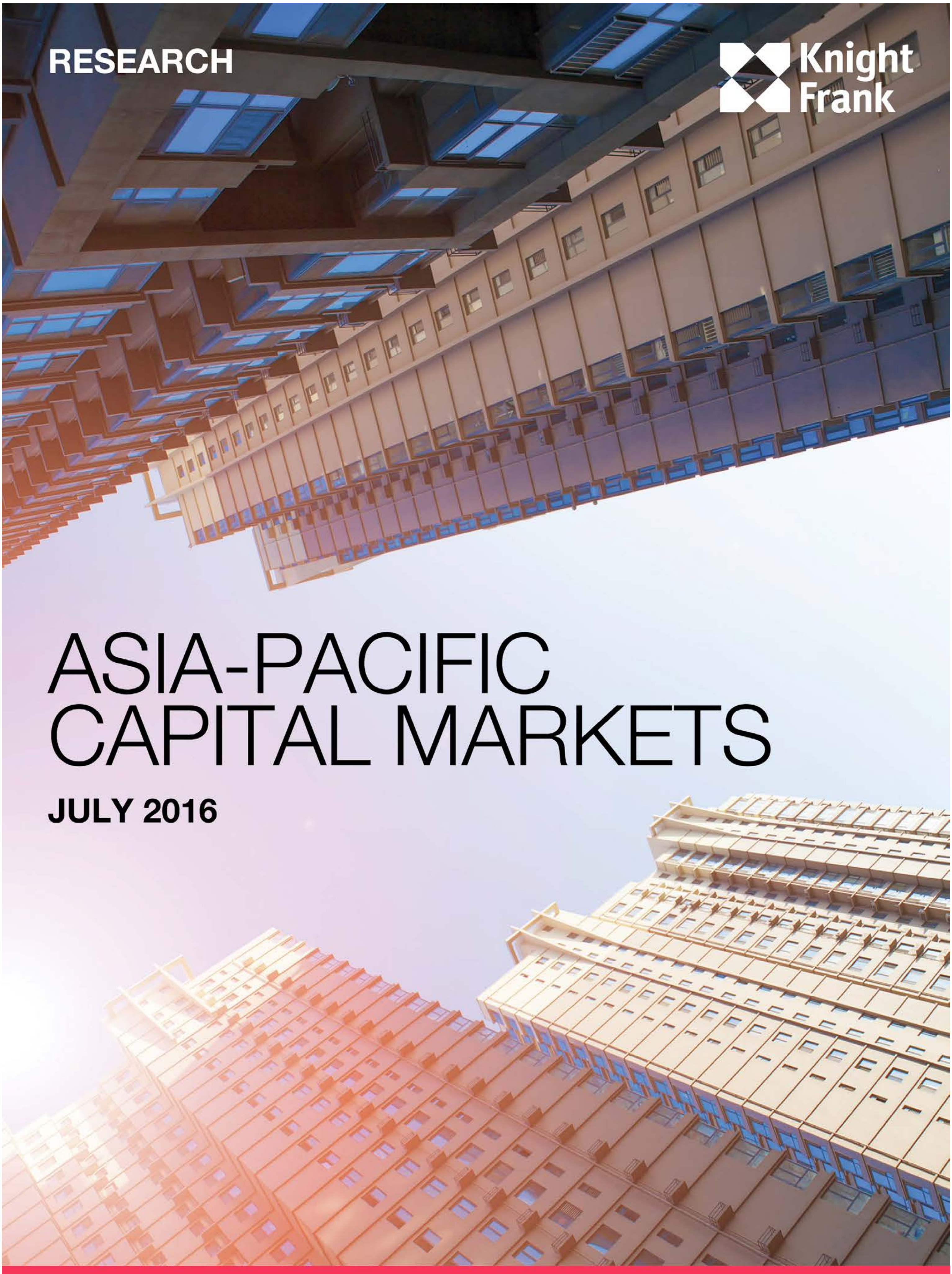
RESEARCH



ASIA-PACIFIC CAPITAL MARKETS

JULY 2016

ECONOMIC SNAPSHOT | OCCUPIER MARKETS | INVESTMENT MARKETS | THE NATURAL RATE OF OFFICE MARKET VACANCY

Key Findings

Economies in Asia-Pacific continue to face significant headwinds (page 4)

Office rental growth picked up pace from 0.2% in Q4 2015 to 1.0% in Q1 2016, as the number of markets that registered zero or positive growth among the 19 tracked increased from 11 to 15 (page 6)

As a result of cyclical and structural challenges, retail rents rose by a marginal 0.1% in Q1 2016 (page 8)

Singapore and Hong Kong returned to the forefront of the region, accounting for the three largest investment transactions (page 10)

Natural vacancy rates in the developing office markets are manifestly higher (page 14)

NICHOLAS HOLT
Asia Pacific Head of Research

"Whether it is demographics, immigration, new emerging sectors, manufacturing or significant government initiatives, new sources of growth will be the key drivers behind real estate demand in the future."

Follow Nicholas at @nholtKF

For the latest news, views and analysis on the world of prime property, visit Commercial Briefing or @KF_CommBrief

With concerns over the state of the global economy, investors are balancing a need for security and liquidity, while searching for the next sources of growth. Some more unlikely markets could begin to emerge...

The seemingly perpetual "uncertainty cycle" that has dogged the global macroeconomic backdrop for the last few years looks set to continue – at least for the rest of this year. The strength of the US recovery, the success of China's re-balancing efforts and the future of Europe following the result of the UK's referendum on its EU membership, all continue to have a palpable impact on the mindset of real estate investors in the Asia-Pacific region (see page 4).

Balancing these concerns with a need for security, liquidity and growth has led to the major core markets of Japan and Australia dominating investable grade property trading within the region. At the mid-point of 2016, however, there is a notable reduction in the number of prime assets for purchase in these core markets, with liquidity starting to look a little exhausted. With a growing pool of capital looking to find a home in regional bricks-and-mortar, where should investors look to next?

Two markets that have recently seen an uptick in activity are Singapore and Hong Kong, two of the major regional financial hubs. The largest three deals so far of 2016 were transacted in the two cities. In particular, a willingness

for previously significant pricing gaps to be bridged in Singapore led to the largest ever single-tower transaction in Asia-Pacific, bringing optimism that more deals could come to market (see page 10). While there is limited potential for opportunities in these markets, investors are also asking a major question: where will the future sources of growth be?

Future growth drivers

Whether it is demographics, immigration, new emerging sectors, manufacturing or significant government initiatives, new sources of growth will be the key drivers behind real estate demand in the future.

Shanghai is starting to appear on many investors' radar, not only because it is the most mature and sophisticated market in mainland China, but also due to the new wave of start-ups in the creative and technology industries driving the city's economy. The city, along with Beijing and Shenzhen, could be the next new emerging core markets for regional or global investors.

Technology as a driver is not restricted to China. Most major regional markets are seeing growth in this sector, with a number of other tech hubs really standing out: Seoul, Beijing and Bengaluru. In respect to the latter, the development in "India's Silicon Valley" is just one of the growth drivers in the Indian economy, leading many investors to look more closely at a country which in the recent past would not have been considered. Favourable demographics, infrastructure investment, growth in manufacturing and service industries as well as initiatives such as the Delhi-Mumbai Industrial Corridor and Smart Cities are all proving attractive to investors with longer-term investment horizons.

The natural rate of office market vacancy

Aside from looking at long-term growth drivers, timing can be everything in real estate investment. In any market, entering and exiting at the right point of the cycle can be the difference between par and outperformance. Where each market is in terms of the cycles and how far the market has to go in each stage is vital for this analysis. Going a little deeper, this report considers what the natural rate of vacancy might be in the major office markets around the region, i.e. at what vacancy level we would start to see rental growth and, most importantly, where we are now (see page 14).

ECONOMIC SNAPSHOT

China is attempting to strike a delicate balance between short-term and long-run sustainable growth. To avert a hard landing, it has resorted to supporting the old engines of growth with fiscal and monetary stimulus, while simultaneously trying to tackle over-capacity by restructuring inefficient firms in those industries. Cheaper money, however, means that the debt-to-GDP ratio will continue rising, when deleveraging is badly needed. 17 publicly traded bonds have defaulted so far this year, up from six in the whole of 2015 according to Bloomberg, and there will be more financial stresses going forward; nevertheless, given that most major banks are state-owned, the government should be able to keep credit flowing.

The slowdown in China has weighed on growth in Asia-Pacific through the trade channel. However, as some of the exports to China are intermediate goods that eventually end up in the West, economic improvement in the US and Eurozone would mitigate this effect. Beyond this cyclical consideration, as China moves up the value chain and increasingly sources these goods domestically, economies in the region will also encounter structural challenges.

The GDPs of Hong Kong, Singapore and Taiwan are most exposed to China. In **Hong Kong**, China's clampdown on corruption has also contributed to falling visitor spending as Mainland tourists avoid conspicuous consumption. On the domestic front, with the PMI languishing in the contractionary territory since March 2015, investment tumbled for three consecutive quarters. Private investment has also been dropping in **Singapore** as a result of weak external demand, despite the government's push to enhance productivity. While the manufacturing sector is showing signs of improvement, the services sector, which has supported growth, is losing steam. As such, the government has been doing the heavy lifting. **Taiwan**'s economy experienced three quarters of year-on-year contraction. Although the recently inaugurated President has identified strategies to diversify its export destinations, renewed political tension with China could impede her ability to make significant headway.

At the time of writing, the **Japanese** Yen has appreciated by more than 10% against the US dollar since the beginning of

FIGURE 1

Exports to Key Economies as a Percentage of GDP

Source: IMF, World Bank, *Bureau of Foreign Trade, Knight Frank Research the year, a bane especially given the current challenging external environment, contributing to the fall in manufacturing PMI to a 40-month low in May 2016. A weak start this year has prompted the government to postpone a consumption tax hike previously scheduled for April 2017 by two and a half years.

The combination of monetary and fiscal policies has had some success in **South Korea**. The tax cut on car purchase was particularly potent, such that private consumption dipped briefly after it expired in December 2015 and before it was reintroduced in February 2016. Recently, the central bank has cut its main policy rate further by 25 basis points to a fresh record low of 1.25% and the government will soon roll out another package of fiscal stimulus. The President is also working to prevent any policy deadlock after a legislative election in April installed a hung parliament.

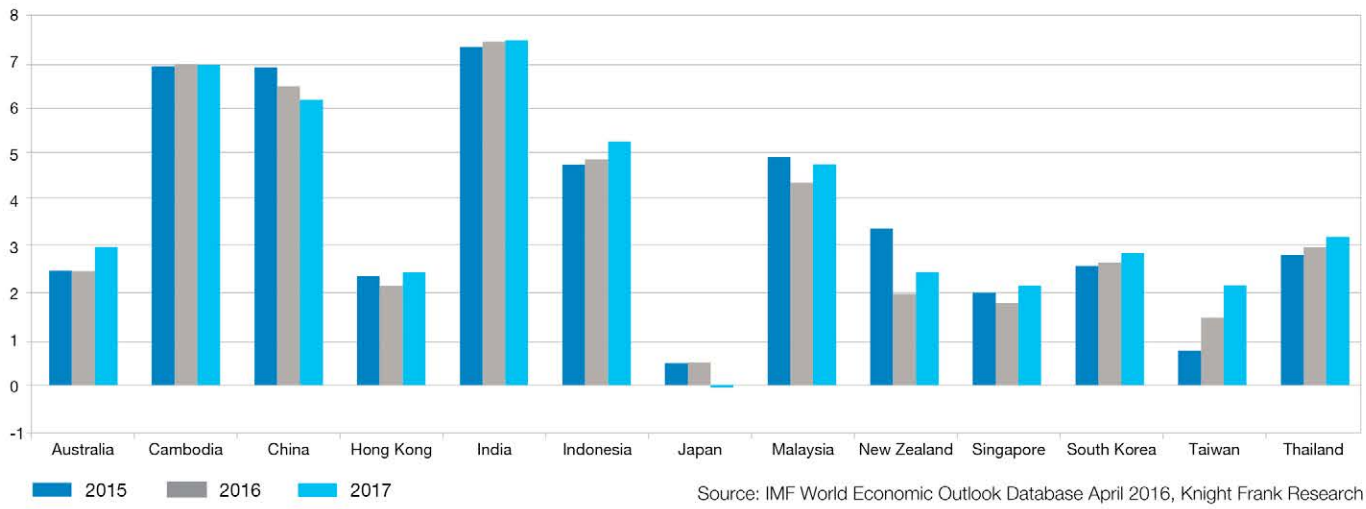
Monetary policy was eased in **Indonesia** as well. The central bank has lowered its policy rate by a cumulative one percentage point so far this year to stimulate the slowing economy as public investment looks to be hampered by a shortfall in tax receipts. In contrast, **Thailand**'s economy was and will continue to be buoyed by government spending and tourism. However, the controversial referendum and royal succession issues will introduce some uncertainties. In **Malaysia**, domestic consumption was resilient even though consumer confidence as reported by the Malaysian Institute of Economic Research is at the level last seen during the Global Financial Crisis. In fact, the annual growth of private consumption in Q1 2016 even accelerated. However, weak business confidence is dampening investment growth.

India stands out among Asian countries with both its business and consumer confidence firmly in the optimistic territory according to the Confederation of Indian Industry and Nielson respectively. Although investment slid on a year-on-year basis in Q1 2016, private consumption is enviably growing robustly at an increasing rate. However, unravelling the political gridlock is necessary to implement reforms and achieve the country's potential growth.

As the mining investment boom's contribution to growth reverses, the housing and services sectors as well as transport infrastructure developments have been supporting growth in **Australia**. These drivers of growth, along with related industries such as financial services, have been especially positive for Sydney and Melbourne.

> "The slowdown in China has weighed on growth in Asia… as some of the exports to China are intermediate goods that eventually end up in the West, economic improvement in the US and Euro zone would mitigate this effect."

FIGURE 2
Real GDP Growth per Annum (%)

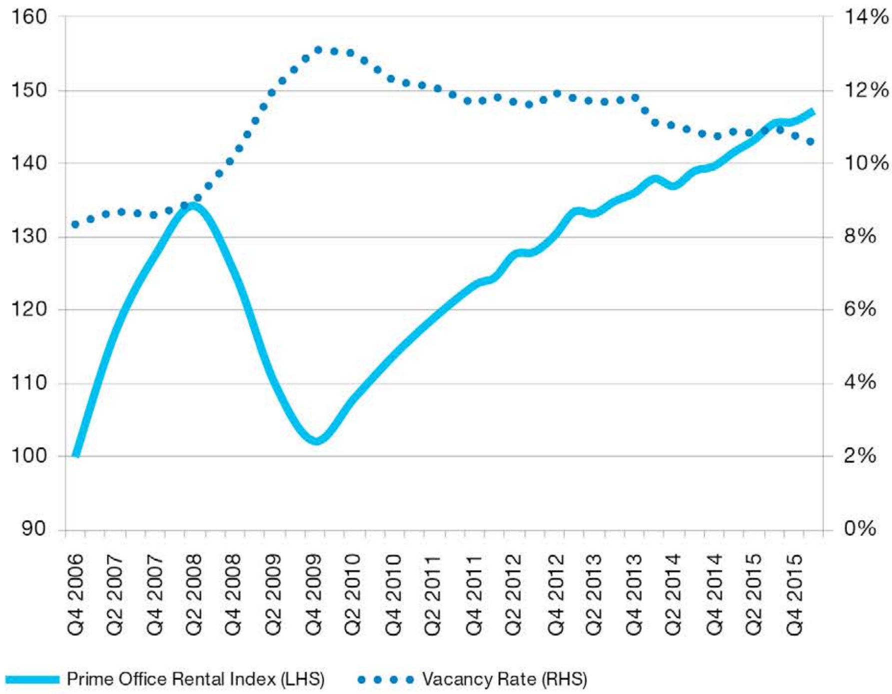


Source: IMF World Economic Outlook Database April 2016, Knight Frank Research

REAL ESTATE OCCUPIER MARKETS

Office | 2016 starts on a more positive note

FIGURE 3
Asia-Pacific Prime Office Rental Index



Source: Knight Frank Research

Knight Frank's Asia-Pacific Prime Office Rental Index grew 1.2% in the six months to the end of March 2016, decelerating from 2.8% in the previous half year, as the average vacancy fell by 0.4 percentage points. However, rental growth actually picked up pace from 0.2% in Q4 2015 to 1.0% in Q1 2016, as the number of markets that registered zero or positive growth among the 19 tracked increased from 11 to 15.

In the first quarter of 2016, robust leasing demand from domestic firms in the finance and technology sectors drove net absorption to outstrip new supply in **Beijing**, arresting the downward trend in rents. Meanwhile, the lack of new office completion helped rents stabilise in **Guangzhou**. **Shanghai** enjoyed rental improvement, as vacancy continued to tighten. Sustained, significant supply in the coming few years will, however, limit rental growth in these Chinese cities going forward.

Although the supply pipeline is also strong in **Hong Kong**, it is concentrated in decentralised areas. Rents in Central continued to rise as a result of limited available space. Meanwhile, rents in **Taipei** remained stable.

Two buildings came online in **Brisbane**, adding a record amount of space. Despite this, effective rents have begun to stabilise. Although the total net absorption in the second half of 2015 was negative, prime net take-up turned positive, as tenants took advantage of gross effective rents that have declined 46.7% since the pre-Global Financial Crisis peak to move into quality offices in a more central location. Prime offices in **Melbourne** also benefited from the centralisation of tenants, while the demand for those in **Sydney** was augmented by tenants displaced by the withdrawal of secondary stock. Rents in Melbourne stayed flat and those in Sydney grew healthily, while downward pressure on rents in **Perth** continued in Q1 2016.

Despite a substantial amount of new space delivered into the **Bengaluru** office market, robust demand buoyed rents upwards. **Mumbai** saw a surprise drop in net absorption. While the traditional demand drivers – namely finance and IT/ITeS sectors – took up less space, manufacturing firms were more active. In **Delhi**, rents stayed flat.

In Southeast Asia, **Phnom Penh** saw rents remain stable even as a surge in demand drove down the vacancy rate by 10.0 percentage points. With landlords vying to secure tenants as Hongkong Land's Exchange Square nears completion, this trend is expected to continue. Likewise, in anticipation of an influx of new supply, landlords in **Kuala Lumpur** have become more flexible in their negotiations. On the demand side, the technology, media and telecom (TMT) sector has helped to take up some of the slack left behind by the oil and gas industry. There is also anecdotal evidence that start-ups are moving into prime space. **Jakarta** experienced similar demand dynamics as well. Rents in these two cities slipped marginally. The TMT sector also drove demand in **Bangkok**. Notwithstanding the ongoing political uncertainty, the net absorption of prime space in the quarter was almost two times higher than the 10-year average. With the limited supply in the CBD, this has supported rental appreciation. Meanwhile, **Singapore** continued to be mired in a double whammy of massive supply and weak demand.

The average rent in **Seoul** increased as a 2.3-percentage-point fall in the vacancy rate in the Gangnam Business District lifted rents there. Nearby, the prime vacancy rate in **Tokyo** remained at the tightest level in more than seven years.

FIGURE 4

Asia-Pacific Prime Office Rental Cycle

Source: Knight Frank Research

The diagram does not constitute a forecast and is intended only as an indicative guide to current rental levels. Rents may not necessarily move through all stages of the cycle chronologically.

FIGURE 5

Asia-Pacific Prime Office Rents

↑ Increase
→ No Change
↓ Decrease

City	Submarket(s)	Prime Net Headline Rent	Local Measurement	3-month % change (Q4 2015-Q1 2016)	6-month % change (Q3 2015-Q1 2016)	USD/ sq m/ mth	Gross Effective Rent** USD/sq m/mth	Forecast next 12 mths
Brisbane	CBD	559.6	AUD/sq m/annum (Net Floor Area)	0.2%	0.6%	35.7	28.4	→
Melbourne	CBD	502.0	AUD/sq m/annum (Net Floor Area)	0.0%	1.4%	32.0	31.1	↑
Perth	CBD	579.0	AUD/sq m/annum (Net Floor Area)	-1.6%	-4.3%	36.9	31.4	↓
Sydney	CBD	843.9	AUD/sq m/annum (Net Floor Area)	1.2%	3.2%	53.8	45.9	↑
Phnom Penh	City Centre	22.3	USD/sq m/month (Net Floor Area)	0.2%	-0.4%	22.3	29.3	→
Beijing	Various	375.0	CNY/sq m/month (Gross Floor Area)	2.5%	2.1%	58.0	84.7	↓
Guangzhou	CBD	176.3	CNY/sq m/month (Gross Floor Area)	0.3%	-1.0%	27.3	46.4	→
Shanghai	Puxi, Pudong	292.0	CNY/sq m/month (Gross Floor Area)	2.3%	3.0%	45.2	68.7	↑
Hong Kong	Central	137.1	HKD/sq ft/month (Net Floor Area)	1.1%	5.2%	190.3	189.6	↑
Bengaluru	CBD	1,158.0	INR/sq ft/annum (Gross Floor Area)	0.5%	1.6%	15.7	25.2	↑
Mumbai	BKC	3,190.0	INR/sq ft/annum (Gross Floor Area)	1.3%	2.9%	43.3	69.4	↑
New Delhi	Connaught Place	3,565.0	INR/sq ft/annum (Gross Floor Area)	0.0%	7.9%	48.3	77.6	→
Jakarta	CBD	6,089,220.0	IDR/sq m/annum (Semi-Gross Floor Area)	0.0%	-3.8%	38.5	48.6	↓
Tokyo*	Central 5 Wards	33,995.0	JPY/tsubo/month (Net Floor Area)	3.4%	-4.6%	91.4	90.0	↑
Kuala Lumpur	City Centre	5.4	MYR/sq ft/month (Net Floor Area)	-0.4%	-0.4%	14.7	17.9	↓
Singapore	Raffles Place, Marina Bay	8.8	SGD/sq ft/month (Net Floor Area)	-4.4%	-6.8%	69.8	81.9	↓
Seoul	CBD, GBD, YBD	32,628.8	KRW/sq m/month (Gross Floor Area)	2.6%	3.5%	28.4	66.2	↑
Taipei	Downtown	2,600.0	TWD/ping/month (Gross Floor Area)	-0.2%	-0.4%	24.3	37.2	↑
Bangkok	CBD	861.1	THB/sq m/month (Gross Floor Area)	2.2%	2.6%	24.5	29.7	↑

Source: Knight Frank Research / *Sanko Estate

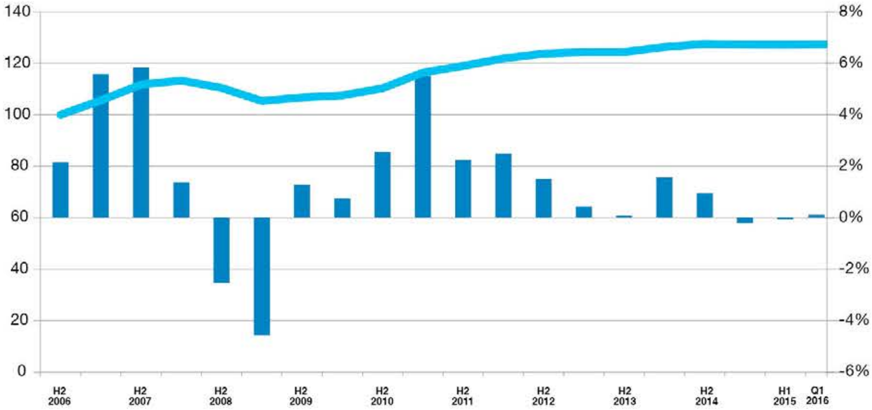
**Inclusive of incentive, service charges and taxes. Based on net floor areas.

Retail | Knight Frank's Prime Shopping Centre Rental Index remains stable

On the retail front, broadly speaking, Asia-Pacific continued to face two main challenges. Cyclically, the macroeconomic environment has not been robust; structurally, online retailers are competing with brick-and-mortar stores for business. As a result, rental growth has been muted. Knight Frank's Prime Shopping Centre Rental Index increased marginally by 0.1% in Q1 2016.

In **Singapore**, excluding motor vehicles, retail sales have been tumbling on a year-on-year basis. It does not help that the Singapore dollar has remained strong, especially against the currencies of its top sources of tourists i.e. Indonesia, China and Malaysia. In addition, tight supply of manpower due to government policy has reduced retailers' demand for space since labour and space are complementary factors of production. Some mall owners have responded to rising vacancies by offering flexible rental terms such as in the form of pop-up stores, while others seized the opportunity to pursue asset enhancement initiatives.

FIGURE 6
Asia-Pacific Prime Shopping Centre Rental Index



Prime Shopping Centre Rental Index (LHS) % Change (RHS)

Source: Knight Frank Research

On a year-on-year basis, retail sales in **Jakarta** have contracted for 26 consecutive months, even as Indonesia as a whole is still enjoying double-digit growth. April 2016, the latest month for which data is available, saw Jakarta register a 5.8% decline, in contrast with the 10.4% growth in Indonesia. Having said that, thanks to a moratorium that limited new supply, the vacancy rate remained low at 7.9% at the end of 2015, as compared to the 10-year average of 13.1%. Rents continued to grow modestly.

Meanwhile, significant supply in the first half of 2016 is driving the overall vacancy rate up in **Kuala Lumpur**, but prime and established shopping centres continued

FIGURE 7
Asia-Pacific Prime Shopping Centre Rental Cycle

Source: Knight Frank Research

The diagram does not constitute a forecast and is intended only as an indicative guide to current rental levels. Rents may not necessarily move through all stages of the cycle chronologically.

FIGURE 8
Asia-Pacific Prime Shopping Centre Rents
Q1 2016

City	Prime Net Headline Rent	Local Measurement	3 mths % change	US$/sq m/mth
Brisbane	1,450.0	AUD/sq m/annum	0.0%	92.5
Melbourne	3,000.0	AUD/sq m/annum	0.0%	191.4
Sydney	3,105.8	AUD/sq m/annum	0.0%	198.1
Beijing	41.5	CNY/sq m/day	-0.8%	195.3
Guangzhou	19.2	CNY/sq m/day	0.3%	90.3
Shanghai	55.7	CNY/sq m/day	0.7%	262.1
Hong Kong	1,149.0	HKD/sq ft/month	1.0%	1,595.0
Jakarta*	9,051,127.7	IDR/sq m/annum	1.0%	57.2
Kuala Lumpur	1,938.2	MYR/sq m/annum	0.0%	41.1
Singapore	389.4	SGD/sq ft/annum	-0.1%	258.3

* Q4 2015

Source: Knight Frank Research

to enjoy high occupancy rates in excess of 90%. On the demand side, a weak Malaysian Ringgit has meant higher import costs for retailers and lower purchasing power for consumers, who have gone online for cheaper options.

China is also seeing abundant supply pushing vacancy rates up. After rapid expansion during the boom period, many luxury brands are now consolidating. The new tax regime implemented in April, however, may lend brick-and-mortar stores some support, as overseas purchase of high-end products became more expensive. While retail sales in **Shanghai** and Guangdong province – including **Guangzhou** – grew by 7.1% and 9.8% respectively in Q1 2016, **Beijing** only saw a 2.2% increase; as a result, the rental performance in the capital is the weakest among the three cities. A strong supply pipeline will exert downward pressure on rents going forward.

Retail sales growth in Australia is also trending down, albeit still positive. The trend growths in New South Wales and Victoria – proxies for **Sydney** and **Melbourne** respectively – are still robust at above 4% year-on-year in April 2016. However, Queensland, where **Brisbane** is located, only managed a 1.1% growth. Despite this, international retailers are still driving leasing demand in Australia. In particular, with the bulk of refurbished and new developments already pre-leased, we are now expecting accelerating rental growth in Sydney.

MODERN RETAIL POTENTIAL IN INDIA

While much attention has been paid to the Chinese and Southeast Asian retail markets, India with an enormous consumption base and undergoing rapid modernisation has one of the largest market potentials. Below we identify the existing modern retail in India's three largest markets.

Bengaluru
Shopping streets dominate the retail scene in Bengaluru. They constitute 60% of the total modern retail space, demonstrating the ability of traditional markets to adapt by recognising and attuning themselves to the rising demand for modern retail.

Retail expenditure totalled INR640 billion (US$9.6 billion) in 2015, of which 24.1% or INR154 billion was incurred in a modern retail setting, suggesting a significant potential for modern retail to grow.

Mumbai
The penetration of modern retail is extremely low in the Mumbai Metropolitan Region (MMR), primarily due to the haphazard way retail markets are organised across the city, unlike Bengaluru and the National Capital Region where shopping streets are transforming into modern retail destinations. The market size of modern retail in the MMR stood at INR164 billion in 2015, just 13.5% of the total retail expenditure. This implies that modern retail in the MMR has the greatest growth potential among the three main Indian cities. Expanding at a compound annual growth rate of 23.5%, the market size of modern retail is expected to reach INR381 billion in 2019.

National Capital Region
Approximately 59% of the modern retail stores in the NCR are located along shopping streets. However, in terms of modern retail space, high streets accounted for a smaller proportion of 43%.

At INR 269 billion, the market size of modern retail represented 25.7% of the total retail expenditure in 2015.

REAL ESTATE INVESTMENT MARKETS

Singapore and Hong Kong register largest deals in first half of 2016

Asia-Pacific saw a subtle change in direction in the first half of 2016, as Singapore and Hong Kong returned to the forefront of the region, accounting for the three largest investment transactions. Meanwhile, in Australia and Japan, the two largest real estate markets in terms of investment-grade transaction volumes, prime liquidity started to look a little exhausted, as volumes dropped below the levels seen over the previous three years.

The purchase of Asia Square Tower 1 in **Singapore** by Qatar Investment Authority (QIA) for S$3.4 billion (US$2.5 billion) from BlackRock broke the record for the largest deal in Asia-Pacific. The second and third largest went to **Hong Kong**, with the sale-and-leaseback of Chinese Estates' interest in the Mass Mutual Tower to Evergrande for HK$12.5 billion (US$1.6 billion) and the purchase of Dah Sing Financial Centre by China Everbright for HK$10 billion (US$1.3 billion). Total trading was not restricted to these three deals, which were accompanied by a number of other significant transactions boosting volumes after a quiet 24 months in both markets.

Meanwhile in **Japan**, the lack of prime office stock for purchase in Tokyo's CBD has led many investors to look further afield at the more secondary markets. Negative interest rates introduced by the Bank of Japan (BOJ) however have failed to halt the appreciation of the Yen, impacting offshore investors looking at the Japanese market.

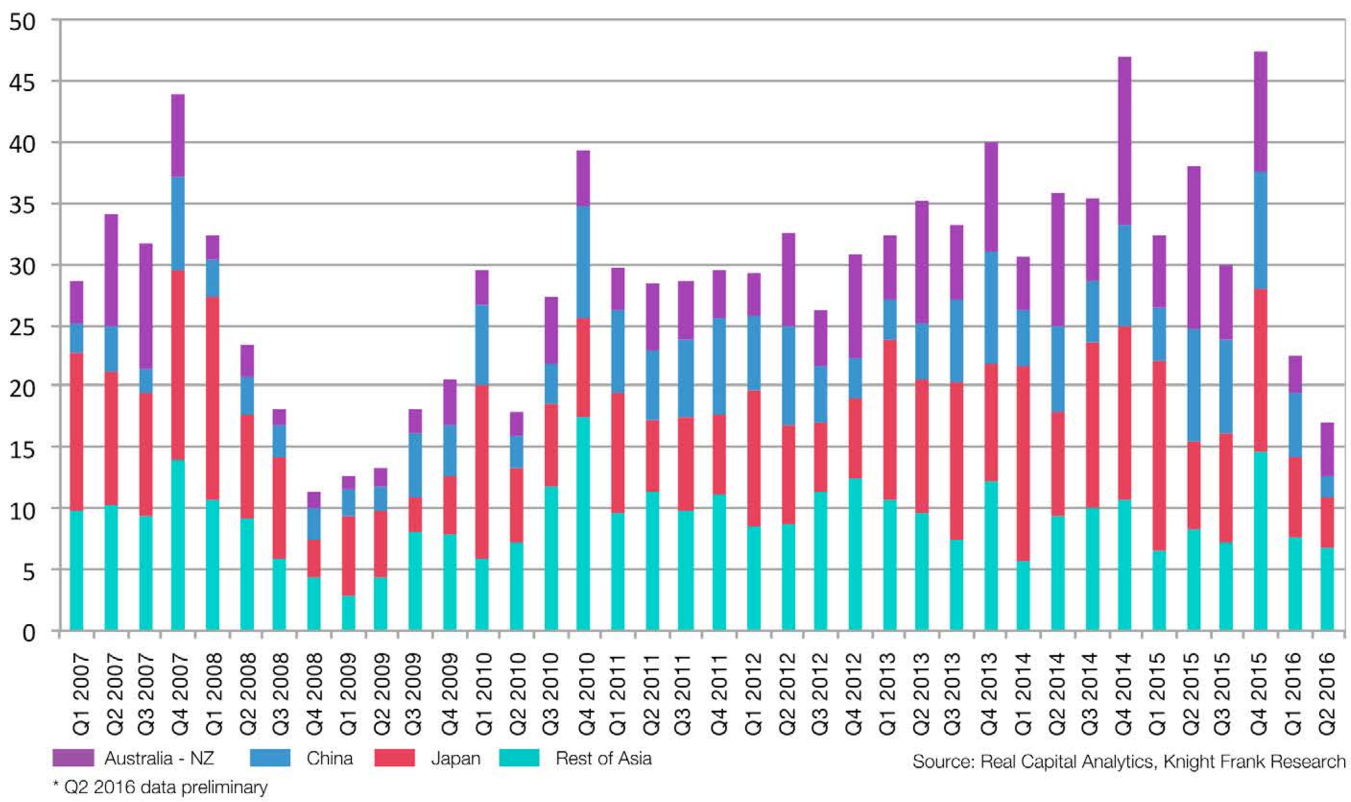
Similarly in **Australia**, Investa Property's (ICPF) purchase of a 75% interest in 420 George Street for AU$442.5 million (US$340 million) and Charter Hall's acquisition of the Macquarie Bank Building at 1 Shelley Street for AU$525 million (US$379 million), both in the Sydney CBD, demonstrate the continued strong demand for core, prime assets. However, due to the reduction in available assets for purchase, there is a likelihood that secondary and suburban assets will continue to be considered more strongly over the coming months and year.

In **China**, prime assets in Shanghai and Beijing continue to emerge as alternative core markets on a number of institutional investors' wish lists, with the strong liquidity recorded in Shanghai at the back end of 2015 continuing into 2016. Notably, Corporate Avenue 3 was acquired by a joint venture between Lee Kum Kee and developer China Vanke for RMB5.7 billion (US$865 million).

India, which has attracted attention from international groups over the last 24 months, continues to benefit from positive sentiment in the commercial property market, demonstrated by

FIGURE 9

Asia-Pacific Investment Volumes (US$ billion, excluding land sales)



Source: Real Capital Analytics, Knight Frank Research

* Q2 2016 data preliminary

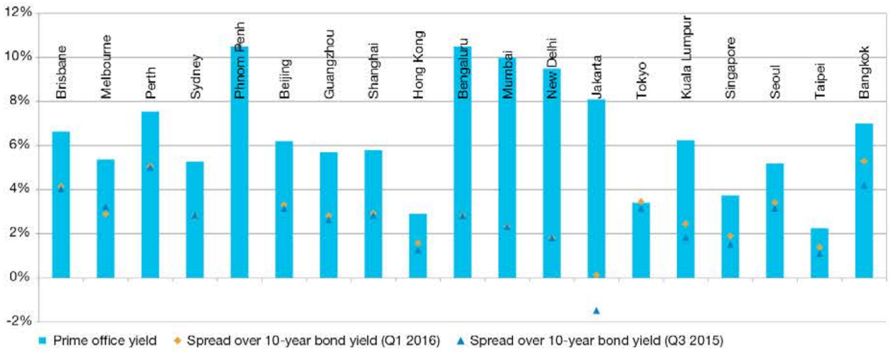
Brookfield's pending purchase of Hiranandani Business Park in Powai, Mumbai for a reported US$1 billion. The relaxation of the rules for foreign investors, strong growth in leasing demand for commercial real estate, infrastructure upgrades and some ambitious national plans have enhanced its appeal to long-term, patient investors.

Negative interest rates in Japan to prolong yield compression cycle?

The move by the BOJ in January to introduce negative interest rates is likely to prolong the yield compression cycle in Japan. Meanwhile, the delay in rate tightening by the US Federal Reserve will ensure that debt remains cheap for longer, especially in countries with pegged currencies, notably Hong Kong and Singapore, reinforcing the appeal of prime properties. While a number of markets are approaching their peaks, the significant amount of capital still searching for yield will ensure that yields continue to compress or stay stable in the majority of the key markets, throughout the remainder of 2016.

FIGURE 10

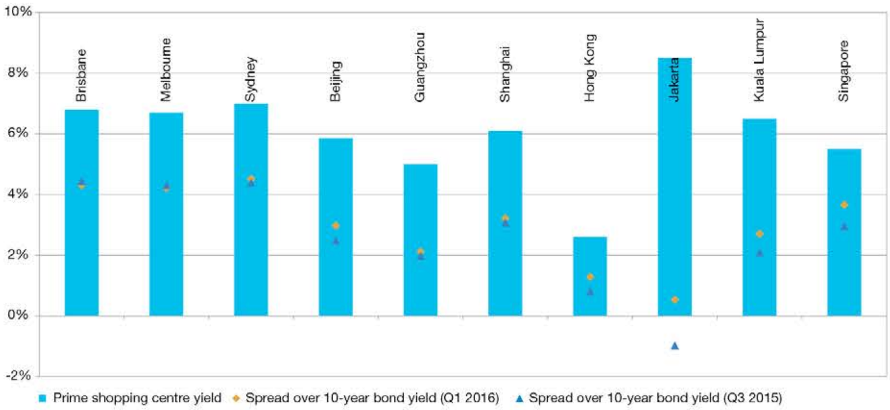
Office Yields and Spreads over 10-Year Bond Yields



Source: Knight Frank Research

FIGURE 11

Shopping Centre Yields and Spreads over 10-Year Bond Yields



Source: Knight Frank Research

US AND SINGAPORE: THE LARGEST CROSS-BORDER PURCHASERS IN THE REGION

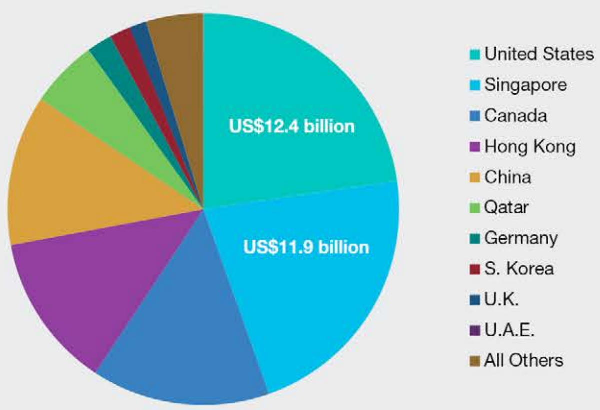
Cross-border activity (excluding land sales) in Asia-Pacific markets totalled US$54.5 billion over the past 18 months since 1 January 2015, accounting approximately one-third of the total investment volumes.

The US is the most significant cross-border investor in the region, followed closely by Singapore, Canada, Hong Kong and China.

The major targeted markets remain Australia, Japan, China, Singapore and Hong Kong, although transactions in India, Vietnam and Malaysia demonstrate that there are opportunities in emerging Asia for those investors looking up the risk curve.

FIGURE 12

Asia-Pacific Cross-Border Investment Volumes by Country of Origin (18 months since 1 January 2015)



Source: Real Capital Analytics, Knight Frank Research

FIGURE 13

Selection of Recent Major Transactions

Property Name	Market	Type	Buyer	US$m	Comments	Date
Macquarie Group Building	Sydney	Office	Charter Hall, Morgan Stanley	379	Consists of Macquarie Bank as the sole tenant.	May-16
Southern Cross	Melbourne	Office	Blackstone	484	50% interest. Consists of 124,778 sq m of NLA of office spance and 2,265 sq m of retail space. Tenants in SX East include Department of Treasury and Finance and Department of Transport. SX West fully occupied by Australian Post.	Dec-15
Plot OS-06A, OS-10B, North of Beitucheng Middle Road, Chaoyang District	Beijing	Dev Site	Beijing Urban Construction, Beijing Inno-Olympic	631	Retail development.	Jan-16
Plot AH040163, Pazhou West, Zhuhai District	Guangzhou	Dev Site	Guangzhou Industry and Commerce Union Investment, Guangdong Highsun, Guangzhou Yuetian Investment Management, Guangzhou Jingheng Investment	330	Commercial development.	Feb-16
Corporate Avenue 3	Shanghai	Office	Lee Kum Kee, China Vanke	865	Consists of 30,800 sq m of retail space.	Feb-16
Dah Sing Financial Centre	Hong Kong	Office	China Everbright	1,287	Bought for both self-occupancy and lease.	Feb-16
HBP Powai	Mumbai	Office	Brookfield Asset Management	1,000	Tenants include Tata Consultancy Services, Nomura and Deloitte.	Pending
Grand Pacific Le Daiba Hotel	Tokyo	Hotel	Hulic	630	884 rooms. Renting to Hotel Okura.	May-16
Asia Square Tower 1	Singapore	Office	Qatar Investment Authority	2,504	Comprises 3,644 sq m of retail space. Tenants include Citigroup and Julius Baer.	Jun-16
Jongno Tower	Seoul	Office	IGIS, Alpha Investment Partners	322	Sold and leased back by Samsung Life Insurance.	Apr-16
Shin Kong Mitsukoshi A8	Taipei	Retail	Fubon Financial	843	-	Dec-15
Silom Road and Convent Road Sathorn	Bangkok	Dev Site	Hua Kee, Minor International	132	Mixed commercial development.	Feb-16

Source: Real Capital Analytics, Knight Frank Research

Development land | Land investment volumes match previous year's level

In H1 2016, development land investment volumes in Asia matched the level registered in the corresponding period last year. As compared to the preceding six months, however, they were 40.4% lower, as land markets tend to be more active in the second half of the year, which accounts for 60% of the transactions historically. With state-owned enterprises purchasing land aggressively, China, which accounts for more than 90% of the deals in Asia, saw a 6.0% year-on-year increase in volumes. Meanwhile, a few big-ticket transactions boosted volumes in Thailand by 190.4%.

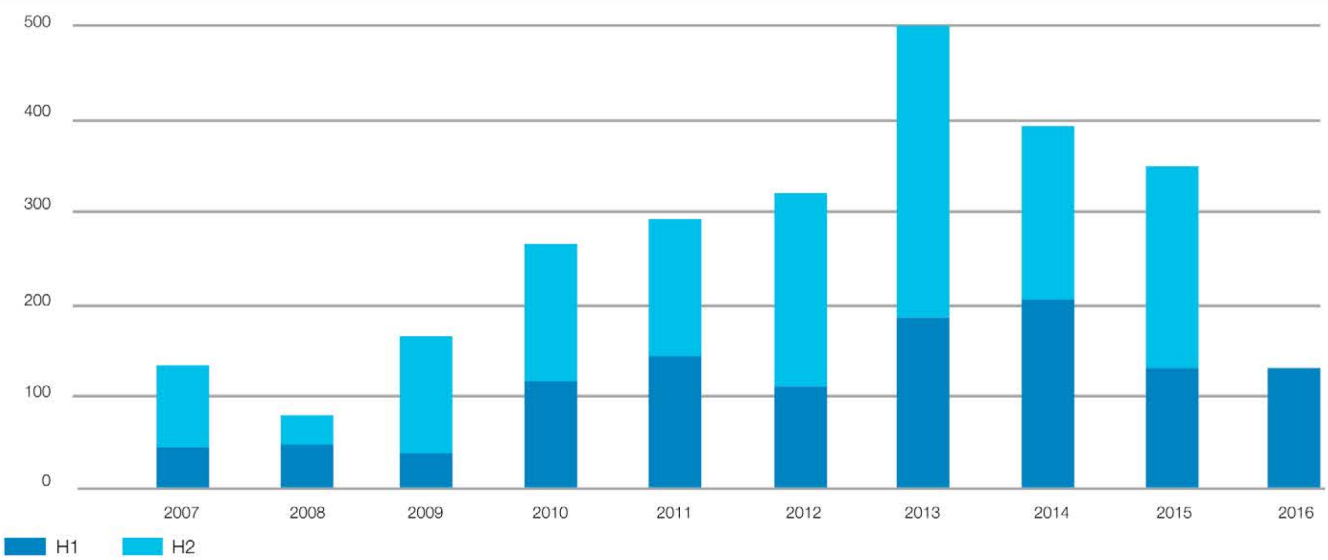
By area, transactions continued to shrink, falling 19.3% year-on-year in H1 2016, meaning that the investment volumes were supported by rising per unit area prices.

Cross-border land investment volumes fell by 11.5% year-on-year. Part of the reason is that while Chinese developers have previously snatched up land in Hong Kong and Singapore, they now appeared to have joined their local counterparts to become more cautious amid the ongoing correction in housing prices in these markets; as a result, China bought 88.8% less land year-on-year in the rest of Asia.

FIGURE 14

Development Site Investment Volumes in Asia

US$ Billion, development sites > US$ 10 million



* H1 2016 data preliminary

Source: Real Capital Analytics, Knight Frank Research

NATURAL VACANCY RATE AND RENTAL GROWTH

In this section, the notion of a natural vacancy rate, below which rents tend to rise, based on historical data is examined.

One interesting finding is that the natural vacancy rates in the developing markets we track are manifestly higher. They averaged 17.3%, twice as high as the 8.6% mean for developed markets. However, the disparity in the (unweighted) average vacancy rates at the end of Q1 2016 – 11.8% versus 10.0% respectively – was much smaller. The fact that the average vacancy rate in developing markets was lower than the average natural rate suggests that rents should have increased. In fact, the rental growth in developing markets averaged 0.8% in Q1 2016. Likewise, developed markets experienced an average rental decline of 0.2%.

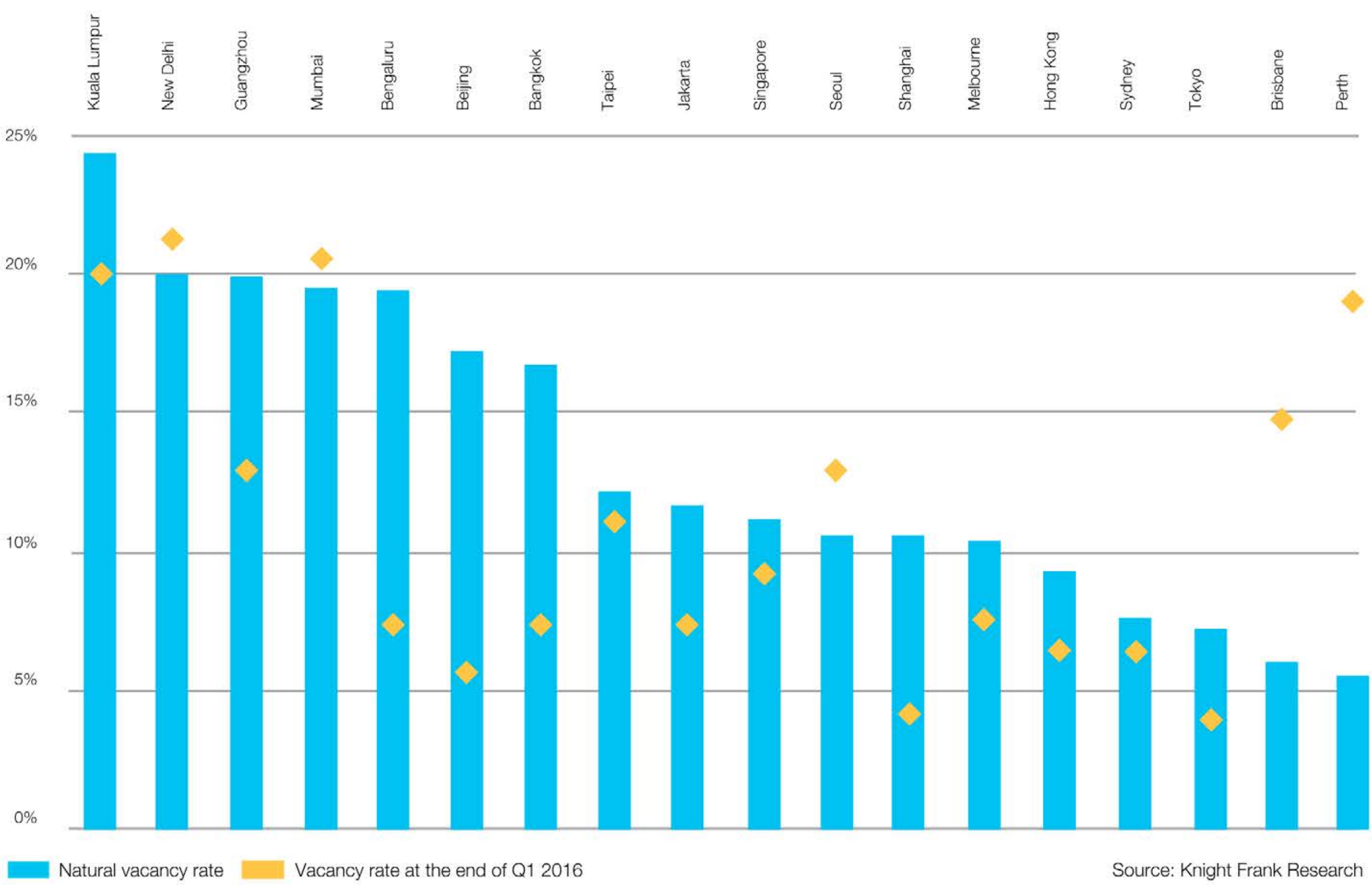
Zooming in on individual cities, Bengaluru is the furthest below its natural vacancy rate, while Perth has the largest positive gap.

Analogous to the natural unemployment rate, the natural vacancy rate can be thought of as comprising two aspects: frictional and structural. The former occurs simply because landlords take time to find tenants. Functional and locational obsolescence accounts for the latter. These happen when an office building does not match the requirements of tenants in terms of specifications or location. For instance, when an industrial space is converted into an office building, the ceiling height, floor plate and floor plan may fall short of expectation. Given the strong presence of office leasing agencies in all the cities we cover, frictional vacancy is likely relatively homogeneous across the markets. The disparity in natural vacancy rates is probably better explained by the structural aspect: with better specifications, the buildings in the baskets for developed markets enjoy lower structural vacancy.

The natural vacancy rate also appears to be time dependent. It settles at a higher level during an upswing, as strong business sentiment drives leasing demand and hence rental growth even when vacancy rates are relatively high. On the other hand, the steady state is lower during a downturn. This illustrates the limitation of having a single natural vacancy rate for all phases of a market cycle.

FIGURE 15

Office Natural Vacancy Rate vs Latest Vacancy Rate



Source: Knight Frank Research

RISKS	As a record amount of local debt matures in China this year, potential defaults may cause gyrations in the financial markets.
	A prolonged or sharp slowdown in the Chinese economy would further weigh on the region through the trade channel, affecting office and retail leasing demand.
	Following Brexit, the US Federal Reserve appeared inclined to keep interest rates at ultra-low levels, aggravating financial distortions. If the US economy grows at a more rapid pace than the market expects presently and consequently interest rates increase faster than what is currently priced in, the financial markets could experience more volatilities moving forward. The Indonesian Rupiah appears particularly vulnerable.
	In the long run, the rise of populism that Brexit epitomised in the West does not bode well for globalisation which export-oriented economies in Asia rely and thrive on.
OPPORTUNITIES	Potential further monetary easing in Australia and Japan for instance could: – increase yield spreads; – create opportunities for currency play to foreign investors; and – weaken currencies and buoy tourist arrivals, supporting the hotel and retail industries.
	In the aftermath of Brexit, uncertainties in the UK could lead to an increased appetite for assets in Asia-Pacific.
	The booming e-commerce sector is still creating demand for prime logistics space across the region.
	The developments of infrastructure such as the industrial corridors in India and railways in the Mekong region present opportunities to investors with stronger risk appetite.

Source: Knight Frank Research

ASIA PACIFIC RESEARCH

Nicholas Holt
Asia Pacific Head of Research
+65 6429 3595
nicholas.holt@asia.knightfrank.com

Ying Kang Tan
Asia Pacific Senior Research Analyst
+65 6429 3589
yingkang.tan@asia.knightfrank.com

GLOBAL CAPITAL MARKETS

Neil Brookes
Asia Pacific Head of Capital Markets
+65 6429 3585
neil.brookes@knightfrank.com

ASIA PACIFIC CAPITAL MARKETS

Australia
James Parry
+61 2 9036 6758
james.parry@au.knightfrank.com

China
Alan Liu
+86 21 60321700
alan.liu@cn.knightfrank.com

Hong Kong
Paul Hart
+852 2846 9537
paul.hart@hk.knightfrank.com

India
Rajeev Bairathi
+91 99997 05552
rajeev.bairathi@in.knightfrank.com

Indonesia
Willson Kalip
+62 21 570 7170 (100)
willson.kalip@id.knightfrank.com

Japan
Daisuke Naoi
+65 6429 3597
daisuke.naoi@asia.knightfrank.com

Malaysia
James Buckley
+6010 511 4906
james.buckley@my.knightfrank.com

New Zealand
Layne Harwood
+64 3 377 1460
layne.harwood@nz.knightfrank.com

Singapore
Ian Loh
+65 6228 6823
ian.loh@sg.knightfrank.com

Taiwan
Michael Tseng
+866 2 8729 8700
michael.tseng@repro.knightfrank.com

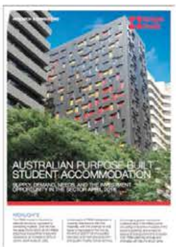
Thailand
Phanom Kanjanathiemthao
+66 2 643 8223
phanom.kanjanathiemthao@th.knightfrank.com

Knight Frank Commercial Research provides strategic advice, consultancy services and forecasting to a wide range of clients worldwide including developers, investors, funding organisations, corporate institutions and the public sector. All our clients recognise the need for expert independent advice customised to their specific needs.

RECENT MARKET-LEADING RESEARCH PUBLICATIONS

The Wealth Report 2016

Prime Asia Development Land Index H2 2015



Australian Student Accommodation Insight - April 2016

India Retail Market - Think India. Think Retail. 2016

Knight Frank Research Reports are available at **KnightFrank.com/Research**

Knight Frank