UK, Germany and France remain the key drivers of growth as Q2 volumes grew by 11% quarter-on-quarter, leading H1 volumes to rise by 9% to US$128 billion. Asia Pacific maintained its outstanding performance as Q2 investment increased by 6%, resulting in H1 volumes of US$81 billion, 29% up on last year and the strongest performance on record.

- Just one quarter after losing its title as the most liquid real estate market in the world to Tokyo, London regained its top spot, edging out New York in the process. The two markets are neck and neck with just US$55 million separating them in terms of liquidity in the second quarter.

- Cross-border activity stayed level in Q2 2018 despite an uptick in inter-regional capital flows. Increased purchases by North American and global funds in Europe were offset by a decline in intra-regional investment by investors from France, Germany and the UK within their home region.

- In the face of ongoing political and economic uncertainty, global property markets continue to perform well and investor demand remains robust, with a growing number of groups increasing their allocations to the sector thanks to its defensive qualities, steady income stream and relative performance compared to other asset classes. Shifting demographic and technological trends are driving appetite for scale, especially in the logistics and alternatives sectors, while demand fundamentals remain underpinned by robust economic growth. Nevertheless, we expect investment in commercial real estate globally to match 2017 levels, at approximately US$715 billion for the full-year 2018.

Direct commercial real estate volumes, Q2 2017 – Q2 2018

US$ billions	Q1 2018	Q2 2018	% Change Q1 2018 – Q2 2018	Q2 2017	% Change Q2 2017 – Q2 2018	H1 2017	H1 2018	% Change H1 2017 – H1 2018
Americas	69	63	-8%	64	0%	122	132	9%
EMEA	61	67	11%	61	11%	117	128	9%
Asia Pacific	39	42	6%	33	26%	63	81	29%
TOTAL	169	173	2%	157	10%	302	341	13%

Source: JLL Research

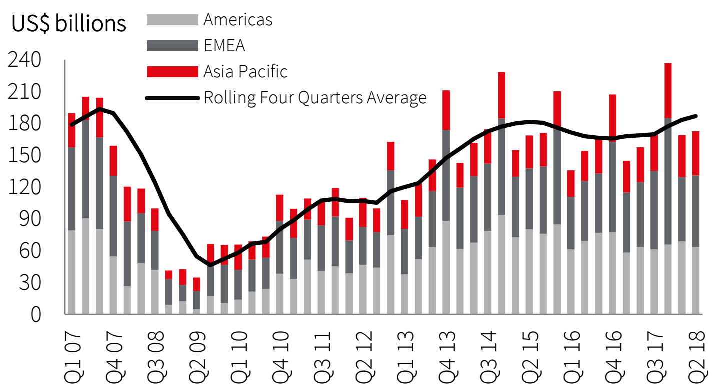
Global & regional

Global growth carries over into the second quarter

Investment activity ticks up in the first half

Following up on the strong start to the year, global commercial real estate markets maintained their momentum as the second quarter saw transactional volumes of US$173 billion. This brings H1 volumes to US$341 billion, 13% higher than last year's mark and the best half-year performance since 2007.

Direct commercial real estate volumes by region, Q1 2007 – Q2 2018



Source: JLL Research

Core regional markets remain engines for growth

In what was a relatively quiet second quarter in the Americas, transactional volumes roughly matched the US$64 billion we witnessed last year. Despite this, the solid start to the year led to a 9% increase in first-half volumes which totalled US$132 billion. While the Canadian market has outperformed relative to its long-run average, the U.S. continues to set the pace for the region with H1 activity jumping by 11%. With foreign investment in the U.S. down by 33% in H1 2018, domestic investors have stepped in to provide ample liquidity; domestic groups accounted for 85% of all investment in H1 2018, up from 75% in H1 2017.

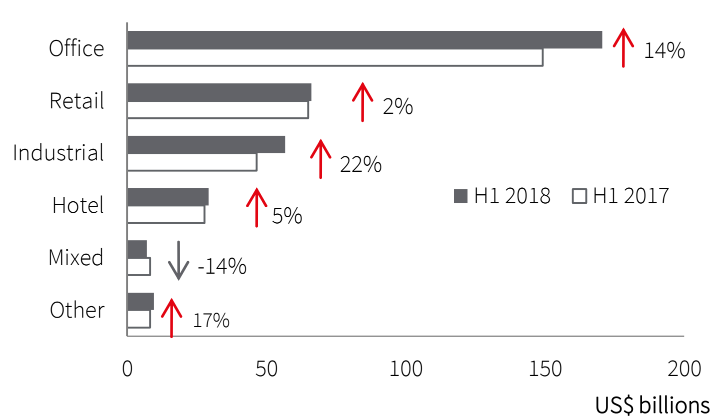
After a sluggish start to the year, sales activity in Europe increased by 11% in Q2 to US$67 billion, resulting in H1 volumes of US$128 billion, 9% above last year's mark. While the relative weakness of the U.S. dollar boosted regional volumes, performance in local currency terms remains positive though more modest. In the UK, despite there still being significant uncertainty around Brexit, transactional volumes rose by 19% in the first half of the year. Cross-border capital inflows, which make up nearly half of all investment in the UK, are up by 35% from H1 2017. Asian investment grew by 24% in H1 2018 to US$7.3 billion with investors from South Korea contributing US$1.2 billion of that total, focusing almost exclusively on Central London offices after a two to three-year period of relative inactivity in the UK market. The region's core continental markets also posted robust growth as H1 volumes in Germany increased by 23%, propelled by heightened demand from both domestic and offshore groups. Likewise, H1 investment in France is up by 60% as cross-border inflows, primarily from global funds, the U.S. and Germany, more than doubled.

Mirroring its first quarter performance, Asia Pacific witnessed year-on-year activity jump up by 26% in the second quarter to US$42 billion. Similarly, H1 volumes are up by 29% to US$81 billion, their highest level on record. Nearly all of the region's largest markets recorded positive investment growth in H1, with Hong Kong, South Korea and Australia emerging as top performers with a combined average growth rate of 110%. Despite double-digit declines in the second quarter, H1 activity is up by 3% and 7% in China and Japan respectively due to their strong start to the year.

Industrial fervour carries over into yet another quarter

With over US$57 billion in investment over the first half of the year, industrial continues to be the most favoured asset class globally. Boasting sturdy investment growth across all three regions, the sector has seen half-year transactional volumes rise at a compound annual growth rate of over 11% since 2014. While established markets such as the U.S., the UK, Japan and Germany have been the biggest beneficiaries of this investment, emerging markets such as China, Poland, India and Brazil have also witnessed greater liquidity as investors seek to capitalise on their sizeable populations and favourable growth prospects.

Global transactional volumes by sector, H1 2017 & H1 2018



Source: JLL Research

London pips New York to reclaim the top spot

New York just misses out at the half-year mark

Just US$55 million separates London from New York after the first six months of 2018 in what is one of the smallest ever margins between the first and second ranked cities. Though their volumes are nearly identical, the current dynamics in each city are quite different.

In London, domestic investment is at a five-year low while foreign participation is at nearly 70%, with capital from Asia making up two-thirds of all cross-border inflows. On the other hand, cross-border capital flows to New York are at their lowest half-year level since 2012, with less than US$4 billion invested so far this year by offshore groups. Large-scale acquisitions by domestic groups have been the driving force in New York, with purchases over US$300 million by local investors accounting for 41% of all activity in the first half of the year.

Most active cities, H1 2018

Rank H1 2017	Rank H1 2018	City	H1 2018 (US$ bn)	H1 2017 (US$ bn)
1	1	London	15.8	15.5
2	2	New York	15.8	11.2
10	3	Hong Kong	14.6	5.8
4	4	Tokyo	12.4	7.6
9	5	Paris	11.6	6.1
6	6	Seoul	10.2	6.8
3	7	Los Angeles	8.5	10.1
22	8	Chicago	7.0	3.0
7	9	Shanghai	6.6	6.3
8	10	Washington, D.C.	6.5	6.2

Source: JLL Research

Mega-deal pushes Hong Kong into the top three

Hong Kong jumped to third on the list of most liquid markets following a record-breaking transaction. The US$5.1 billion sale of The Center, Hong Kong's fifth tallest office tower, by CK Asset Holdings to a consortium of local investors made it the world's largest single-asset transaction. The transaction demonstrates that despite the lofty prices commanded by real estate in Hong Kong's Central sub-market, investor appetite remains resilient.

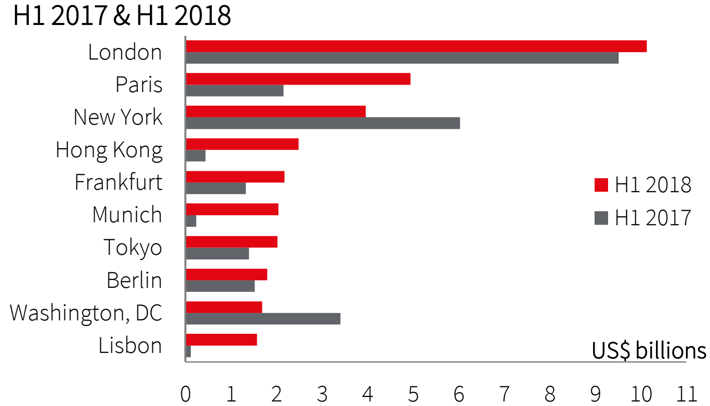
A combination of tight vacancy rates, robust occupier demand and a lack of new supply has pushed up prices in the Central sub-market. An influx of mainland Chinese occupiers and investors has also accelerated the increase in prices. While the effects of government pressure to limit large-scale acquisitions abroad has certainly been felt in Hong Kong – the main Chinese investor in the consortium which purchased The Center divested its share shortly after completing the acquisition - capital from China remains a driving force in the Hong Kong office market. Mainland buyers spent an average of US$2.1 billion on offices in Hong Kong between 2015 and 2017, and with US$1.5 billion in office acquisitions this year already, look set to meet or exceed that level.

Asian investors drive cross-border investment in London

With over US$3.8 billion in acquisitions so far this year, Hong Kong investors are once again the most active offshore group in the UK's capital. Trophy offices continue to be sought after, with the second quarter seeing yet another large-scale trophy office acquired by a Hong Kong based purchaser. Not far behind are investors from Singapore and South Korea, with acquisitions of US$1.2 billion and US$1.1 billion respectively in H1. Singapore's Ho Bee Land made headlines for its US$884 million acquisition of Ropemaker Place, a City of London office tower.

Despite the uncertainty around Brexit, cross-border investors remain drawn to London over other continental cities such as Paris or Frankfurt due to its status as a global financial hub, its liquid capital markets and its relative size. These factors give investors the opportunity to deploy capital at scale, something which they cannot do as easily in other European cities. Since 2014, London has seen eight transactions over US$1 billion – the most of any city in the region - compared to just three in Paris and one in Berlin. Nevertheless, continental markets continue to be significant recipients of cross-border investment, with German cities in particular benefitting from greater foreign interest due to their healthy occupier fundamentals.

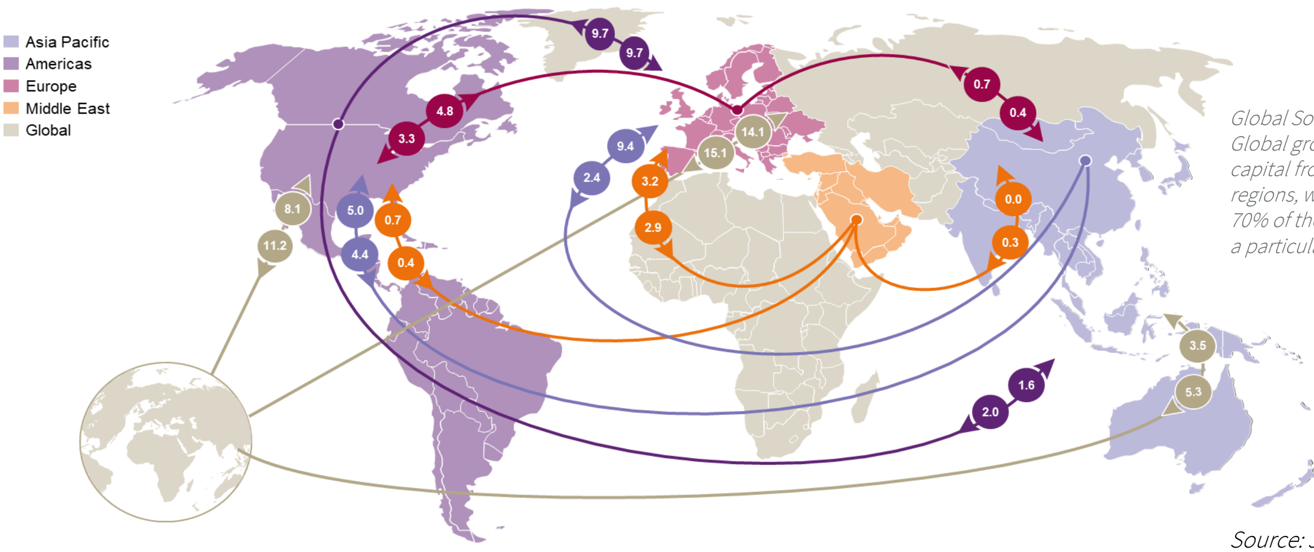
10 Largest recipient cities of cross-border investment, H1 2017 & H1 2018



Source: JLL Research

Cross-border

Inter-regional flows, H1 2018 (US$120 billion in total)



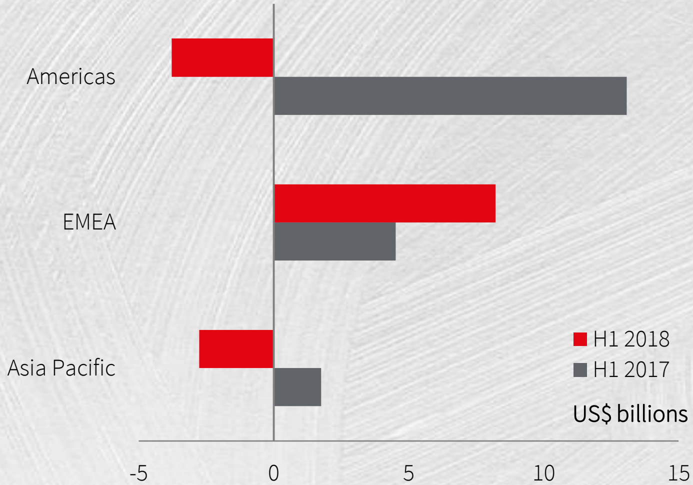
Global Sources of Funds Global groups that raise capital from multiple regions, with less than 70% of the capital from a particular country

Source: JLL Research

Asian investors pivot to Europe as global funds sell

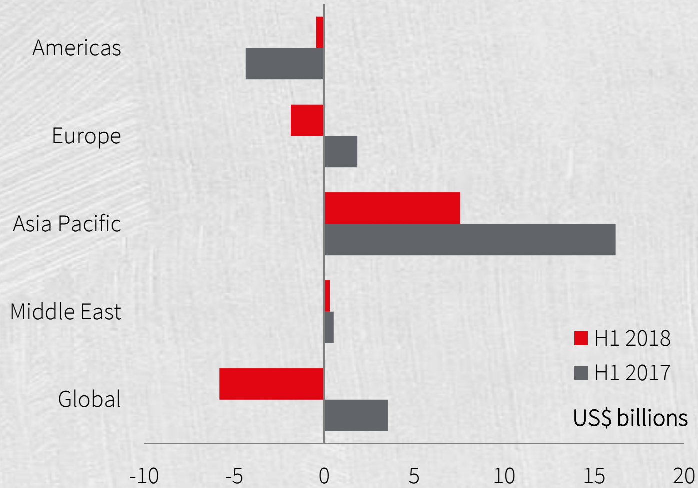
Global funds were the largest net sellers of commercial real estate in H1 2018 with US$31.5 billion in total dispositions after two quarters. The U.S. and UK markets alone accounted for almost 50% of that total as global funds actively exited from office, hotel and retail investments in both countries. Nearly 20% of all sales by global funds were to Asian investors, who were the most active net purchasers of commercial real estate in H1. As Chinese outbound investment was tepid due to ongoing capital controls and regulatory scrutiny, investors from Hong Kong, Singapore and South Korea have stepped in to provide liquidity, demonstrating the depth of the buyer pool from the region. While many of these investors have favoured the U.S. market in prior years, pricing pressures in core markets and rising hedging costs are driving many Asian groups to consider investments in Europe instead. This has been particularly the case for South Korean investors, who face some of the highest hedging costs when investing in the U.S. of any foreign investor; South Korean purchases in Europe were double those made in the U.S. at the half-year mark.

Net beneficiaries of inter-regional flows, H1 2017 & H1 2018



Source: JLL Research

Net buying and selling, H1 2017 & H1 2018



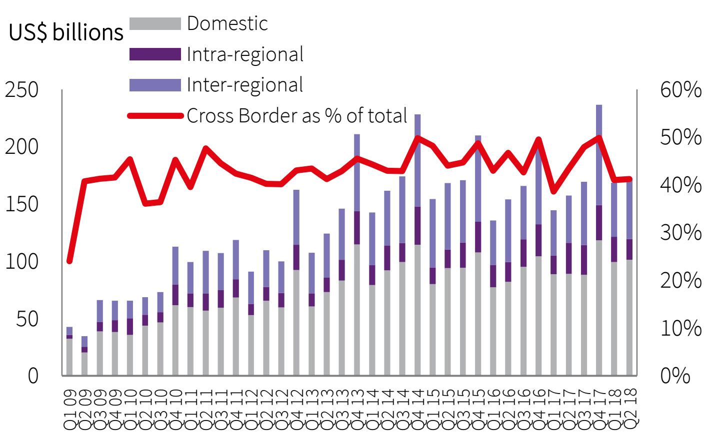
Source: JLL Research

Cross-border flows stay level in the second quarter

Inter-regional purchases on the rise

Cross-border activity stayed level in the second quarter with 41% of all transactions involving either a foreign buyer or seller. Total cross-border investment in the first half reached US$140 billion, well above the average of US$103 billion but 5% below the peak in H1 2015. An 18% decline in intra-regional flows in the Q2, primarily a result of investors from France, Germany and the UK moderating their purchases of offices across the region, was offset by a significant uptick in inter-regional flows in Europe where acquisitions by North American investors and global funds are up by 58% and 116% respectively for the half-year.

Global cross-border transactional volumes, Q1 2009 – Q2 2018



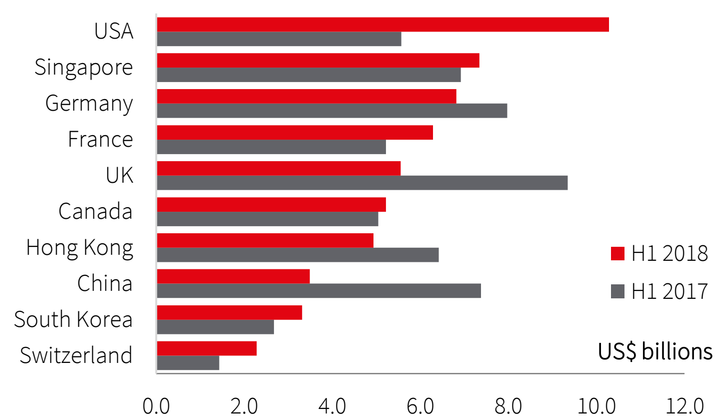
Source: JLL Research

American investors remain focused on Europe

Investors from the U.S. maintained their status as the biggest exporters of capital globally, with US$10.3 billion in overseas acquisitions in the first half of 2018. Activity remains dominated by private equity groups and fund managers, together representing 56% of all outbound investment. Private equity investors were especially active in the UK and Germany, where they have sought to build platforms to eventually sell onto other investors, making acquisitions totaling US$1.5 billion over the first two quarters of the year.

Outbound investment by Singaporean groups continues to be elevated in 2018, with US$7.3 billion in cross-border purchases so far this year. Appetite for global real estate opportunities is growing as investors seek to diversify out of the local market into global gateway cities. These investors have focused on the office and industrial sectors in core markets across the world. The U.S. was the top destination in H1 2018 with the industrial sector attracting almost all inbound capital. Singaporean investors also targeted offices in London, Tokyo and Frankfurt in the second quarter, making acquisitions totaling US$1.7 billion across all three cities.

Top 10 cross-border purchasers by source of capital, H1 2017 & H1 2018



Source: JLL Research

Hong Kong capital makes its return to London

In a continuation of the trend seen throughout 2017, yet another Hong Kong investor has acquired a trophy office in Central London. CK Asset Holdings' US$1.3 billion acquisition of 5 Broadgate, a grade-A office in the City of London which is fully leased to UBS, was the largest cross-border acquisition of Q2 2018. The transaction also marks the second time in as many years that British Land, a UK REIT, has sold a 50% stake in a City of London office to a Hong Kong buyer.

Noteworthy cross-border transactions, Q2 2018

Property name	Location	Sector	Sale price (US$ mn)	Purchaser	Purchaser source of capital
5 Broadgate	UK	Office	1,359	CK Asset Holdings	Hong Kong
Principal Hotels Portfolio	UK	Hotel	1,166	Fonciere des Murs	France
Ropemaker Place	UK	Office	884	Ho Bee Land	Singapore
Breevast Portfolio	Netherlands	Various	733	HighBrook Partners	USA
114 Champs Elysees	France	Retail	713	BVK	Germany

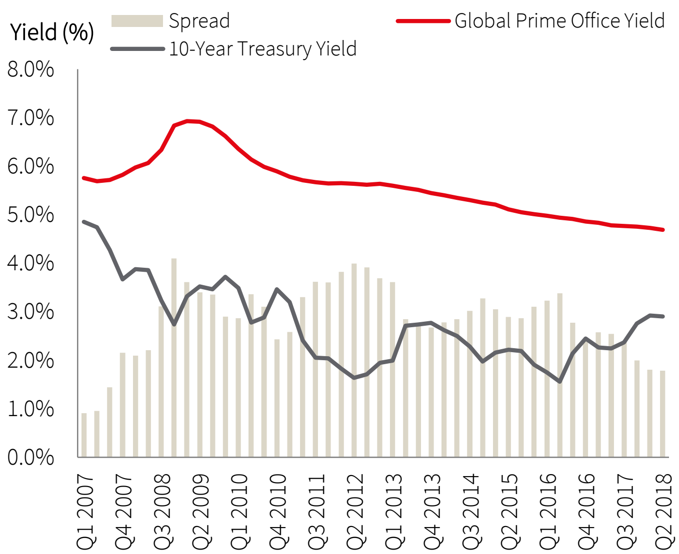
Pricing and allocations

Prime yield spreads to risk-free rates compress further

Spreads to government bonds narrow further

After the global financial crisis, central banks slashed interest rates and used massive asset purchase programmes to drive down bond yields. Lower borrowing costs and less attractive returns in fixed-income pushed investors into other asset classes, real estate being one of them. As investment has flowed into the global real estate sector, asset prices have gone up and prime office yields have compressed by 221 bps from their peak in Q1 2009 to 4.69% in Q2 2018, their lowest point in the current cycle.

JLL Global Prime Office Yield, U.S. 10-Year Treasury Yield and Spread, Q1 2007 – Q2 2018



Source: Federal Reserve, JLL Research

Prime office yields compress as risk-free rates rise

The secular decline in prime office yields over the last eight years has largely been supported by low risk-free rates; spreads between the two averaged 314 bps. Since 2017, however, spreads have compressed by 79 bps as treasury yields have climbed to nearly 3.0%. As the Fed continues its plan to raise policy rates, with two already this year and two more expected, both short and long-term rates have picked up.

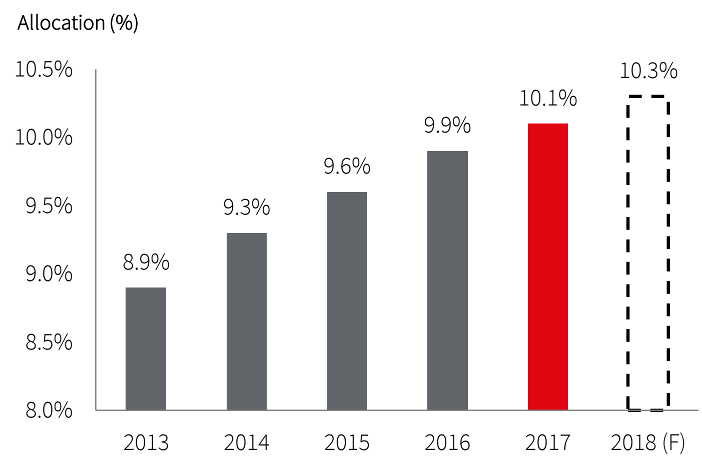
The question now is what effect this will have on commercial real estate prices. While 10-year treasury yields have increased steadily since reaching their low point in mid-2016, prime office yields have compressed by 25 bps over that time. Indeed, yields on 10-year treasuries and prime offices have only exhibited only a moderate correlation of .49 over the course of the current real estate cycle. This lends support to the premise that commercial property prices will continue to be more dependent on market fundamentals rather than interest rates and that, barring any significant market events, yield spreads have room to compress further as rates rise.

Institutional allocations to real estate reach new high

Target allocations to real estate in institutional portfolios surpassed 10% for the first time in 2017, according to data from a survey conducted by Cornell University's Baker Program in Real Estate and Hodes Weill & Associates. The survey showed allocations to real estate in 2017 rising by 20 bps from 2016 and by 120 bps since 2013. Allocations are expected to increase by a further 20 bps in 2018, marking the fifth consecutive year of increases by institutional investors.

One of the factors driving the uptick in allocations to real estate is the sector's continued outperformance. According to the survey, institutions have consistently achieved actual returns significantly above their long-term target. While average returns for all institutions remains 20 bps above their target, several years of strong performance has resulted in asset values that many investors believe are unsustainable. As the cycle progresses, this will be a key metric that many investors monitor closely, and may affect allocations in future years.

Weighted average target allocation to real estate, 2013 – 2018 (F)



Source: Cornell Baker Program in Real Estate and Hodes Weill & Associates

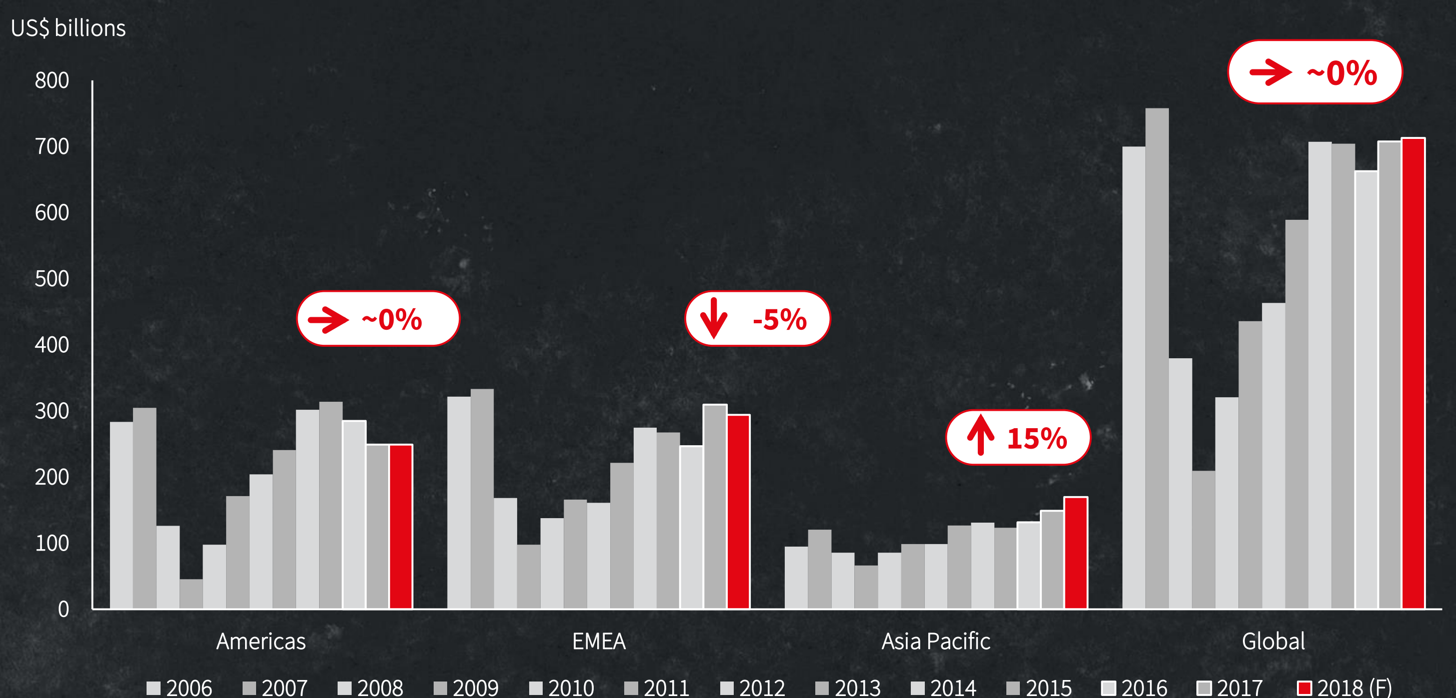
2018 Global market Outlook

After two consecutive quarters of outperformance, global investment expected to hold steady overall in 2018

The second quarter of 2018 saw the emergence of new political and economic pressures for investors to contend with. The escalation of political tensions in London, Berlin and Washington, D.C., along with the threat of a global trade war, all weighed on markets throughout the quarter. Meanwhile, the divergence in monetary policy between the world's major central banks has continued to grow as the Fed has kept to its well-telegraphed plan to tighten rates; the ECB has laid out plans for halting its asset purchasing programme starting next year but plans to keep rates on hold; while the Bank of Japan expects little change for the foreseeable future.

Nevertheless, global property markets continue to perform well and investor demand remains robust, with a growing number of groups increasing their allocations to the sector thanks to its defensive qualities, steady income stream and relative performance compared to other asset classes. Shifting demographic and technological trends are driving appetite for scale, especially in the logistics and alternatives sectors. Global investment in commercial real estate in 2018 is expected to match 2017 levels, at around US$715 billion, despite the supply of product coming to market, large-scale portfolio opportunities in particular, continuing to be limited relative to previous years.

Global transactional volumes by region, 2006 – 2018 (F)



Source: JLL Research

Notes and methodology

Direct real estate investment	Refers to the purchase of individual commercial property assets or portfolio of assets (or shares in special purpose vehicles that own assets) Includes: • Transactions over US$5 million • Sectors covered are office, retail, hotels, industrial, mixed-use and 'other' (includes nursing homes, student accommodation, etc.) The data includes property company M&A, including REIT formations, where the following conditions are met: • The transaction is essentially a real estate transaction • Significant assets over and above the real estate assets (e.g. workforce, intellectual property, "goodwill", etc.) are not transferred • 70% + of revenues come directly from rental income • Transactions involve a significant change of ownership • The transaction must be at 'market price' • Only includes the percentage sold to new investors at the IPO price Excludes: • Entity-level transactions; development deals; and multifamily residential investment
Entity-level transactions	Refers to corporate acquisitions, where significant assets over and above the real estate assets are transferred (e.g. workforce, intellectual property, "goodwill", etc.). An example of this is REIT privatisation 'transaction churn' where a company sells real estate assets to a majority-owned subsidiary
Development deals	Refers to transactions categorised as 'forward funded' development and 'land' transactions
Americas	Detailed coverage of the direct real estate investment markets in Brazil, Canada, Mexico and the United States, and partial coverage of Argentina, Chile, Colombia, Costa Rica, Panama and Peru
Europe	Varying coverage of the direct real estate investment markets in Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the UK
Middle East and Africa	Varying coverage of the direct real estate markets in Bahrain, Israel, Kuwait, Lebanon, Qatar, Saudi Arabia and the UAE In Africa we cover South Africa, with varying coverage across the rest of the continent
Asia Pacific	Varying coverage of the direct real estate investment markets in Australia, China, Hong Kong, India, Indonesia, Japan, Macau, Malaysia, New Zealand, the Philippines, Singapore, South Korea, Taiwan, Vietnam and Thailand
Exchange rates	Transaction values are converted into US$ at the average daily rate for the quarter in which the transaction occurred
Grossed-up figures	Volumes are grossed-up to reflect market coverage

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