

# GLOBAL CITIES

THE 2016 REPORT

THE FUTURE OF REAL ESTATE IN  
THE WORLD'S LEADING CITIES



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380

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MILLION

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THE NUMBER OF NEW CITY DWELLERS  
GLOBALLY IN THE NEXT FIVE YEARS.  
THE EQUIVALENT OF THREE TIMES  
THE POPULATION OF JAPAN

# TRAINS, PLANES AND GLOBAL CITIES

Rapid population growth and infrastructure projects will create opportunities in cities around the world



JOHN SNOW  
Head of Commercial, Knight Frank



JAMES D. KUHN  
President,  
Newmark Grubb Knight Frank

The UN is forecasting the world's cities to increase in population by 380 million people in the next five years. Consequently, the planet will need to build the equivalent of five cities the size of Los Angeles every year between now and 2020, and all the supporting infrastructure.

The development potential of this rapid urbanisation is huge, offering considerable opportunities to firms and investors that operate globally.

Knight Frank and Newmark Grubb Knight Frank would like to brief you on what this will mean for your business. Consequently, we have asked our researchers around the globe, from Los Angeles to Delhi, from São Paulo to Beijing, to draw together a comprehensive outlook for real estate in 21 of the leading business cities. This is Global Cities: The 2016 Report.

We also this year include a Watch List of five cities we believe are set to play a bigger role in the global business community in the coming years. These up and coming centres range from Nairobi in Kenya, which demonstrates Africa's rapid modernisation, to Dubai in the U.A.E., which has pulled clear of past difficulties and is expanding as a hub for investment, tourism and transport.

The cities covered by this report are very different in character, but a common theme among them is new infrastructure development. The Global Cities are

awash with cranes as airports, high speed railways, underground railways, port facilities, and power stations are being constructed. Cities like Mumbai and São Paulo are playing catch-up, bringing in the infrastructure to match the rapid population growth. Mature centres like Paris and London, having reversed population decline in the past are laying new rail lines in anticipation of swelling future numbers of commuters and tourists. Places like Dubai and Beijing are developing mega airports in order to maintain the momentum behind their commercial success.

Whatever the reasons behind the new wave of infrastructure projects, they will reshape the Global Cities. New business districts will emerge, creating gentrification in former industrial districts, and in turn necessitating the development of new homes, shopping centres, leisure facilities, and offices. All this will be underpinned by an advanced logistics system, which starts at the factory gate on one continent and ends with a home delivery thousands of miles away.

Real estate will play an essential part in all of this, and Global Cities: The 2016 Report aims to brief you on where the opportunities are to be found. We hope this study will be a useful tool to assist with your business planning for 2016. Feel free to contact either of us should you wish to discuss the report's conclusions further.



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**GLOSSARY**

- ABW:** Activity-Based Working
- Bn:** Billions
- CBD:** Central Business District
- GDP:** Gross Domestic Product
- GFC:** Global Financial Crisis
- LHS:** Left Hand Scale
- M:** Millions
- PSF:** Per Square Foot
- RHS:** Right Hand Scale
- Sq ft:** Square Feet
- TAMI:** Technology, Advertising, Media & Information
- TMT:** Technology, Media and Telecoms



# THE SUPER CITIES

*The Global Cities are about to see huge growth, and their real estate markets need to be ready for new waves of citizens, firms and global investors*

✦ WRITTEN BY  
James Roberts,  
Chief Economist, Knight Frank

The UN is forecasting the global urban population to grow by 380 million people by 2020, which if correct means demand for city real estate is about to surge. The development potential of this forecast growth is huge, when one considers all the new homes, offices, shops, logistics centres and infrastructure projects that such rapid expansion would necessitate.

Cities in high-income countries are projected to rise in population by 34 million by 2020, the equivalent of three cities the size of Paris. City populations in middle-income countries are forecast to increase by 290 million people over the same period, which is about 12 cities the size of Shanghai.

#### THE INVESTOR'S DILEMMA

The dilemma faced by today's global real estate investor is whether to buy into the slower growth established cities in the high-income countries, or the faster growing but riskier emerging markets. While the rapid growth in emerging markets speaks for itself, the strengths of the mature cities are sometimes overlooked. While Shanghai has more than twice the population of Paris, GDP per capita is four times higher in the French capital, a consideration when buying lifestyle-related property like retail or leisure.

Also, rather than anyone building a 'new Paris', in wealthier countries we expect new city dwellers to settle in existing cities that will expand accordingly. Being long-established centres, they will find international investors willing to fund the necessary development. In emerging markets, where towns can transform into cities in a few years, a share of the projected growth could be in cities that are so new it would be ambitious for an overseas investor to buy there. Since 1990, an estimated 470 new cities have been established in Asia, of which 393 were in China and India.

Expansion for the newer emerging market cities will probably be funded by local investors. International investment is more likely to look at either established centres or the emerging cities that have moved into the global league, like Beijing or Bengaluru. This is not to say the developing world does not offer opportunities. There can be the opportunity to exploit transformational change if rapid growth is well managed. Indeed, on satellite maps there is now an identifiable super city along China's Pearl River delta, encompassing Hong Kong, Shenzhen, Guangzhou and Macao, that is home to an estimated 120 million people. With the UN predicting China's urban population to grow by 95 million by 2020, more super cities will appear. Similarly, Indian government policy is pushing an 'industrial corridor' between Mumbai and Delhi.

Therefore, we expect property investors to seek a balance of growth and diversification in a global property portfolio.

#### SOURCES OF CAPITAL

Next year, we expect two major sources of capital to be particularly active, namely North American money into the global market and opportunist domestic money in Europe.

The dollar has strengthened on currency markets, while the spread between U.S. real estate and bond yields has narrowed. Recent economic indicators suggest that the Eurozone is through the worst, and we expect U.S. capital to look to exploit recovery opportunities. Current evidence suggests a pattern of both direct investment and providing non-bank finance.

CONTINUED FROM 08-09

We also believe more European money will re-enter the property market, given the very low level of government bond yields. This has made property yields look comparatively high, which is drawing buyers into the market. As a result, in many European markets sales volumes are picking up, and prices are once again rising.

Expectations of how low property investment yields can go are about to be tested, given we have seen negative yields for some European bonds in 2015. In London, property yields have fallen below 2007 levels while still maintaining a healthy spread over government bonds. This is because old norms on pricing have been rendered obsolete by a changed financial landscape, and economic recovery should spread this effect to other cities in Europe.

#### OCCUPIERS LOOK ABROAD

Just as real estate investors are looking further afield for opportunities, so are corporate occupiers.

New patterns of economic growth since the Global Financial Crisis (GFC) have created extra pressures on companies to operate worldwide. In contrast to the

Regent Street,  
London, U.K.



general rising tide in the global economy prior to the GFC, today growth is patchy and good news in one geographic region is usually counterbalanced by slowdown elsewhere. Companies need to be able to redeploy capital and people around the world according to where the next opportunity is appearing.

Office demand is in many markets coming from new sources. The new wave of technology firms that have driven the North American and U.K. office markets in recent years are now setting up outposts in Asia and continental Europe.

Also, among occupiers in the sub-20,000 sq ft size bracket we are seeing more office deals by firms that blur the lines between technology and other industries. These are often technology-driven media companies, and FinTech firms that bridge the worlds of finance and IT.

#### "CITIES IN HIGH INCOME COUNTRIES ARE FORECAST TO RISE IN POPULATION BY 34 MILLION PEOPLE BY 2020"

Flexible offices are another growth area, particularly collaborative offices. These operate like tech incubators, where independent entrepreneurs work side by side in a communal office.

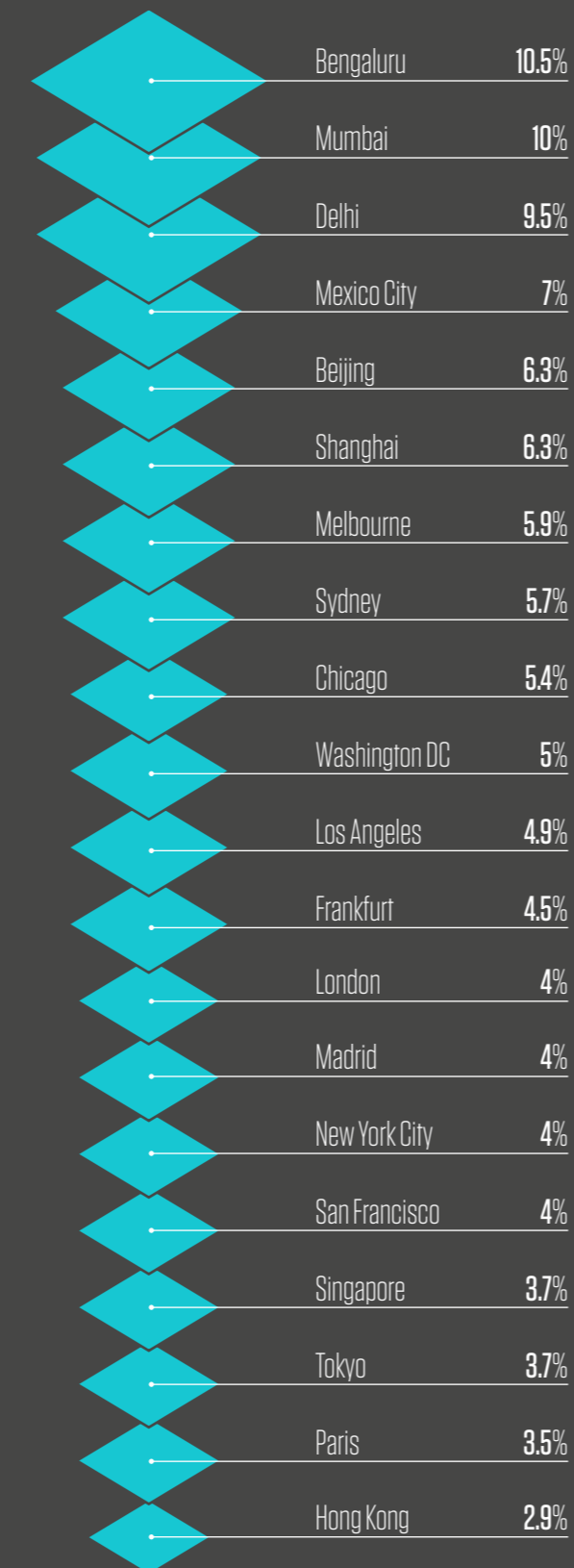
#### NO GUARANTEE OF A DESK

Many occupiers increasingly view offices as an effective means of controlling the bigger and more damaging business cost of staff attrition. Whereas in the past an office relocation was largely managed by the finance director, increasingly the chief executive and the head of human resources are showing an interest, now that staff retention is featuring within the decision making process.

The trend is towards a workplace that increases staff satisfaction, with features that make the whole work experience more pleasurable, from games rooms

#### PRIME YIELDS - END OF 2015 FORECAST

Source: Knight Frank Research, Newmark Grubb Knight Frank Research, Sumitomo Mitsui Trust Research Institute



to free food and yoga areas. Fit-out is changing to match how people work, with informal meeting areas displacing desks.

The move towards non-desk workspace is delivering efficiency savings. In Sydney, a growing number of firms are no longer providing desks for all their workers. This is based on the idea that a percentage of staff are not in the office at any given time, and non-desk work areas can cater for a fluid traffic of those who come and go during the course of a day.

In the future, rather than consisting of rows of desks, the office could be an expansive series of meeting places – some built around chance encounters, others more formal or designed for quiet concentration. Firms need to adapt to these workplace changes that can improve communication, raise the quality of life in the office, and save money.

#### DIVERSIFICATION AND FLEXIBILITY

The key words are now diversification and flexibility. Both investors and occupiers need to be able to quickly redeploy to wherever in the world growth is appearing, given the global economy

is seeing multiple economic cycles set at different stages. A diverse investment portfolio, or office network in the case of the occupier, is the best way of being able to catch the next rising tide.

To exploit these opportunities, investors and occupiers need to be operating in cities that have the flexibility to respond to their changing needs. A city must have a dynamic labour market for the occupier to recruit the right workers, while investors need a fluid investment market to deploy funds or exit with speed.

For both the investor and the occupier the Global Cities are a strong option. They offer liquidity to the investor and wholesale access to workers and customers to the occupier. Those who view themselves as global operators will always want a presence in the 26 cities discussed in this report.

#### SUPER CITIES

Pudong district, Shanghai, China



#### SUPER CITIES

# SKYSCRAPER INDEX



London and San Francisco are seeing the fastest rental growth for high-rise offices

"LONDON RECORDED THE HIGHEST RENTAL GROWTH - NEARLY 11%"

In our latest Skyscraper Index, based on Q2 2015 data, Hong Kong retains the title of the most expensive place in the world to rent office space in a tower building. However, other cities are seeing considerably greater rental growth, reflecting stronger office markets elsewhere in the world.

London recorded the highest level of rental growth – nearly 11% in the six months to June. This is partly thanks to a buoyant occupier market, which has left the vacancy rate at a 14 year low. Also, several high profile new tower completions have delivered space to the market capable of setting new benchmark levels for rents.

Hot on the heels of London is San Francisco, where the office market continues to benefit from the city's expanding technology sector. Rental growth for tower buildings exceeded 8%, which is considerably higher than any other U.S. city in the study.

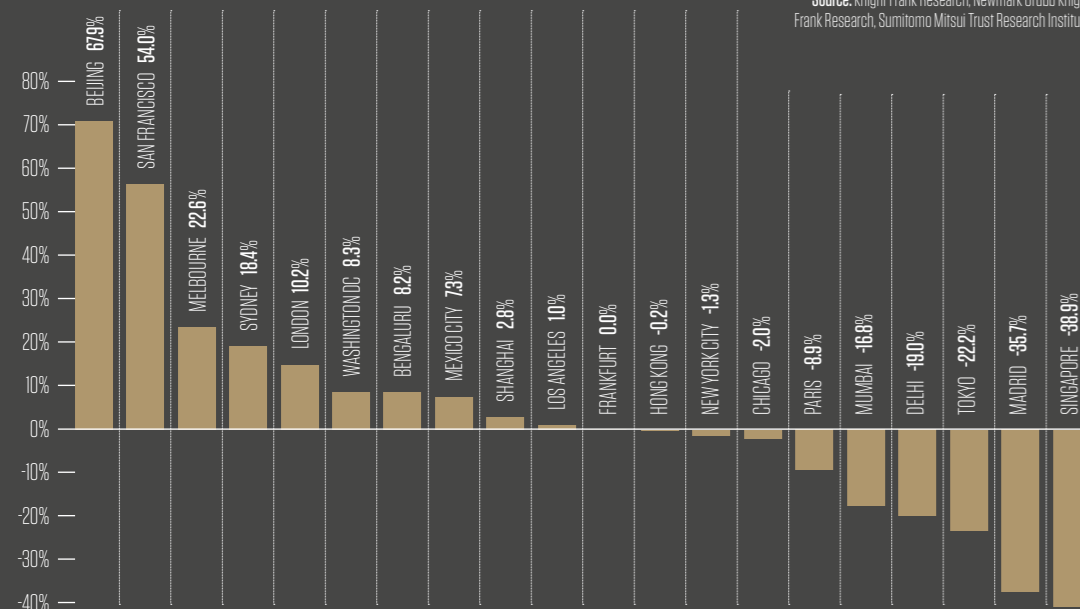
City	Prime rent (U.S./sq ft/yr)	Six months growth*
Hong Kong	\$255.50	1.9%
New York City	\$153.00	2.0%
Tokyo	\$125.00	3.4%
London	\$122.00	10.7%
San Francisco	\$105.00	8.2%
Singapore	\$93.25	1.2%
Sydney	\$86.50	0.7%
Moscow	\$79.00	0.0%
Boston	\$75.00	0.0%
Los Angeles	\$73.00	0.0%
Shanghai	\$72.75	5.3%
Chicago	\$68.00	4.6%
Beijing	\$67.00	-1.0%
Paris	\$56.75	1.9%
Frankfurt	\$53.25	0.0%
Mumbai	\$52.00	1.3%
Melbourne	\$46.25	0.0%
Dubai	\$43.50	0.0%
Madrid	\$38.50	3.3%
Taipei	\$37.00	0.0%
Seoul	\$33.50	2.6%

\*Q4 2014 to Q2 2015, excluding exchange rate fluctuations. Currency conversions as at 30/06/15

Source: Knight Frank Research, Newmark Grubb Knight Frank Research, Sumitomo Mitsui Trust Research Institute

#### OFFICE RENTS - CHANGE ON 2007 BASED ON END OF 2015 FORECAST

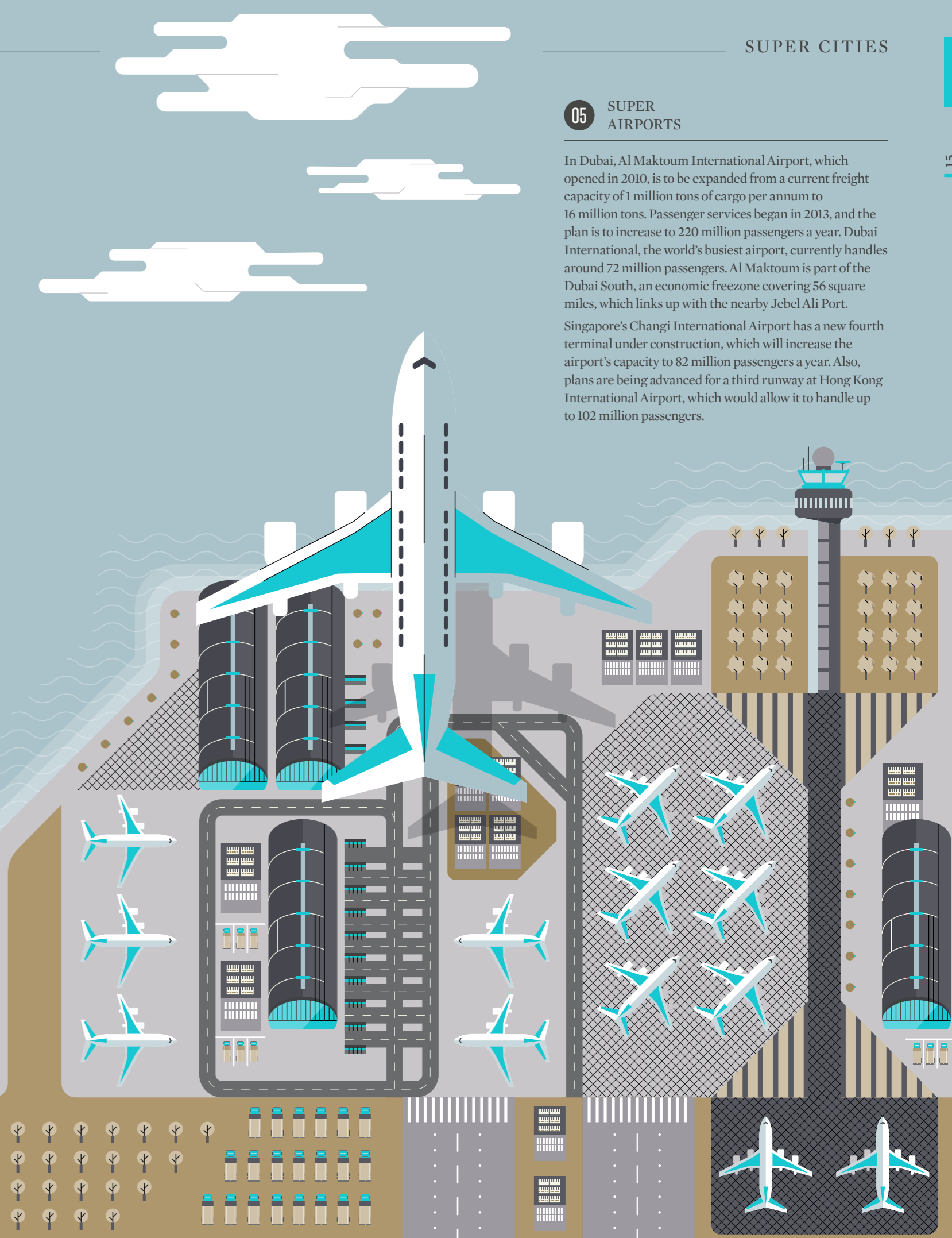
Source: Knight Frank Research, Newmark Grubb Knight Frank Research, Sumitomo Mitsui Trust Research Institute



05 SUPER AIRPORTS

In Dubai, Al Maktoum International Airport, which opened in 2010, is to be expanded from a current freight capacity of 1 million tons of cargo per annum to 16 million tons. Passenger services began in 2013, and the plan is to increase to 220 million passengers a year. Dubai International, the world's busiest airport, currently handles around 72 million passengers. Al Maktoum is part of the Dubai South, an economic freezone covering 56 square miles, which links up with the nearby Jebel Ali Port.

Singapore's Changi International Airport has a new fourth terminal under construction, which will increase the airport's capacity to 82 million passengers a year. Also, plans are being advanced for a third runway at Hong Kong International Airport, which would allow it to handle up to 102 million passengers.



03 THE DELHI-MUMBAI INDUSTRIAL CORRIDOR

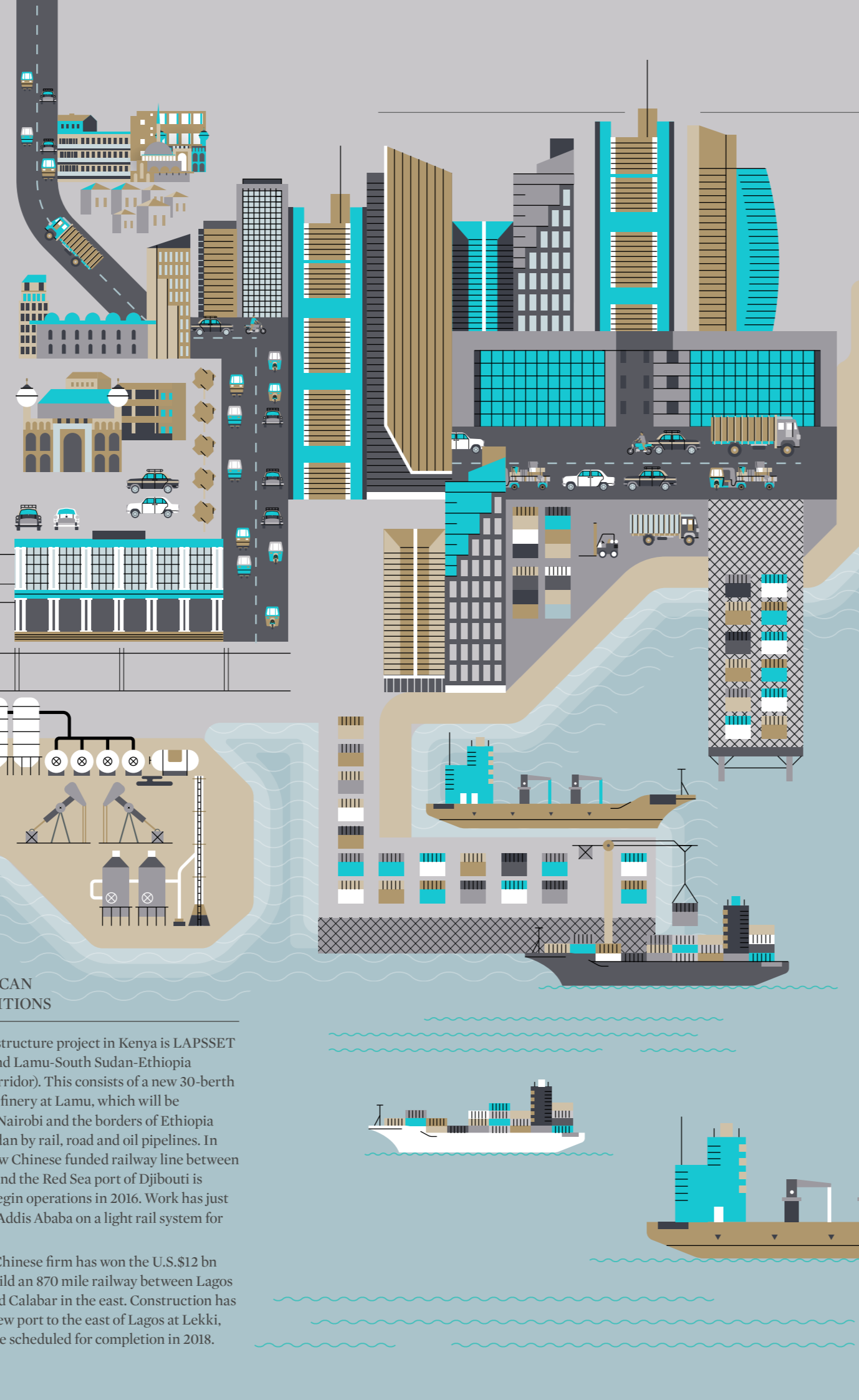
The Delhi-Mumbai Industrial Corridor (DMIC) is a development zone that will be targeted for investment to build up new industries to support India's rapid urbanisation. The project will be partly backed by Japanese investment. The transport backbone will be a freight rail line called the Dedicated Western Freight Corridor, which is intended to push down logistics costs in the region.

Along the corridor, smart cities are to be developed, as well as three new seaports and six airports. The city of Dholera has been declared a Special Investment Region, with a target of tripling industrial output and quadrupling exports in the next five years. The long-term goal is to create a new mega city for India. IBM and Cisco have been contracted to transform Dholera into a smart city.

04 EXPANDING THE PANAMA AND SUEZ CANALS

Presently ships queue up to transit the Panama Canal, whose original locks are restricted to 'Panamax' ships that carry around 5,000 containers. A new set of locks completes construction in 2016 that will offer passage to 'post-Panamax' ships that can carry up to 13,000 containers. Port facilities around the world are being expanded to handle post-Panamax ships, creating development opportunities for real estate investors.

The Suez Canal's lane has just been doubled in width to allow ships to sail in both directions, with plans to develop the land along its banks into an industrial zone. There is also more traffic on the North East Passage, where ships follow icebreakers from Europe to Asia through the Arctic Ocean. This could require new logistics centres to serve the route.



# 5 GLOBAL INFRASTRUCTURE PROJECTS

WRITTEN BY James Roberts, Chief Economist, Knight Frank

With the world's cities predicted to add 380 million new citizens in the next five years, new mass transit systems, power and utilities, and faster connections to markets will be needed. Here is our choice of the mega infrastructure projects that will be generating new business clusters, and creating real estate opportunities

01 CHINA'S GLOBAL RAILWAY LINKS

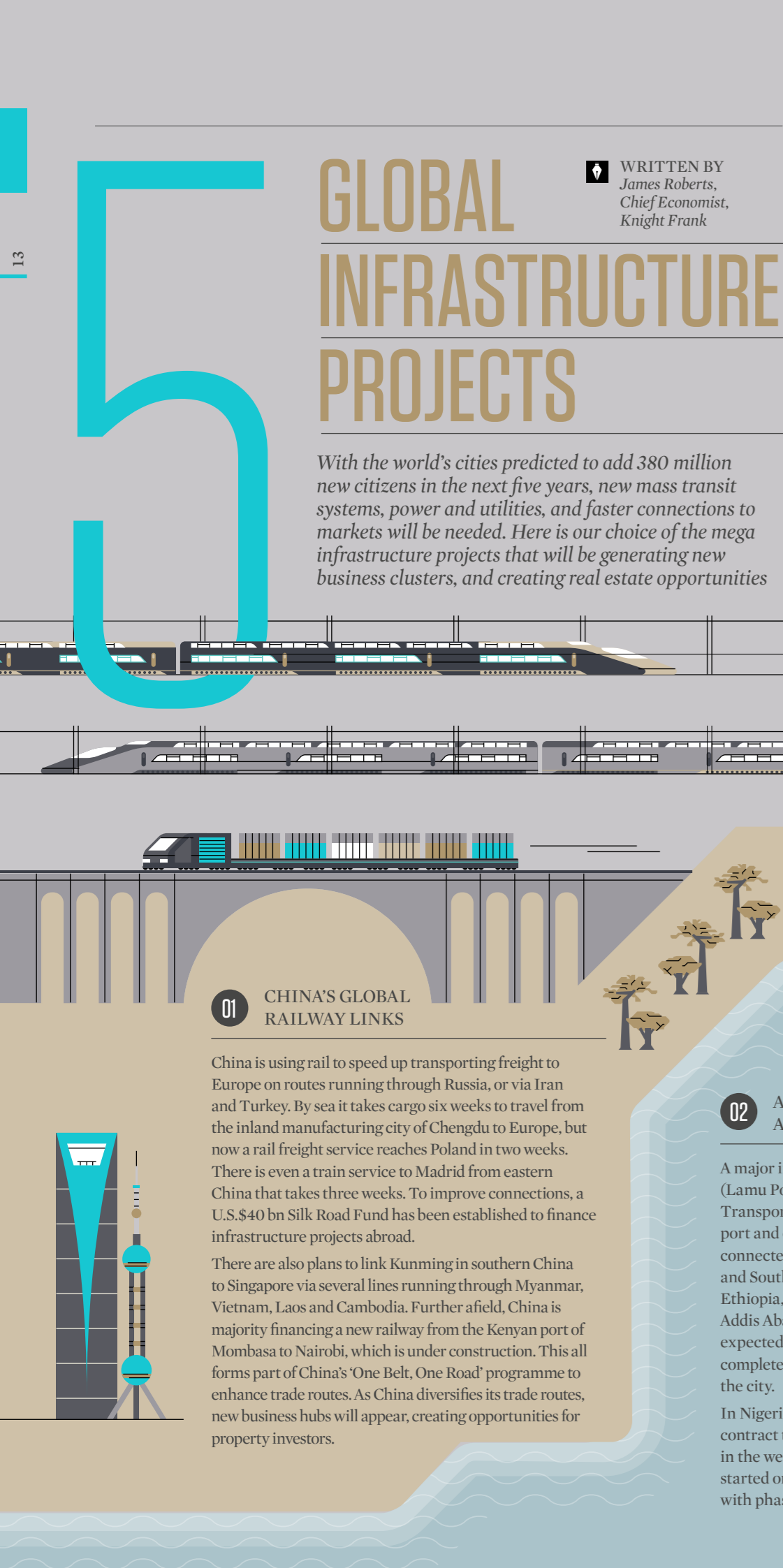
China is using rail to speed up transporting freight to Europe on routes running through Russia, or via Iran and Turkey. By sea it takes cargo six weeks to travel from the inland manufacturing city of Chengdu to Europe, but now a rail freight service reaches Poland in two weeks. There is even a train service to Madrid from eastern China that takes three weeks. To improve connections, a U.S.\$40 bn Silk Road Fund has been established to finance infrastructure projects abroad.

There are also plans to link Kunming in southern China to Singapore via several lines running through Myanmar, Vietnam, Laos and Cambodia. Further afield, China is majority financing a new railway from the Kenyan port of Mombasa to Nairobi, which is under construction. This all forms part of China's 'One Belt, One Road' programme to enhance trade routes. As China diversifies its trade routes, new business hubs will appear, creating opportunities for property investors.

02 AFRICAN AMBITIONS

A major infrastructure project in Kenya is LAPSSET (Lamu Port and Lamu-South Sudan-Ethiopia Transport Corridor). This consists of a new 30-berth port and oil refinery at Lamu, which will be connected to Nairobi and the borders of Ethiopia and South Sudan by rail, road and oil pipelines. In Ethiopia, a new Chinese funded railway line between Addis Ababa and the Red Sea port of Djibouti is expected to begin operations in 2016. Work has just completed in Addis Ababa on a light rail system for the city.

In Nigeria, a Chinese firm has won the U.S.\$12 bn contract to build an 870 mile railway between Lagos in the west and Calabar in the east. Construction has started on a new port to the east of Lagos at Lekki, with phase one scheduled for completion in 2018.



Manhattan is experiencing a transformational wave of new development

# NEW YORK CITY



Lower Manhattan, New York City, U.S.



WRITTEN BY  
Jonathan Mazur,  
Managing Director, Research,  
and David Chase, Research Analyst  
at Newmark Grubb Knight Frank

With 26 million sq ft of new office space slated for completion, New York City is in the midst of a construction renaissance similar to that of the 1980s, when more than 50 million sq ft of space was built. The lack of modern office product in Manhattan's traditional business corridors, coupled with growing demand from the expanding TAMI (Technology, Advertising, Media, and Information) sector, has driven the large-scale development projects underway on the Far West Side and at the World Trade Center site.

Inactivity in Manhattan's construction pipeline over the past 15 years has created substantial pent up demand for modern offices. With an average age of 70 years, most buildings in the traditional Midtown core submarkets cannot offer the space efficiency and customization that many tenants now expect when making long-term lease commitments. Government rezoning initiatives are underway to incentivize landlords to replace outdated office buildings with modern skyscrapers that would enhance

the city's inventory and offer comparable options similar to other global cities. Additionally, the nature of the workplace is in the midst of a paradigm shift, with the emphasis on increased density, open floor plans, collaborative space and shared recreational facilities. The rapid growth of the TAMI sector has been the main driving force behind the work/play office design, borne out of the workplace campuses of Silicon Valley and the retro-fitted loft spaces in Midtown South that became the archetype for creative workspace. Large TAMI tenants have been among the most active players in the new developments on the Far West Side and at the World Trade Center.

## "THE NATURE OF THE WORKPLACE IS IN THE MIDST OF A PARADIGM SHIFT"

With eight buildings comprising 16.4 million sq ft of new ultra prime office space in the construction pipeline, the burgeoning development at the Hudson Yards rail site amounts to the ground up creation of an entire micro market on Manhattan's Far West Side. The project gained momentum from the Metropolitan Transit Authority's

plan to extend the 7 train to 34th Street and 11th Avenue, creating the level of interconnectivity necessary to sustain a business district on the Far West Side. Subsequently, various prominent landlords, including Related Properties, Brookfield Properties, Tishman Speyer, Mitsui Fudosan and The Moinian Group, have invested in developments surrounding the Hudson Yards site.

The Far West Side has drawn a number of high-profile commitments from various industries, such as legal, technology, creative and luxury goods, which enabled construction to commence on additional towers and boosted the area's visibility. Coach, L'Oreal, SAP, Time Warner and Skadden, Arps, Slate, Meagher & Flom are examples of anchor tenants that have allowed various projects to enter the next phase of development.

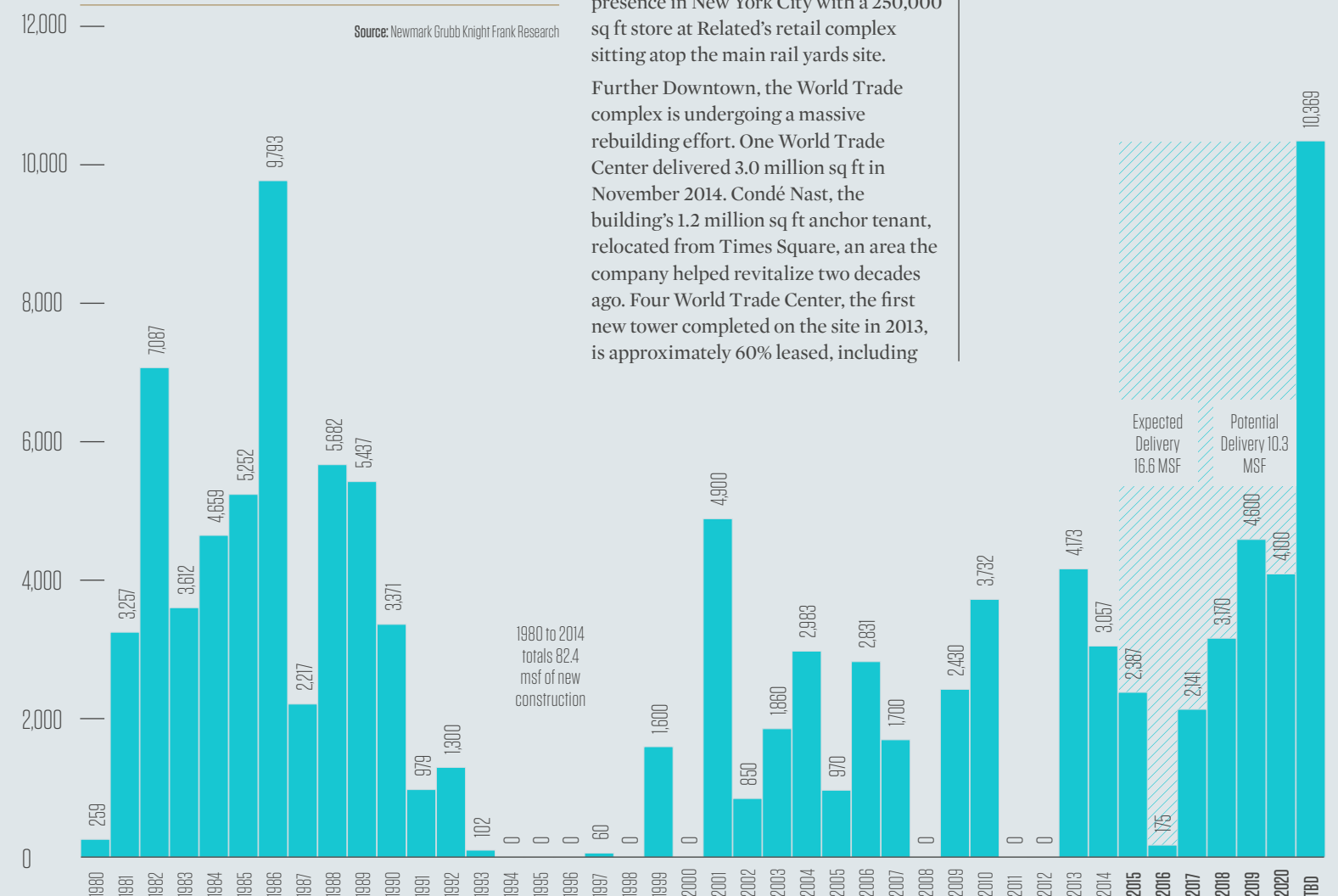
Running concurrent to the office pipeline at Hudson Yards is the development of nearly 4.0 million sq ft of residential space alongside world class retail, hospitality and amenities. Luxury retailer Neiman Marcus will establish its first presence in New York City with a 250,000 sq ft store at Related's retail complex sitting atop the main rail yards site.

Further Downtown, the World Trade Center complex is undergoing a massive rebuilding effort. One World Trade Center delivered 3.0 million sq ft in November 2014. Condé Nast, the building's 1.2 million sq ft anchor tenant, relocated from Times Square, an area the company helped revitalize two decades ago. Four World Trade Center, the first new tower completed on the site in 2013, is approximately 60% leased, including

government tenants, media and financial firms. Three World Trade Center is under construction and will be anchored by global advertising giant, Group M. Two World Trade Center, which is still in the planning stages, has drawn significant attention from News Corporation for approximately half of its proposed 2.8 million sq ft of space.

Redevelopment of the World Trade Center and its immediate vicinity includes two new transit hubs, an 18 acre memorial park and museum, and nearly 600,000 sq ft of retail at three sites. Westfield Group will open a 365,000 sq ft retail complex at the World Trade Center Transit Hub and at the base of Three and Four World Trade Center. Brookfield Properties is upgrading 200,000 sq ft of shopping and dining space at Brookfield Place. Saks Fifth Avenue will anchor Brookfield's retail complex with a four floor, 85,000 sq ft department store. The Fulton Transit Center, with 65,000 sq ft of retail space, will connect to the World Trade Center Site and Brookfield Place via an underground passageway.

### COMMERCIAL DEVELOPMENT PIPELINE ('000s SQ FT)





1.3000° N, 103.8000° E

# SINGAPORE



Office buildings in Raffles Place, Singapore

## New business locations will house future office demand

WRITTEN BY  
Alice Tan,  
Director and Head,  
Consultancy & Research,  
Knight Frank Singapore

Singapore's stellar transformation from 'third world to first' in the span of five decades is a success story many other nations aspire to match, but few succeed. The process of building the city state into a thriving metropolis was shaped by the need to decentralise business locations and house new, up-and-coming industries. The Global Financial Crisis (GFC) and the rise of new technology office tenants is now resulting in changes in occupier demand in the CBD and Fringe office markets, with future opportunities for both.

Changes in legislation to give greater powers to landlords in 1969 paved the way for wholesale redevelopment of the city centre during the 1970s and 1980s, which provided the offices to support Singapore's rapid growth during those decades. However, to create business space to accommodate future waves of expansion, a policy of 'decentralisation' was adopted through the 1991 Concept Plan. This aimed to use the Mass Rapid Transit (MRT) rail system to establish business centres outside the crowded CBD area, creating new suburban and peripheral office markets.

Decentralisation resulted in an expanded commercial real estate market. Within the past 15 years, total office space stock in Singapore grew by 24% to 81.6 million sq ft (see graph), although in the Fringe area, stock

increased by 40% over the same period. This is not to say the traditional CBD stagnated. In fact, it expanded on to land reclaimed from the sea at Marina Bay, where tower developments housed the front offices of Singapore's fast growing financial community.

This created a real estate landscape that was highly suited to the financial and business services industries, with front office operations paying higher rents to be in CBD buildings, while back offices occupied more affordable space in Fringe districts like Tampines and Changi. As office rents escalated in 2007, government agencies were urged to consider relocating out of the CBD to make space for the private sector.

However, the post-2007 period has been a time when the relationship between the CBD and the Fringes has changed. After the falls in rents during the GFC, the CBD became more affordable, reducing pressure on cost conscious tenants to consider relocating to the Fringes. Consistent with the experience in New York and London, the TMT (Technology, Media and Telecoms) sector defied decentralisation and made its foray into the CBD.

Office rents peaked in Q1 2015, amid slowing demand and consolidation of office space in the face of an economic slowdown in the Asia Pacific region. However, over the long-term we see



Helix Bridge and Marina Bay Sands Hotel, Singapore

preference for city centres shown by the TMT sector across the world.

Also, Singapore is working towards a well diversified and sustainable economy that builds upon its success in healthcare, education, logistics, aerospace, petrochemicals, and biotechnology. For many firms in these industries, locating in the CBD is not essential – indeed, globally, aerospace and biotechnology firms are usually in suburban office markets – which should generate office demand in the Fringes. The government plans to establish various commercial clusters, business and industrial parks by 2030 provide further insight into where future property development will appear in Singapore.

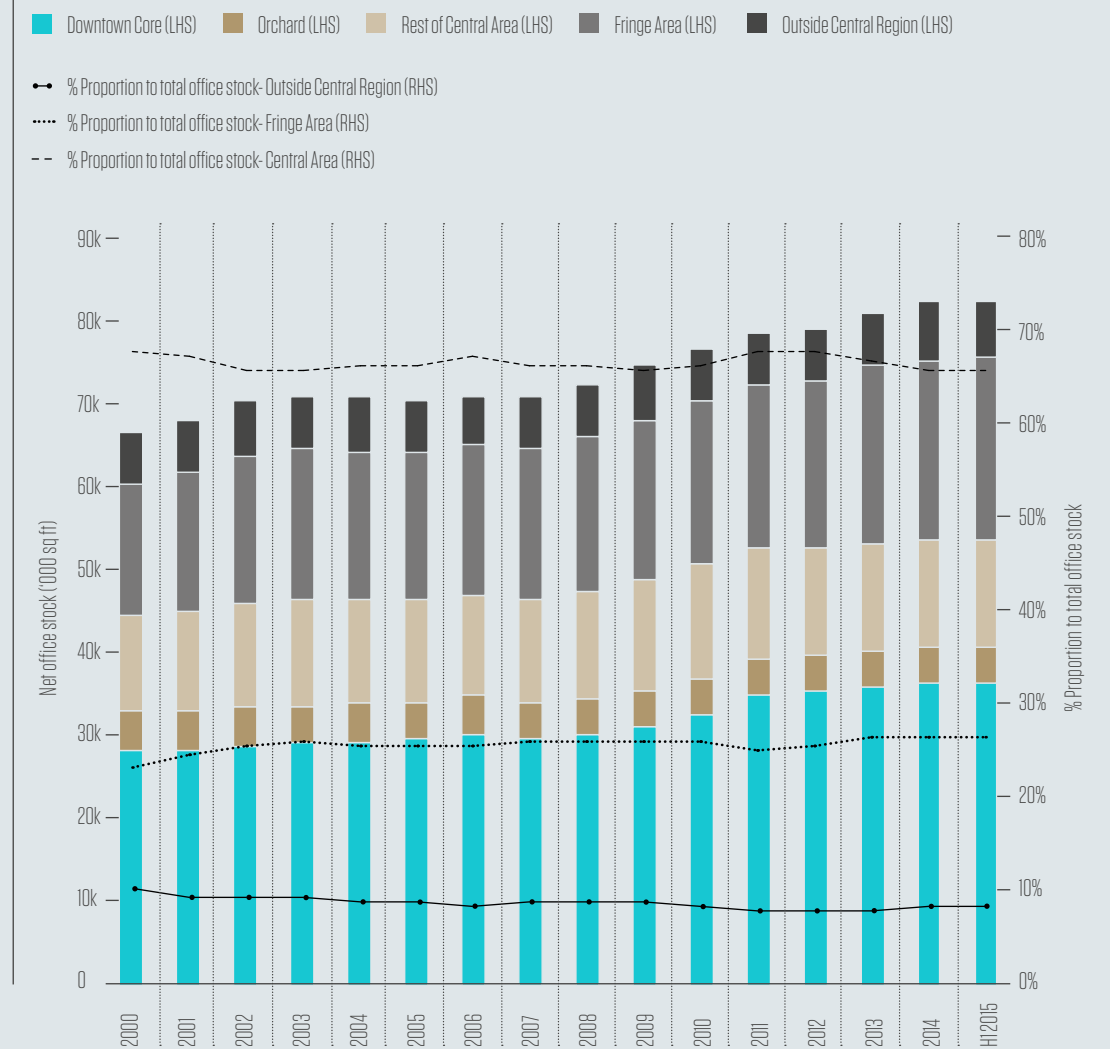
future sources of demand emerging that will create opportunities in both the CBD and the Fringes.

While at present the financial sector is seeing consolidation, leaving some occupiers with 'shadow' space, in the long run, finance should benefit from Singapore's growth as the key trading centre for South East Asia. To date, asset management, insurance and currency trading are fast growing industries, which are drawn to Singapore by the conducive business environment. This should provide demand in the long-term for both the CBD and Fringe markets, from front and back office operations respectively.

Technology firms are in our view a strong source of future demand for offices in Singapore. The Smart Nation iN2015 masterplan is a positive step towards promoting technology, and will benefit various sectors of the economy, including commercial property. Moreover, as the workforce becomes increasingly dominated by tech-savvy Millennials, companies need to change the way they work. This will mean a rethink in how firms lay out their offices, where they are located, and how much technology is incorporated into the workplace (and indeed in public areas, and the home). This will buoy technology firms and in turn generate office demand, probably with more of a CBD bias, given the

## BREAKDOWN AND PROPORTION OF SINGAPORE OFFICE SPACE BY AREA / REGION, 2000 TO FIRST HALF 2015

Source: REALIS, Knight Frank Research



“TECHNOLOGY FIRMS ARE IN OUR VIEW A STRONG SOURCE OF FUTURE DEMAND”

# LONDON

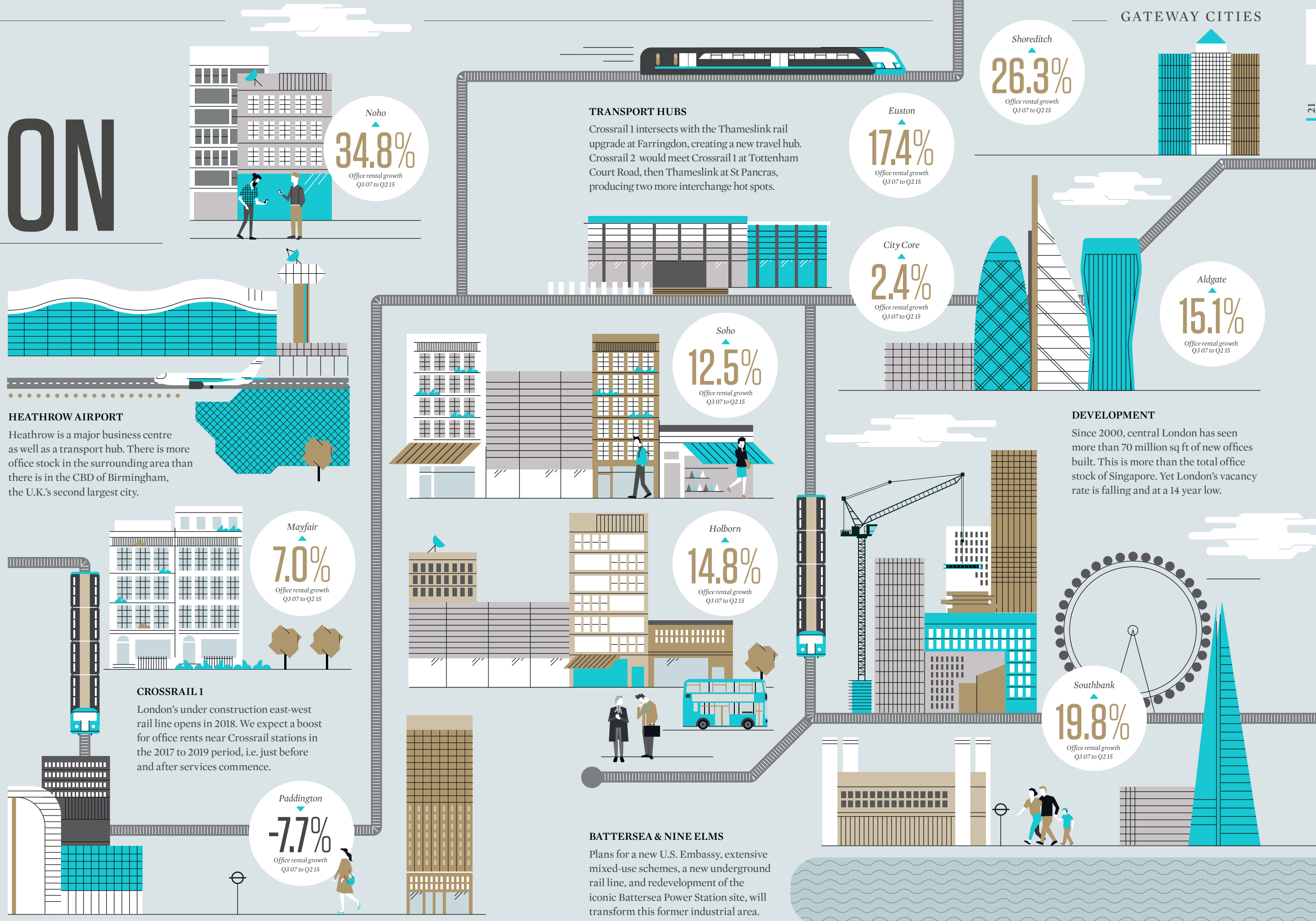
London is being transformed by a new wave of creative firms and rail links

WRITTEN BY  
Patrick Scanlon,  
Partner, Central London Research,  
Knight Frank

The third quarter of 2007 was the time that the Global Financial Crisis (GFC) reached London, as confidence in the banking sector slumped. However, eight years later, the office market is thriving. London's economy is being driven by a new wave of technology and creative firms who are shaping the digital age. The last year has also seen more traditional financial and professional occupiers initiating office searches, which demonstrates broadening demand.

Comparing rents today with Q3 2007, the strongest growth has occurred in the areas popular with the technology and creative industries. Noho is a former garments industry district that is now home to many leading creative firms. Prime rents are 35% higher today compared to Q3 2007. Shoreditch, another former industrial area, is a hub for start-up technology firms. Office rents there are 26% above their pre-GFC peak.

Infrastructure projects abound in London. The development potential of the Nine Elms corridor is being unlocked thanks to a planned new underground rail line to the Battersea Power Station site. With the Crossrail 1 and Thameslink upgrade railway projects under construction, we are seeing the development of a transport hub running from Tottenham Court Road to Farringdon to King's Cross. This hub would be boosted further if the proposed Crossrail 2 receives government approval.



## HEATHROW AIRPORT

Heathrow is a major business centre as well as a transport hub. There is more office stock in the surrounding area than there is in the CBD of Birmingham, the U.K.'s second largest city.

## CROSSRAIL 1

London's under construction east-west rail line opens in 2018. We expect a boost for office rents near Crossrail stations in the 2017 to 2019 period, i.e. just before and after services commence.

## TRANSPORT HUBS

Crossrail 1 intersects with the Thameslink rail upgrade at Farringdon, creating a new travel hub. Crossrail 2 would meet Crossrail 1 at Tottenham Court Road, then Thameslink at St Pancras, producing two more interchange hot spots.

## DEVELOPMENT

Since 2000, central London has seen more than 70 million sq ft of new offices built. This is more than the total office stock of Singapore. Yet London's vacancy rate is falling and at a 14 year low.

## BATTERSEA & NINE ELMS

Plans for a new U.S. Embassy, extensive mixed-use schemes, a new underground rail line, and redevelopment of the iconic Battersea Power Station site, will transform this former industrial area.

## GATEWAY CITIES

22.2783° N, 114.1747° E



Victoria Harbour, Hong Kong

# NEW HORIZONS FOR HONG KONG

*A shortage of office space and high rents in the city's Central Business District are leading to decentralisation*

WRITTEN BY  
Pamela Tsui,  
Senior Manager, Research & Consultancy,  
Greater China, Knight Frank

Land shortage in Hong Kong is a widely known problem for the densely populated city. Limited office availability in the CBD, also known as Central, means it is becoming increasingly difficult to fulfil multinational companies' rising demand for business space. With the highest prime office rents across the globe, Hong Kong also creates a major challenge for firms who wish to set up offices there – especially in Central,

where net effective rents rose above U.S.\$186 per sq ft per annum recently. Manufacturing firms shifting operations to mainland China have left Kowloon East with many vacant industrial buildings. In order to alleviate Hong Kong's office supply shortage, the government announced an initiative to develop Kowloon East into CBD2 in 2012. Many former factories have been redeveloped as high quality office buildings. Other

supporting policies, such as land rezoning, improvement of connectivity and enhanced urban design, have also accelerated the redevelopment process in the area. As an emerging business district with abundant supply, Kowloon East's office rents are still as low as U.S.\$46.50 per sq ft per annum.

Meanwhile, a new East Lantau Metropolis is proposed to become the third core business area over the next 50 years. In the latest policy address, the government announced its plan to reclaim a 1,000 hectare manmade island in waters between Hong Kong Island and Lantau Island.

**NEW CBDs WILL FURTHER ENHANCE CENTRAL**

In the coming years, emerging CBDs will continue to witness rapid growth and help alleviate the office shortage problem in the Central CBD. Given the considerable rental gap between various business districts, this decentralisation trend is expected to continue.

History has proven that once the rental gap between core and decentralised business areas has narrowed, the decentralisation process slows down as companies have less incentive to relocate their offices, especially when increasing relocation costs are taken into consideration. Therefore, Central's role as the prime office district and commercial hub in Hong Kong is unlikely to be replaced in the short to medium-term.

In the long-term, although decentralisation will remain one of the most important trends changing the landscape of the Hong Kong office market, we believe emerging CBDs will serve as complements, rather than direct competitors, to Central.

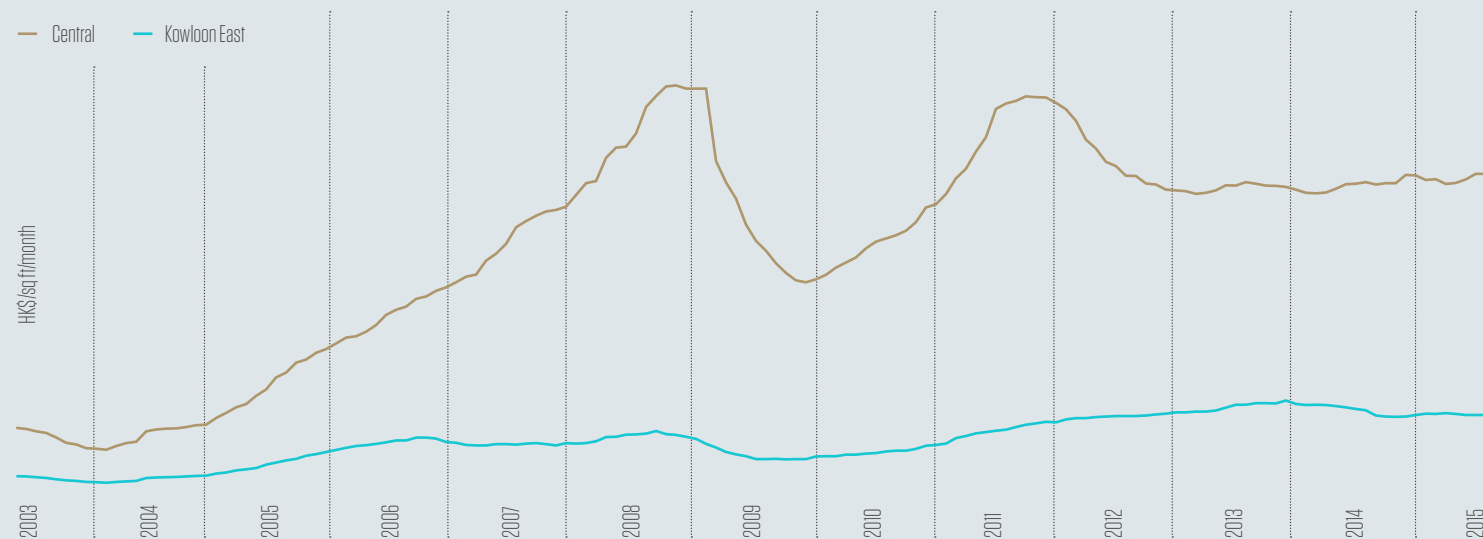
**CBD, CBD2 AND POTENTIAL LOCATION OF CBD3**

Source: Knight Frank Research



**OFFICE RENTS IN CENTRAL AND KOWLOON EAST**

Source: Knight Frank Research



**“KOWLOON EAST HAS NOW BECOME THE SECOND LARGEST BUSINESS AREA AFTER CENTRAL”**

Thanks to the ample supply of new offices, and the significant rent discount compared to Central, many companies that are anxious to control costs have relocated to Kowloon East in recent years.

Kowloon East has now become the second largest business area after Central in terms of Grade A office stock. With many upcoming development projects in Kowloon East, the total amount of Grade A office space in the area is expected to overtake Central within the coming decade.

**THE NEW CBDs CANNOT REPLACE CENTRAL**

Despite the concentration of quality stock and attractive rents, we believe CBD2 cannot replace Central in the short-term because only some firms or operations (e.g. back offices) prefer relocating to Kowloon East. Some industries will opt to stay in Central due to company image, transport accessibility and proximity to related business clusters – law, accounting and financial firms usually locate together. CBD2 will not replace Central as it still needs further development in area image, connectivity and business clusters, which cannot be achieved in a short period of time. As for CBD3, it will take several years to complete, and the developments are expected to be mainly residential and retail. As a result, there is little prospect of it ever replacing Central as Hong Kong's prime commercial location.

48.8567° N, 2.3508° E

# PARIS

WRITTEN BY  
Cyril Robert,  
Head of Research,  
Knight Frank France

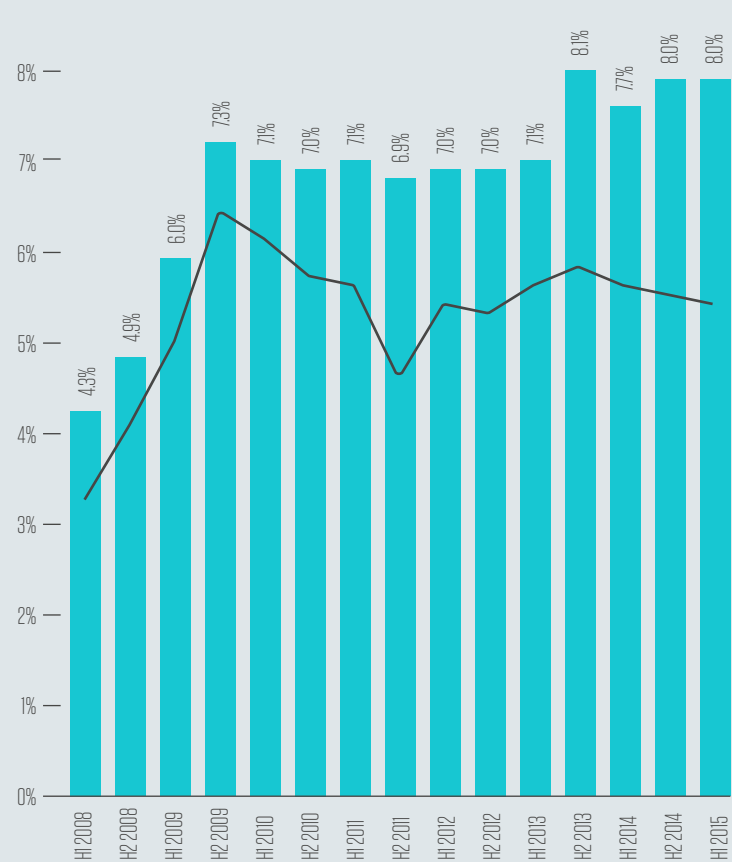
*The Cargo has landed in the 19th arrondissement of Paris*

With more than 160,000 sq ft across six floors, The Cargo is the largest start-up incubator yet in the French capital. Moored alongside the impressive 2,000 ft long Macdonald warehouse, The Cargo fits in perfectly with other ship-like structures in the area. The Macdonald industrial building from the 1960s is currently undergoing a major transformation, harbouring a secondary school, over 1,000 housing units, 355,000 sq ft of retail, as well as 290,000 sq ft of office space. The office element has recently become home to hundreds of employees of a leading financial institution. This port is the gateway to the future, the Paris of tomorrow: mixed-use, hi-tech, environmentally friendly, plugged in, multi-sector and socially inclusive – a smart city.

The Cargo clearly has flagship status, with its high specification, and portholes for maritime effect. It is part of the new urban model, which acknowledges that businesses are made up of individuals whose wider needs have to be catered for. This includes homes, shops and leisure facilities, that are all close to work. Via a workplace that is integrated into an individual's daily life, companies forge links with their employees, and a community is born. The new economy

## PARIS OFFICE VACANCY RATES

Source: Knight Frank Research  
— CBD    ■ Paris Region



Le Cargo, Paris, France



Commuting through the business district, Paris, France



Business district in Paris, France

“YES, THE REVOLUTION IS HERE!”

plays a vital role in this new world, drawing on its own mechanisms, players, organisation and working methods. Businesses aim to attract high flying young professionals by offering a workplace that is fun, fluid and part of the work-life balance. The aim is to blur the lines between work and leisure, which leads to less clock watching and reduced hierarchy. The Cargo is designed with the challenge posed by the sociologist Bruno Marzloff in mind: we need to rethink the work that makes a city. As a result of this changed approach to work and urban living, offices, public and private spaces, neighbourhoods and even the city will undergo a profound transformation towards greater openness, equality, and a stronger community spirit: longer opening hours and more services, new ways of using them and emerging roles.

This major change is no work of science fiction. The Cargo is not an isolated step in this process: the various co-working spaces are another example of this new movement for a radical step away from traditional office buildings – a phenomenon that is still in its infancy. However, The Cargo will not remain Paris's largest incubator for long. With the Halle Freyssinet due to open its doors in the 13th arrondissement of Paris in just over a year, more than

377,000 sq ft of shared space will be made available to start-ups in this entirely private investment, headed by a leading French business tycoon.

Expectations are high in this area of strong demand. France and its capital city stand out at a European level in terms of the number and vitality of tech start-ups. At the Consumer Electronics Show (CES) 2015 in Las Vegas, the largest tech event in the world, France, with 120 exhibitors, had the greatest presence among European countries – far ahead of Germany (39) and the United Kingdom (33). In Eureka Park, the section dedicated to emerging start-ups, one in four businesses were French. Naturally, some of these companies come from outside Paris, but the Paris tech scene is particularly vibrant and always on the lookout for growth opportunities. Paris has launched the first Paris French Tech Ticket competition targeted at foreign businesses wishing to join the Paris tech scene.

Innovative businesses are flocking to areas which were previously economically disadvantaged and working class, where there was little interest in the commercial property market until now: from the north to the south of Paris, from the 13th to the 19th arrondissement, and along the ring road that defines the city limits. These areas form an arch of innovation which is being actively promoted by the local authorities. It boasts competitively priced property, development opportunities and an increasingly young and trendy feel. A number of new developments are coming to these areas, with a call for proposals from teams backed by investors, with local authorities entrusting the projects to the most innovative bidder. Even the tower block is no longer a dirty word. In June, the Paris City Council approved the Triangle tower project led by Unibail Rodamco. This 590 ft skyscraper, located at Porte de Versailles (15th arrondissement) and designed by the architects, Herzog and de Meuron, will be the first mixed-use new generation skyscraper to grace the Parisian skyline.

Yes, the revolution is here!



# FUTURE OFFICES

## BREAKING THE MOULD

*In the future, the office will principally be a place that generates staff satisfaction and interaction*

WRITTEN BY  
James Roberts,  
Chief Economist, Knight Frank

How businesses view their offices has changed enormously in the past two decades. Previously the emphasis was on cost control. Firms looked for ways to pack more desks on to floors, and there was a trend towards relocating jobs from expensive Central Business Districts (CBDs) to lower cost out-of-town office markets. However, today firms are more conscious of the role the workplace plays in controlling a far bigger business cost - namely staff retention. This is reversing the out-of-town trend, and transforming the perception of the office from a business expense into a place that firms use to inspire and energise their staff.

### LOSING STAFF IS EXPENSIVE

A study by Oxford Economics found that the cost of replacing a member of staff averages U.S.\$50,000, with over 80% of the cost in lost output while the new employee gets up to speed. If the new worker is in a leadership or rainmaking role, this loss of output could have a trickle-down effect on other staff who are reliant upon that person for work generation or guidance.

On top of the replacement cost, there is also the loss of value that goes out the door with the departing employee, such as training, knowledge, reputation, and client relationships. Some studies estimate the total cost of losing an employee can be equivalent of 150% of salary.

For a typical office worker in London, the total cost of their workstation in rent, local taxes and service charge, is around U.S.\$16,000 per annum. The median salary in London is U.S.\$54,000, so based on the 150% figure, their replacement cost is U.S.\$81,000 or five times the cost of a workstation. Most professional workers earn far more than the U.S.\$54,000

figure, with the average newly qualified commercial lawyer earning U.S.\$91,000, according to recruitment firm Michael Page, suggesting a replacement cost of nearly U.S.\$143,000.

Given that the cost to the business of replacing the worker vastly overshadows property costs, more firms are questioning the logic of achieving a small saving by moving to a peripheral business location if it increases staff turnover. There are even examples of firms choosing to move out-of-town jobs into more expensive CBD areas in order to appeal to a broader talent pool.

**“THERE ARE EVEN EXAMPLES OF FIRMS CHOOSING TO MOVE OUT-OF-TOWN JOBS INTO MORE EXPENSIVE CBD AREAS IN ORDER TO APPEAL TO A BROADER TALENT POOL”**

### ACTIVITY-BASED WORKING

Indeed, transforming the office into an inspiring and enjoyable place to work is now seen as a cost effective means of retaining staff. In Europe and North America, technology and media firms were the first to break the mould, and bring free buffets, exercise areas, spiral staircases, games rooms, and sofas into the office, and now more traditional industries are following suit.

CONTINUED ON 28-29

CONTINUED FROM 26-27

In Australia, the financial sector has led this movement away from the desk, known as activity-based working (or ABW), which beckons the question: will all industries eventually go down this route?

Levels of adoption of ABW vary from one city to the next. In some European cities, where the office stock contains a lot of historic buildings, internal walls sometimes can hinder adopting ABW. Another issue is when lease expiries fall, as it is during a relocation that a company has to acquire a new fit-out, making it the time for a radical change. Consequently, the shift to ABW will be gradual – not earthquake – in any market.

**ON TO PHASE TWO**

The first wave of ABW was about breaking down barriers in the office, and creating a communal atmosphere. However, we are now seeing a second phase that builds on the experiences of phase one. By removing the partitions and increasing the level of interaction, noise is becoming an issue for those who need some quiet time to write a report. Some firms have found that by removing cellular offices they lost a raft of unofficial meeting rooms, placing extra strain on the actual meeting rooms. So, interestingly, the next wave of ABW is now putting some barriers back in, introducing quiet areas and private booths.

We are also now seeing more firms who are going down the ABW route aiming to provide more space per

FCB, Chicago, U.S.



**“TRANSFORMING THE OFFICE INTO AN INSPIRING AND ENJOYABLE PLACE TO WORK IS NOW SEEN AS A COST-EFFECTIVE MEANS OF RETAINING STAFF”**



Atlas Holdings, Greenwich, Connecticut, U.S.



Draft Inc, Tokyo, Japan

worker for those actually in the office, but based on the assumption that a percentage of staff will be out of the office at any given time.

**DO YOU REALLY NEED A DESK?**

Cutting the bond to a personal desk is allowing firms who fully embrace ABW to take a lower multiple of space compared to total staff. This does not mean that firms will need less office space in the future, as the total workforce continues to expand over the long-term in most Global Cities. Irrespective of whether they allocate 90 or 100 sq ft for each additional worker, a firm still needs to acquire more space as it grows. However, the multiple of space per worker is probably going to fall, as companies will utilise absence to offer a spacious office to those who are actually at work.

The net result is that companies are achieving highly efficient offices, but staying in the more expensive CBD areas. This allows staff to enjoy all the amenities available in city centres, and indeed that amenity offering supports the companies' own activities. In any Global City, the cafés and restaurants are actually the unofficial meeting rooms of the business community, while their sports and cultural venues are used by firms in their marketing mix. A company distances itself from all these 'beyond-the-office' benefits of the big city when it moves to a business park.

CONTINUED ON 30

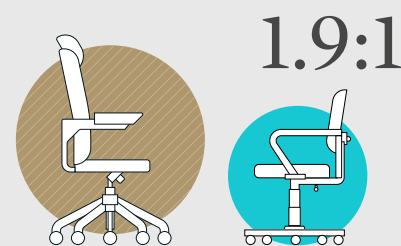
**EGO SPACE FOR THE BOSS?**

A Hong Kong executive in an advertising firm gets four times more office space than his secretary, but in Sydney the boss and PA get about the same. Here is the 'boss to support staff' office space ratio from ad firms around the world

Executive Support staff



HONG KONG



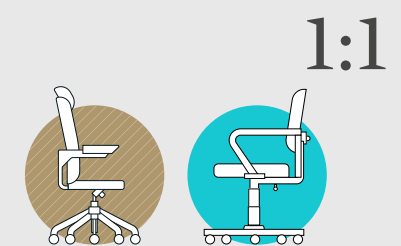
LONDON



SHANGHAI



NEW YORK



SYDNEY

Source: Knight Frank Research / Newmark Grubb Knight Frank Research

CONTINUED FROM 28-29

**CHALLENGING PAST CONVENTIONS**

Around the world we see huge disparities in how offices are occupied. These typically reflect cultural differences, and the extent of those variations was not widely known when globalisation was in its earlier stages. Twenty years ago, a senior partner in a Chicago law firm with no overseas offices was probably unaware that lawyers in London occupied far less office space per worker. As businesses merge and expand into global networks, and staff are transferred overseas, awareness of the differences grow.

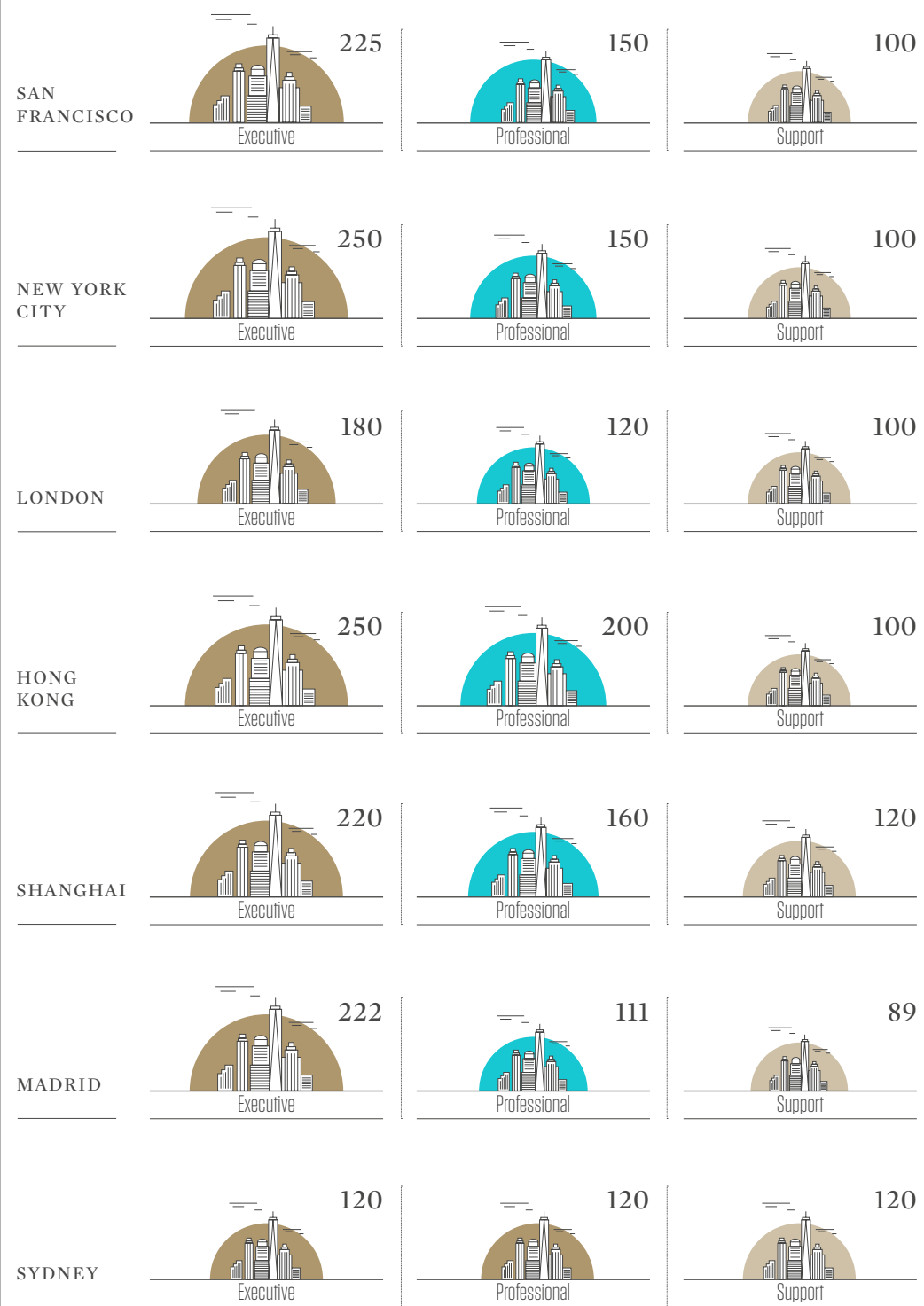
Previous conventions on office occupation are being called into question. Knight Frank figures show that a professional worker in a Hong Kong corporation is typically occupying 200 sq ft in a cellular office, but his Shanghai equivalent occupies 160 sq ft in a cubicle. Meanwhile his Sydney equivalent occupies 120 sq ft in open plan. How long before firms with global networks start asking why there should be so much difference in office occupation by people doing much the same job?

In the Global Cities, firms are thinking long-term and planning for headcount growth again, and they want their offices to help keep staff happy and reduce headcount attrition (which costs firms far more than rents do). They want to reduce the per-person ratio of occupation, but packing people in with ever-smaller desks does not make for a conducive working environment, and relocations out-of-town can be unpopular. ABW offers a solution, providing more space for people to work in by utilising the fact that a proportion of staff are not in the office at any given time.

The extent to which ABW is embraced will always vary from one company to the next, but its influence is spreading across industries and throughout the globe. Thus the future office will be dominated less by the desk, and more by the comfortable sofa.

**OFFICE SPACE ALLOCATION**

IN CORPORATE HQs IN VARIOUS GLOBAL CITIES (IN SQ FT)



Source: Knight Frank Research / Newmark Grubb Knight Frank Research  
 Note: Corporate HQ is defined as the head office of an industrial, energy, or manufacturing conglomerate.

# CROWD WORKING

*The rise and rise of collaborative offices*

WRITTEN BY  
 James Roberts,  
 Chief Economist, Knight Frank

New technology has been bringing previously unconnected people together to achieve things. We have crowd sourcing to develop ideas, and crowd funding to raise money. Now a new type of office is bringing people together, often in the service of advancing the tech economy.

Collaborative offices are the real estate equivalent of crowd sourcing, but in the form of a rather cool serviced office. An office space is fitted out with a combination of meeting rooms, hot desks, and lots activity-based working (ABW) space, with sofas and communal tables. Entrepreneurs then take out memberships allowing different levels of access, where they will mingle with other people running their own firms. The fit-out is often unashamedly targeted towards Millennials, and the tech and creative industries.

Some entrepreneurs pay by the hour to use a café area with wifi, while others pay monthly fees for all day access and wider ranging services.

The concept is proof that offices are a necessity for any business, and the benefits they offer stretch beyond providing somewhere to log on to a computer. Entrepreneurs check into collaborative offices as they want the intellectual synergies that arise as people converse and trade ideas in a working environment. By banding together in communal office space, entrepreneurs are thus able to access



Level39 offices, London



WeWork offices, London

the wider idea pool of their co-workers, in the same way staff in larger companies can when in the office.

While collaborative offices first emerged in San Francisco, driven by technology entrepreneur demand, the past few years have seen the format go global. Having begun operations in New York in 2010, WeWork has since opened in 11 other U.S. cities, as well as in the U.K., the Netherlands and Israel. A year ago, they had no presence in London, but WeWork now has over 320,000 sq ft of office space there; some of it in technology and media districts like Soho and Whitechapel, but also in more traditional financial and

insurance locations. In New York City, WeWork has 2 million sq ft of office space.

WeWork is also branching out from flexible working to flexible living. It has established a new short-stay apartment format, known as WeLive, in two buildings where its collaborative offices are found – one in Washington DC, the other in Downtown Manhattan. A WeWork pre-let in the Brooklyn Navy Yard will also include WeLive apartments.

To add to crowd sourcing, and crowd funding, we can now add crowd living.

# THE SYDNEY OFFICE

WRITTEN BY  
Matt Whitby,  
Head of Research & Consulting,  
Knight Frank Australia

*Activity-Based Working (ABW) is increasing rapidly in popularity in Sydney offices. This raises the question: will ABW one day become ubiquitous around the world?*

According to Telsyte, by 2020 two thirds of Australian offices will be using some form of ABW, up from about 28% today. This is in response to a drive for greater efficiency and adaption of the workplace to match the practices of Millennials.

ABW is not just a new incarnation of hot-desking, but the provision of a series of work areas that staff move between, depending on the task at hand. By breaking perceptions that an employee should hug their desk, and have claims on it even when on holiday, the company enjoys greater efficiency of office use and increased productivity through interaction and knowledge sharing.

## 01

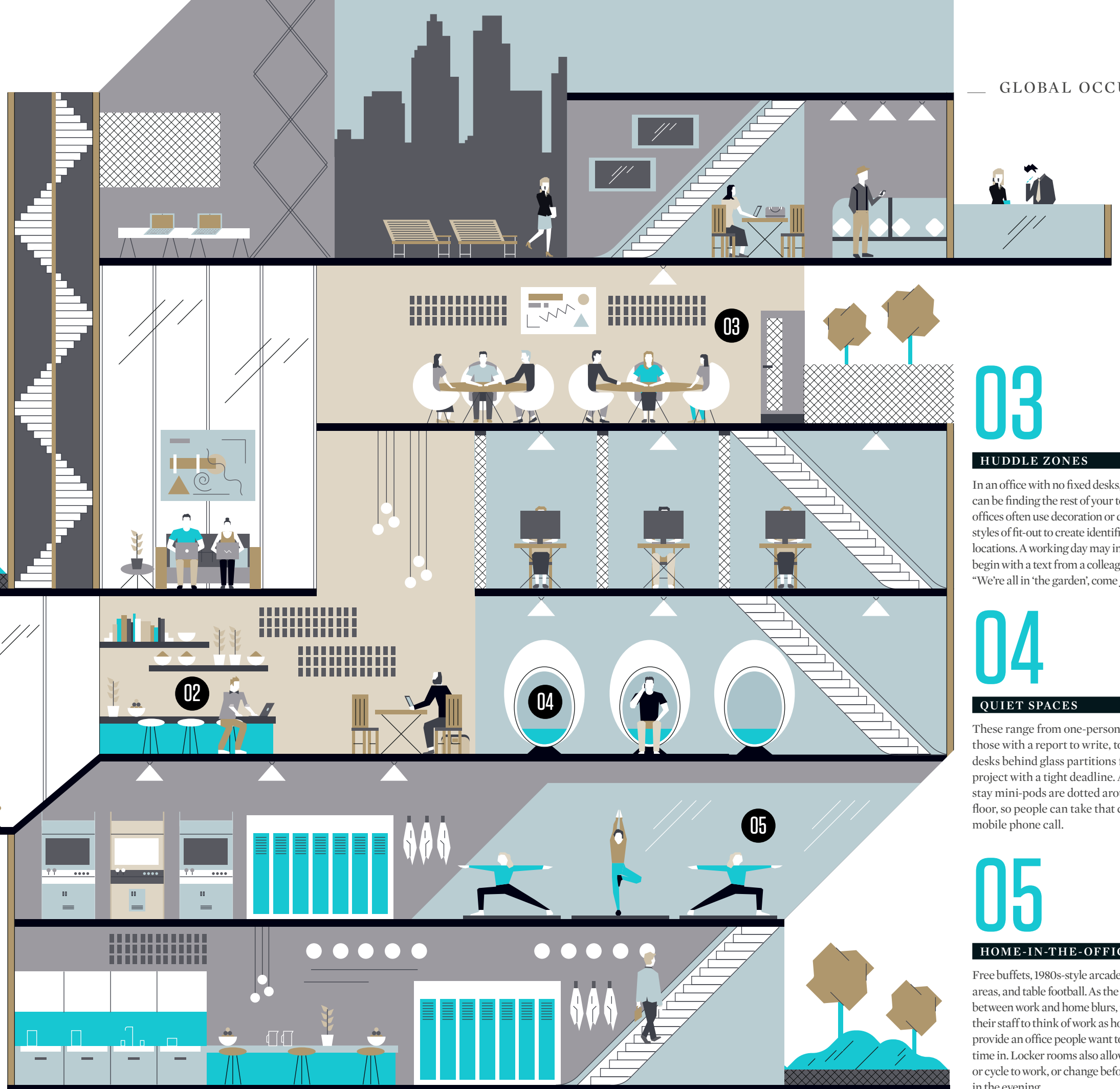
### LIGHT AND CIRCULATION

ABW offices aim to get natural sunlight to as many people as possible, via atriums and minimising the use of partitions. Internal staircases and the absence of blocking lines of desks encourage people to go speak to colleagues in person rather than sending emails (a common source of miscommunication).

## 02

### INTERACTION AREAS

Often resembling a branch of Starbucks rather than a traditional office, this area reflects the need to dip in and out of interaction with others and screen time. This fit-out increases the likelihood of chance encounters and conversations overheard, promoting knowledge sharing.



## 03

### HUDDLE ZONES

In an office with no fixed desks, a problem can be finding the rest of your team. ABW offices often use decoration or different styles of fit-out to create identifiable locations. A working day may in the future begin with a text from a colleague that says, "We're all in 'the garden', come join us".

## 04

### QUIET SPACES

These range from one-person booths for those with a report to write, to clusters of desks behind glass partitions for a group project with a tight deadline. Also, short-stay mini-pods are dotted around the floor, so people can take that confidential mobile phone call.

## 05

### HOME-IN-THE-OFFICE

Free buffets, 1980s-style arcade games, yoga areas, and table football. As the boundary between work and home blurs, firms want their staff to think of work as home and thus provide an office people want to spend more time in. Locker rooms also allow staff to jog or cycle to work, or change before going out in the evening.



# FIVE FUTURE TRENDS IN CAPITAL MARKETS

Sanlitun, Beijing, China



## Niche markets and deregulation are creating new property investment opportunities

**WRITTEN BY** Jonathan Mazur, Managing Director, Research, Newmark Grubb Knight Frank; Matthew Colbourne, Head of EMEA Research, Knight Frank; and Nicholas Holt, Head of Research, Asia Pacific, Knight Frank.

We are now seeing the landscape emerge of the post-Global Financial Crisis (GFC) real estate investment market. The new environment is characterised by growing cross-border money flows, a push to diversify portfolios, and a willingness to think laterally by looking beyond the traditional sectors of offices, retail and industrial. As investors search the globe for new opportunities, here are the five trends which we believe should influence your asset selection in 2016.

### 1. SPECIALIST PROPERTY

Specialist property continues to evolve as a segment, led by fixed income sectors such as healthcare and retirement accommodation. It also encompasses automotive hotels, student accommodation and even private rented sector residential accommodation.

The key reasons for the growth in demand for specialist property relate to changing market requirements. For example, 20 years ago the demand for purpose-built facilities for the elderly or students was

relatively limited. However, strong growth in the ageing population and expansion in student numbers – combined with generally poor-quality existing provision – has stimulated occupier demand.

Another major reason for increased investor interest in specialist property has been the drive for diversification, particularly following the GFC. While sentiment in global real estate markets has improved markedly, some parts of the traditional market have been challenging until recently. The less cyclical nature of specialist property is also appealing to investors.

As demand and competition for investment product has risen, yields across the traditional sectors have been squeezed. As a result, investors have sought alternative ways of protecting and enhancing their wealth. Assets such as petrol stations, service areas, data centres and waste management facilities are now playing an increasing role in property investment portfolios.

### 2. PROPERTY INCOME – LONG OR SHORT?

Essentially, commercial real estate is an income-driven asset class whose long-term performance has been driven mainly by a high and stable level of income. In the U.K., for example, from 2000 to 2014 the average annual income return on all property was 6%, against a total return of 7.7%.

A key attraction of commercial property in many Western markets is the availability of long leases, which provide good security of income, especially valuable during times of economic and property market instability. In addition, many countries (particularly in Europe) have lease structures where rents are inflation linked.

However, market realities mean that more investors are being forced up the risk curve. This is particularly true in locations where stronger occupier activity is coinciding with declining availability.

A good example is the central London office market, where there is a significant imbalance between supply and demand. With rental growth expected to continue for the next two to three years and a limited development pipeline, availability is falling steadily. As a result, some investors are increasingly willing to buy buildings with limited unexpired income, provided the asset can be turned around quickly for re-letting.

In Asia Pacific, the market drivers are somewhat different, with relatively short leases of two to five years typical. Investors therefore tend to focus more on capital values and rental growth prospects, rather than initial yields and lease lengths.

Over the longer term, commercial real estate has proved its value within a mixed investment portfolio, notably during times when other asset classes have been unstable.

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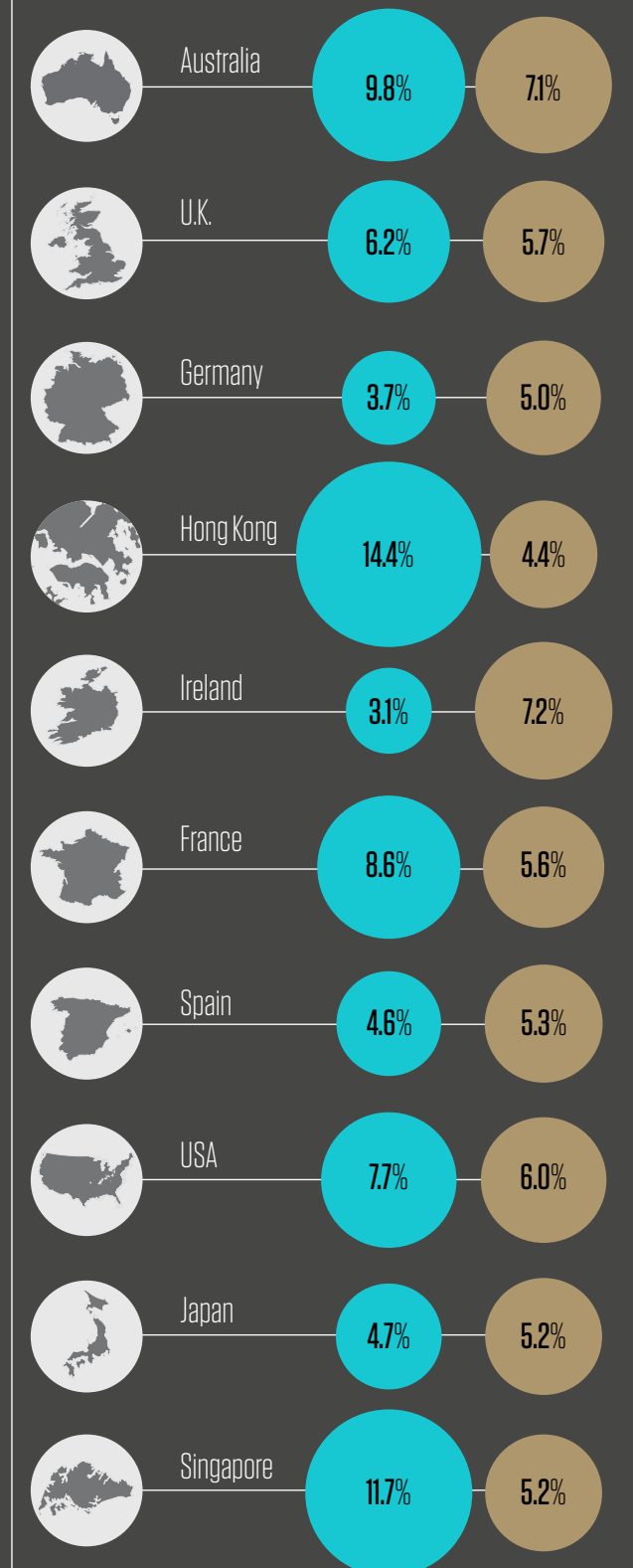
Canary Wharf, London, U.K.

“OVER THE LONGER TERM, COMMERCIAL REAL ESTATE HAS PROVED ITS VALUE WITHIN A MIXED INVESTMENT PORTFOLIO”

## COMMERCIAL REAL ESTATE RETURNS (10 YEARS TO 2014)

● Total return % p.a.  
● Income return % p.a.

\* Average annual returns over 10 years to December 2014, except Hong Kong and Singapore (7 years to 2013)



Source: IPD

Tokyo, Japan

“THE STRONG RECENT GROWTH IN CITY LIVING HAS BROUGHT THE FOCUS BACK ON HOW TO BEST INTEGRATE THE WAYS IN WHICH PEOPLE LIVE, WORK, SHOP AND PLAY”



CONTINUED FROM 34-35



Madrid, Spain

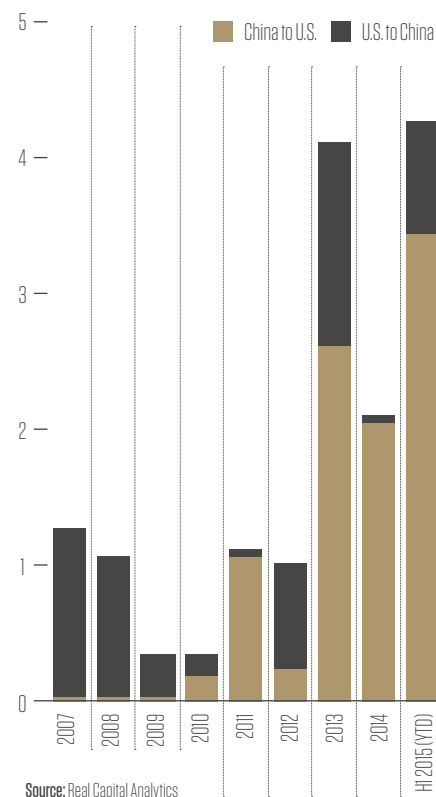
3. DEREGULATION

Government regulation exerts a major influence on global capital flows and can help to make or break real estate investment markets.

Changes to regulation – such as the removal of ownership restrictions or legislation to allow new investment vehicles – can also help to attract significant amounts of inbound capital, an example being India's new Real Estate Investment Trust (REIT) legislation in 2014. The Indian REIT sector could be worth as much as U.S.\$100 billion within a few years. India has also recently relaxed its rules on foreign investment in real estate.

Significant recent changes include the decisions to allow Chinese and Taiwanese insurance companies to invest in international real estate in 2012 and 2013 respectively. Chinese insurers have since made in-roads into major international real estate markets and, on paper, have a potential U.S.\$220 billion to invest in overseas property and other assets. Taiwanese insurers meanwhile have initially focused on major cities in the U.S. (New York, Las Vegas and San Francisco) and Asia Pacific (Shanghai

U.S.-CHINESE COMMERCIAL REAL ESTATE INVESTMENT (U.S.\$bn)



Source: Real Capital Analytics

and Tokyo), while London has been the core European destination to date.

In the U.S., one potential major change relates to the much discussed relaxation of the Foreign Investment in Real Property Tax Act of 1980 (FIRPTA - see box overleaf). Currently, foreign investors account for just 17% of the U.S. commercial market – considerably lower than the U.K. and Europe (around 50% and 60% respectively). An easing of the FIRPTA regulations could lead to a doubling of investment in larger U.S. cities such as New York and San Francisco.

In Asia Pacific, perhaps the most significant recent news is the free trade agreement between China and Australia, which is expected to boost cross-border property investment between the two countries.

4. MIXED-USE

The strong recent (and forecast) growth in city living has brought the focus back on how to best integrate the ways in which people live, work, shop and play.

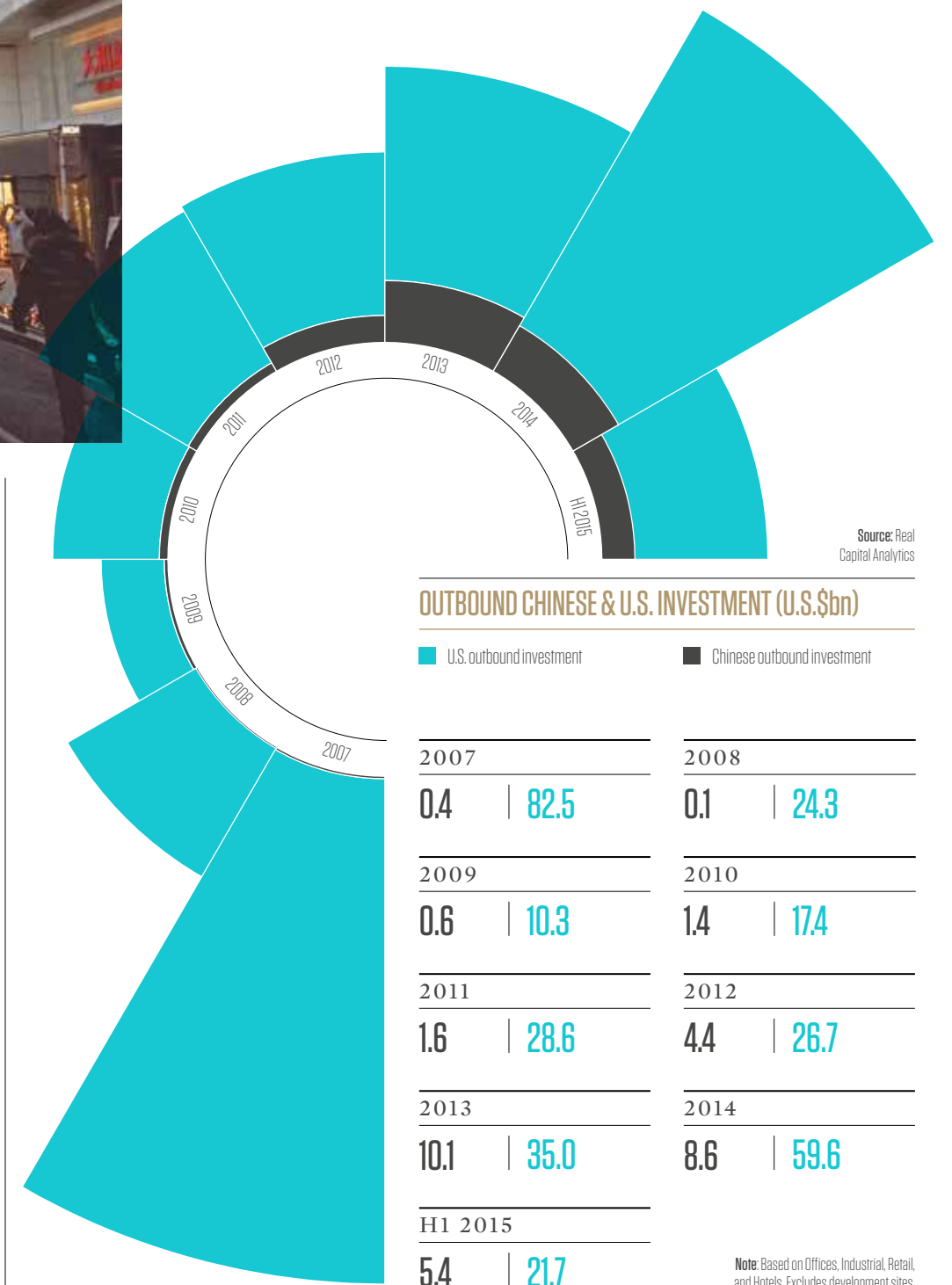
Mixed-use projects offer portfolio characteristics that allow investors to spread risk, as well as gain exposure to a fast growing trend that is set to continue

for some time. However, investing in mixed-use requires an understanding of variety of different uses and business sectors, how they interact with each other and, in particular, how to approach valuation for the different components.

Examples of mixed-use buildings and locations around the world range from Marina City in Chicago to the planned Super Tower in Bangkok, which comprises hotels, retail and offices. Europe is also seeing its share of new mixed-use developments, notably Battersea Power Station and White City in London, Bercy Charenton in Paris, and Milanosesto in Milan.

5. U.S. AND CHINESE OUTBOUND CAPITAL

Traditionally, U.S. investors have dominated cross-border investment. In fact, in the two years to June 2015, U.S. investors invested more than \$100 billion in international retail, offices, logistics and hotel property. Major drivers for the acceleration in overseas investment have been a combination of the strong dollar, competition in the domestic market and



Source: Real Capital Analytics

Note: Based on Offices, Industrial, Retail, and Hotels. Excludes development sites.

CONTINUED ON 38

Wuhan, China



CONTINUED FROM 36-37

opportunities to find value – notably in Europe where the property market recovery has lagged behind. In the last two years, over 80% of U.S. overseas investment has focused on Europe, with a very heavy bias towards London and Paris, as well as Tokyo.

Asia Pacific has been on the radar of U.S. investors but in the last two years only around \$18 billion, or 15%, of outbound U.S. capital has been deployed in the region. Of the acquisitions made by U.S. investors, some 66% was spent on office assets.

U.S. interest in China peaked in 2013, with the recent economic slowdown impacting buyer confidence. In H1 2015 the number of deals has been limited, although transactional volumes will look impressive on the back of Blackstone's U.S.\$814 million acquisition of L'Avenue, an office and retail complex in western Shanghai. However, following the stock market turbulence of summer 2015, U.S. interest in the Chinese market may cool in the near-term.

A slowing domestic economy, measures to cool the housing market and the relaxation of regulations on overseas investments has also prompted many Chinese investors

### WHAT IS FIRPTA?

The Foreign Investment in Real Property Tax Act (FIRPTA) has been in force since 1980, and applies to foreign nationals selling U.S. real estate.

There has been considerable discussion about repealing or changing the act, which is seen as discouraging international investment in U.S. real estate, given the onerous nature of some of the rules for foreign investors, in particular the 10% withholding tax on disposals.

However, despite ongoing discussion among U.S. legislators, there has to date been little progress in terms of concrete changes.

to seek opportunities abroad. As a result, Chinese outbound investment continues to grow, with a total of U.S.\$24 billion invested in overseas commercial property in the two and a half years to June. In July, sovereign wealth fund, CIC, bought a U.S.\$1.8 billion portfolio of office buildings in Australia, sold by Investa Property.

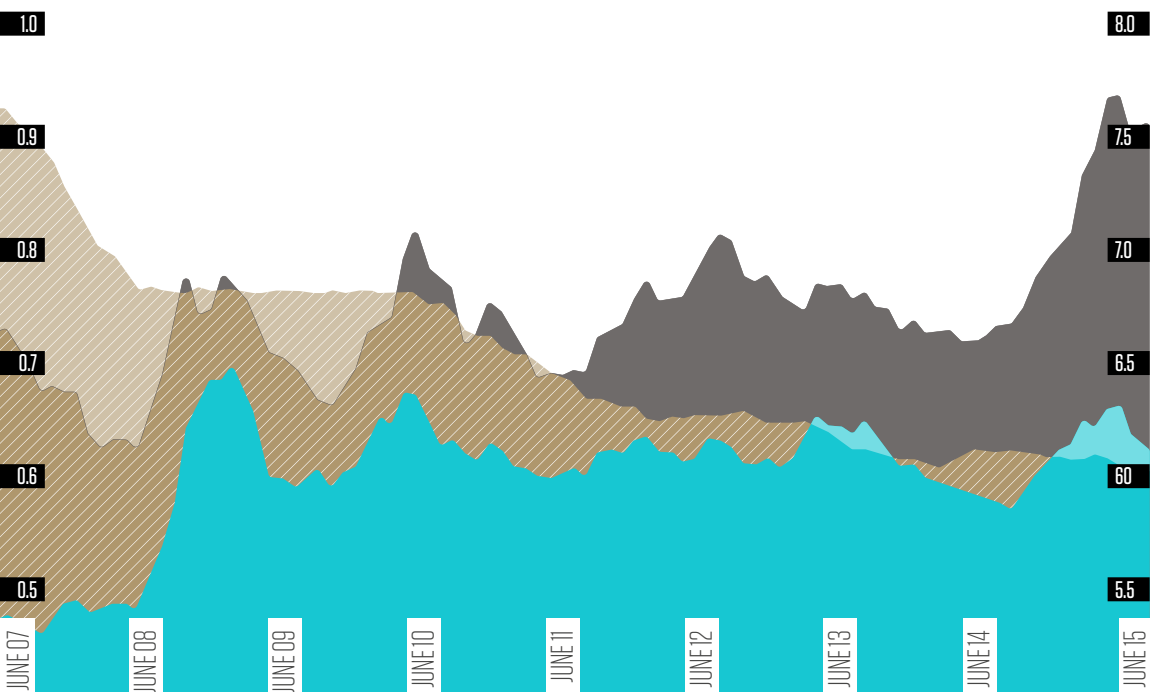
There have been several waves of outbound capital, beginning with the sovereign wealth funds buying trophy assets and banks securing property for owner-occupation. The second and third waves comprised large developers and institutional investors respectively. The fourth wave of outbound investment is now underway, with wealthy individuals and small to mid-cap state-owned enterprises seeking exposure to global real estate markets.

The Chinese authorities recently announced the Qualified Domestic Individual Investor programme 2 (QDII2) in six cities (Shanghai, Tianjin, Chongqing, Wuhan, Shenzhen and Wenzhou), which will lift restrictions on the amount individual investors can spend overseas. Investors with over U.S.\$163,000 of assets will be able to invest up to half the value of their total assets in overseas markets, while the limit for corporate investors will rise from \$300 million of foreign assets to \$1 billion.

### THE U.S. DOLLAR

■ £ (LHS) ■ EURO (LHS) ■ Renminbi (RHS)

Source: Real Capital Analytics



# GLOBAL MEGATRENDS

Mike Sales, the Chief Executive Officer of TH Real Estate, discusses the megatrends shaping real estate investment



Global megatrends are re-shaping the world economic order. From mass urbanisation, to the rise of the global middle classes, aging populations, technological trends and the shift of economic power from the West to the emerging world, all pose major implications for the built environment and demand for real estate. While megatrends in emerging Africa and Asia tend to lend themselves to the more eye watering headlines, their more subtle impact on developed world cities can sometimes get overlooked. Yet understanding their impact is critical. Although the short-term performance of real estate is determined by economic cycles, there may be potential risks to long-term value as these trends play out. Ignoring long-term structural trends in favour of short-term gain could mean missed opportunities.

The impact of megatrends are more apparent at the city rather than the country level, so any strategy needs to be focused on cities in order to provide investors with better clarity. A two-pronged approach to top-down strategy allows structural megatrends to be considered alongside tactical real estate fundamentals. This means cities can be judged according to the qualities that make them attractive to people and occupiers, both today and in the future.

The first stage of any filter process, therefore, is not about real estate investment fundamentals, but purely about targeting cities that are “future resistant” from economic, social and environmental perspectives. Factors such as size, affluence, age profile, the willingness to embrace technologies, and the quality of life are all relevant. Given the emphasis is on long-term investment opportunities, growth potential is also an important consideration.

As mentioned, traditional structural measures of specific real estate risk must not be overlooked, so potential city targets must also score adequately against liquidity, transparency and income security measures. This is why institutional investors often struggle to access opportunities in emerging world cities, where megatrends are producing dramatic impacts and leading to an explosion in new consumer markets. In developed world cities, where real estate risk is more palatable, the emphasis should therefore be on cities which have the ability to attract talent, tourism and international tenants.

When constructing a portfolio, the benefits of diversification – whether location, sector or demand drivers – should be at the forefront of any acquisition strategy. A balance of occupiers by industry type helps lower

“MEGATRENDS ARE PRODUCING DRAMATIC IMPACTS AND LEADING TO AN EXPLOSION IN NEW CONSUMER MARKETS”

volatility and void risk. Investments underpinned by financial and business services, for example, might be complemented with investments in resource or technology-led cities. Of course, the focus on long-term demographic, social and environmental trends does not mean that timing entry and exit points and asset management initiatives are not critical factors in day-to-day portfolio management decisions. Although the universe of “winning” cities based on long-run fundamentals might not change very much, short- to medium-term buy and/or sell priorities will inevitably evolve to reflect the cycle and enhance performance.

# RETAIL

## ALL THE WORLD'S A STAGE

Retailers with international ambitions need to adapt to local needs

WRITTEN BY  
Stephen Springham,  
Head of Retail Research,  
Knight Frank

Internationalisation among retail occupiers is anything but a new phenomenon. The likes of H&M and Zara are common sights on high streets the world over, while IKEA sheds are an equally omnipresent force out-of-town. However, global retail markets are anything but homogeneous, and the path to international growth is

not necessarily paved with gold. Many retailers have successfully made the global transition, others are just starting out in their endeavours. Some retailers are still licking their wounds in the wake of ill-advised or poorly executed overseas forays.

The rewards of successful internationalisation are substantial, but the risks are also manifold. Real estate markets play a fundamental role in the globalisation process and are often the tipping point between success and failure.

### THE OCCUPIER RATIONALE

The attraction of internationalisation for retailers is simple: growth. Domestic opportunities may be limited due to

market saturation, excessive competition or regulatory issues, such as restrictions on market share. International retail markets may also be on a far higher growth trajectory, while at the same time offering the win-win scenario of being less competitive. This is particularly true for retailers expanding from mature to emerging markets.

### THE OCCUPIER OPTIONS

A retailer with international aspirations has four key options for market entry:

- Organic expansion
- Acquisition of a local operator
- Collaboration with a local player
- Franchising

There is a direct correlation between the level of risk and potential reward. The financial returns of organic expansion are potentially the highest, but there are also significant downside risks. Organic expansion tends to be a slow, piecemeal process and the lead time to break even can be a long one. At the other end of the spectrum, franchising is a far lower-risk option, but the returns are usually less attractive. The 'middle' options offer a more balanced risk-reward profile, drawing on the know-how and experience of a local operator familiar with the market.

### THE PITFALLS

The most common failing by far is an inability to understand and adapt to the local marketplace. Aborted international ventures invariably stem from a retailer rigidly trying to impose its domestic values on its new market, rather than tailor its proposition to meet local demands. Globalisation also

brings greater exposure to more volatile economies, with those offering the highest growth often those also with the highest level of uncertainty. Currency fluctuations are another inherent risk, as many U.S. retailers are currently experiencing. Any hard earned growth achieved by international markets can be rendered negative by unfavourable exchange rates.

### IMPLICATIONS FOR REAL ESTATE MARKETS

Internationalisation is undoubtedly a force for good for real estate markets on a number of counts.

**"SOME RETAILERS ARE STILL LICKING THEIR WOUNDS AFTER ILL-ADVISED OVERSEAS FORAYS"**

Many internationalising retailers are cash rich multinationals, able to pay a rent with solid covenant strength. The arrival of new entrants from abroad also brings a series of holistic benefits. By bringing a sense of diversity, they lay down a competitive gauntlet, which gives an impetus to existing retailers to upgrade their own propositions in response. International brands also have a multiplier effect: where high profile brands venture, others tend to follow. Particularly in emerging markets, a major international retailer can give a scheme credibility and put it on a wider radar screen – among consumers, other

retailers and would-be investors. In short, an internationalising retailer is a catalyst for positive change generally – and positive change is invariably a stimulus to rental and capital value growth.

### WHAT REAL ESTATE MARKETS CAN DO

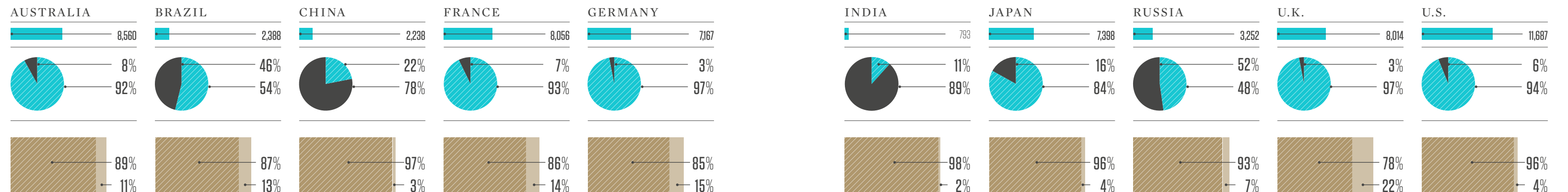
Real estate markets can be far more proactive in fostering retailer internationalisation. On the one hand, there is an onus to supply the right property stock, where possible through purpose-built facilities. Traditional stock is often dated, too small or ill-configured for modern-day retailing needs. This issue transcends both emerging and supposedly mature markets – for example, the prime retail pitch in central London (Oxford Street/Regent Street/Bond Street) is no exception and many units are heavily compromised.

On the other hand, the real estate community has a wider role to play, principally by providing transparency and market guidance. Few internationalising retailers will have had first hand experience of local property practices and idiosyncrasies. Lease terms can differ radically from one market to another. Many internationalising retailers are also guilty of having a very blinkered view of a market, often failing to look beyond the prime pitch of the capital city. Attractive and lucrative as these locations may be, there could be far greater potential at lower cost in provincial towns and cities. Retailers may need educating about these opportunities and the property market has much to gain by providing it.

Source: Planet Retail, Knight Frank Research

### GLOBAL MARKETS: MACRO COMPARISONS (2015)

Total retail format sales/capita (U.S.\$)\*  
Traditional trade\*\*  
Modern trade  
Domestic  
International



\* Retail sales per capita is a comparable form of spending power

\*\* 'Modern' versus 'Traditional' compares the structure of the local retail market. Modern includes unit shops, shopping centres, and online. Traditional includes market stalls and bazaars.



Rodeo Drive, Los Angeles, U.S.

# FLEXIBLE LIVING

## SHORT-TERM THINKING, LONG-TERM REWARDS

*For investors and landlords, there are clear long-term rewards in the world of short-term rental accommodation. Cities that embrace the flexibility of models like serviced apartments will reap the economic rewards*

**WRITTEN BY**  
Tom Bill,  
Head of London Residential Research,  
Knight Frank

# 18.2%

Estimated increase in the number of serviced apartments worldwide between 2014 and 2015

Source: The Apartment Service

There are two compelling factors driving global demand for short-term rental accommodation.

First, companies have become more cost conscious after the financial crisis and are curbing the expense and altering the nature of overseas assignments. Second, there is a new generation of younger employees used to more flexible business and leisure travel, which is encouraging companies to deploy people around the world for shorter periods.

However, supply is struggling to match fast growing demand in many established markets, for what is a relatively new form of accommodation. It is a situation compounded by the fact that short-term lets often fall into a legal grey area, despite the rise of online providers like Airbnb.

The combination of a supply shortage and a fluid regulatory landscape means those cities that embrace the short-term rental model stand to reap substantial economic benefits.

### CHANGING WORKING HABITS

One way companies have become more conscious about costs is to increase their reliance on short-term assignments and use serviced apartments rather than hotels during the initial stages of a relocation.

Some 63% of companies reported increased pressure to reduce assignment costs, according to a 2015 report by Brookfield Global Relocation Services.

Staying in serviced apartments saves employees making trips to scope out an area before they relocate full time. And, unlike with hotels, extra costs like food and laundry do not tend to build up quickly.

The trend for short-term stays is part of a fundamental shift in the way companies manage their real estate, says Wadih Canaan, Managing Director of buying and relocation agent WSC Properties.

"It has taken a while for people to figure out there was a market for serviced apartments," Canaan explains. "Companies used to lease or buy buildings, but that is capital intensive. They are not in the real estate business and would rather not deal with the headache of maintaining properties." Short-term assignments are forecast to grow to over a fifth of all international relocations in the three years to 2017, according to assignment consultant ECA International. Meanwhile, long-term

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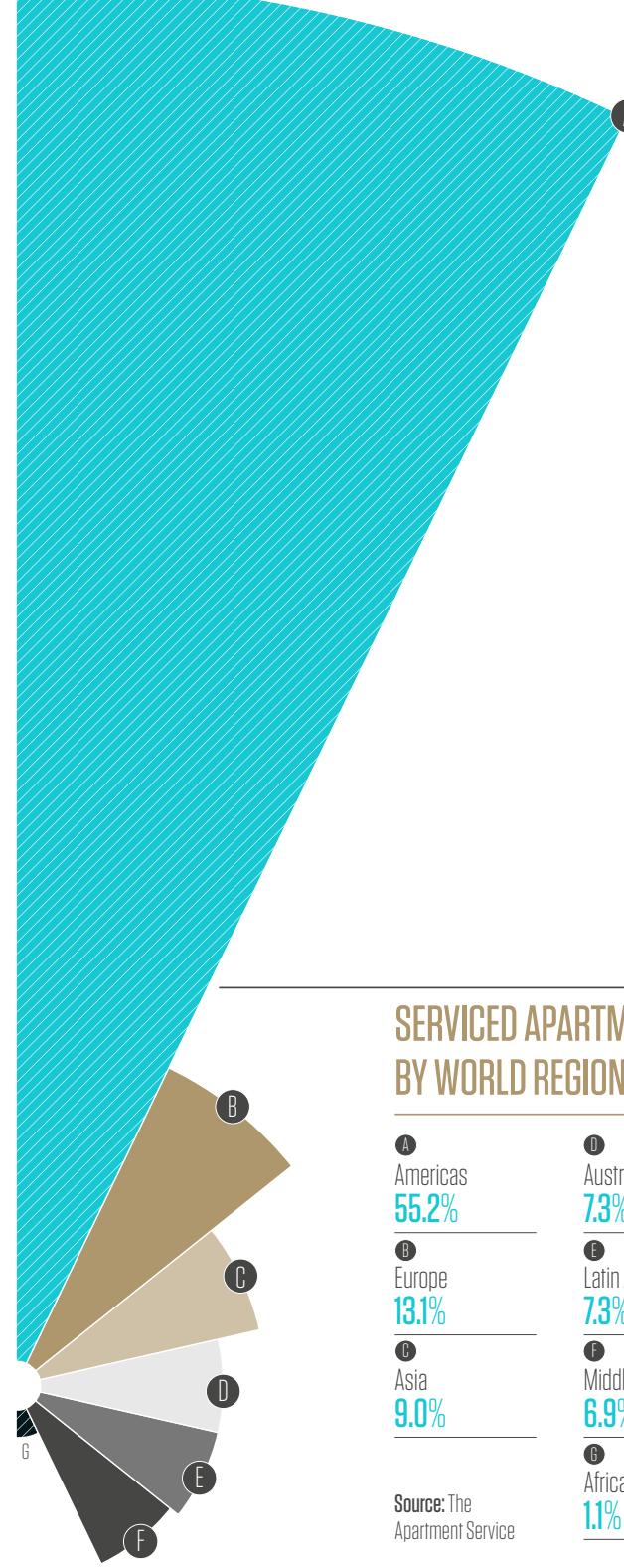
One Fine Stay apartment, New York City, U.S.



assignments are expected to fall from 52% to 45% over the same period. Shorter-term relocations are less disruptive than longer-term moves and are also driven by the desire of larger companies to share skills around the world, including the rotation of graduates, says Alec Smith, Accommodation Services Manager at ECA. "The traditional expat package is based on a longer-term, two to five year deal," Smith explains. "That approach is still popular, but ultimately the world is more global and clients have a growing need for short-term project work. Five years ago companies were put off by the administration of tax and immigration compliance for stays of less than 12 months. While that is still a big challenge, they are more prepared now to accept that they need to absorb the pain."

**THE STRUGGLE TO MEET DEMAND**

However, while demand is surging, supply around the world is often patchy or constrained by local regulations. Hong Kong is one of the most mature markets for short-term lets, but for a two bedroom apartment at the most popular level of U.S.\$6,450 per month, availability is low.



**SERVICED APARTMENTS BY WORLD REGION**

- A Americas 55.2%
- B Europe 13.1%
- C Asia 9.0%
- D Australasia 7.3%
- E Latin America 7.3%
- F Middle East 6.9%
- G Africa 1.1%

Source: The Apartment Service

In India, there is currently an under supply of serviced apartments in most major cities. However, a number of developers are building spaces that will hit the market in the next few years.

In Central London, the supply of serviced apartments and short-let accommodation falls far short of the demand from both international tourists and the film industry. Between April and October there is particularly strong demand from directors, producers and actors for three bedroom apartments in Notting Hill. Property that is realistically priced lets immediately and those clients unable to obtain a short let property have to use the more expensive hotel option.

**THE OPTIONS**

Serviced apartments (see box page 47) is only one way to capitalise on growing demand.

The private short-let market is a lucrative option. However, the reward of rental values that are typically double those in the long-term market is balanced by the greater risk of void periods.

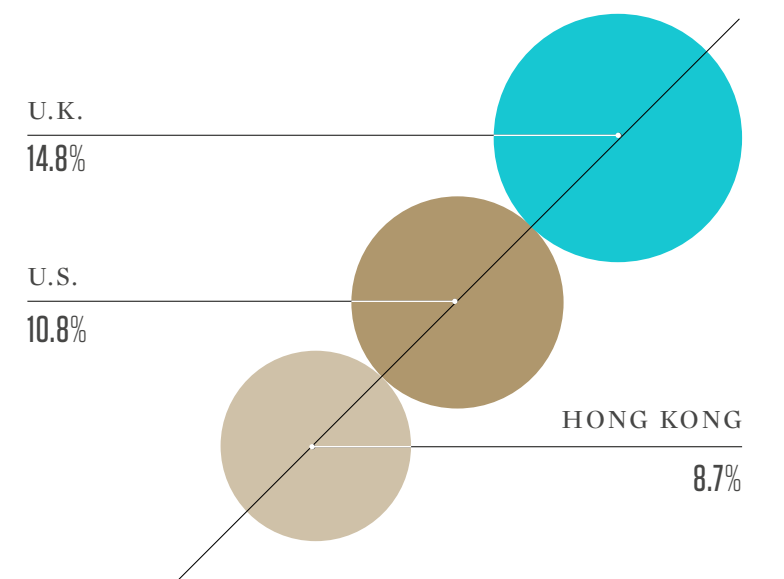
On top of the financial risks, private lets below a certain time period are illegal in most developed markets around the world. For example, the lower limit is three months in the London borough of Westminster, while short lets have become more tightly regulated in Dubai,



Brownstones, New York, U.S.

**VISA APPROVALS BY CITY**  
% CHANGE IN WORK-RELATED VISA APPROVALS 2014 V 2013

Source: Home Office immigration statistics / U.S. Department of State / Hong Kong Immigration Department



**“THE TREND FOR SHORT-TERM STAYS IS PART OF A FUNDAMENTAL SHIFT IN THE WAY COMPANIES MANAGE THEIR REAL ESTATE”**

Jumeirah Lakes Towers, Dubai, UAE

in preparation for the emirate’s Expo 2020 event.

For private landlords, lets of less than 30 days are a grey area in New York, and condo and co-op boards and local bylaws make short lets difficult, even though the internet is driving the popularity of the model. Furthermore, the market is not standardised and there are laws to protect tenants that can result in problems for landlords when getting them to leave.

Such grey areas have done little to dent the growth of online short-term accommodation providers like One Fine Stay and Airbnb. The latter entered the Cuban market this year, following reports that it would float in the U.S. with a valuation of \$20 billion.

Despite the rapid growth and heady valuations, local restrictions can limit the scope for such platforms, as is the case in Singapore. Airbnb is allowed under Singapore law but the property

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owner has to be living in the apartment at the same time.

Furthermore, many companies continue to favour serviced apartments for reasons of transparency and uniformity of service and quality.

However, Airbnb is increasingly targeting corporate travellers and aims to grow a side of its business that currently accounts for 10% of stays.

“We are seeing a huge rise in business travel,” says James McClure, Airbnb’s Country Manager for U.K. & Ireland. “Travellers and employers have long been asking Airbnb to help make it easier to incorporate Airbnb into their travel policies.”

**THE FUTURE**

As the sector grows, ensuring quality levels of short-term accommodation will be a challenge, particularly given that future economic growth will be dominated by emerging markets.

For the serviced apartment market, it underlines the growing importance of

branding and the uniform quality of services and booking systems.

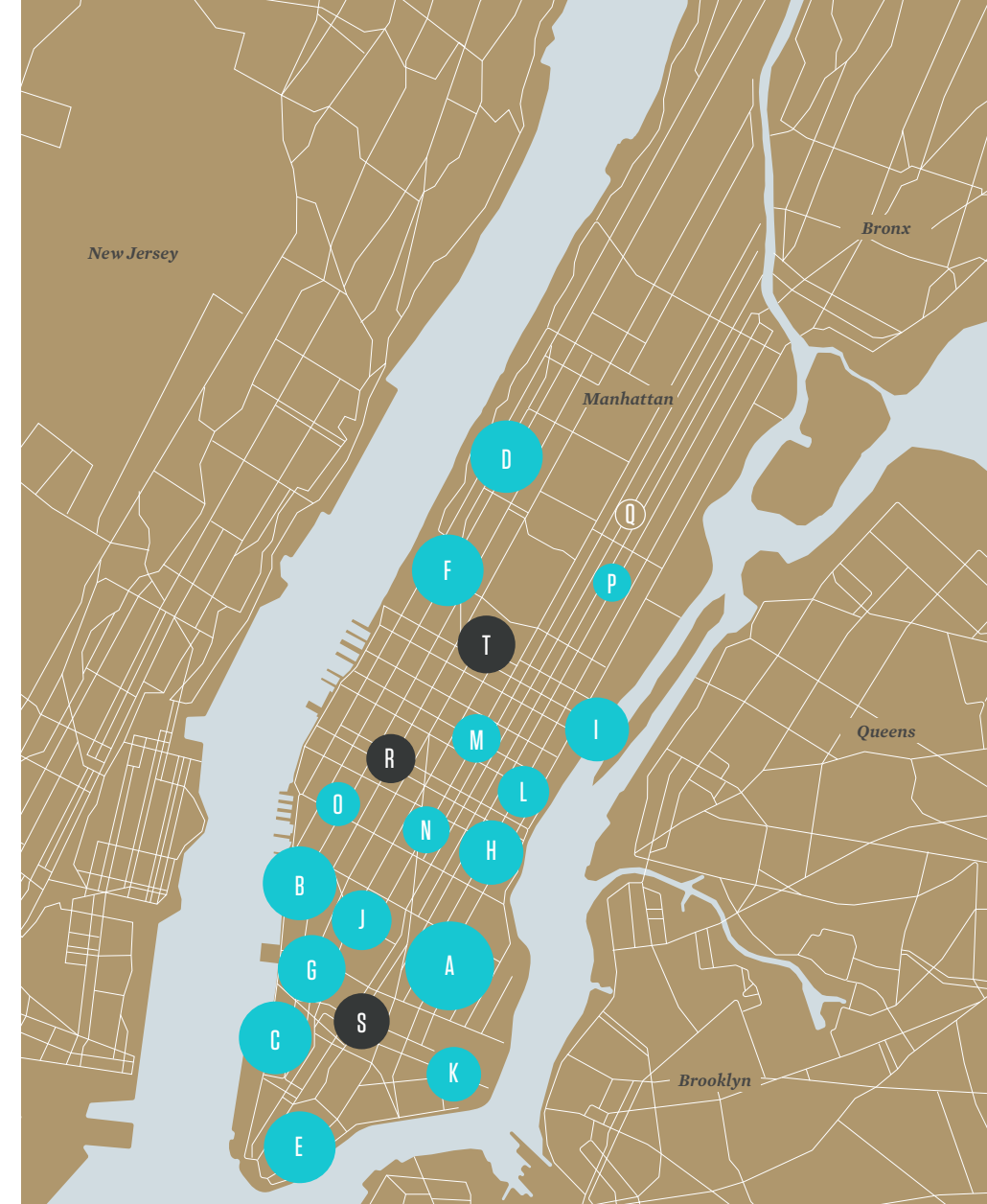
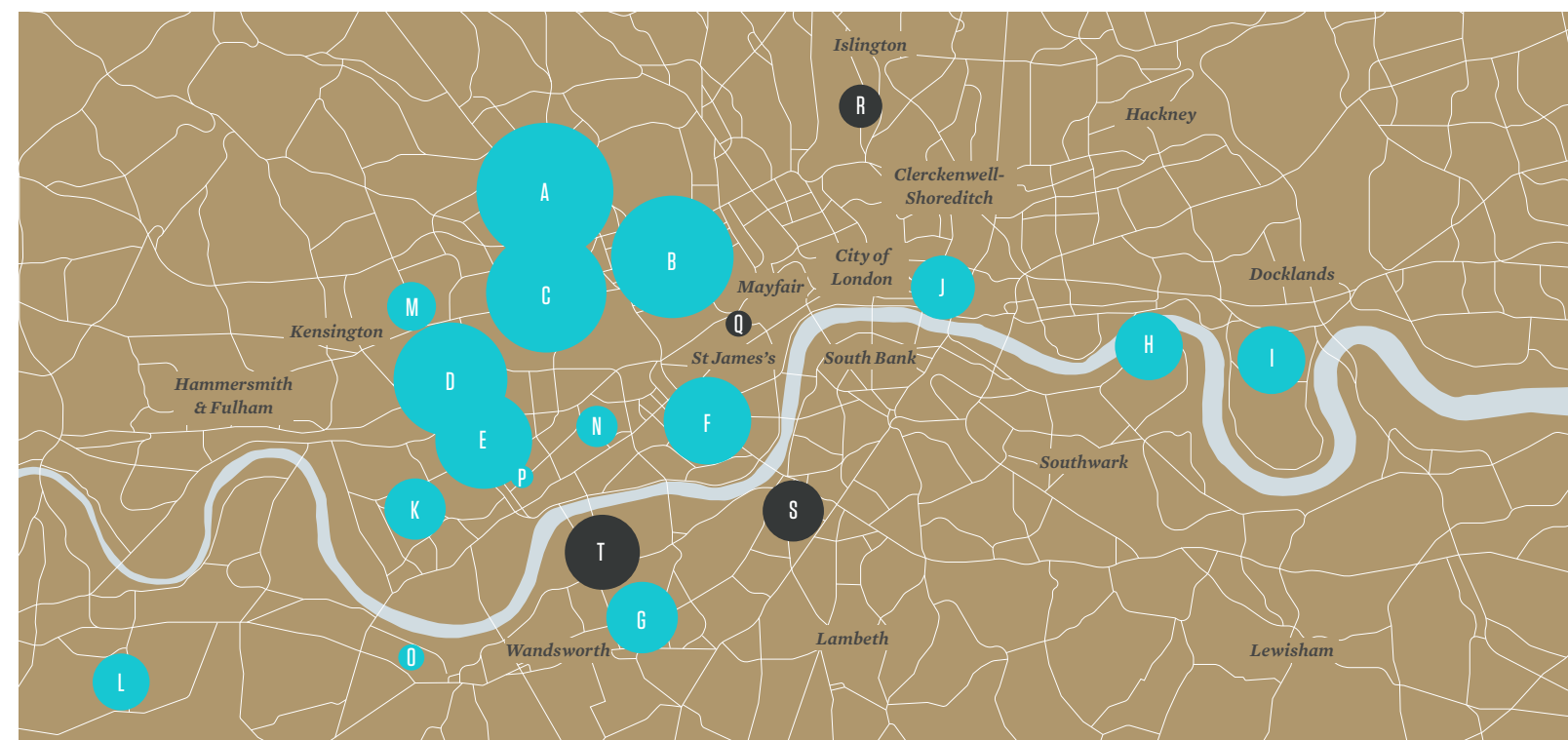
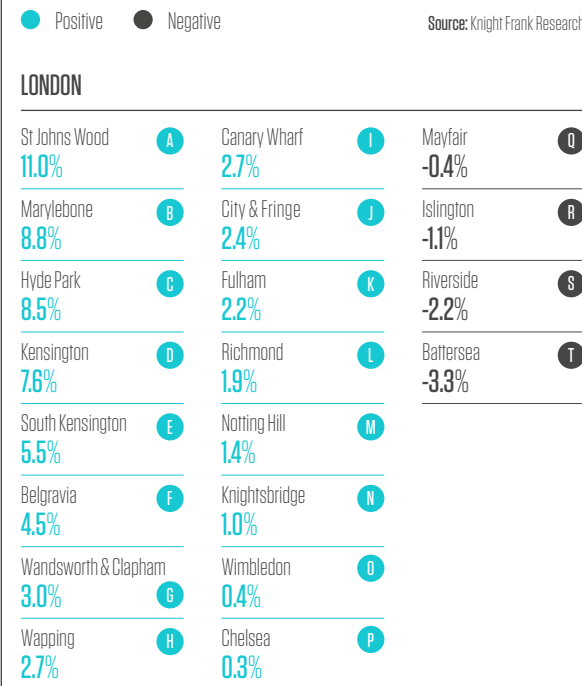
For example, the quality of serviced apartments in Kenya matches that of a hotel, but it’s been done relatively informally to date. The next level will mean more professionalism and a branded type of offer.

There is also a growing trend for operators to locate serviced apartments and hotels on the same site. This produces savings both during development and once open as they share back of house facilities.

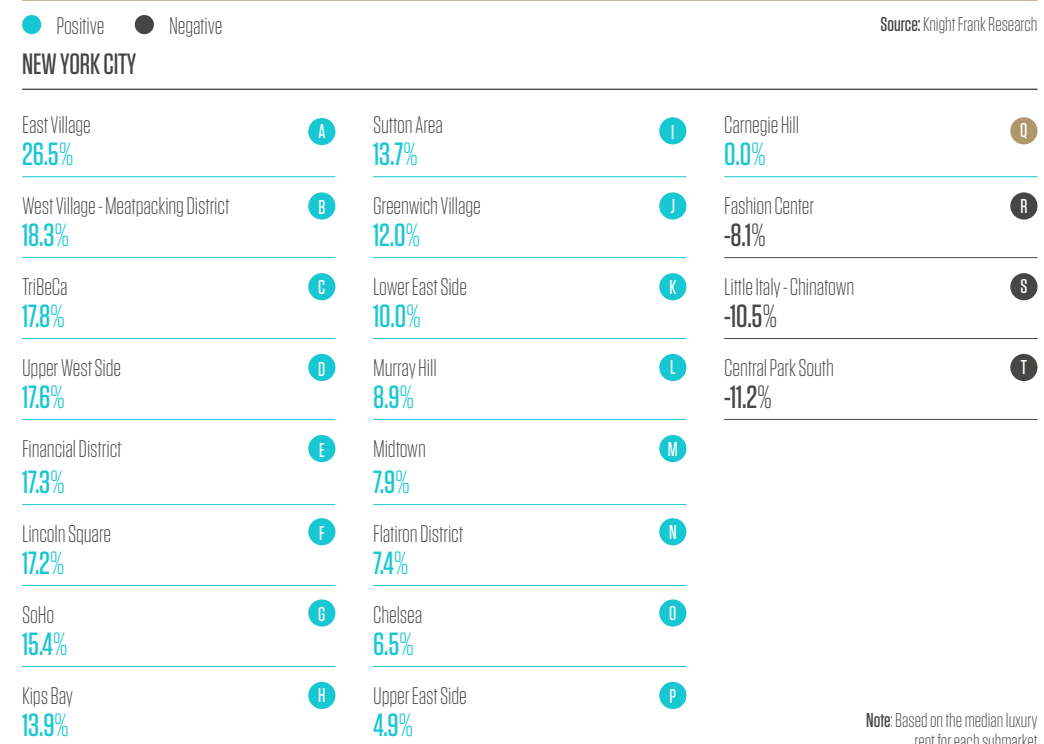
However, there are risks as well as opportunities, underlined by the fact that competitive tension between serviced apartment and hotel operators remains in the most developed of markets.

Those cities that can find a way through such complexities and embrace this new form of real estate stand to benefit from a sector that is set for strong growth.

**MAPPING RENTS: LONDON VS NEW YORK**  
RENTAL GROWTH BY PRIME SUBMARKET  
ANNUAL % CHANGE TO Q1 2015



**RENTAL GROWTH BY LUXURY SUBMARKET**  
ANNUAL % CHANGE TO Q1 2015



**THE RISE OF THE SERVICED APARTMENT**

An all inclusive hybrid of a hotel room and a rental apartment, the number of serviced apartments in the world has grown by 80% since 2008 to about 750,000, according to a report by The Apartment Service, a global provider of short-term accommodation.

The advantage over a hotel is that it’s cheaper and more homely. In India, a decent complex can be about a third of the price of a five star hotel.

The serviced apartment began life in the U.S. in the 1980s and North America still accounts for 61% of the world’s serviced apartment locations, followed by Europe (17%), Australasia (11%) and Asia (5.5%).

The fastest-growing markets in 2015 were Europe (up 42% on the previous year), Africa (34%), while the number of serviced apartment sites in Asia and the Middle East grew by 31.5%. North America increased by a more modest 6%.

The fact that demand exceeds supply puts upwards pressure on occupancy levels, with nearly three quarters of global operators reporting a year-on-year increase, according to The Apartment Service report.

Such strong occupancy rates mean hotels are increasingly moving into the service apartment market. Marriott and Intercontinental were two of the top three serviced apartment operators in the world by number of units in 2014.

# THE ARCHITECTURE OF INCLUSIVITY

*Dame Zaha Hadid argues that all architects now have a social responsibility to create buildings that welcome the public and celebrate communal spaces*



Portrait of Zaha Hadid  
by Steve Double

way of living. Modern communities should be inclusive, with varied spaces and programmes that invite social interaction.

## MATERIAL GAINS

Part of architecture's job is to make people feel good in the spaces where we live, go to school or work, so we must raise standards. Having a home is a crucial issue – not only in terms of a shelter, but also for wellbeing, for a better life. There's enough wealth in society today that all people should have a good home, not just the very rich. Social housing, schools, hospitals and other vital infrastructure have always been based on the concept of minimal existence, but that shouldn't be the case today. Architects now have the skills and tools to address these critical issues, and many communities around the world are committed to resolving them.

Elevated view into public courtyard of complex, Galaxy Soho, Beijing, China. Architect: Zaha Hadid Architects, 2012

**“AS AN ARCHITECT, YOUR CLIENT IS NO LONGER A SINGLE PERSON OR TYPE OF PERSON - YOUR CLIENT IS EVERYONE”**

Architecture can assist in the reorganisation of living patterns in a meaningful way, so that everyone can contribute to a more ecologically and socially sustainable society. Huge advances in design technology are enabling architects to rethink both form and space, using new construction methods and materials in development, such as sophisticated architectural facades that can take almost any shape, and have the structural, weatherproofing and insulation properties compressed

Architecture is ultimately about wellbeing - the creation of pleasant environments for all aspects of life. But it is also important to create places that uplift, enthuse and inspire people. Architecture can carry a sense of vitality and optimism, the ability to connect communities and shape their futures. Ecological sustainability and social disparity are the defining challenges of our generation, and the 'architecture of inclusivity' offers solutions to these key issues.

The complexity and dynamism of contemporary life cannot easily be cast into the simple orthogonal grids and blocks of the 20th century architecture of Henry Ford's era. We must move beyond these ideas of separation and compartmentalisation, towards an approach for the 21st century that addresses the richness, complexity and interconnectivity of modern day lives.

More than half of the world's growing population now lives in cities, and this figure is increasing. Cities today are much more diverse and must now cater for a range of people with different cultures, experiences and influences. As an architect, your client is no longer

a single person or type of person - your client is everyone. This is very exciting and adds to the richness of civic spaces.

## OPENING DOORS

All buildings should have a civic component. Even a commercial high-rise should offer public spaces in which people can connect. Developers in both the public and private sectors must invest in these spaces. They are a vital component of a rich urban life – they unite a city, tie the urban fabric together. Arts centres, opera houses, dance schools, sports centres and public parks, by the very nature of their cultural and civic importance, are spaces accessible to everybody, eliminating segregation and division in our cities.

There has been a move in many world cities in recent years towards walled, private spaces. As architects, we must reject this. Over many centuries, architects have been trying to liberate the city, open it up, and make it more porous and accessible. Building closed communities, like mini Kremlins, is a huge step backwards - a very archaic

into a single layer. They can be easily fabricated and assembled anywhere, and 3D printing is also opening many new possibilities for the construction industry.

We can now create buildings that optimise their environment to suit the needs of their users and changing weather patterns at any given moment. We are also researching new materials, design techniques and construction methods that bring significant environmental benefits. As these different developments - sustainability and the applicability of the materials - come together, we are beginning to find significant solutions to urgent ecological challenges.

Our task as architects is to continue this progress. We must marry concepts of accessibility and integration with

the incredible advances in ecologically sound materials and construction practices. We must not look at the disparate parts, but understand them as a whole, working together to create integrated communities that present solutions to the defining ecological and social challenges of our time. It is only through an architecture of inclusivity that we will create a truly sustainable society.

*British architect Dame Zaha Hadid is a recipient of the Pritzker Prize and two-time winner of the Stirling Prize.*

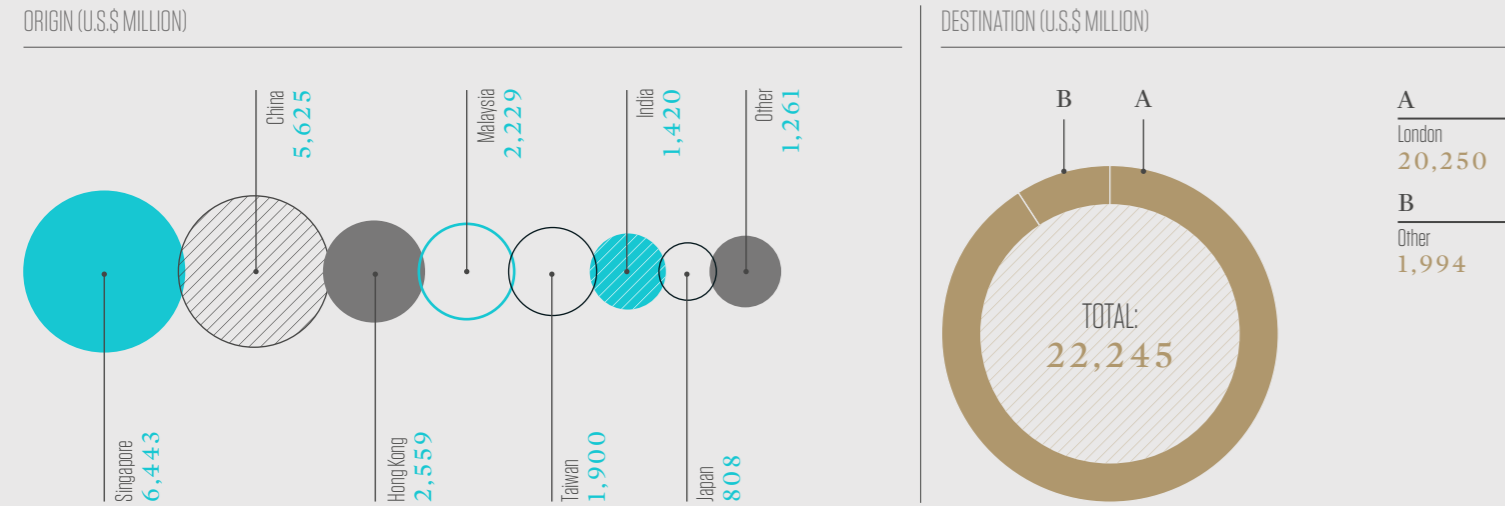




# ASIA DASHBOARD

A growing wave of Asian outbound capital is targeting core real estate assets in Western markets. Here we examine the key outbound trends over the last 24 months

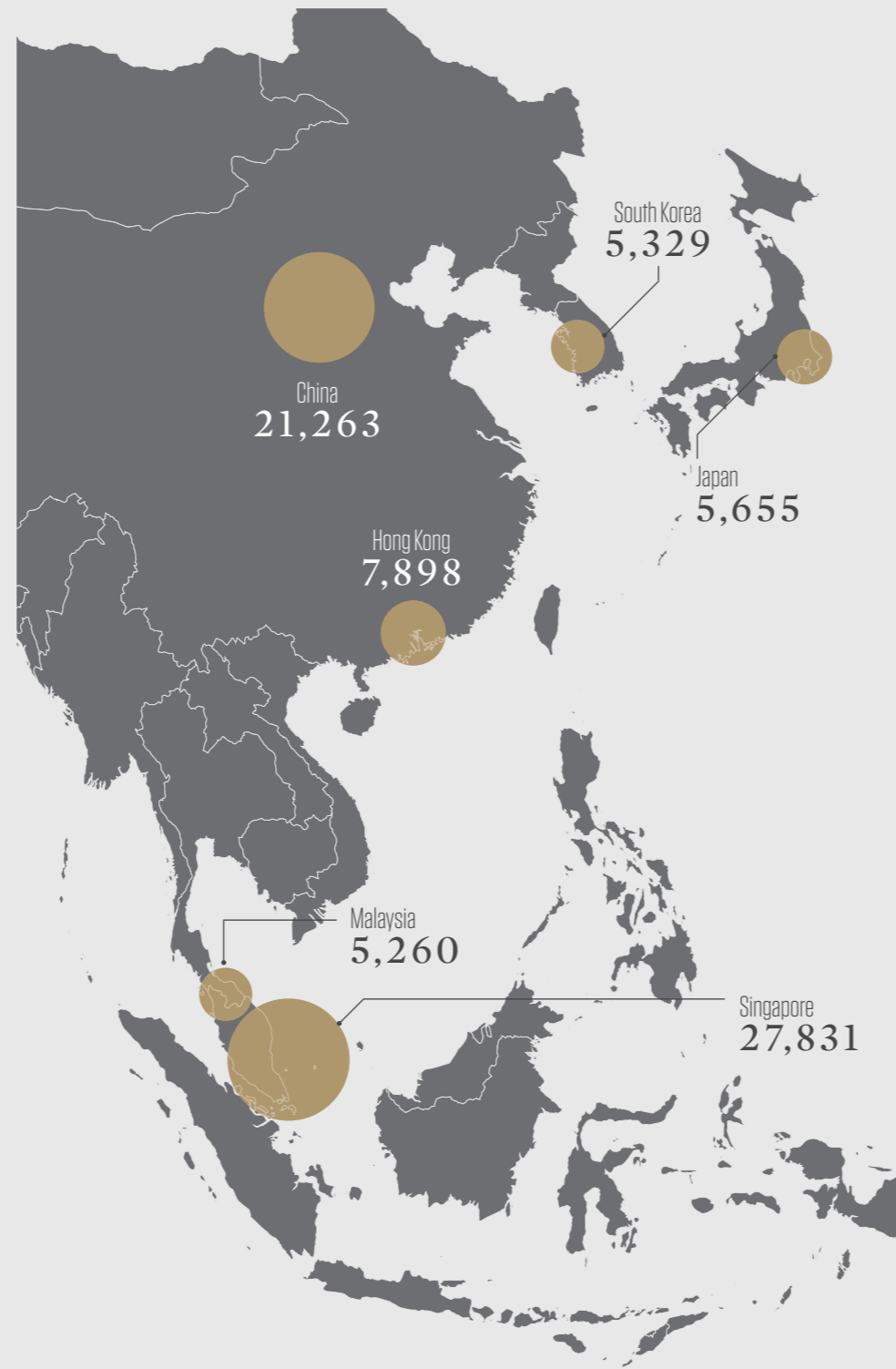
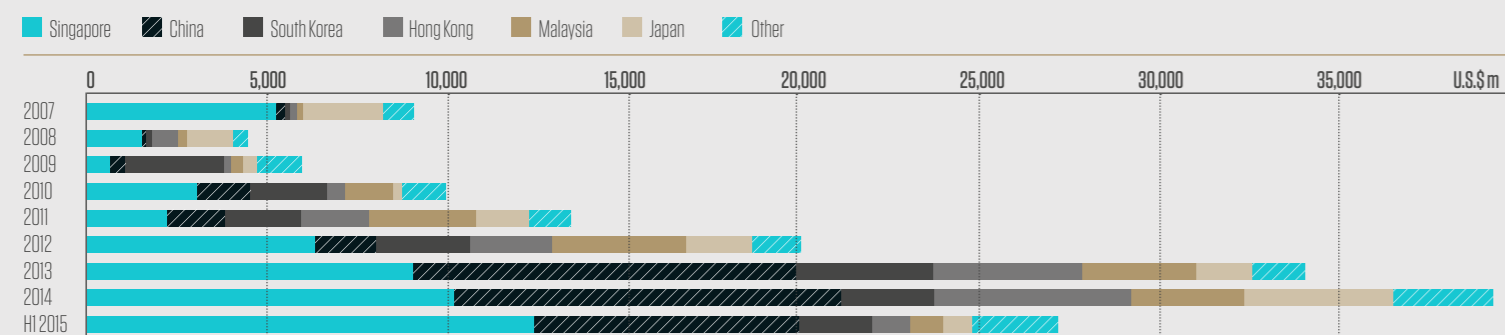
## ASIA INVESTMENT INTO U.K., 24 MONTHS (Q3 2013 - Q2 2015)



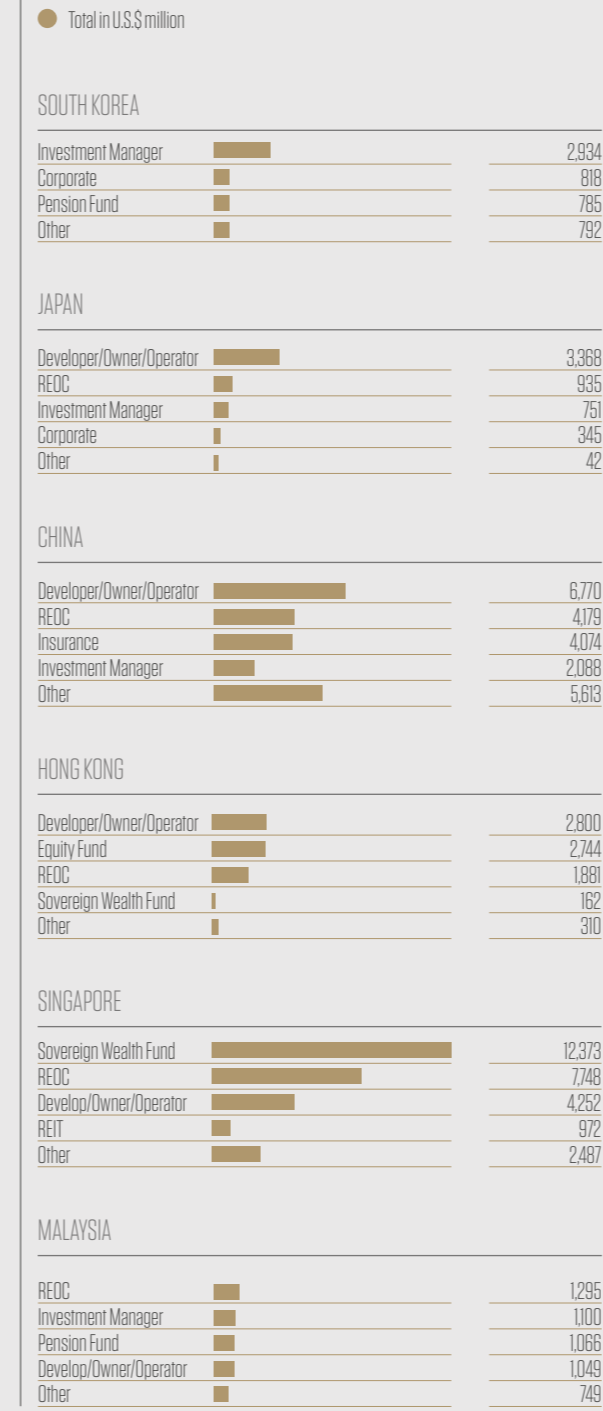
## ASIA INVESTMENT INTO CONTINENTAL EUROPE, 24 MONTHS (Q3 2013 - Q2 2015)



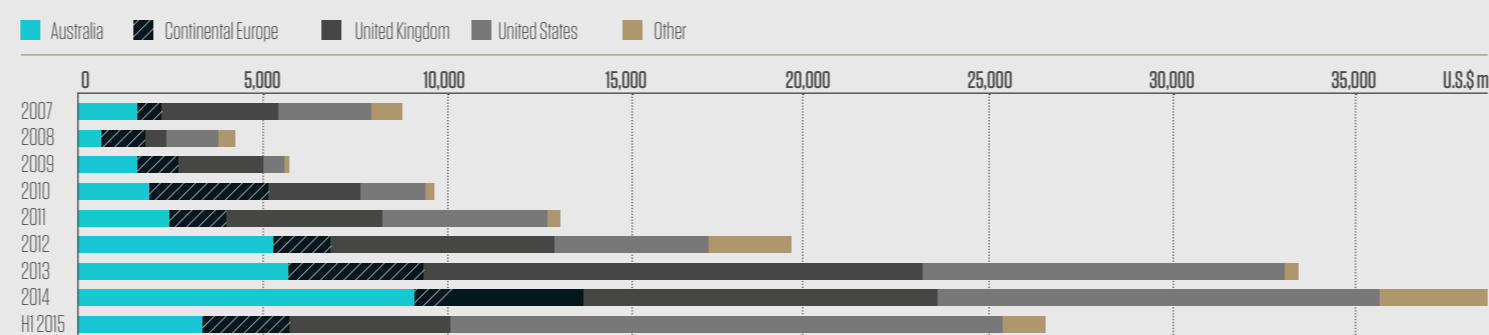
## ORIGIN OF ASIA OUTBOUND CAPITAL FLOWS



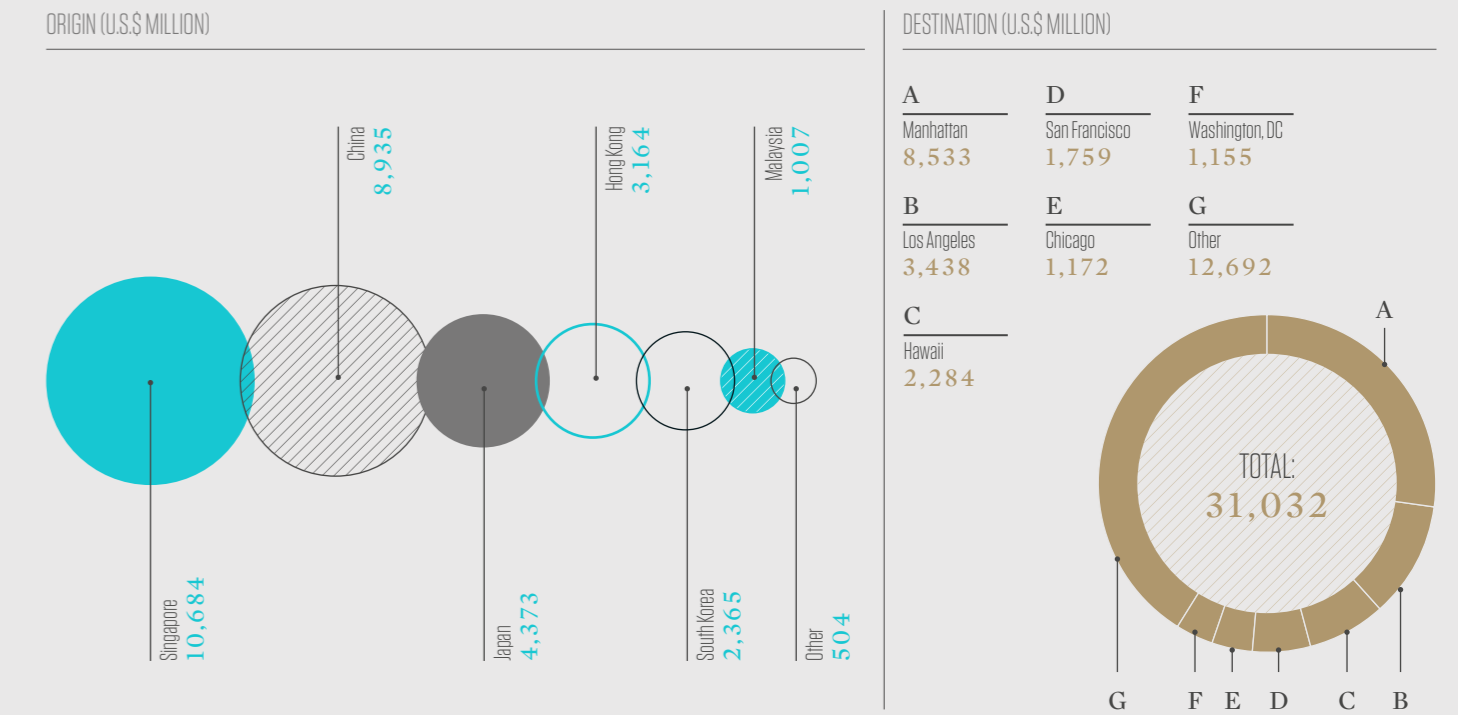
## ASIA OUTBOUND INVESTMENT VOLUMES BY BUYER TYPE, 24 MONTHS (Q3 2013 - Q2 2015) U.S.\$ MILLION



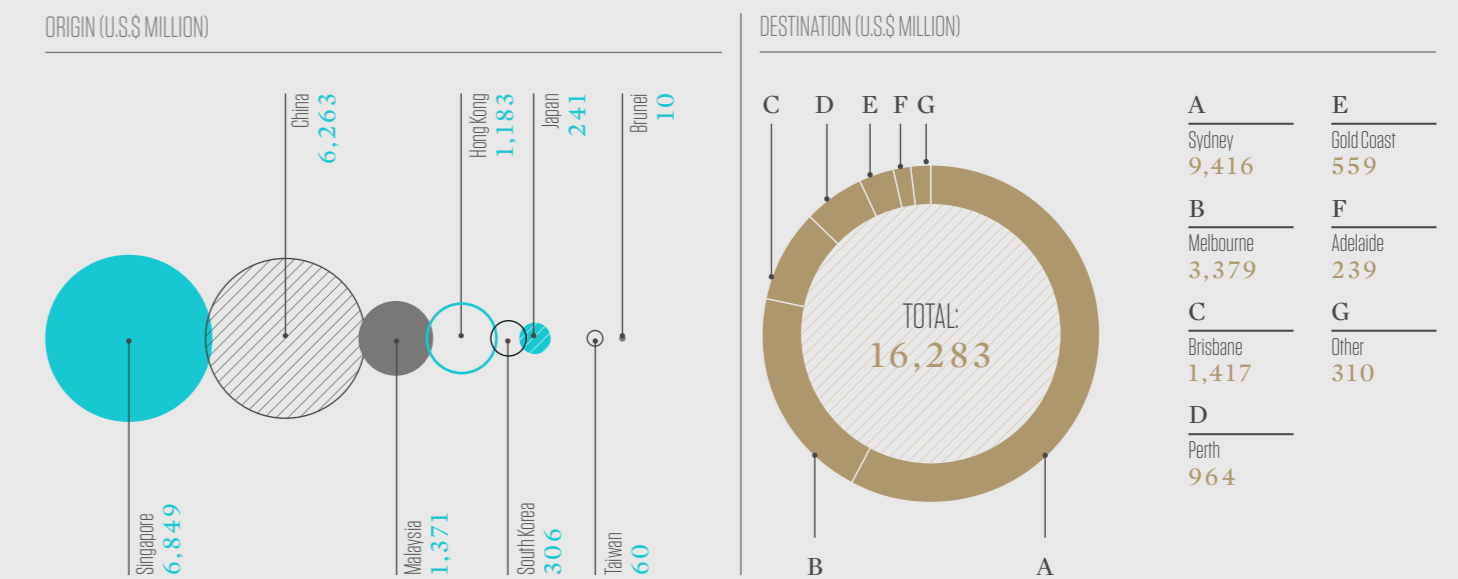
## DESTINATION OF ASIA OUTBOUND CAPITAL FLOWS



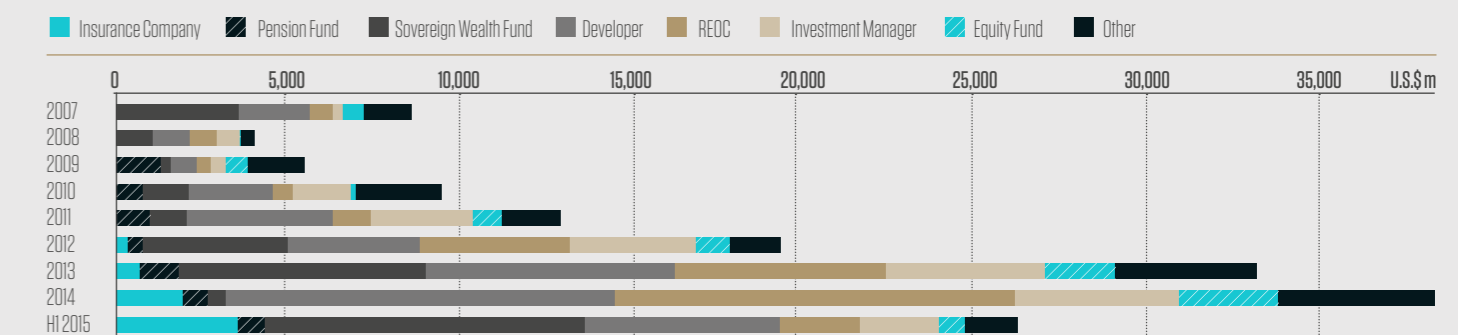
## ASIA INVESTMENT INTO U.S., 24 MONTHS (Q3 2013 - Q2 2015)



## ASIA INVESTMENT INTO AUSTRALIA, 24 MONTHS (Q3 2013 - Q2 2015)



## TYPE OF ASIA OUTBOUND INVESTOR



REOC = Real Estate Operating Company  
REIT = Real Estate Investment Trust

Source: Real Capital Analytics / Knight Frank Research

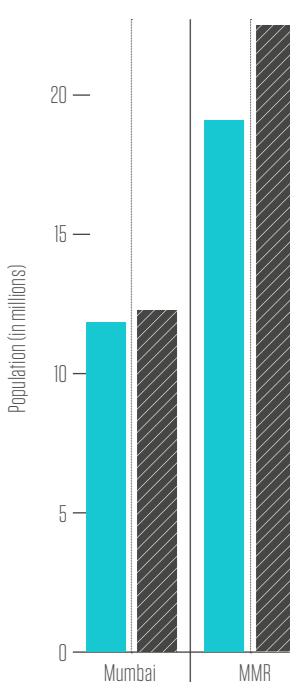
18.9750° N, 72.8258° E

# MUMBAI

## POPULATION GROWTH FASTER IN THE METROPOLITAN REGION

Source: ICMGM

25 — 2001 2011



Note: MMR = Mumbai Metropolitan Region

*The city's new plan will encourage transit-oriented infrastructure development and higher densities*

The distinction of being the financial capital of India puts Mumbai at the forefront of the economic landscape, not only of India but also Asia, making Mumbai an important city from a global perspective. Besides being the state capital, the city also serves as headquarters for the political and administrative machinery of the State of Maharashtra. Among the most densely populated cities in the country, Mumbai's population increased from 9.9 million in 1991 to 12.4 million in 2011. Of these, 5.2 million people live in slums. While the population increased, the city's infrastructure development did not keep up the pace, putting tremendous pressure on the quality of life of its residents.

The situation is aggravated when we look at the larger geography that is driven by the opportunities in Mumbai. As an extension to the 177 sq miles of Mumbai city, the Mumbai Metropolitan Region (MMR) is spread over 1,681 sq miles, putting further pressure on the city's infrastructure. Additionally, the population of MMR increased from 19.3 million in 2001 to 22.8 million in 2011 – a decadal growth rate of 17.8%, much faster than the 3.9% for Mumbai.

By contrast, 80% of the 114 million sq ft of office space in the MMR is located in Mumbai. While a slew of significant infrastructure projects, namely the Mumbai Metro, Mumbai Monorail and the controlled-access Eastern Freeway, became operational last year, they are only remedial measures – too little too late to rehabilitate the city's crumbling infrastructure and enhance the quality of life of its citizens.

While the previous city development plans focused on the growth of the suburbs and decongesting the island city, the draft Development Plan for Greater Mumbai 2014–2034 prepared



Chhatrapati Shivaji Terminus Train Station, Mumbai, India

WRITTEN BY Vivek Rathi, Vice President, Research, Knight Frank India

by the Municipal Corporation of Greater Mumbai has focused on transit-oriented development, with a view to aligning real estate development with the infrastructure of the larger MMR. Providing for a floor area ratio (FAR) – the ratio of a building's total built area versus the size of the lot it stands on – of as much as eight on transit nodes is a significant change in favour of dense urban development, compared to the existing rules that provide a base FAR of just 1 to 1.33 across the city.

While the plan is currently being reviewed to address concerns pertaining to the impact of high FAR and low open space, it is clear that a steady supply of sustainable real estate – liveable and affordable – is crucial to quality of life and business prosperity. Keeping this in mind, while increasing the FAR in transit nodes would be a vital first step, it should be supported by fast track development of the infrastructure projects whose benefits extend to the larger metropolitan region.

28.6139° N, 77.2090° E

# DELHI

*Delhi is set to become the economic anchor of north India as a result of two ambitious projects*

WRITTEN BY Ankita Sood, Consultant, Research, Knight Frank India

Loaded freight train passing through Delhi, India



The Delhi–Mumbai Industrial Corridor (DMIC) and the Amritsar–Delhi–Kolkata Industrial Corridor (ADKIC) projects are huge Indian government initiatives that will place Delhi at the hub of an expansive infrastructure and industrial network.

Both these industrial corridors will be established along dedicated freight corridors (DFCs). The DFC in the western part of the country will be 921 miles long and will run from Dadri in the National Capital Region (NCR) of Delhi to Jawaharlal Nehru Port near Mumbai in Maharashtra. The DFC in the eastern part of the country will start from Amritsar and end at Kolkata, covering a stretch of 1,143 miles. The DFCs will offer faster rail connectivity for high-axle-load wagons supported by powerful locomotives.

An influence zone of 93 miles on both of sides of these DFCs will be developed as industrial corridors. The influence zone on the western side of the country will be the DMIC – a \$90 million mega infrastructure project being executed with financial and technical aid from Japan. The eastern corridor is the ADKIC, which will be developed in phases, with financial assistance from the central government of India and the World Bank.

## INDIA'S FREIGHT CORRIDORS

The Western Dedicated Freight Corridor

### THE WESTERN DEDICATED FREIGHT CORRIDOR

Length of Dedicated Freight Corridor (DFC): 921 miles  
Influence area (93 miles on either side of the DFCs): Delhi–Mumbai Industrial Corridor (DMIC)  
States covered: Haryana, Rajasthan, Gujarat and Maharashtra  
Investment\*: \$90 billion

### THE EASTERN DEDICATED FREIGHT CORRIDOR

Length of Dedicated Freight Corridor (DFC): 1,143 miles  
Influence area (93 miles on either side of the DFCs): Amritsar–Delhi–Kolkata Industrial Corridor  
States covered: Punjab, Haryana, Uttar Pradesh, Bihar, Jharkhand and West Bengal  
Investment\*: \$975 million - Phase I, 2011  
\$1,000 million - Phase II, 2014  
\$650 million - Phase III, 2015



In the states along the routes of the corridors there will be projects to enhance manufacturing and services industries, as well as other infrastructure improvements to support growth. The corridors look set to create a competitive environment for local industries, draw global investment into a wider part of India, and deliver improved social infrastructure as smart cities are built along the two routes.

The projects will unlock huge zones of land along the corridors, which will be available for industrial and other real estate development purposes in the form of investment regions and industrial estates. The implementation and operation of various industrial and infrastructure activities will have a multiplier effect on job creation and real estate demand in the manufacturing, agro-processing and IT/ITeS sectors.

Owing to the large influence zone of these mega projects, Delhi, the country's capital city, will be positioned as a strategic economic hub anchoring the two industrial corridors. Overseas companies planning to set up base in these corridors are expected to fuel the office and residential demand around the NCR. This effect in terms of real estate demand and the consequent appreciation in land prices will propel development in the region as projects pick up steam.

12.9667° N, 77.5667° E

# BENGALURU

*The e-commerce ecosystem is driving real estate demand in the technology capital of India*

WRITTEN BY Sangeeta Sharma Dutta, Lead Consultant, Research, Knight Frank India

E-commerce has seen unprecedented growth in India in the last year, which is creating opportunities in the real estate market of Bengaluru (formerly Bangalore). Though the sector has been present in the country for the last 15 years, it is only recently, with several home-grown companies in the fray and the introduction locally of international players, that the e-commerce ecosystem has finally begun to take hold.

E-commerce was one of the major growth drivers of the country's economy in 2014. According to industry estimates, the sector in India has grown since 2009 to touch U.S.\$16.4 billion in 2014, reflecting a compound annual growth rate of 34%, and is expected to be in the range of \$22 billion in 2015.

Bengaluru has gained the most from this growth. The city, known globally as a major IT office hub, has witnessed substantial interest from the e-commerce sector. In 2013, e-commerce accounted for 1% of the total office leasing deals transacted, increasing to 4% in 2014. Although the sector's share in the first half of 2015 (H1 2015) is just 2%, it stands at 35% when pre-committed transactions in H1 2015 are taken into account.

**“AN IMPORTANT REASON WHY E-COMMERCE FIRMS WANT TO EXPAND IN THE CITY IS THE AVAILABILITY OF SKILLED TECHNOLOGY WORKERS”**

In 2015, Indian online retailer Flipkart signed up for 2 million sq ft of custom built office space in Bengaluru, while Amazon leased approximately 1.2 million sq ft of space, both pre-committed deals, to keep pace with its accelerated growth and hiring plans. E-commerce is expected to create around 50,000 jobs in the next three years, suggesting tremendous opportunities lay ahead for Bengaluru's real estate market.

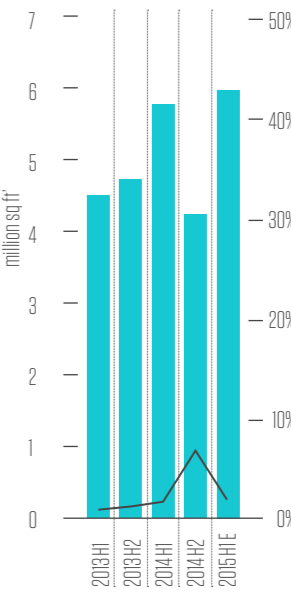
Skyscrapers, Bengaluru, India



## E-COMMERCE ENTERPRISES FAVOUR BENGALURU

Office space absorption (LHS)  
Share of e-commerce (RHS)

Source: Knight Frank Research



The figures for H1 2015 are estimated

An important reason why e-commerce firms want to expand in the city is the availability of skilled technology workers. Currently, Bengaluru accounts for more than a third of the 1,000+ global in-house centres (facilities that combine technology development with the back office functions of multinational corporations) in India.

Bengaluru is also a preferred destination for domestic firms. Delhi-based Snapdeal carried out its R&D expansion here, owing to the scale and variety of skilled manpower available. Meanwhile, robust demand for commercial real estate is expected to impact the housing sector. With the quantum of office space taken up by these companies, job opportunities are set to improve, thereby leading to residential demand.

Thus, with technology advancing continuously, business confidence gradually returning and investors aggressively funding the e-commerce sector, growth prospects are improving. This bodes well for Bengaluru, and we expect e-commerce to reinforce its position in the city's real estate market in the coming years.

## SHANGHAI

Shanghai, China



*A shortage of land in the city is pushing development underground*

WRITTEN BY  
Regina Yang,  
Director, Head  
of Research &  
Consultancy, Knight  
Frank Shanghai

The redevelopment of global event sites are interesting projects that often prove to be challenging for local government. Currently, the former 2010 Shanghai Expo site is undergoing such a transformation, with the aim of creating a new business, leisure and exhibition centre, some of which will be subterranean.

The plans for the Post-Expo Area cover the former Expo site and surrounding area. There will be five zones and one belt: the cultural museum zone, the urban best practice zone, the global community zone, the convention, exhibition and business zone, the Houtan development zone and the Binjiang ecological and leisure landscape belt. The site covers a total of 5.28 sq km (Zones A-E), with 3.93 sq km in Pudong and 1.35 sq km in Puxi.

## GOING UNDERGROUND

For further city development, Shanghai must find a way to maximise its limited space. Traditionally, most metropolitan cities have resolved their spatial constraints by building outwards or upwards. Both these solutions, however, pose various problems and challenges. Expanding outwards often breaks up business clusters and creates political conflicts of interest, such as construction on natural areas and green fields surrounding cities. When building upwards, developers must consider

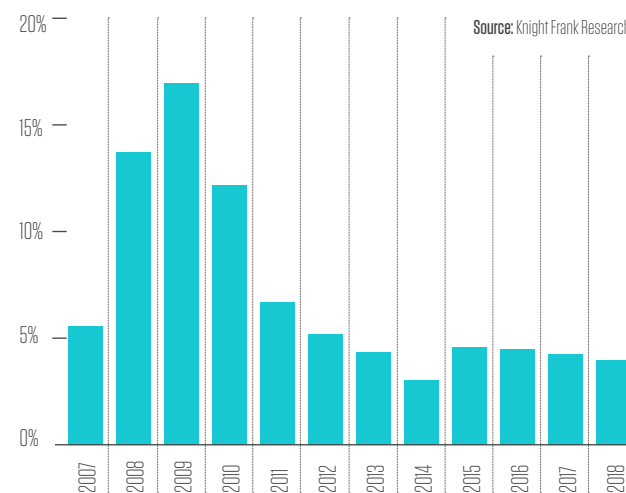
the potential environmental impact, including increased energy use.

In addition, some cities, like Shanghai, are slowly sinking due to the massive development of towers on soft soil and the effects of global warming. Expanding underground is an alternative for cities with Central Business District land. Shanghai's government has begun exploring this trend as a way to accommodate future development.

## THE FIRST AND LARGEST SUPER UNDERGROUND CITY

In May 2015, construction of Zone B's underground complex on the Post-Expo site was completed. The 4.8 million sq ft underground space is linked to the permanent Expo buildings and 28 headquarters buildings. It includes a pedestrian passageway, shopping malls and entertainment venues where the former China Pavilion currently stands. It will also provide approximately 6,000 parking spaces with a cutting edge system that will help drivers find their vehicles easily.

The Post-Expo site's massive underground complex will provide a new benchmark for the development projects in Shanghai. In addition, there is no doubt that going underground will become a new trend in China for cities facing land shortage.

SHANGHAI OFFICE VACANCY RATE (%)  
FORECAST 2015 TO 2018

## BEIJING

WRITTEN BY  
David Ji,  
Head of Research  
& Consultancy,  
Greater China,  
Knight Frank

*A new airport will lead to the development of a massive regional CBD*

Beijing already has one of the world's busiest airports, but the expanding city is about to see a second international airport built. This will have a major impact on the real estate market.

Beijing Daxing International Airport, the proposed second international airport for the capital, is to be built on the southern outskirts of the city in Daxing District, 18 miles to the south of the Beijing CBD along the borders of Beijing, Tianjin and Hebei Province (or "Jing-Jin-Ji", the abbreviations of the Chinese names of the three regions).

The planned airport is scheduled to complete construction in late 2019. It is expected to serve the economies in Jing-Jin-Ji, led by Beijing (the nation's capital and a financial centre), Tianjin (a port city with hi-tech manufacturing) and Hebei Province (which has an abundance of land and labour). The airport will have a capacity of 72 million passengers per year by 2025. A new

Beijing Daxing  
International Airport,  
Beijing, China

14-mile high-speed rail line is planned to connect the airport to Beijing South Railway Station, with a travel time of 30 minutes to the city centre.

Like many Asian cities, Beijing is undergoing a process of decentralisation to tackle a shortage of land. The government's latest blueprint promotes the development of more satellite townships for the capital.

The completion of the new airport is expected to nurture a new CBD in Daxing District, in line with government plans to limit large-scale commercial development within the city's inner circle. The new Daxing CBD is expected to accelerate the process of decentralisation, forming a new district in Beijing's Grade A office market.

Some leading developers have already invested in high-end commercial projects in Daxing. Vanke's Shoukai Vanke Centre, which is about 12 miles away from the new airport, will complete in late 2015. This commercial complex has a total floor area of about 2.2 million sq ft, consisting of a premium Grade A office tower, luxury service apartments, a lifestyle mall, low density garden style office buildings and prime shopping streets.

City clustering is the latest trend in China's urbanisation process, in which nearby cities utilise each other's comparative advantage to maximise their economic gain. The famous examples are the rise of the Yangtze River Delta (YRD) led by Shanghai, and the Pearl River Delta (PRD) bordering Hong Kong. These are powerhouses of the global economy.

Daxing airport, conveniently situated at the heart of Jing-Jin-Ji cluster, will help harness the advantages of nearby municipalities, and propel the region to a status on par with the YRD and PRD. The Daxing CBD will also certainly benefit from industries attracted to the region.



# AUSTRALIA DASHBOARD

From a wave of new overseas investment, to more offices switching to other uses, the Australian market is seeing transformation that is creating opportunities



## MAJOR INFRASTRUCTURE PROJECTS

Confirmed projects (U.S.\$380 million+) total U.S.\$90 billion in expenditure and are largely transitioning from resource sector related projects to urban road and rail long-term improvements

Source: Knight Frank Research, nics.gov.au, various state and federal publications/news releases

### A WESTERN AUSTRALIA

Gateway WA 2016 \$760 m	Perth Freight Link 2017 \$1.22 bn
NorthLinkWA 2019 \$850 m	
WAIO Optimisation Port Headland 2015 \$1.57 bn	
New Perth Stadium 2018 \$702 m	Fiona Stanley Hospital 2015 \$1.32 bn
Perth Children's Hospital 2016 \$896 m	

### B SOUTH AUSTRALIA

Adelaide South Road Darlington Upgrade 2018 \$475 m	Adelaide South Road Torrens to Torrens 2018 \$686 m
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New Royal Adelaide Hospital 2016 \$1.61 bn	
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### D VICTORIA

Western Highway Duplication Ballarat to Stawell 2015 \$548 m	West Gate Distributor 2017 \$4.2 bn
CityLink Tulla Widening 2017 \$980 m	

Cranbourne-Packenham Rail Corridor Upgrade 2019 \$2.37 bn	Level Crossing Removal Project 2018 \$1.84 bn
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Melbourne Metro Rail 2026 \$8.4 bn	
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Port of Melbourne Capacity Project 2016 \$1.22 bn	Ravenhall Prison 2017 \$512 m
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### C QUEENSLAND

Bruce Highway Upgrade Action Plan 2016 - 2025 \$6.5 bn	Toowoomba Second Range Crossing 2018 \$1.23 bn
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Legacy Way Tunnel 2015 \$1.15 bn	Gateway Upgrade North 2018 \$888 m
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Moreton Bay Rail Link 2016 \$880 m	Wiggins Island Rail Project 2015 \$657 m
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Wiggins Island Coal Terminal Stage 1 2015 \$1.99 bn	Hay Point Coal Terminal Stage 3 2015 \$2.7 bn
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### E NEW SOUTH WALES

WestConnex 2023 \$11.4 bn	NorthConnex 2018 \$1.99 bn
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Western Sydney Infrastructure Plan 2025 \$2.76 bn	Pacific Highway Woolgoolga to Ballina 2020+ \$3.1 bn
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Sydney Metro Northwest 2019 \$6.35 bn	Sydney CBD and South East Light Rail 2018 \$1.61 bn
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Sydney Metro City and Southwest 2024 \$11 bn	Northern Beaches Hospital 2018 \$760 m
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Western Sydney Airport Badgery's Creek 2025+ \$1.84 bn Stage 1	Darling Harbour Live and International Convention Centre Sydney 2016 \$2.6 bn
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# \$3.4bn

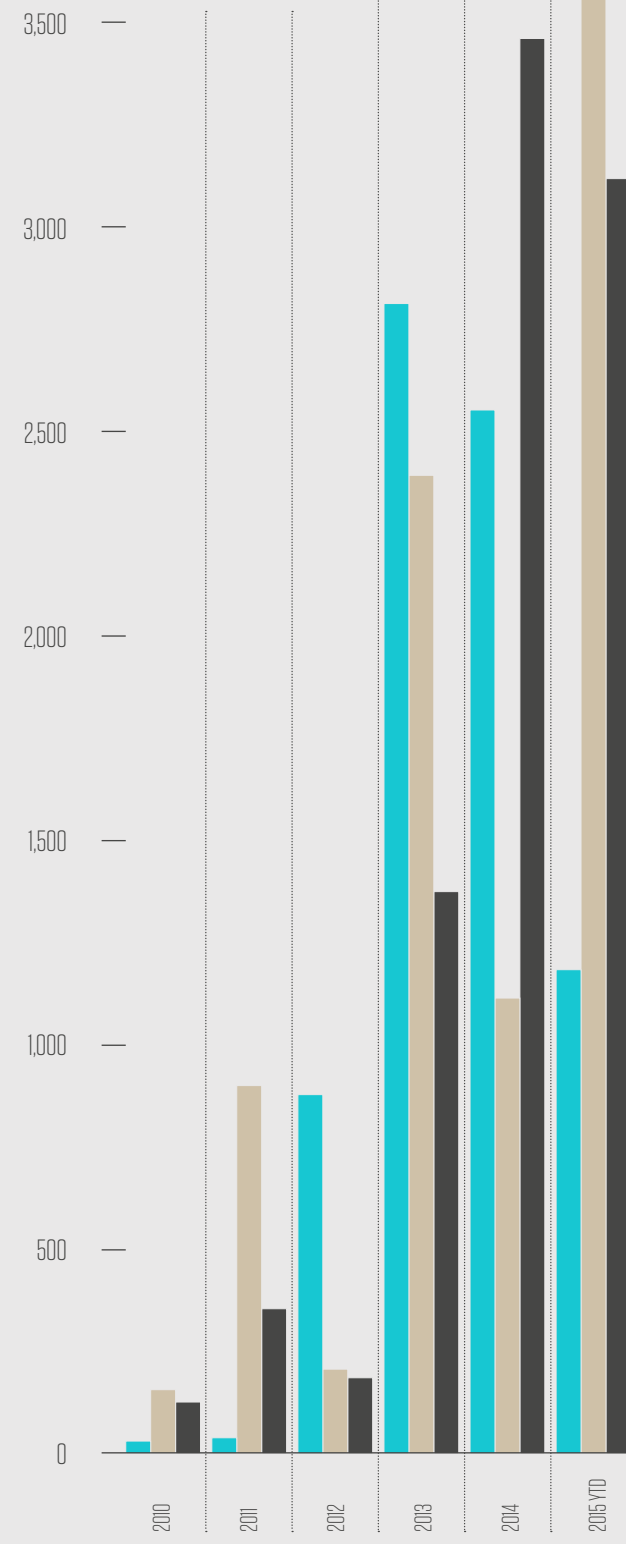
The volume of Chinese investment in Sydney and Melbourne commercial real estate in 2014 - overshadowing London

## CHINESE OUTWARD REAL ESTATE INVESTMENT IN SELECTED GATEWAY CITIES

London New York Sydney and Melbourne

Past 5 years, \$U.S. million  
(Does not include residential or multi-family dwellings)

Source: Knight Frank Research/Real Capital Analytics



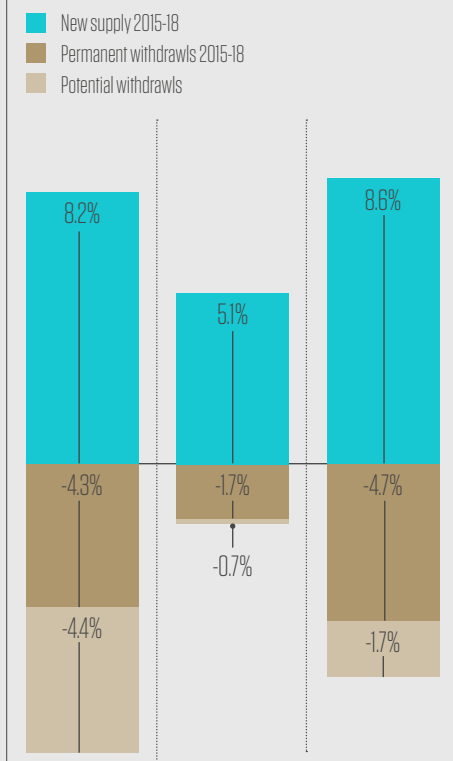
## CONVERTING OFFICES TO OTHER USES

The permanent withdrawal of older office stock is becoming more prevalent in the East Coast office markets, with both CBD and near-CBD office precincts being impacted. Demand for residential development opportunities is behind much of this

activity, however hotels, student accommodation/ education and office redevelopment are also factors. Particularly in the Sydney and Brisbane CBDs, this withdrawal activity will somewhat balance high new office supply to be delivered 2015-2018.

### EAST COAST CBDs NEW OFFICE SUPPLY AND PERMANENT WITHDRAWALS

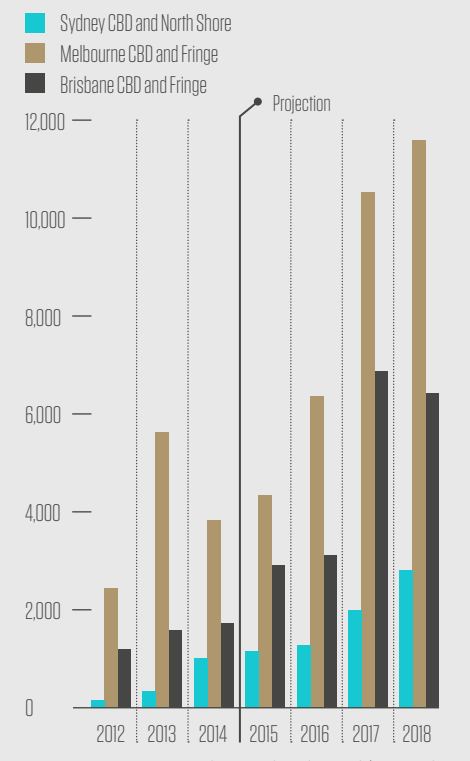
% of current office stock base additions/withdrawals



Source: Knight Frank Research/PCA

### CBD AND FRINGE RESIDENTIAL CONSTRUCTION UPSWING

Number of new apartments completed in selected CBD and near-CBD locations

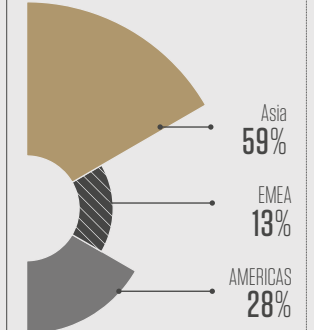


Source: Knight Frank Research (projects with 25+ apartments and 4+ storeys)

## OFFSHORE CAPITAL FLOWS INTO AUSTRALIAN REAL ESTATE

### SOURCES OF GLOBAL CAPITAL INTO AUSTRALIAN PROPERTY

Past two FY (2013/14 and 2014/15) by global region

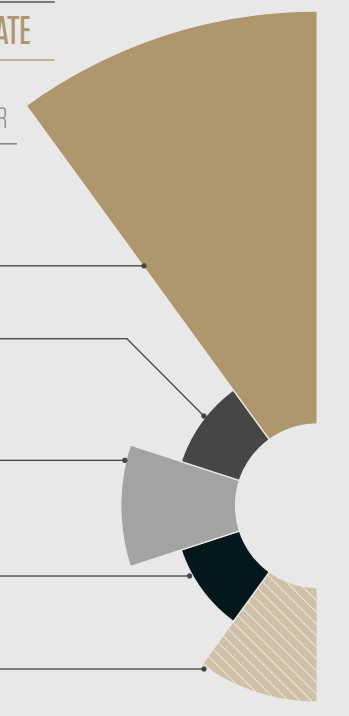


Source: Knight Frank Research/Real Capital Analytics

### GLOBAL CAPITAL INTO AUSTRALIAN PROPERTY BY SECTOR

(Does not include residential or multi-family dwellings)

- Office 54%
- Retail 8%
- Hotels 15%
- Industrial 8%
- Development site 15%



33.8650° S, 151.2094° E

# SYDNEY

Ownership of major CBD office and hotel assets is going global

WRITTEN BY Matt Whitty, Head of Research & Consulting, Knight Frank Australia

Investment into Sydney CBD office and hotel assets by offshore groups has grown considerably over the past five years, boosted by relatively higher yields and more recently by currency appreciation. To measure the impact, Knight Frank has assessed the ownership of investment grade stock in the Sydney CBD office and hotel sectors as at August 2015, compared against January 2010. The globalisation thesis is clear cut, with offshore ownership of CBD office assets increasing from 16% to

Darling Harbour, Sydney, Australia



30% of the market by value, whilst offshore ownership of significant four and five star hotels increased from 69% of rooms analysed to 88%.

In the office sector, the assessed market value of Knight Frank's Sydney CBD investment grade database at August 2015 was U.S.\$38.0 billion, covering 47 million sq ft, of which 14.5 million sq ft (U.S.\$11.4 billion) is owned by offshore groups, either wholly or in part. This has more than doubled in square footage terms since January 2010, and increased by 190% in value terms. Boosting activity has been the strong inflow over the past year, when 56% of office sales (U.S.\$2.1 billion) was to offshore groups. In comparison, domestic institutional ownership has shrunk by 6% to 26.4 million sq ft since January 2010.

Over the same period, Greater China has seen the strongest rate of growth, up eleven fold to U.S.\$3.26 billion, accentuated by the Investa portfolio transaction to CIC, while North American investment also increased, most notably over the past 18 months. Canada has overtaken Singapore as the largest owner by country, with U.S.\$2.64 billion of assets compared to U.S.\$2.39 billion.

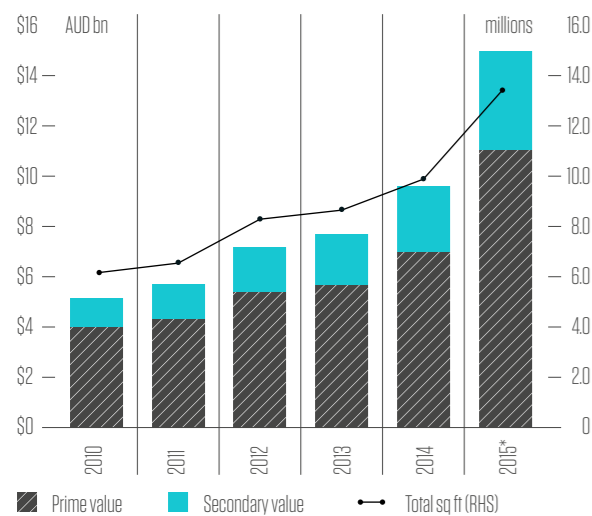
Since January 2010, c.9.2 million sq ft or 44%, of the total turnover of the Knight

Frank database, has transferred to offshore ownership with secondary grade stock acquisitions dominating sales activity. A significant driver of this has been demand for large, non-prime assets with re-development/change of use potential, with major examples including 1 Alfred Street & 31 Pitt Street (Dalian Wanda), 175 Liverpool Street (Shimao) and 338 Pitt Street & 233 Castlereagh Street (Visionary).

In the hotel sector, analysis of four and five star hotels in the Sydney CBD (10,850 rooms) shows that, since January 2010, 4,825 rooms or 45% of these hotels have sold and all were to offshore groups, which now own 88% of four and five star hotel rooms. Recent significant sales (U.S.\$350 million+) have included the Westin Hotel (Far East Organisation/Sino Group), Hilton Hotel (Bright Ruby) and Sheraton on the Park (Sunshine Insurance Group).

This demand from Asia has seen their ownership increase to 8,363 rooms, or 77%, up from 51% in January 2010, with Chinese/Hong Kong ownership increasing from effectively zero to almost 2,000 rooms or 18.4%. Notwithstanding a slight decrease over the period, Singapore remains the dominant owner by country, with just over 3,000 rooms, or 29%, of total stock.

## OFFSHORE OWNERSHIP - SYDNEY CBD OFFICE ASSETS TOTAL VALUE AND SQ FT BY GRADE - JAN 10 TO AUG 15



Source: Knight Frank Research  
\* Dates are at January except 2015, which is current (August 2015)

37.8136° S, 144.9631° E

# MELBOURNE

Office occupiers drawn into the Melbourne CBD are continuing to underpin the market

WRITTEN BY Richard Jenkins, Research Director, Victoria, Knight Frank Australia

Last year, Melbourne saw the greatest population growth of Australia's cities, adding 95,600 residents. Also, Victoria has overtaken Western Australia to become the country's fastest growing state. Over the same period, Victoria also recorded the highest net interstate migration figure, with a net 9,340 new arrivals from interstate, supporting economic growth, the housing market and the office market.

White collar employment growth in the Melbourne CBD has outpaced all other Australian cities over the past decade, with net growth of over 60,000 employees, more than four times the growth recorded in Sydney CBD, and even outpacing the combined growth in the resource boom cities of Brisbane and Perth.

The Melbourne CBD is the second largest office market in Australia (behind Sydney), currently comprising 47.4 million sq ft of office space. Over the past decade, it has grown by 28%, and is now the largest Grade A office market in Australia. The Melbourne Docklands precinct has been

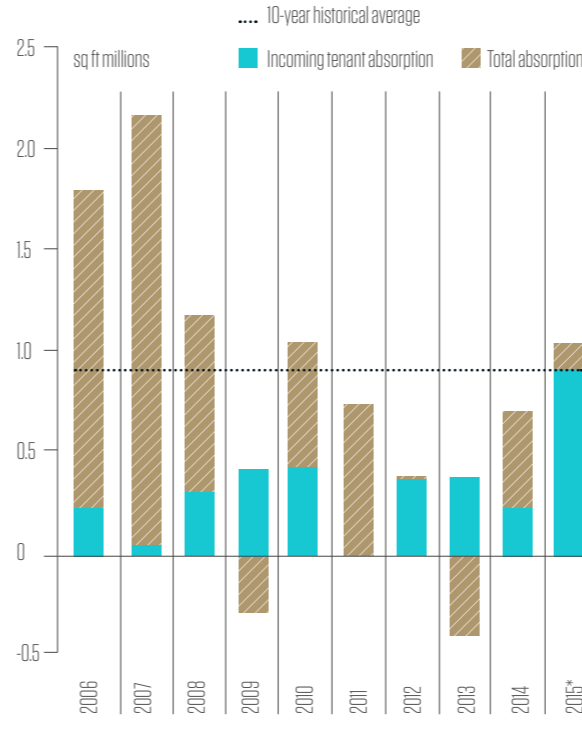
the engine room of this growth, expanding from a stock of zero to 8.2 million sq ft over the past 12 years. Like London's Canary Wharf precinct, the regeneration of the former docks, on low cost industrial land, into new commercial districts, has been critical to satisfying the demand from financial and business services tenants over this period.

Melbourne's appeal as a commercial hub has grown significantly over the past decade, as it is an affordable location for national or global occupiers, with a relatively good public transport system. The emergence of the Docklands precinct, providing low cost, campus-style options, has also assisted this growth. Based on comparable occupancy costs in other CBD office markets, many office tenants have chosen to grow their white collar employment base within Melbourne. This is demonstrated by Melbourne CBD absorbing a total of 9.4 million sq ft over the past 10 years, compared to 5.6 million sq ft in Sydney and 2.1 million sq ft in Brisbane.

This result has been boosted by strong migration into the CBD by fringe and suburban tenants. Including 2015 projections, 37% of Melbourne's absorption



## NET ABSORPTION - MELBOURNE CBD OFFICE BY TENANT ORIGIN - 2006 TO 2015



\* Dates are calendar years. 2015 is a forecast

over the past decade has resulted from incoming tenants, with this trend also underpinning major developments. A total of 56 tenants, occupying 3.4 million sq ft have migrated, adding directly to net absorption.

By industry sector, the space absorbed by migrating tenants was evenly spread between government, technology and business services occupiers, each making up around 16% of total absorption.

The year 2015 will set a record level for migrating tenants, with 11 tenants totalling 930,000 sq ft relocating into the CBD, which alone is around 50% higher than the long-term annual average net absorption of the market.

Melbourne Docklands, Melbourne, Australia

35.6833° N, 139.6833° E

# TOKYO

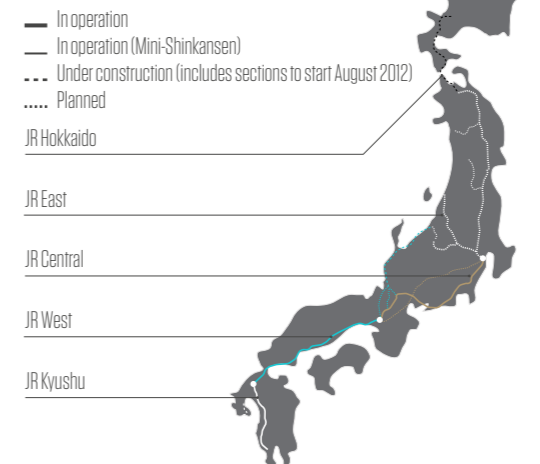
Bullet trains are shrinking Japan and boosting the Tokyo office market

WRITTEN BY Nicholas Holt, Asia Pacific, Head of Research



Shinkansen bullet train, Japan

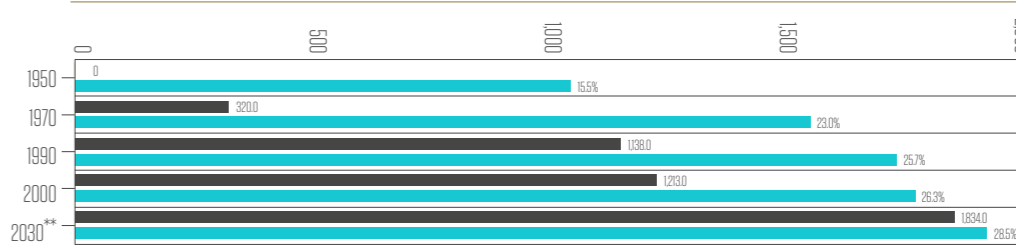
## SHINKANSEN MAP OF JAPAN



When real estate investors talk about Tokyo, they refer to one of the largest markets in the world, a global financial centre with significant property market liquidity and some of the largest ticket deals going around. They point to Abenomics and the massive stimulus and reform packages that have helped boost the domestic occupier market, while keeping the cost of debt at all time lows.

However, looking at the country as a whole, something else is happening: its population is getting smaller. For some time there have been concerns over demographics – only Monaco and Saint Pierre & Miquelon have lower birth rates, and the population is down by about 1

## SHINKANSEN NETWORK GROWTH VS TOKYO'S SHARE OF JAPAN'S POPULATION



\* Greater Tokyo in this case refers to South Kanto, consisting of Saitama, Chiba, Tokyo and Kanagawa prefectures  
\*\* The graph goes to 2030, but the 500 km includes projects that will not fully complete until 2035  
Source: Population census of Japan. The population projections by Prefectures 2000-2030. Knight Frank Research

million since peaking in 2008. As well as these demographic concerns, another, more subtle, driver is helping to shrink Japan, while also influencing economic activity: the Shinkansen (literally "new trunk line") or bullet train.

The network now covers most of the islands and stretches for 1,624 miles, with another 341 miles of new track planned. With possible maglev (derived from magnetic levitation) upgrades that will enable trains to reach speeds of up to 370 miles per hour (including a one hour link between Tokyo and Osaka planned by 2045), the impact on the structure of Japan and its real estate markets is worthy of attention.

With all tracks leading to Tokyo, the significant reduction in travel times to the nation's capital has, and will continue to have, a number of consequences on its property markets.

Firstly, visiting Tokyo from many regional cities is now possible as a day trip, so many companies no longer need branches in smaller cities, and are consolidating in the capital. While this has provided extra demand for Tokyo's office markets, it has been at the expense of regional cities. Regional hotels have also been under pressure for the same reason, as business travellers from Tokyo no longer need overnight accommodation. This trend is less apparent in Osaka, Nagoya and Fukuoka – major regional cities, each with an economic gravity still big enough to survive by themselves.

It is not all downside, though, for smaller regional cities, as improved connectivity has increased tourism, to the benefit of retail and hotel industries. Regional office markets with Shinkansen stations have benefited from interest from companies not headquartered in Tokyo, attracted by locations in proximity to stations. Land prices around these stations, typically not located near to regional city centres, have been boosted as a result.

Uncertainty still surrounds the long-term impact of Abenomics and demographic trends continue to cause unease. However, the great centralisation of Japan, accelerated by the Shinkansen, will continue to support office markets in Tokyo while providing select opportunities elsewhere.

# U.S. DASHBOARD

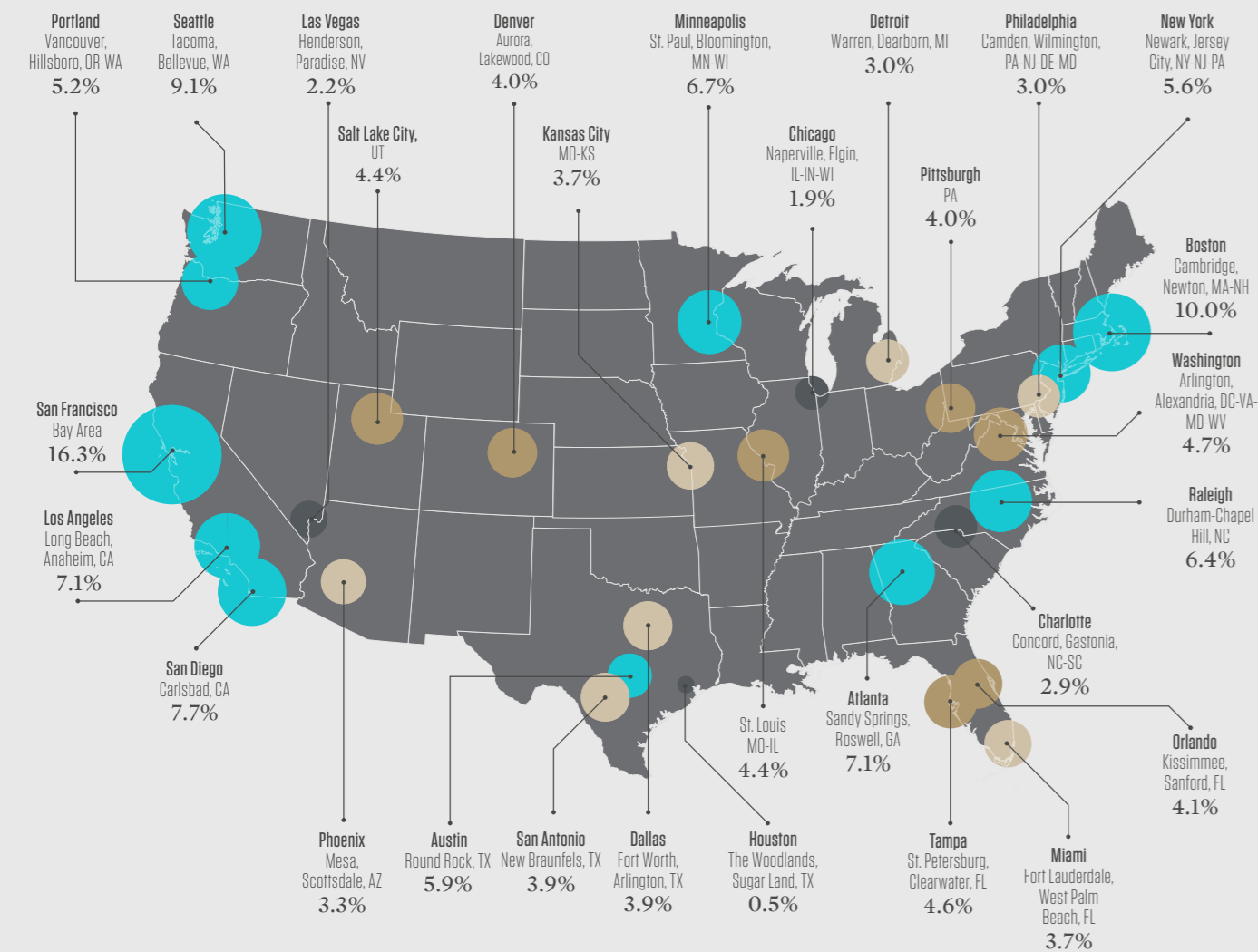
The U.S. recovery has weathered the recent plunge in oil prices, in part thanks to expansion by technology and media firms. Office demand is surging in the cities popular with 'TAMI'

## TAMI DRIVES URBAN ECONOMIES ACROSS U.S.

The TAMI sector (Technology, Advertising, Media and Information) has changed the fortunes of particular cities and districts.

Source: U.S. Bureau of Labor Statistics, Newmark Grubb Knight Frank Research

Greater than 5%    4% - 5%    3% - 4%  
 Less than 3%    % - TAMI employment % of total

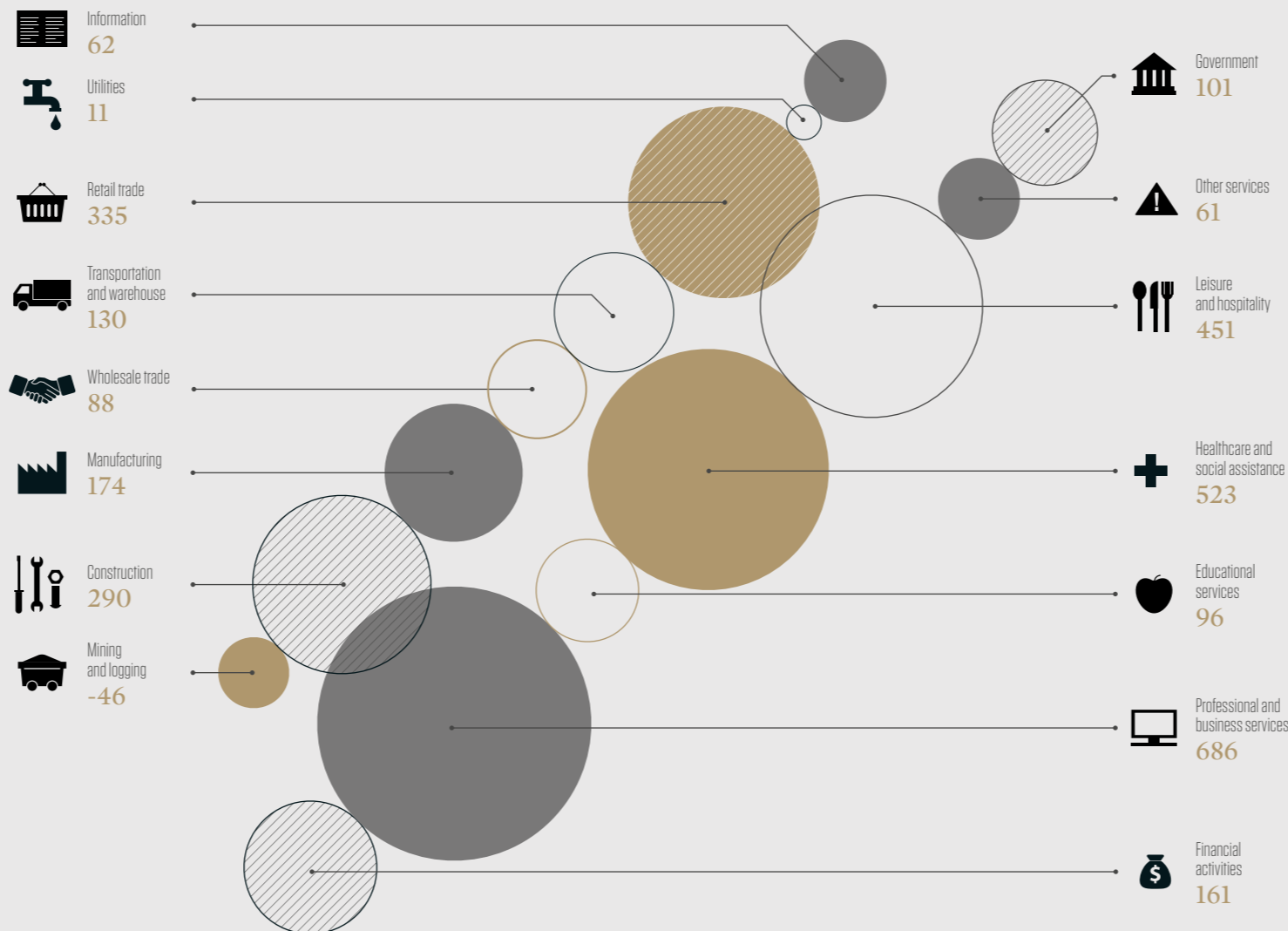


## JOB GROWTH IS SURGING

### JOB GROWTH PAST 12 MONTHS\* (000s)

Job growth, weak in the early stage of the expansion, has gained steady momentum, particularly in sectors related to demand for commercial property.

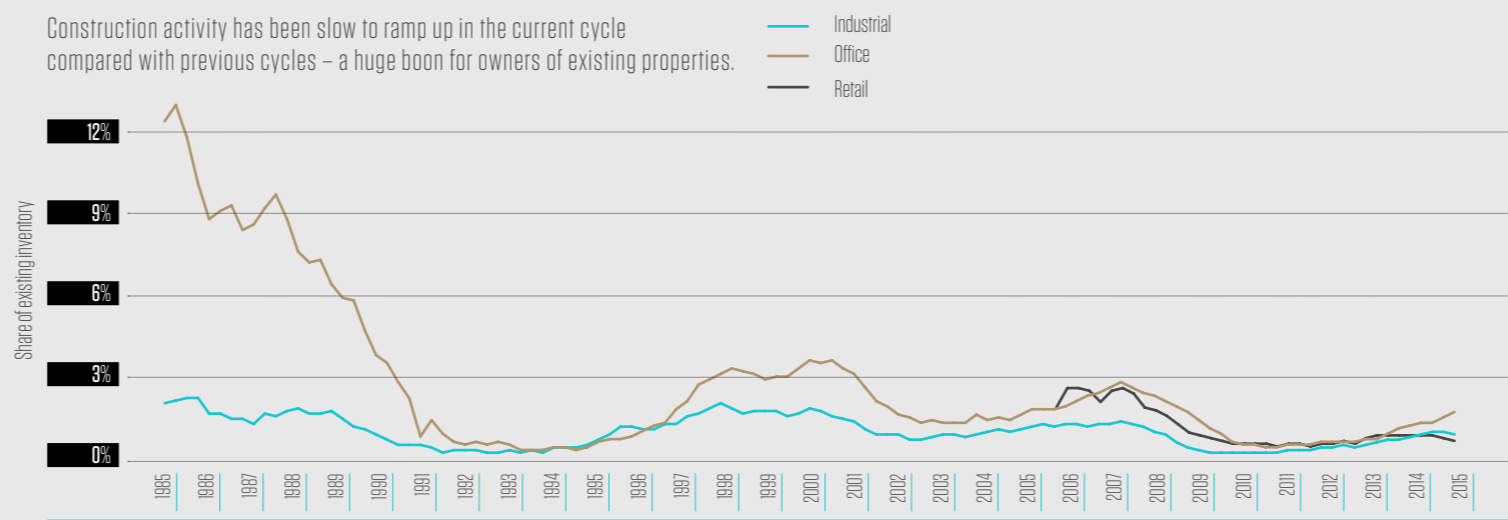
Source: U.S. Bureau of Labor Statistics, Newmark Grubb Knight Frank Research  
 \*12 months ending May 2015



## SPACE IS UNDER CONTROL

Construction activity has been slow to ramp up in the current cycle compared with previous cycles – a huge boon for owners of existing properties.

Source: CoStar, Newmark Grubb Knight Frank Research



## MARKET FORECAST

Developers and construction lenders have been remarkably disciplined due to increased scrutiny from regulators in the wake of the financial crisis. Expect rents to gain momentum slowly over the next two years.

Another recession will happen eventually, creating excess vacancies and downward pressure on rents. However, we do not anticipate the widespread overbuilding that accompanied some earlier recessions.

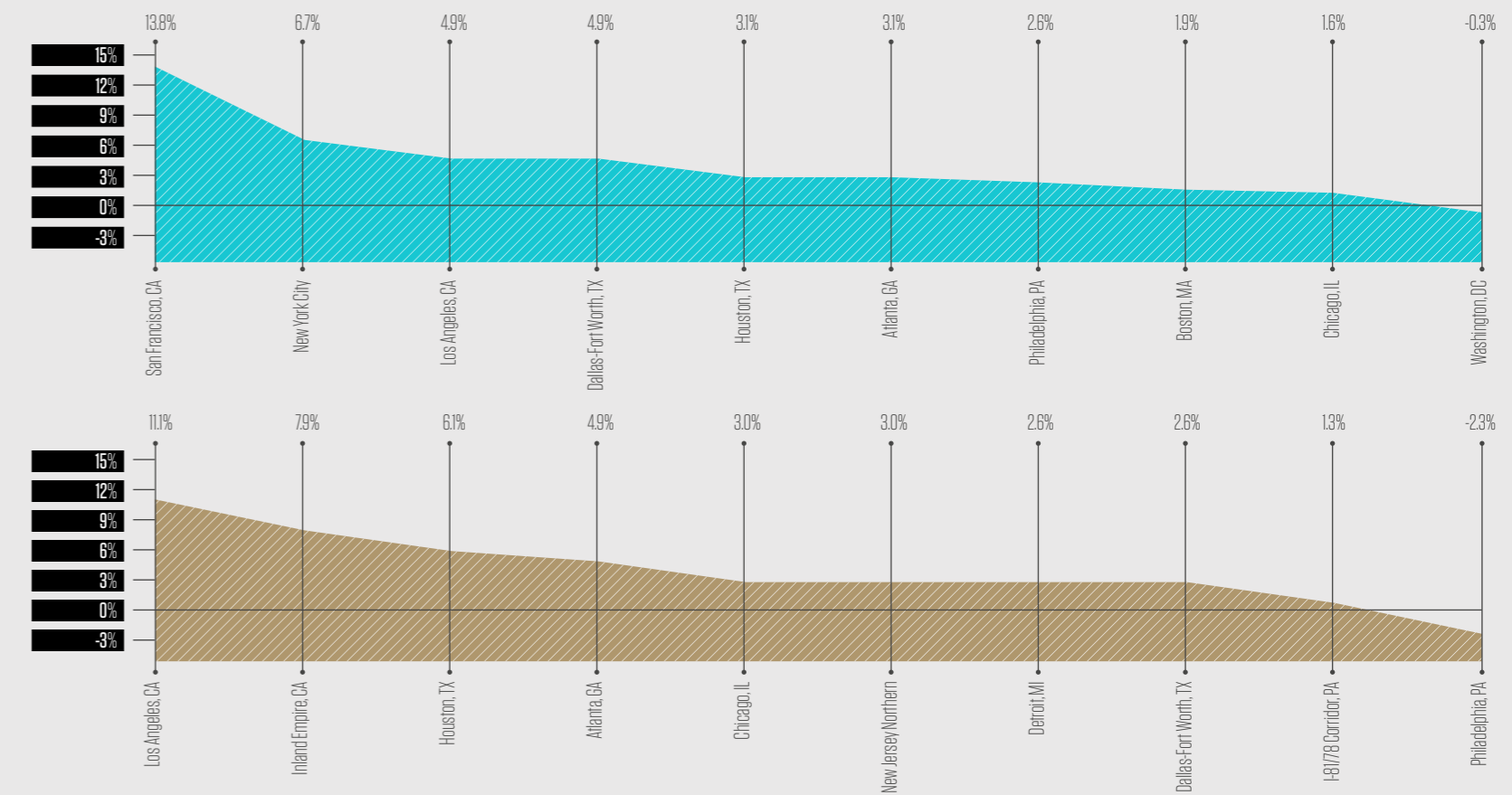
## ECONOMIC FORECAST

The catalysts that can trigger a recession, such as inflation, asset bubbles or a plunge in consumer and business confidence, appear to be well managed. A recession is unlikely in the next 12 to 18 months.

## RENT GROWTH TO CONTINUE

Source: CoStar, Newmark Grubb Knight Frank Research

Asking rents are rising in the low- to mid-single digits across most markets and property types, with double-digit gains in some high-profile technology-driven submarkets.



## KEY MARKET DRIVERS

KEY	WEST	SOUTH	MIDWEST	NORTHEAST
<ul style="list-style-type: none"> <li>Aerospace</li> <li>Healthcare</li> <li>Financial</li> <li>Technology</li> <li>Tourism</li> <li>Energy</li> <li>Auto manufacturing</li> <li>Manufacturing</li> <li>Science</li> </ul>	<ul style="list-style-type: none"> <li>California</li> <li>Seattle</li> <li>Phoenix</li> <li>Dallas</li> <li>Austin</li> <li>Atlanta</li> <li>Charlotte</li> <li>Raleigh-Durham</li> <li>Phoenix</li> </ul>	<ul style="list-style-type: none"> <li>Houston</li> <li>Dallas</li> <li>Austin</li> <li>Atlanta</li> <li>Charlotte</li> <li>Raleigh-Durham</li> <li>Phoenix</li> </ul>	<ul style="list-style-type: none"> <li>Chicago</li> <li>Minneapolis-St. Paul</li> <li>Columbus</li> <li>Philadelphia</li> <li>Washington, DC</li> </ul>	<ul style="list-style-type: none"> <li>New York</li> <li>Boston</li> <li>Philadelphia</li> <li>Washington, DC</li> </ul>

37.7833° N, 122.4167° W

WRITTEN BY  
Andrea Arata,  
Market Researcher,  
Financial Analyst,  
Newmark Cornish  
& Carey

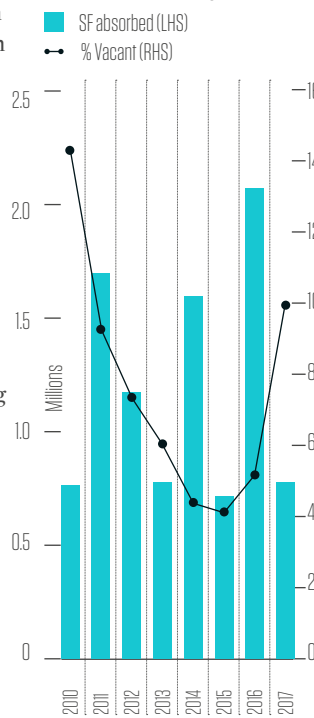
*Strong growth in the  
tech sector continues  
to drive demand for  
offices and homes*

The Bay Area economy has been outperforming most other markets in the U.S., largely due to the strength of the technology industry. Of the 100+ companies on the Fortune list of “unicorns” (companies with a valuation of \$1 billion or greater, based on fundraising), 41 are located in either San Francisco or Silicon Valley, including Uber, Airbnb, Pinterest and Square. Venture capital interest in this market remains strong: investments in Bay Area companies in the first half of 2015 totalled more than \$15 billion, or about 49% of all investment nationwide. While the technology industry is centered on the city of San Francisco and Silicon Valley (South Bay), the entire region has benefitted from the robust job market these companies have created.

A San Francisco address can give a company an edge in recruiting, and many have moved at least part of their operations here. As a result, increased demand and dwindling supply have driven up asking rents. Annual Class A asking rents in SoMa, the most desirable location for tech tenants, are nearly \$75 per sq ft, having increased by more than 140% since the beginning of 2010. Scarce supply in SoMa is driving some tech tenants to the Financial District, particularly to buildings that have been converted from traditional corporate space to more desirable creative space. Other tech tenants, such as Uber and Stripe, are signing leases in buildings that have not yet been built.

Downtown San  
Francisco, U.S.

### OFFICE MARKET KEY METRICS

Source: CoStar, Newmark Grubb  
Knight Frank Research

Mirroring the high demand for office space, residential space is also in short supply. Young tech workers have long favored life in the city over the suburbs, and San Francisco apartment rents have increased by nearly 15% in the past year to an average of more than \$3,450 per month. Median home prices in San Francisco have also increased steeply, to \$1,225,000 – 37% above their peak before the city’s present housing crisis.

While housing in much of the rest of the Bay Area is less expensive, prices have risen sharply across the region. In response, Facebook is building a 394 unit residential development for its employees in Menlo Park in Silicon Valley, while corporate housing companies are reserving certain percentages of their units for tech clients under contract. For the past few years, many big tech firms in Silicon Valley have provided commuter buses for their employees living in San Francisco. Now, many San Francisco based tech companies are following suit, providing commuter buses for their employees living elsewhere in the Bay Area.

# SAN FRANCISCO

34.0500° N, 118.2500° W

# LOS ANGELES

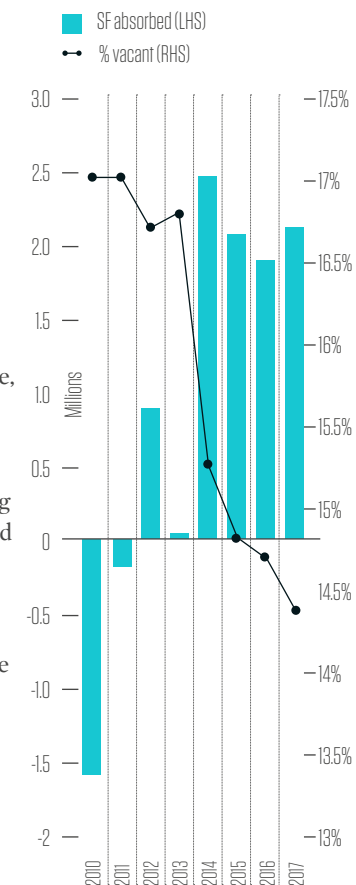
*Technology and trade are  
influencing the shape of the  
city’s economy*

WRITTEN BY  
Tim Van Noord,  
Regional Director, Research,  
and Mike Rudis, Research Analyst  
at Newmark Grubb Knight Frank

Los Angeles County would rank as the 21st largest economy in the world if it were an independent country. More than 244,000 businesses drive the local economy, concentrated in technology, tourism, international trade, manufacturing and creative industries, including media, entertainment and advertising. However, technology and trade industries in particular are having a significant impact on the economy and the real estate market.

Los Angeles has become one of the nation’s leading technology centers. Home to the headquarters of 15 Fortune 500 companies, Los Angeles also ranks among the top regions in the U.S. for the venture capital investment that fuels the growth of young companies. These companies continue to absorb a significant amount of creative space in popular submarkets like El Segundo

### OFFICE MARKET KEY METRICS

Source: CoStar, Newmark Grubb  
Knight Frank Research

and West Los Angeles, where prominent high-tech companies including Apple, Google, Amazon, Sony, Yahoo! and Microsoft have offices.

International trade has also been a driving force behind the Los Angeles industrial market, one of the largest markets in the U.S. and always the tightest, with vacancy currently at a nearly invisible 1.3%. The ports of Los Angeles and Long Beach, North America’s two busiest, handle almost one third of the entire continent’s imports, creating strong demand for warehouse space across Los Angeles and eastward into the deserts of the adjacent Inland Empire market.

While demand is expected to remain strong, it may be influenced by new regulations in the city of Los Angeles that will raise the minimum wage by 67% over the next five years. This could shift industrial demand outside the city if adjacent municipalities do not follow suit.

Investment in Los Angeles, commercial real estate is very strong, with sales volumes surging and cap rates trending lower. Investor demand is fuelled by an influx of money from the Asia Pacific region, where investors have more than doubled their stake in the past 12 months to almost \$3 billion.

With its legendary traffic congestion showing no sign of improvement – the Southern California urbanized region, with Los Angeles County at its heart, has a population of 21 million people – substantial investment in transportation infrastructure is being made throughout the region. Metro, highway, bus and rail projects in the pipeline total more than \$18 billion. The nation’s first high-speed rail system is scheduled to carry passengers between Los Angeles and San Francisco by 2029, strengthening connections between businesses and California’s highly trained labor force. The new infrastructure will support the city’s growth as a technology and trade hub in the future.

Office buildings at night,  
Los Angeles

38.9047° N, 77.0164° W

# WASHINGTON, DC

Government cuts have impacted the market, but increased hiring by private firms offers cause for optimism

WRITTEN BY  
Marianne Skorupski,  
Research Manager, Washington, DC,  
Newmark Grubb Knight Frank

The Washington, DC, metropolitan area continues to struggle towards a sustained recovery from the effects of federal austerity programs. Each of the region's three jurisdictions is experiencing a period of light demand for additional office space, resulting in record high leasing concession packages and an investment sales market at times out of sync with leasing fundamentals.

Close examination shows that the market is bifurcated, with the Class A market – especially trophy assets – outperforming the rest. Dividing office absorption by class, data shows that Class A properties have continued to

attract interest, whereas Class B and Class C properties no longer appeal to the needs of many tenants - a reality that is driving the bifurcation of the market. Simply put, demand is present for top of the market space, but largely absent for properties at lesser locations or without robust amenities.

Bigger tenants continue to tour the market well ahead of their lease expirations, as large blocks of high quality space remain rare. This has led to discussions with owners and developers about the redevelopment and additional development potential of their existing properties, particularly

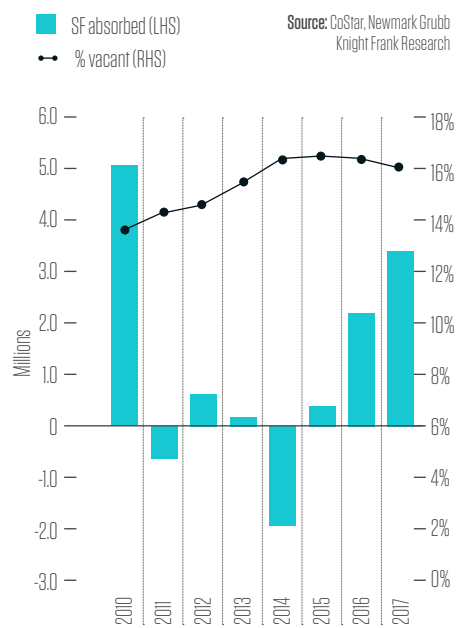
in the East End and Central Business District, where many older buildings are awaiting significant pre-leasing before renovations to modernize them can begin. These renovations will add floors, new amenities and upgrades to heating, ventilation and air-conditioning systems.

In early 2015, the National Institutes of Health (NIH) announced a 20 year master plan to shift all employees now located in space leased off-campus back on to the main campus in Bethesda, Maryland. The return to a campus-centric model would substantially impact the market, as NIH leases more than 3.1 million sq ft of office space. The NIH's announcement comes after federal downsizings and consolidations by the Food and Drug Administration, National Institute of Allergy and Infectious Diseases and NIH in suburban Maryland soured the market.

However, despite these headwinds, there are signs of improvement that bode well for the future outlook.

New budget proposals suggest an increase in federal spending over the next few years, which would aid the office market's recovery, especially if additional spending boosts demand among government contractors. This should balance the continued downsizing by the federal government, as it addresses the pending expirations of its leased space over the near-term. Recent increases in hiring within the private sector, especially within the office intensive professional and business services sector, are a cause for optimism in 2016.

## OFFICE MARKET KEY METRICS



Washington, DC, U.S.

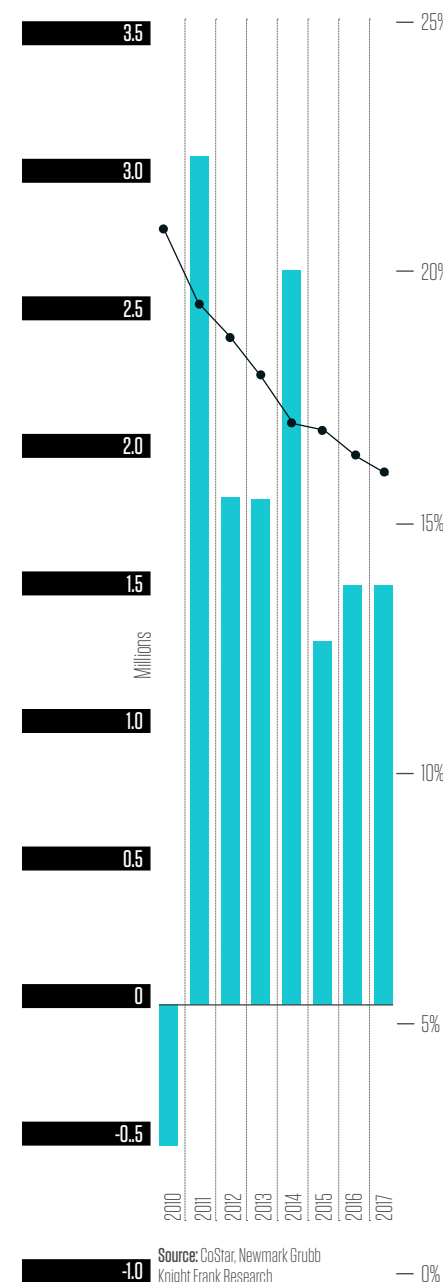


41.8369° N, 87.6847° W

# CHICAGO

## OFFICE MARKET KEY METRICS

SF absorbed (LHS)  
% vacant (RHS)



A growing population of Millennials is fostering a new wave of tech industries

As the third largest metropolitan region in the United States after New York and Los Angeles, Chicago is viewed as a 'gateway market', one of a loosely defined group of cities marked by their attractiveness to cross-border investors, corporate occupiers and tourists. Among this elite group of cities, Chicago stands out for its low business and living costs and the higher yields it offers commercial property investors. Chicago is served by an extensive public transportation system consisting of heavy rail (the L), commuter rail (Metra) and buses. This system has supported Chicago's dense urban core, walkable neighborhoods throughout the city, and mixed-use 'villages' around suburban train stations—a growth pattern that newer, auto dependent cities seek to emulate.

Chicago's growing population of educated Millennials has fostered a robust tech community with companies including Groupon, Gogo and GrubHub progressing from start-up to IPO, and tech giants Google and Facebook opening state-of-the-art offices. The surge in manufacturing has been particularly strong in Chicago, where Goose Island, formerly home to heavy industry, is being transformed into a cutting edge manufacturing and tech district. Recently, the first of its kind UI Labs' Digital Manufacturing and Design Innovation Institute—a start-up hub for modern manufacturers—opened on the island.

Employers including United Airlines, Motorola, Capital One and Hillshire Brands have relocated their offices downtown to gain access to the young and educated workforce living nearby. Both downtown and suburban office vacancy rates are shrinking, while rental rates



Cloud Gate (The Bean), Millennium Park, Chicago, U.S.

WRITTEN BY  
Craig Hurvitz,  
Director of Research,  
Chicago, Newmark  
Grubb Knight Frank

are rising downtown, but steady in the suburbs. Several new high profile projects are under construction downtown, including two 50 story skyscrapers.

As a mid-continent transportation nexus, greater Chicago is home to the nation's largest industrial market, with more than 1 billion sq ft of space. More than 10.6 million sq ft of new product—an eight year high—is under construction in new, multi-modal logistics parks, high image business parks and infill submarkets.

Chicago's most famous retail strip, Michigan Avenue, continues to reinvent itself with a diverse mix of upscale retailers; many are establishing anchor or brand house facilities to showcase their offerings to a global audience. Retail districts throughout the city are evolving, as new and renovated residential development transforms neighborhood after neighborhood.

The region is not without its challenges: The City of Chicago, Chicago Public Schools and the State of Illinois are struggling under high debt loads, and the city's lagging neighborhoods need investment. As Chicago tackles these challenges, it will remain a magnet for property investors, occupiers and young workers migrating to the city from across the Midwest and beyond.



19.4333° N, 99.1333° W

# MEXICO CITY

*Increased trade and investment is supporting growth in Mexico City*

**WRITTEN BY**  
 Juan Flores, Director of Research;  
 Ricardo Reyes, Market Research Industrial;  
 and Stephanie Martínez, Market Research Offices  
 at Newmark Grubb Knight Frank Mexico

With 80% of its exports flowing to the United States, Mexico offers a sophisticated industrial property sector with state-of-the-art product, occupied by U.S. and multinational manufacturers and distributors. This sector has experienced major growth and development over the past decade, driven by foreign direct investment and a recovering U.S. economy. The vacancy rate for modern industrial space in the country is in the mid-single digits.

This surge of trade and investment is benefiting Mexico City, and in turn supporting the real estate market. Mexico City, with a population of more than 20 million inhabitants in its metropolitan area, is the country's main economic engine, generating more than half of its industrial output.

Mexico City's office market, which houses the headquarters of large domestic and international corporations, continues to grow at an impressive pace. The inventory of modern office space stands at 52 million sq ft of which 3.8 million sq ft was delivered in the past year. Another 52 million sq ft is scheduled for delivery over the next three years. About half of all recent development completions are in the CBD, specifically the Polanco, Reforma and Lomas submarkets, with the

North Corridor also attracting substantial development. The vacancy is around 11%, down from 15% six quarters ago. The flow of investment into Mexico's retail property sector is expected to top U.S.\$3.5 billion by 2017, which will add 100 new shopping centers with an additional 36 million sq ft of space. About half of this development will occur in Mexico City and its environs.

Mexico is not without its challenges. The peso has declined by almost 20% against the U.S. dollar over the past year, a trend that favors exporters but could restrain consumer spending and stoke inflation as imports become more expensive. The low price of oil is creating revenue shortfalls for the government, while the simmering problems of government corruption and drug-related violence have yet to be resolved.

Despite these challenges, Mexico City continues to enjoy vibrant growth. Construction activity has remained strong through the recent economic turbulence, and—unlike many emerging markets—demand has kept pace. REITs are competing to gain market share and to develop innovative space for increasingly sophisticated occupiers. PwC forecasts that Mexico City will be the seventh richest city in the world by 2025, with a GDP of



Bolivar Street, Mexico City, Mexico

U.S.\$745 billion (after Tokyo at number one, followed by New York, Los Angeles, London, Chicago and São Paulo). This increased wealth and production will create more real estate opportunities for developers, investors and occupiers.

## OFFICE MARKET KEY METRICS



Source: CoStar, Newmark Grubb Knight Frank Research

São Paulo is South America's economic powerhouse, a global center of finance, commerce, entertainment and the arts. The metropolitan region has nearly 20 million inhabitants, slightly more than half of whom live in the city of São Paulo.

The region is served by a sophisticated, multi-modal transportation system that, although it is expanding, has not kept pace with development, giving São Paulo a reputation for epic traffic congestion. Facilities include local and international airports serving more than 18 million passengers per year, an expanding subway system that is one of the most modern in the world, an extensive bus and train network, a massive cab fleet and South America's largest fleet of private helicopters.

A new city master plan released last year is seeking to better align land use and transportation infrastructure. The plan calls for increasing densities in areas served by public transportation, with the goals of encouraging pedestrian and biking access, discouraging automobile use and protecting existing lower density neighborhoods from encroachment by incompatible high rise development.

The city is home to major companies from all sectors of the economy, notably manufacturing, services, technology, entertainment and hospitality. Development of corporate office space is expanding to the south, where most modern Class A+ buildings

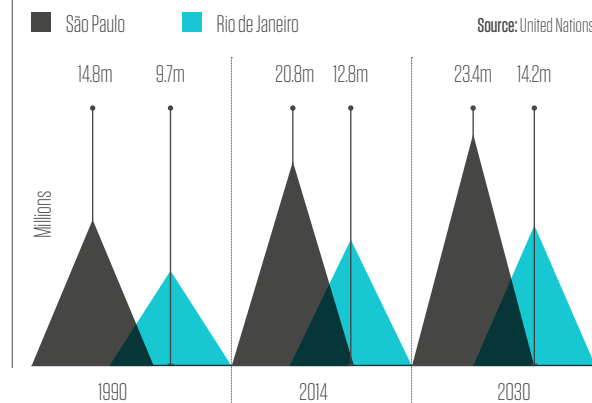
23.5500° S, 46.6333° W

# SÃO PAULO

*Brazil's super city plans to direct growth towards transport links*

**WRITTEN BY**  
 Rodrigo Pela,  
 Director of Research,  
 Newmark Grubb Knight Frank Brazil

## POPULATION OF SÃO PAULO VS RIO DE JANEIRO 1990 TO 2030



Source: United Nations

are located, and to the west, a newer area where development picked up about two years ago. Major developers and investors including Odebrecht, Brookfield, Tishman Speyer and Bueno Netto have acquired land in these areas, and are building Class A and Class A+ corporate space with Green Building certification. Most new projects are mixed-use developments that incorporate office, retail, services and housing components.

With GDP anticipated to shrink for a second consecutive year in 2015, the office market is contending with tepid demand at the same time that a large amount of new construction is moving through the pipeline. The vacancy rate, a slim 5% in 2011, is expected to hit 23% this year, and rents are expected to fall by 6.8%, the third consecutive year of softening.

Net absorption is expected to increase, however, as companies take advantage of weak conditions to move up to higher quality space. Areas that will receive major new deliveries in 2015 include Vila Olímpia (1.8 million sq ft), Marginal N-S and Berrini (both with about 860,000 sq ft) and Barra Funda (388,000 sq ft).

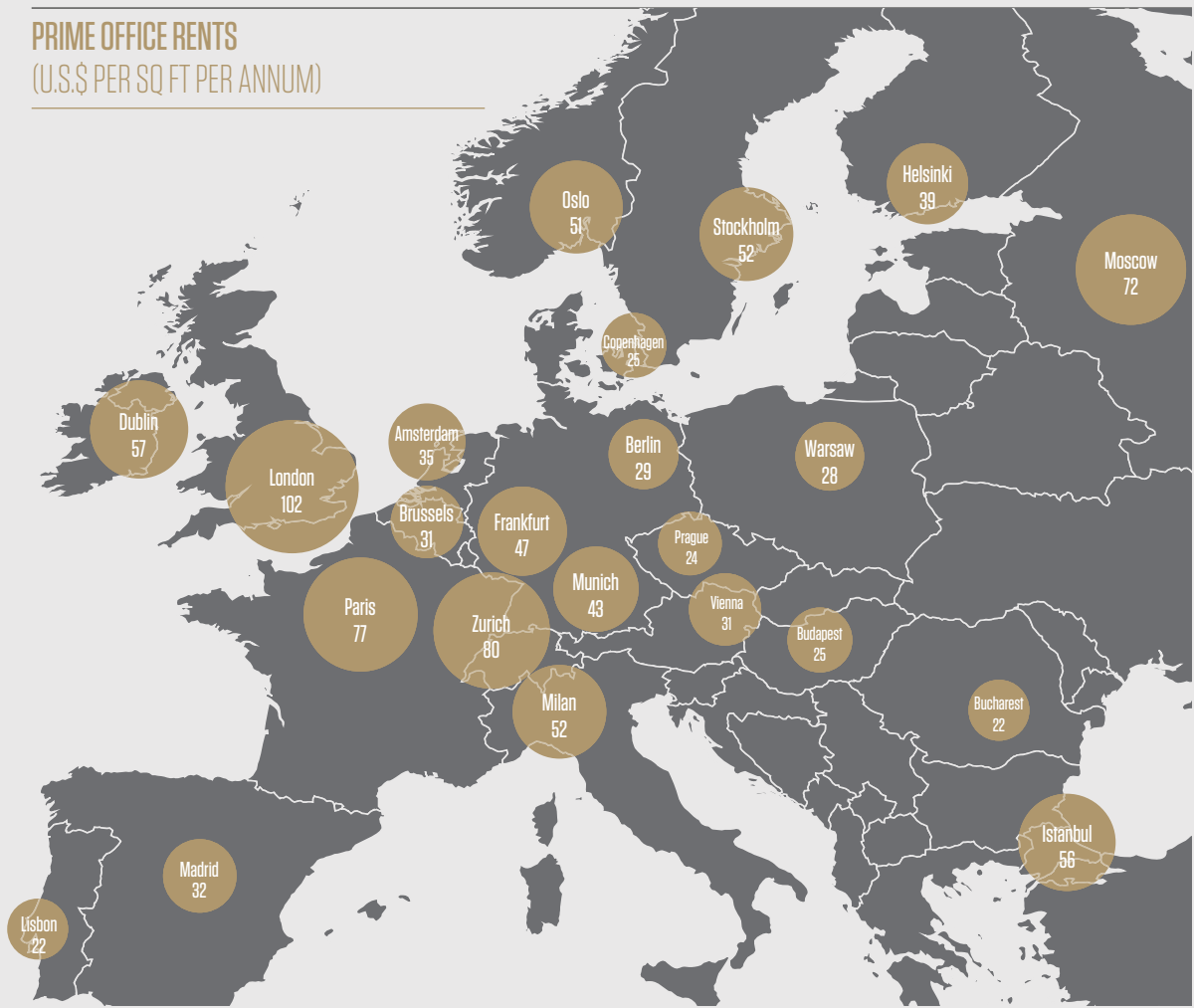


Estaiada Bridge, Marginal Pinheiros

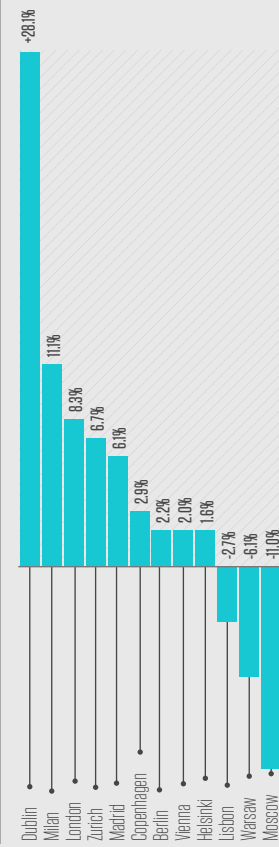
# EUROPE DASHBOARD

After years of crisis, the European property market is experiencing an early stage recovery

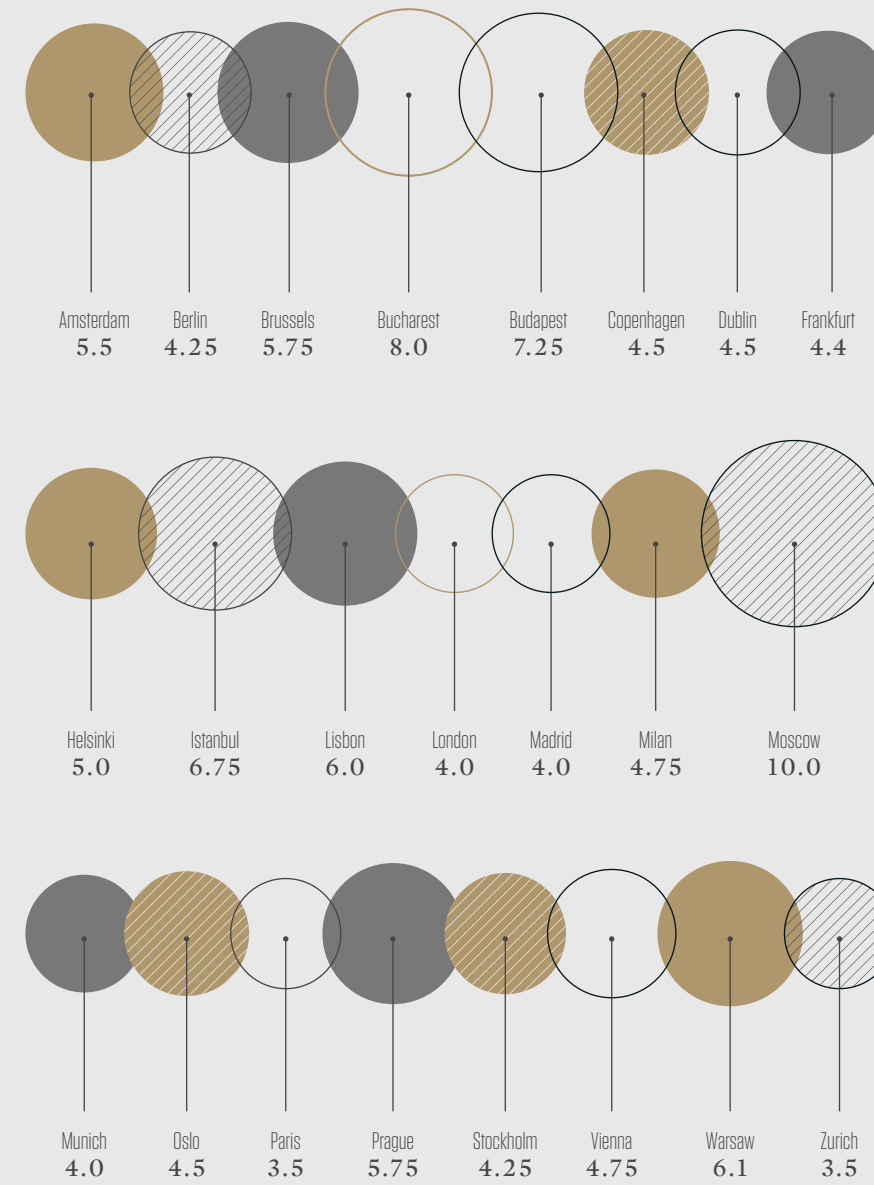
## PRIME OFFICE RENTS (U.S.\$ PER SQ FT PER ANNUM)



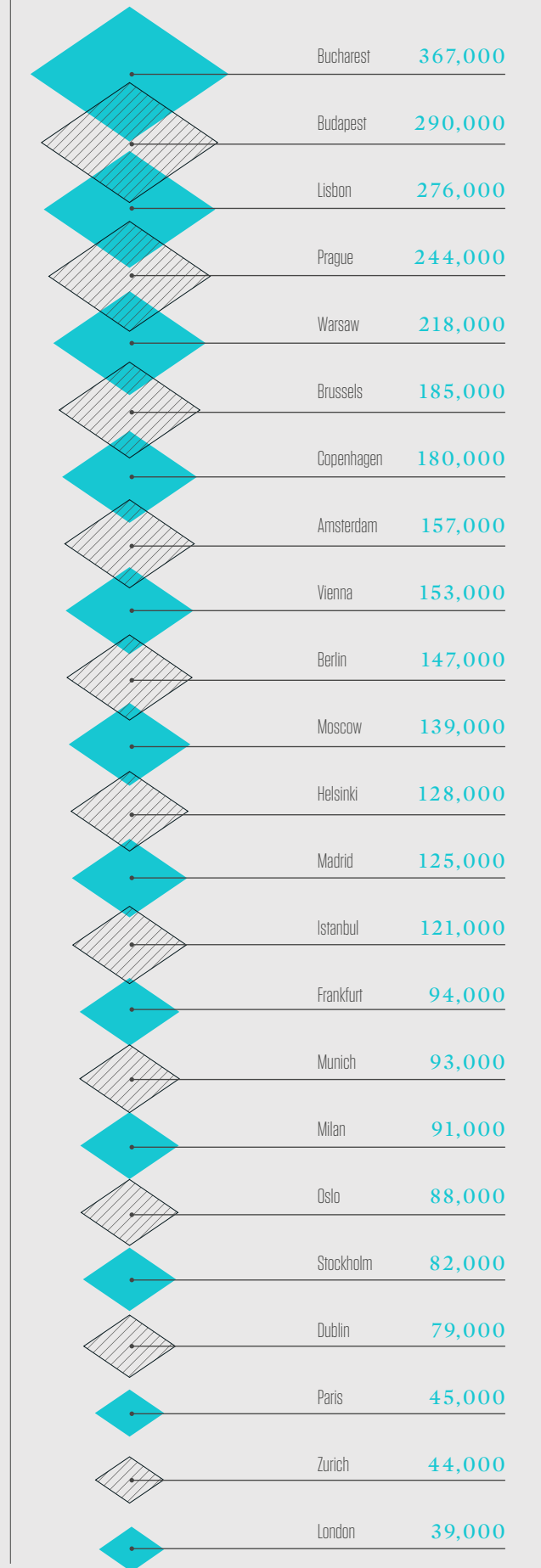
## YEAR-ON-YEAR CHANGE (%) (LOCAL CURRENCY RATES)



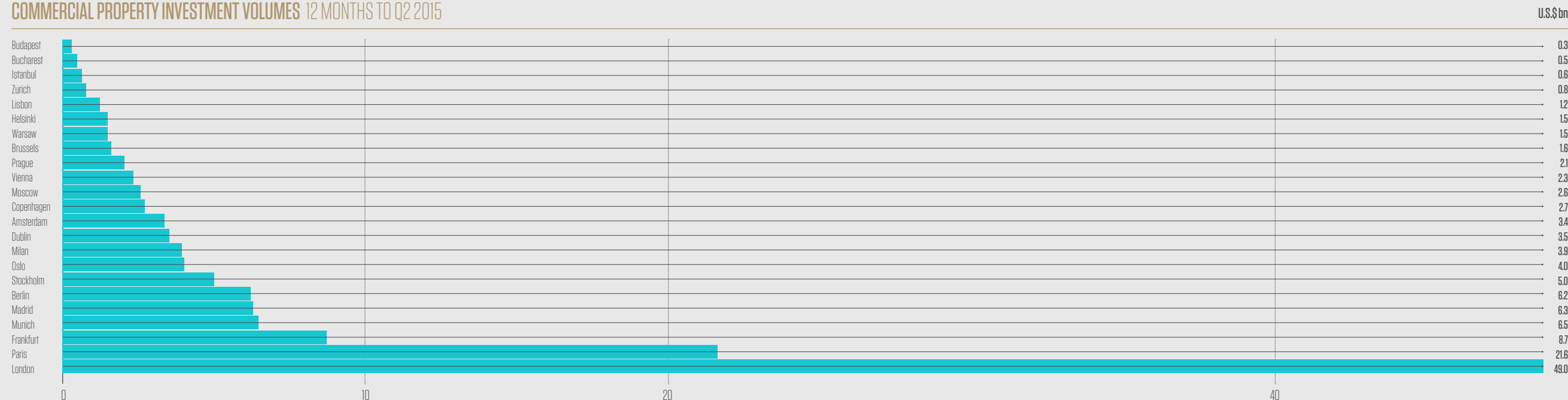
## PRIME OFFICE YIELDS (%)



## HOW MUCH PRIME OFFICE SPACE DOES U.S.\$100 MILLION BUY? (SQ FT)



## COMMERCIAL PROPERTY INVESTMENT VOLUMES 12 MONTHS TO Q2 2015



# MADRID

*A new post-crisis landscape in the office market is apparent in Spain's capital*

WRITTEN BY  
Ignacio Buendia,  
Research Manager,  
Knight Frank Spain

The office market in Madrid has been reshaped by the seismic changes seen in the real estate market over the last seven years. This has brought both positive and negative effects.

On the negative side, a phenomenon of embedded availability is evident in certain peripheral areas of the city. In districts like San Sebastián de los Reyes, in the north of Madrid, availability has never been below 750,000 sq ft, even in the good years when the buildings were recently built. In the recession years of the cycle, buildings in these areas struggled with high vacancy, and must now compete against better located refurbished offices.

Another negative aspect is seen in the CBD, where there is a shortage of high quality space. As a result, we are seeing more turnkey transactions in buildings in good locations which need comprehensive refurbishment.

The shortage of quality office space and rising demand is pushing up prime rents, and drawing investors to the opportunities available in the refurbishment market. Moreover, the office market today is showing signs of having matured, in part regarding location but also on office configuration.

Firstly, we are seeing greater evidence of occupiers clustering according to industry. While concentrations of law firms, technology and communication companies, banks and industrial conglomerates were in evidence before the financial crisis, the trend has become more pronounced in recent years.

Secondly, we are seeing occupiers changing office fit-out configurations. There is more demand for open workspace areas and zones for co-working, which has been accompanied by a drive for greater space efficiency.

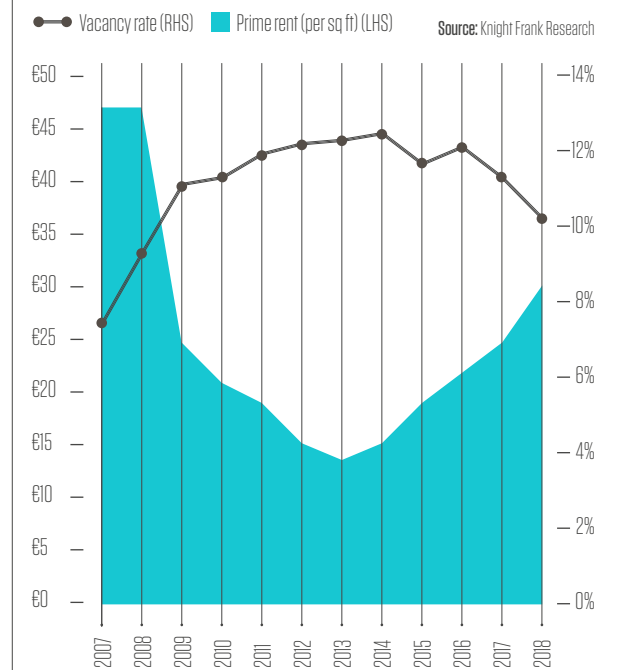
Madrid is also in a period of transition on the characteristics of new office demand. Rather than looking to hand space back to the landlord, tenants now want to expand. Also, smaller tenants are returning to the market, suggesting the base of demand is broadening.

To this backdrop of improvement, net absorption has turned positive, and 20% of take-up includes expansion space. Going forward, as the economy gains momentum, we expect a sharp rise in demand that will be reflected in take-up.

Despite this scenario of improving demand and low supply in the CBD, development activity is low in Madrid due to a lack of finance. The banks have been consolidating, working down bad loans, and largely only financing projects with loan to value ratios of around 55-60%. This is keeping the future supply pipeline slim.

As a consequence, we see rents set to rise further in Madrid in the coming years, thanks to a recovering Spanish economy buoying occupier demand, and shortage of modern office space in the CBD.

## MADRID VACANCY RATE VS PRIME RENTS (FORECAST FROM 2015 TO 2018)



Calle de Alcalá and Plaza de Cibeles, Madrid, Spain

*Dubbed the Manhattan of Europe, Frankfurt am Main's impressive city skyline has grown to become an attraction throughout Europe*

# FRANKFURT

## A GROWING CITY

WRITTEN BY  
Heena Kerai,  
European Research  
Analyst, Knight Frank

With many banks and financial institutions operating from the collection of skyscrapers along the River Main, Frankfurt has become the financial capital of continental Europe. It houses not only Germany's Bundesbank and Deutsche Börse stock exchange (the 10th largest globally), but is also the seat of the European Central Bank (ECB).

Often praised for its accessibility, with the airport among Europe's largest and busiest, and only a 15 minute train journey into the city, Frankfurt is an ideal location for multinational companies. The airport region's office market has seen masses of expansion in recent years, with development still ongoing. However, the focal point for real estate development is currently in the heart of the city centre.

Office completions in Frankfurt increased in 2014 to reach 3.2 million sq ft, although the ECB's new headquarters accounted for approximately 35% of this figure. Their recent relocation to the impressive 184 metre tower along the River Main in the east end of Frankfurt will undoubtedly attract many tenants to the already popular city; however, a lack of modern vacant space will continue to be a hindrance to the office market.

In recent years, a great deal of low quality space has been withdrawn from the market for refurbishment or redevelopment, and together with the city's growing occupier demand, vacancy rates have fallen each year since the global crisis to reach a 10-year low of 10% so far in 2015, and are forecast to fall further by year end.

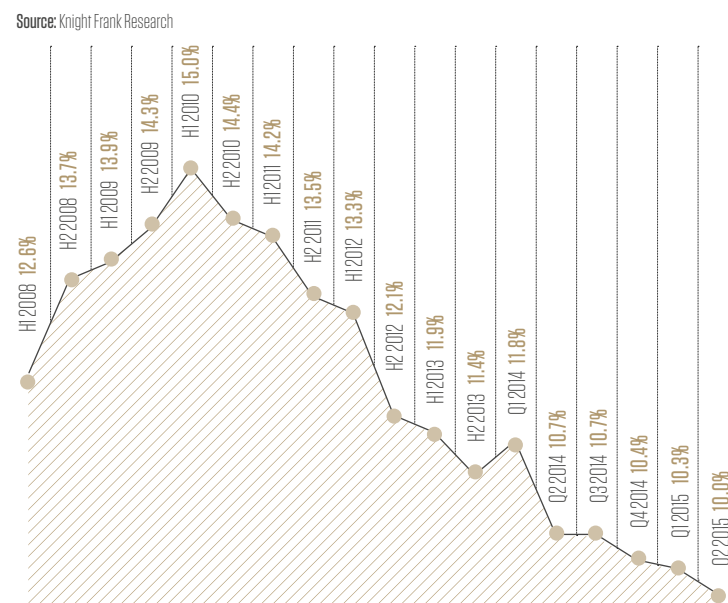
A moderate development pipeline, in comparison to earlier years, is expected in 2015 and 2016. Though not as high as 2014, office completions are forecast to total c.1.4 million sq ft this year (of which 622,000 sq ft completed in H1), which may help relieve some pressure on the city's high occupier demand in the medium-term. However, construction activity will need to increase further beyond 2016, if the city is to accommodate future demand.



EBC Tower, Frankfurt, Germany

In addition to the future developments, approved plans for a 700,000 sq ft mixed-use office and residential tower in the banking district (due in 2018) have recently been unveiled – the first of its kind in Frankfurt – which could completely change the real estate dynamics throughout the city. Such a scheme could act as a catalyst, encouraging similar projects across the city. In the coming years, Frankfurt may see its banking district modernised and converted into a mixed-use district and, although commercial space will ultimately be reduced, the city could rival the likes of London and New York.

## FRANKFURT VACANCY RATE



25.2048° N, 55.2708° E

# DUBAI

## BUILDING AN AEROTROPOLIS

*Not content with the world's largest airport, Dubai is building a bigger one as part of a giant economic hub*

WRITTEN BY  
Khawar Khan,  
Research Manager,  
Knight Frank Middle East

Over the past 15 years, Dubai has become a city of superlatives – the tallest building, the largest shopping mall, and the biggest man made island spring to mind. More recently though, the emirate added another to the list: the busiest international airport. In 2014, Dubai International overtook London Heathrow to become the world's air travel hub, handling more than 70 million passengers – compared to the latter's 68.1 million.

Much like the office buildings in close proximity to London Heathrow, good quality floor space near Dubai International Airport is in short supply – driven by strengthening tenant demand in recent years. Thus in response to increasing enquiries for space from both new and existing occupiers, authorities at Dubai Airport Freezone (an 'offshore' location adjacent to the airport, where a number of multinational firms are already based) have been building new facilities.

With the number of passengers passing through Dubai International expected to hit 100 million by 2020, and scope

for expanding the existing site limited, officials have turned to Dubai's second airport: Al Maktoum International. Its planned expansion is among the largest projects in the region and is anticipated to be fully complete in around ten years. Also, the airport is located in Dubai South – an area almost twice the size of the island of Hong Kong.

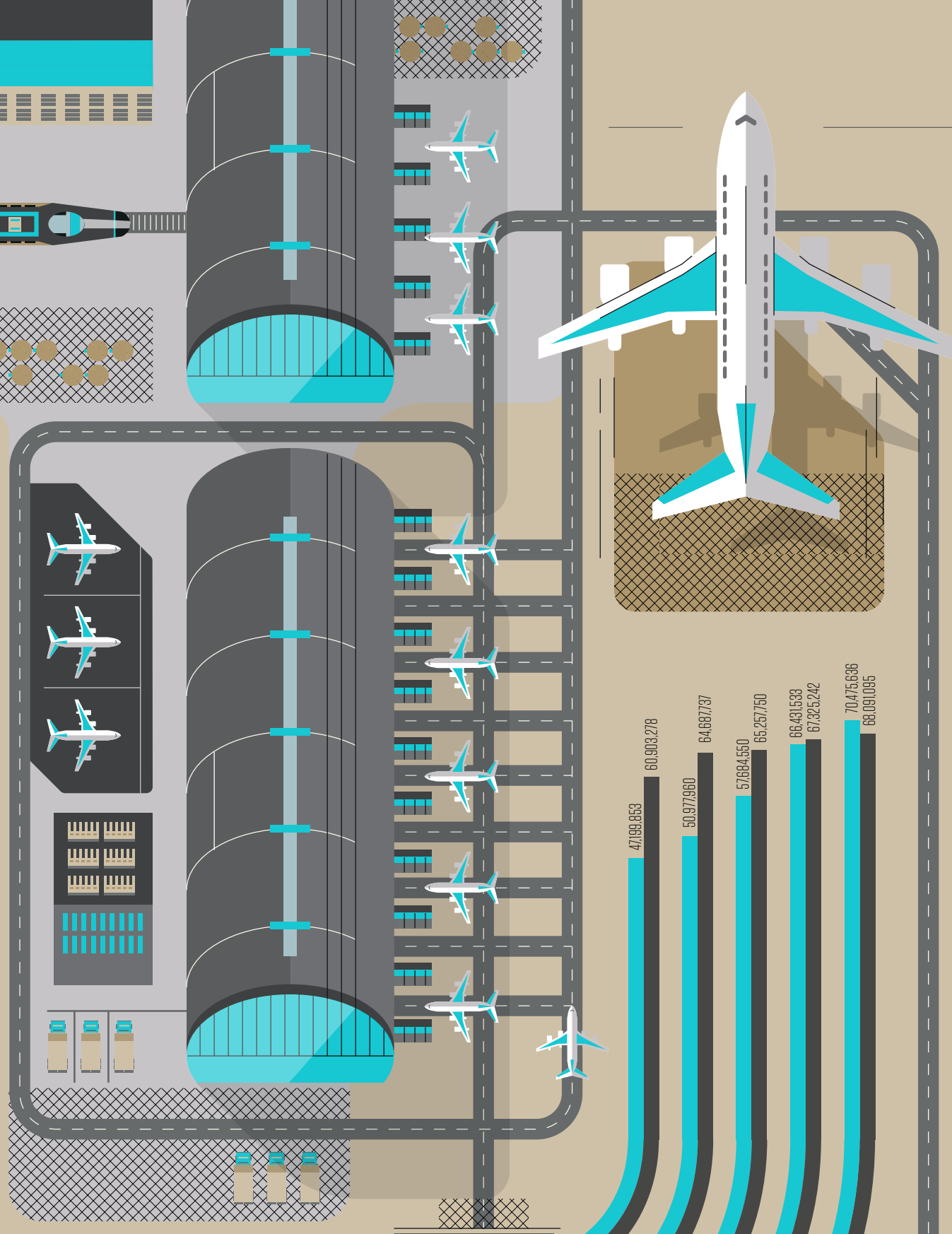
While full completion is still some way off, the airport is already conducting general passenger and cargo operations, with Emirates SkyCargo, for example, currently running air freight out of Dubai South. Eleven office buildings of around 3.3 m sq ft at Dubai South's business park are complete and ready for occupation, but with the airport still in the early stages of development, occupancy rates are understandably low. Nevertheless, the park is already drawing in major names as tenants, such as Nestlé and CEVA Logistics.

So what does the future hold for the purpose built aerotropolis? Also, why are companies gravitating towards it?

Source: Airports Council International

### INTERNATIONAL PASSENGER TRAFFIC 2010-2014

■ Dubai International ■ London Heathrow



The answer is its connectivity. Over the next decade or so, Dubai South aims to be easily accessible by road, rail, sea and air. Moreover, while the project is part of a long-term strategic masterplan, it also ties in with the World Expo 2020 that will be hosted at Dubai South. The event is projected to attract around 25 million visitors, of which around 70% are anticipated to be from overseas.

Al Maktoum International Airport is expected to play a critical role in transiting this surge of foreign visitors. In fact, Emirates, the global airline, has said that if the required facilities at the new airport are completed in time, it may well move operations across from Dubai International in time for the Expo. Given that Emirates is already flying to over 140 destinations across six continents, this will boost the appeal of Dubai South for firms looking for a hub to serve the Middle East, as well as parts of Africa and Asia.

Another scheme planned to improve Dubai South's connectivity with the rest of Dubai is the construction of 'Route 2020'. This partly comprises the extension of the existing metro's red line from Jebel Ali (the main seaport) to Al Maktoum International Airport. The area is also envisioned to be served by Etihad Rail, which will eventually connect the emirates with neighbouring countries – although the level of progress so far suggests the full network will not be joined up by 2018, as originally intended.

It is also worth remembering that Dubai South is linked to Jebel Ali (the largest container port between Rotterdam & Singapore) via a dedicated logistics corridor. This forms a single customs bonded freezone, allowing the seamless flow of cargo from sea to air by eliminating the processes of exit and entry between the two freezones. Also, the road network leading to Dubai South is currently being improved in order to cope with an anticipated rise in traffic.

Looking forward, Dubai South's improving connectivity will be pivotal in establishing it as an important commercial hub in the UAE. The freezone is in a strong position to appeal to firms looking for international reach: a four hour plane ride from Dubai allows access to a third of the world's population and an eight hour flight to two thirds. This wave of mega infrastructure projects should guarantee Dubai's reputation as a global centre over the next decade, with Dubai South as a cornerstone.

3.1333° N, 101.6833° E

# KUALA LUMPUR

*The Malaysian capital is the centre of a rapidly expanding rail network*

**✦** WRITTEN BY  
Judy Ong,  
Executive Director,  
Research & Consultancy,  
Knight Frank Malaysia

Transport infrastructure development is being stepped up in Greater Kuala Lumpur/Klang Valley, having been outpaced by the rapid urbanisation in the region.

With Malaysia's urbanisation rate at over 73%, there is an urgent need to address road congestion. The main modes of public transportation currently serving Greater Kuala Lumpur/Klang Valley include the Monorail, Light Rail Transit and KTM Komuter train service.

The past few years have seen massive investment in the country's transport infrastructure. The first line of the Klang Valley Mass Rapid Transit (MRT) project, the ongoing MRT Sungai Buloh-Kajang Line, will serve a corridor with a population of 1.2 million people. Slated for full completion by July 2017, it will enhance connectivity within the Greater Kuala Lumpur/Klang Valley region.

In planning is the second MRT line, the Sungai Buloh-Serdang-Putrajaya Line. The proposed line, covering a distance of 32 miles, is expected to serve a highly populated corridor with 2 million people. Scheduled for completion by 2022, this line will further alleviate congestion in the capital city.

The most eagerly awaited project is the proposed Kuala Lumpur-Singapore High Speed Rail (HSR). The ambitious rail link, billed by the leaders of both countries as a

Helipad Bar and Kuala Lumpur Tower, Kuala Lumpur, Malaysia



'game-changer', is likely to be completed post 2020.

With increasing traffic between the two neighbouring countries, the HSR presents an opportunity to provide seamless connectivity by reducing travelling time between Kuala Lumpur and Singapore (a 205 mile journey) to just 90 minutes.

The cross-border HSR project is expected to boost investment, improve trade and business opportunities, as well as promote tourism. Real estate opportunities are abundant along the route, and successful implementation will promote more development activity in the urban centres of Seremban, Melaka and Johor, as well as along the coastal corridor of Malaysia.

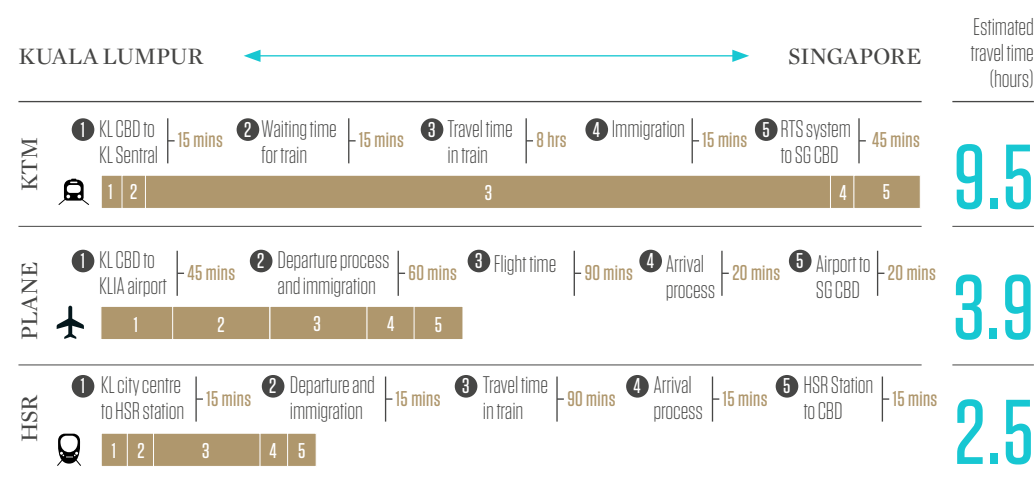
The HSR project is also key to the proposed 495 acre Bandar Malaysia

project which involves the redevelopment of the old airport at Sungai Besi, in Kuala Lumpur's city fringe. The urban mixed-use development will house the HSR terminus and be integrated with the MRT Line, helping to transform the Greater Kuala Lumpur/Klang Valley region into a world-class metropolis.

The Kuala Lumpur office market, with its upcoming supply of good quality dual compliant space available at competitive rates, may see improved demand from multinational corporations when the HSR becomes operational. The travel time from Singapore will be greatly reduced thanks to the HSR and there may be more cross-border business and investment opportunities.

## HSR IS ESTIMATED TO REDUCE TRAVEL TIME BY TWO HOURS COMPARED TO FASTEST ALTERNATIVE TODAY

Source: SPAD



Glossary:  
KL = Kuala Lumpur  
HSR = High Speed Rail  
RTS = Rapid Transport System  
SG = Singapore

13.7563° N, 100.5018° E

# BANGKOK

*The city's CBD is branching out in three new directions*

**✦** WRITTEN BY  
Risinee Sarikaputra,  
Director, Research and Consultancy,  
Knight Frank Thailand

The Central Business District (CBD) of Bangkok is considered to be the area lying within Sathorn, Silom, Ploenchit, Wireless, Rama I and Rajdamri roads. With a high density of office buildings, hotels and retail complexes, including the Rama I shopping precinct, the area in recent years has suffered from a shortage of land for development, pushing prices up sharply. While the mass transit system has anchored the city centre, encouraged by the expansion of the public transport system, commercial development projects have therefore started to spread to three new emerging areas.

Ratchadapisek-Rama 9 is the most talked about commercial sub-centre. This area, just to the north east of the core CBD, has at its centre the impressive Grand Rama 9 project. This cluster of high-quality office buildings includes the planned Super Tower, a 125 storey tower with a height of over 2,000 ft which on completion will be the tallest building in Southeast Asia. The project area additionally includes the under-construction G Land and the newly completed U-Place, a 12 storey 517,000 sq ft green office building, let to Unilever. Elsewhere, further up Ratchadapisek Road, the new Stock Exchange of Thailand's (SET) head

Bangkok, Thailand



**“RATCHADAPISEK-RAMA 9 IS THE MOST TALKED-ABOUT COMMERCIAL SUB-CENTRE. THIS AREA HAS AT ITS CENTRE THE IMPRESSIVE GRAND RAMA 9 PROJECT”**

The decision to build a new transport hub at Bangsue Grand Station, to the north of the CBD, looks likely to be another commercial real estate catalyst in the third of the new commercial districts. Provincial bus networks, rail lines and the city's rail system, which is expanding by more than 250 miles, will all intersect in the area and the station will become the city's main transport hub, replacing Hua Lumphong, Bangkok's current major station. With a significant amount of land available to private developers, the area is set to be a future hotspot in the Bangkok real estate landscape.

1.2833° S, 36.8167° E

# NAIROBI

*Ready, steady... shop! Kenya's capital is rapidly expanding its retail experience*



WRITTEN BY  
James Roberts,  
Chief Economist, Knight Frank

Those embarking on a shopping trip in Nairobi today have a lot more choice compared to a year ago. Around 1.8 million sq ft of modern shopping mall space has opened in 2015. Given that the mall stock previously had totalled 980,000 sq ft, this amounts to a revolution in the city's retail experience, which matches the huge economic and demographic changes that have unfolded in Kenya.

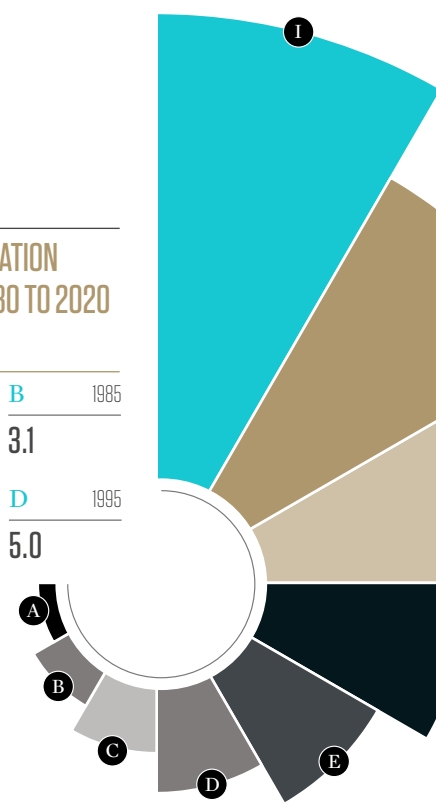
Kenya has seen its economy expand by nearly 16% between 2011 and 2014 in constant prices, according to the National Bureau of Statistics. Over the same period, electricity consumption has risen by nearly 24%, secondary school pupil enrolments have increased by nearly 31%, and university student enrolments have more than doubled. Famously, Kenya is seeing a surge in electronic payments via mobile phones. The country is undoubtedly a developing world success story.

While agriculture retains a large share of GDP, Kenya is developing a broad-based economy with rising services and production industries. The country is a fast growing centre for IT and telecom industries in Africa, and output from information and communication industries has risen by 30% between 2011 and 2014 in constant prices. Financial and insurance output is up by 24% over the same period.

Kenya, and Nairobi in particular, is also taking off as a hub location for global corporations looking to establish an office to cover East Africa. This is partly due to a growing realisation by many multinationals that sub-Saharan Africa is too big to be serviced just out of an office in South Africa.

## URBAN POPULATION OF KENYA - 1980 TO 2020 (MILLIONS)

A	1980	B	1985
2.5		3.1	
C	1990	D	1995
3.9		5.0	
E	2000		
6.2			
F	2005		
7.7			
G	2010		
9.6			
H	2015	I	2020
11.9		14.7	



Source: United Nations

For 2016, the IMF is forecasting Kenya GDP to expand by nearly 7.2%, compared to 2.1% for South Africa and nearly 5.0% for Nigeria.

As a result of this economic transformation, the ranks of Kenya's middle class are swelling thanks to so much growth in services industries. They are now living, working and shopping ever more in line with developed world expectations. As well as a modern retail experience and international brands, there is rising demand for food and leisure outlets, now that shopping is increasingly combined with socialising. This is why Nairobi needs more modern retail stock.

Over the five years to 2020, the United Nations is forecasting Kenya's urban population to expand to 14.7 million people, an increase of nearly 2.8 million. Clearly, there is going to be more demand for modern retail over the next five years, although the shopping development pipeline is ready to meet the challenge. In 2016 and 2017, a further 1.3 million sq ft of modern retail space will complete development in Nairobi.

Nairobi is expanding from being the economic focus of East Africa into its biggest modern shopping destination.



City street in Nairobi, Kenya

# MOSCOW

## WHAT NEXT FOR MOSCOW CITY?

*Falling rents are resulting in a drift back into central office locations*



WRITTEN BY  
Matthew Colbourne, Head of EMEA Research, Knight Frank London and Mikhail Titov, Associate, Knight Frank Moscow

### FEDERATION TOWER

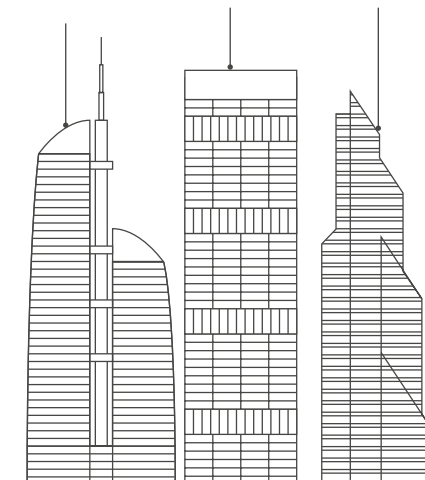
Height: 1,223 ft  
Floors: 95  
Current status: Under construction  
Expected completion date: 2016  
Will be the tallest commercial building in Europe on completion

### OKO APARTMENT TOWER

Height: 1,154 ft  
Floors: 85  
Current status: Topped out  
Expected completion date: 2015  
Will be Europe's tallest residential building

### MERCURY CITY TOWER

Height: 1,112 ft  
Floors: 75  
Current status: Completed  
Completion date: 2013  
The tallest commercial completed building in Europe



Inspired by London's Canary Wharf business area, the Moscow City district has risen over the last decade to become arguably the most impressive skyscraper cluster in Europe. Built on a riverside site 2.5 miles west of the city centre, it includes Europe's tallest completed building, the 1,112 ft high Mercury City Tower. Two even taller buildings, OKO Apartment Tower (1,154 ft) and Federation Tower (1,223 ft) are close to completion.

However, behind the gleaming facades of Moscow City's towers, there are large swathes of vacant office space. The district's vacancy rate currently stands at 26%, and is forecast to rise to 36% by the year end, due mainly to the imminent delivery of 1.3 million sq ft of offices in the mixed-use IQ-Quarter complex. This development will be entering a uniquely challenging market, as office demand in Moscow has fallen sharply over the past 12 months as a result of Russia's economic difficulties.

The landlords of Moscow City have had to offer significantly reduced rents and increased incentives to attract tenants. In U.S. dollars, average office rents in the district are now more than 30% below their previous peak, at U.S.\$57.10 per sq ft per annum, and they may fall further by the end of 2015. It has become increasingly commonplace for tenants to negotiate leases with ruble-denominated rents, as currency depreciation has had a massive impact on businesses that earn their income in rubles, but pay their rents in dollars.

Although challenging, the current market conditions have provided some businesses with opportunities to lease or acquire large volumes of office space. The state-owned company Transneft has bought one of Moscow City's most distinctive structures, the twisting Evolution Tower, and it intends to relocate to this building.



Belaya Ploshad, Moscow, Russia

The availability of large amounts of office space at relatively low rents in both Moscow City and the CBD is causing a reversal of the decentralisation trend that has characterised the Moscow market in recent years. Prior to the current slowdown, suburban business parks had become a major focus of office market activity, but occupiers are now gravitating back towards more central locations.

Moscow City's landlords currently face an uphill task in filling their vacant offices and it may be some time before they are able to achieve acceptable occupancy levels. In the meantime, tenants will be able to lease some of the best offices in Moscow at sharply reduced rents.

55.7500° N, 37.6167° E

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The combined group has more than 12,500 property professionals, with more than 370 offices around the world; this global commercial and residential capability allows us unrivalled access to wealth, properties and occupiers in 55 countries.

Our integrated platform enables us to offer clients a dedicated service from our headquarters in London and New York City. Together, we are strengthened by the specialist desks we have created in these cities, devoted to further enhancing our global client relationships.

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## CONTRIBUTORS

GLOBAL CITIES: THE 2016 REPORT  
BY KNIGHT FRANK AND NEWMARK GRUBB KNIGHT FRANK

### COMMISSIONED BY

JOHN SNOW, HEAD OF COMMERCIAL,  
KNIGHT FRANK  
JAMES D. KUHN, PRESIDENT,  
NEWMARK GRUBB KNIGHT FRANK

### EDITOR

JAMES ROBERTS, CHIEF ECONOMIST,  
KNIGHT FRANK

### PROJECT STRATEGY

LIAM BAILEY, GLOBAL HEAD OF RESEARCH,  
KNIGHT FRANK  
PETER MACCOLL, HEAD OF GLOBAL CAPITAL  
MARKETS, KNIGHT FRANK  
WILLIAM BEARDMORE-GRAY, GLOBAL HEAD OF  
TENANT REPRESENTATION & OFFICE AGENCY,  
KNIGHT FRANK

### REGIONAL RESEARCH CONTRIBUTORS

NICHOLAS HOLT, ASIA PACIFIC HEAD OF  
RESEARCH, KNIGHT FRANK  
JONATHAN MAZUR, MANAGING DIRECTOR,  
RESEARCH, NEWMARK GRUBB KNIGHT FRANK  
ROBERT BACH, DIRECTOR OF RESEARCH,  
AMERICAS, NEWMARK GRUBB KNIGHT FRANK  
MATT WHITBY, GROUP DIRECTOR, HEAD OF  
RESEARCH & CONSULTING, KNIGHT FRANK  
AUSTRALIA

### MARKETING

FIONA O'KEEFE, GROUP HEAD OF MARKETING  
& COMMUNICATIONS, KNIGHT FRANK  
DEBORAH GOODMAN, HEAD OF COMMERCIAL  
MARKETING, KNIGHT FRANK  
JESSICA BRADLEY, HEAD OF MARKETING  
& COMMUNICATIONS, NEWMARK GRUBB  
KNIGHT FRANK

### PRESS

ALICE MITCHELL, HEAD OF CORPORATE  
COMMUNICATIONS, KNIGHT FRANK  
CHARLOTTE LAWRENCE, COMMERCIAL  
PR MANAGER, KNIGHT FRANK  
SARAH BERMAN, THE BERMAN GROUP  
FOR NEWMARK GRUBB KNIGHT FRANK

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MIKE SALES, CHIEF EXECUTIVE OFFICER,  
TH REAL ESTATE  
ALICE BREHENY, GLOBAL CO-HEAD OF  
RESEARCH, TH REAL ESTATE  
ANDREW SCHOFIELD, DIRECTOR OF RESEARCH,  
TH REAL ESTATE  
DAME ZAHA HADID, ZAHA HADID ARCHITECTS  
REAL CAPITAL ANALYTICS  
WEWORK  
LEVEL 39  
SUMITOMO MITSUI TRUST  
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This report was largely written in July and August 2015 based on available data and drawing from the business news and market sentiment at the time; then going to press in late September 2015.

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