AEW RESEARCH

ASIA PACIFIC MARKET PERSPECTIVE

Q4 2019

AEW

Prepared by AEW Research, February 2020

Investment Strategy

The COVID-19 outbreak, and the necessary protective measures many countries have subsequently implemented, have reduced the optimism from which the year started. As we entered January, and the U.S.-China trade 'Phase One' agreement was signed, expectations were for an improved economic climate. These views have now been tempered. The viral outbreak that coincided with Lunar New Year holidays will likely prolong this seasonally quiet time of year. The initial view is that as long as the outbreak stays relatively contained, the effects should be transitory.

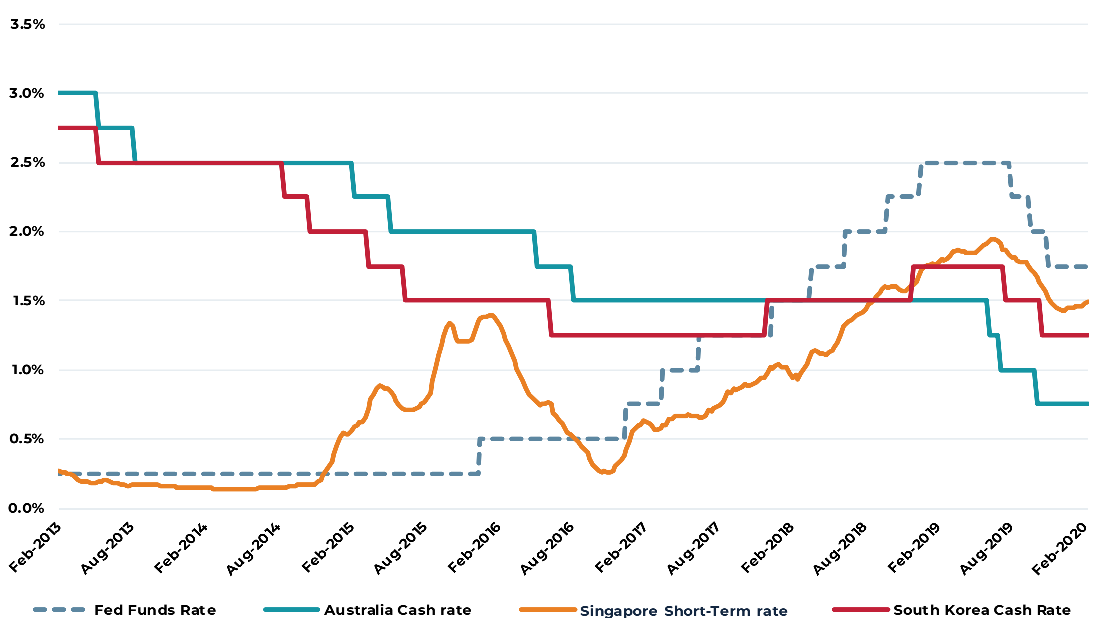
This exogenous demand side shock may end up having only a short-term disruption, with supportive policy responses a positive for aggregate activity in the second half of the year. That said, growth estimates for the first half of the year are being reduced due to the outbreak.

The underlying factors supporting the region's real estate capital markets remain in place. Low interest rates and strong investment volumes are supporting pricing and valuations. Allocation targets are broadening with increased interest in moderate risk strategies such as value-add investing on top of core. Investment volumes for the full year 2020 may end the year slightly behind 2019 levels.

Most office markets around the region continue to see supportive fundamentals. The average vacancy rate across the region was 4.6% at the end of 2019 indicating a well-balanced sector. The construction pipeline is also under control. Completions will peak this year with stock growth of about 3.2%, and then fall to under 2% in 2021. Rental growth is mixed with some markets correcting and others continuing to rise.

With 2020 likely to continue to have heightened levels of uncertainty, a defensive investment strategy is to focus on domestic fundamentals. That is, commercial assets with tenants focused on serving domestic markets. These can be found in Australian state capital Central Business Districts (CBDs) or metro markets, Japan's residential sector and Asia Pacific logistics.

SHORT-TERM INTEREST RATES
FEB 2013 TO FEB 2020 YTD



Source: Bloomberg

Economy

The year started with positive developments on the U.S.-China trade Phase One deal, calmer geopolitical relationships, and an expected recovery in the global electronics cycle, which all contributed to initial optimism on the outlook. However, several challenges relating to climate change and COVID-19 has diluted some of the initial confidence. The International Monetary Fund (IMF) downgraded their global growth outlook by 0.1% for both 2020 and 2021 to 3.3% and 3.4%, respectively. In Asia Pacific[1], growth is expected to come in at 3.9% in 2020. For the region's major developed economies, growth is expected to the average 1.3% in 2020, with China leading the pack at 5.4% (downgraded from 6.0% previously) and Hong Kong serving as the major drag as it suffers another recession year.

Ongoing issues for the past several months such as the social unrest in Hong Kong and the bushfires on the eastern coast of Australia have eroded 2020 growth forecasts for these economies. More so, COVID-19, which originated in Hubei province in China, has spread rapidly since January 2020. Efforts to contain the outbreak by restricting travel and business activity has caused a slowdown in export services, private consumption and tourism. These repercussions, while most impactful in China, will also have knock-on effects on the rest of the Asia Pacific markets, especially in the first half of 2020. While still preliminary, forecasts suggest that the impact of the virus will be high, but short-lived, as was the effect from the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003.

A potential comfort is that Asia Pacific economies generally have the policy space to buffer domestic demand. This has already come through in China where the People's Bank of China (PBOC) effectively injected CNY1.7 trillion into the financial system on the week of 3 February 2020. Other measures outlined so far include fee breaks, subsidies and tax cuts for businesses directly affected, but it is likely that these will only be rolled out once the virus is reasonably contained and outstanding travel restrictions are released. Similarly, in Australia AUD2.0 billion has been set aside for reconstruction efforts from the fire's damage and the New South Wales Government has announced further AUD1.0 billion to rebuild infrastructure. Elsewhere in Singapore, South Korea and Japan, we expect expansionary budgets in 2020 to bolster consumption and investment.

Further, with growth still subdued and inflation low, central banks should maintain an easing stance in 2020, with possible frontloading of rate cuts to shore up growth. The Reserve Bank of Australia (RBA) are expected to further cut rates in Q2 2020 and the Bank of Korea and Japan have maintained an accommodative stance. Because of this, we expect growth to rebound in the second half of 2020, as the benefits of fiscal and monetary policy filter through alongside a normalization of business conditions.

U.S. dollar strength was a consistent trend in the first three quarters of 2019, but this began to shift in Q4 2019 when Asian currencies started to turn. However, given unforeseeable events of 2020 to-date, Asian currencies has resumed their decline with the largest depreciation against the USD year-to-date recorded for the AUD (4.8%) and KRW (2.9%).

MACROECONOMIC INDICATORS

Countries	GDP (y-o-y)		CPI (y-o-y)		Interbank rate/cash rate		USD exchange rate	
Year	2020	2021	2020	2021	2020	2021	2020	2021
Australia	1.9	2.8	2.00	1.98	0.50	0.50	0.68	0.70
China	5.4	6.1	0.95	1.72	2.26	2.78	6.90	6.78
Hong Kong	-2.8	3.4	2.22	1.91	1.75	1.75	7.76	7.76
Singapore	1.0	2.7	0.95	1.72	1.73	1.81	1.34	1.33
S. Korea	1.8	2.7	0.95	1.75	1.25	1.25	1186	1169
Japan	0.5	1.0	0.56	0.50	-0.06	-0.05	106	106

Source: Oxford Economics, 11 Feb 2020

[1]Source: Oxford Economics, 11 Feb 2020

Tokyo

Favorable fundamentals for multifamily, office demand surprises on the upside

MULTI FAMILY: STABLE OCCUPANCY, RENTS UP IN CORE AREAS

Fundamentals remain favorable for multifamily in Tokyo. The city continues to see population growth on the back of migration and immigration trends, contributing to steady demand. At the same time, the construction of "for-rent" units have generally been on a decline, keeping supply limited.

The sector is broadly characterized by stable occupancy and rents, but pockets of outperformance are visible. These are mostly for smaller units located in the core central areas where demand from young individuals and foreigners are highest. Estimates suggest that overall rent in the Central 5 Wards (C5W) were up by about 5% to 8% in 2019 year-on-year. The rental premium of the C5Ws to 23 Wards now stands at about 20%, expanding slightly over the year.

OFFICE: TECHNOLOGY OCCUPIERS DRIVE DEMAND

Supported by extremely tight leasing conditions (vacancy rate at 0.45%), rents in Tokyo office continued to increase in Q4 2019, bringing overall rental growth to around 5.0% for 2019. Demand came in ahead of expectations lifted by strong corporate earnings cycle and positive hiring across several sectors.

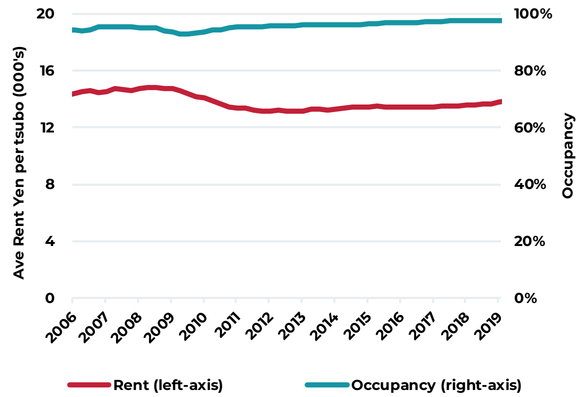
Of note, the information and technology sector continues to expand aggressively, which has led to the outperformance of the technology-focused submarkets like Shibuya and Shinjuku, where rents have increased by close to 14% in 2019 and hit a new high. Some of these technology occupiers have also recently been taking space in prime buildings in other submarkets which is helping to drive rents in areas like Otemachi and Marunouchi.

PRE-LEASE HEALTHY, SPACE SHORTAGE COULD RE-SURFACE

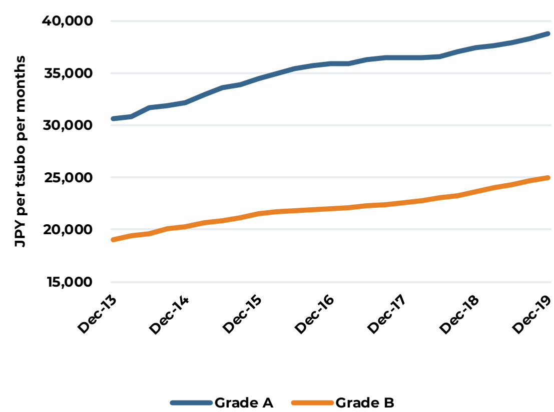
In Tokyo, the supply cycle will reach an eight-year high with around 9.0 million square feet of prime space completing in 2020 to 2021. This strong supply delivery has been met with equally strong demand, with brokers confirming that about 90% of this supply has already been pre-leased as of January 2020.

As the economic outlook for 2020 still remains uncertain, we expect landlords to be accommodative in the near-term, supporting the lease-up of the backfill space. Beyond this period, however, medium-term supply will only be completed from 2023 to 2024, which means a space shortage could re-surface in the 2021 to 2022 window. Rental growth is expected to remain below 1% in 2020 before accelerating to 3.0% to 3.3% per annum in 2021 and 2022.

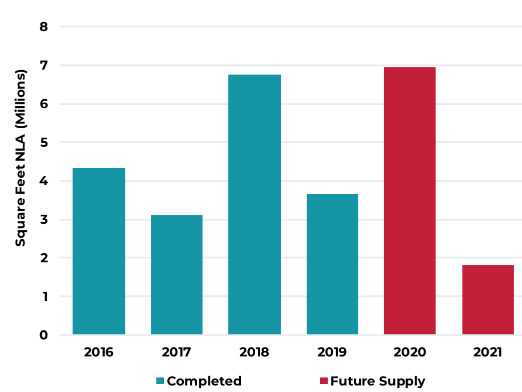
TOKYO MULTIFAMILY OCCUPANCY AND RENTS 2006 TO 2019



C5W OFFICE GRADE A & B ACHIEVED RENTS 2013 TO 2019



TOKYO OFFICE GRADE A NET SUPPLY 2016 TO 2021



Sources: ARES and CBRE, as of December 2019

Seoul

Improved outlook in the CBD, Yeouido to see major new office completion in 2020

CBD: IMPROVED DEMAND IN Q4 AND RENTAL OUTLOOK

After several quarters of leasing weakness, CBD saw its most impressive quarter of take-up since early 2014, of 732,000 square feet. As a result, vacancy rates declined by close to 5.0 percentage points over the quarter, ending at 9.9%. The jump in demand was attributable to several large leasing deals, that are likely to be one-off. We expect demand to revert to average levels in 2020.

Landlords will still be prone to leasing competition from new supply in the coming year, where about 1.9 million square feet will be supplied across three buildings. However, against the backdrop of lower vacancy, the rental outlook for 2020 was revised up. At the same time, the new supply and attractive incentives by landlords could encourage a flight to quality, and we could see a better demand for prime grade and newer buildings in the near-to medium-term. Grade A rents are now expected to grow 1% in 2020 before increasing to 2.5% to 4% p.a. in 2021 and 2022.

YBD: LARGE SUPPLY AND UPCOMING SALE IN 2020

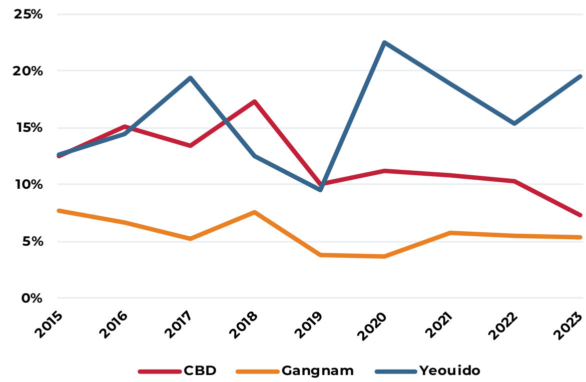
Yeouido recovered throughout 2019 with vacancy decreasing by about 3.0 percentage-points and effective rents increasing by 2.5% in the year. The upcoming completion of twin-towered ParcOne in Q3 2020 (2.1 million square feet) however is placing pressure on the leasing market. ParcOne Tower 2, which has been up for sale on the market since Q3 2019 has been assigned a preferred bidder with indicative pricing of KRW20 million per pyung. The buyer is said to be planning to occupy the bulk of the building premises for self-use upon completion.

With the supply competition, we expect landlords of existing buildings to adjust rents downward in order to maintain occupancy. Effective rents are expected to decrease by 3% per annum for the next two-year period.

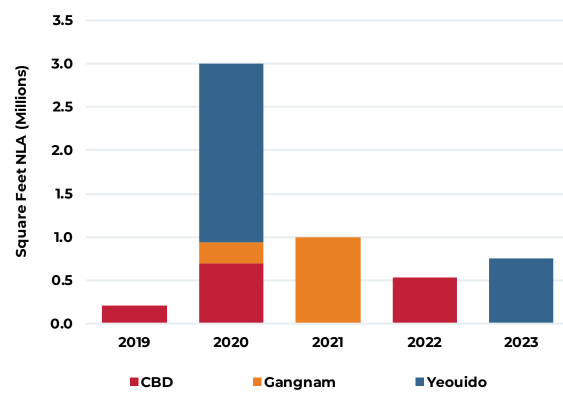
GBD: LANDLORD FAVORABLE CONDITIONS PERSIST

Limited vacancy and strong pent-up demand from the Information, Technology and Communication (ITC) industry kept vacancies limited in Gangnam. Although there have been some announcements of movement out of the submarket, we expect space to be leased quickly. Brokers on the ground have indicated some firms are already enquiring about leasing space in 2021's supply in the revamped Renaissance Hotel Development Site by KKR. Given the robust demand, rental growth is expected to continue in the near-term, up by 1% to 2% per annum over the next three-year period.

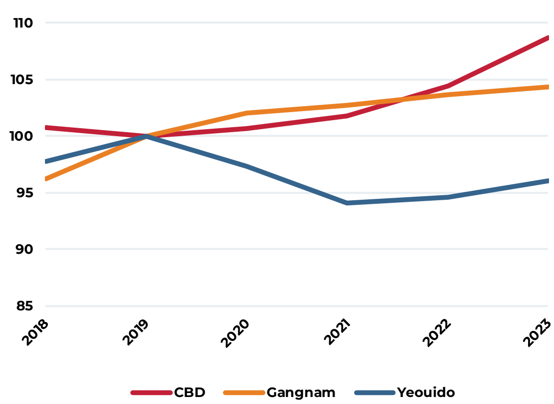
OFFICE VACANCY RATE BY SUBMARKET
2015 TO 2023F



SUPPLY OUTLOOK BY SUBMARKET
2019 TO 2023F



OFFICE RENTAL OUTLOOK
Q4 2019 = 100



Sources: JLL, as of December 2019

China

Subdued demand in Shanghai and Beijing could stretch into 2020

SHANGHAI

PUDONG CBD: SHORT-TERM WEAKNESS, FAVOURABLE OUTLOOK

We expect to see continued weakness in leasing markets in Pudong CBD due to the government's deleveraging campaign and decentralization trends. Landlords in Pudong's decentralized markets like Qiantan have been aggressively marketing with another 3 million square feet of vacancy to fill. The current rental gap at about 50% continues to attract tenants from the CBD.

Effective rents in Pudong CBD were down 10% in 2019. In some of the newer buildings, asking rents have been reduced by as much as 25%. AEW believes however, that medium- to long-term fundamentals in Pudong CBD remain attractive. The submarket's supply cycle ended in 2018, and we do not expect any new construction in the next five-year period. Further, the growth of the finance and insurance industries to foreign firms will add to new sources of demand and support leasing. Nascent signs of these are emerging and we expect them to take hold in 2020.

PUXI CBD: DIVERSE DEMAND SUPPORTS LEASING

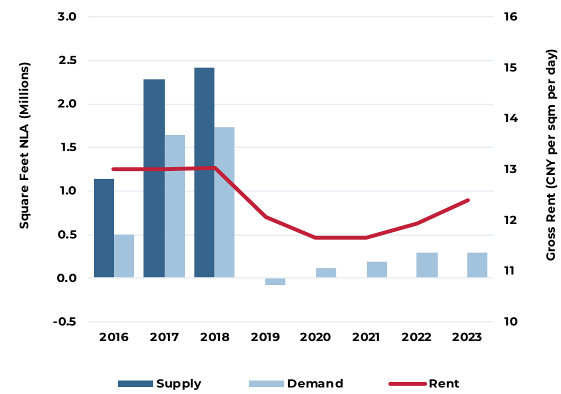
Demand in Puxi CBD is varied across sectors and industries, unlike Pudong, which has the bulk of the tenant-base from the finance industry. As a result, demand in Puxi has been more stable year-to-date, with the leasing of 717,300 square feet and vacancy rates declining to 8.3% as of end 2019. Going forward, supply pressure from decentralized markets will impact the periphery CBD submarkets. We expect rents in the core CBD submarkets of Jing An, Xuhui and Changning to see minimal impact.

BEIJING

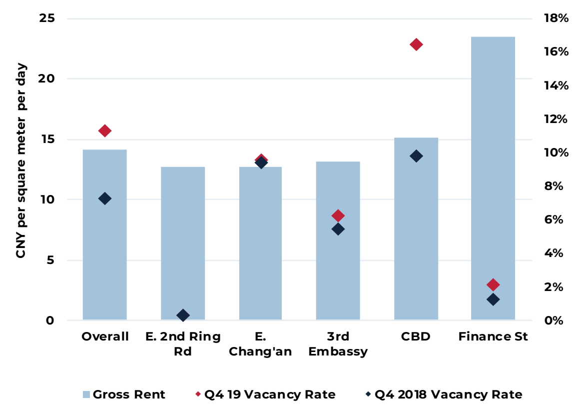
NEW SUPPLY IN CBD INCREASES LEASING COMPETITION

Landlords remain flexible in lease negotiations, offering more incentives and renewing rents at a discount. This is especially so in the core submarkets where about 4.0 million square feet completed in Guomao in 2019 with another 2.2 million expected before the end of 2020. Although a large proportion of the new space is held for self -use, overall vacancy rates in the core submarkets has risen to 8.5%, a level last seen in 2011. Rents in Beijing are expected to decrease by about 5 to 8% as new supply gets absorbed. Submarkets with limited vacancy like East 2nd Ring Road and Finance Street are expected to perform better.

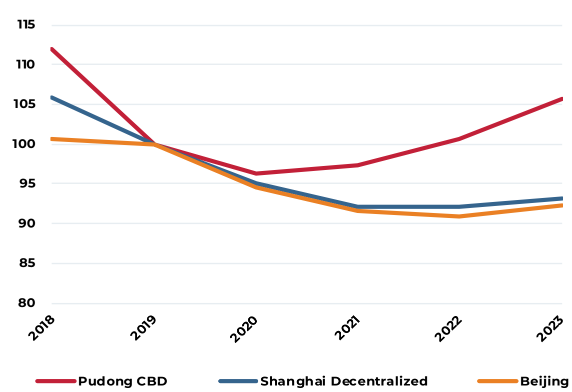
PUDONG OFFICE SUPPLY, DEMAND AND RENTS
2016 TO 2023F



BEIJING VACANCY RATE AND GROSS RENT
2019



OFFICE RENTAL OUTLOOK
Q4 2019=100



Sources: JLL, as of December 2019

Hong Kong

Commercial markets impacted by US-China trade tensions and protracted social unrest

OFFICE MARKET IN DOWNCYCLE, LARGEST DECLINE IN CENTRAL

A slowdown in office leasing was previously anticipated for this period, but the situation has been exacerbated by the social unrest in the city since June 2019. Net absorption for the overall market came in negative and the pull-back was the largest in Central where vacancy increased by close to 2.0 million square feet.

Decentralization is still a key feature of the leasing market as tenants seek cost-effective options. As a result, the impact of the leasing slowdown has been less obvious in markets like Hong Kong East. New supply in Hong Kong East was steadily absorbed over the year keeping vacancy low, while elsewhere, vacancy has expanded.

Rents in Central are now down 5 to 7% since the start of 2019. AEW understands that major landlords in Central are still reporting positive rental reversions for FY 2019, but this may change as the rental decline is expected to pick up pace in 2020.

LIMITED EVIDENCE OF PRICE DECLINE TO-DATE

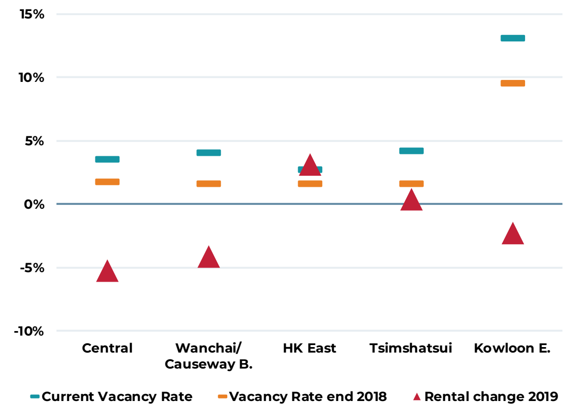
As the market goes through a rental correction, many buyers are waiting on the sidelines for potential entry opportunities at good value. However, there has only been a limited number of transactions that have taken place in the last six months, making the scale of price declines unclear at the moment.

RETAIL AND TOURISM REPORT LARGE DECLINES

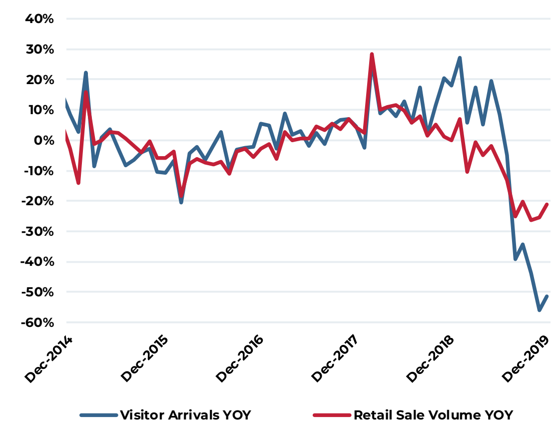
With significant disruption to inbound tourism and consumption-related activities, the tourism and the retail industry have had the largest setbacks. Tourist arrivals fell about 52% year-on-year in December while retail sales volume declined 21.0% for the same period. Alluding to more challenges to come, the Hong Kong Retail Management Association released survey results in December 2019 that highlighted close to 7,000 stores may close and 5,600 retail jobs will be cut in the next six months. On the ground, major retail chains such as jewelry brand Chow Tai Fook announced 15 store closures while LVMH reported that it would be closing its major Louis Vuitton branch at Times Square.

More leases are being renewed at significant discounts (between 40 to 50% lower) and on shorter-lease term periods. AEW also understands some landlords are looking at various options to help struggling tenants which include allowing monthly lease renewals, increasing promotional activities and postponing rental payments.

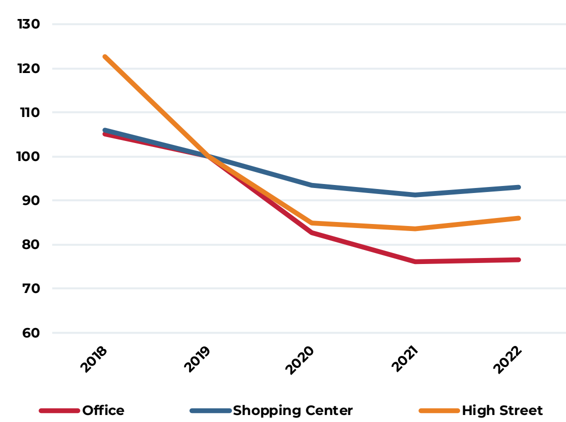
OFFICE VACANCY AND RENTAL CHANGE 2019



RETAIL SALES AND TOURIST ARRIVALS DEC 2014 TO DEC 2019



COMMERCIAL RENTAL OUTLOOK Q4 2019= 100



Sources: JLL, as of December 2019

Singapore

Stable outlook with possible upside in office, retail outlook unchanged

GRADE A RENTS AT A TEN-YEAR HIGH

Still on an uptrend, Grade A office rents have grown by 29% since the last trough in Q1 2017. Average prime rents now stand at SGD10.50 per square foot per month (USD7.70 per square foot per month), which indicates a ten-year high. Although leasing momentum has remained subdued, with limited vacancy (currently at 4.1%), tenants have few options for contiguous space and markets still appear in favor of landlords.

POTENTIAL WITHDRAWALS COULD KEEP VACANCY LIMITED

After two years of minimal completions, the next supply cycle will be from 2020 to 2022. In 2020, the two major completions; the newly renovated 30 Raffles Place and 79 Robinson Road, will add 864,000 square feet to the market. However, some confirmed and potential withdrawals could result in negative net supply for 2020, keeping vacancy rates low. AEW expects rents to be stable in 2020, with potential for upside should business sentiment improve in the second half of the year. Beyond 2020, as economic conditions stabilize, we should see a return to previous-trend growth.

WEIGHT OF CAPITAL TO KEEP YIELDS LOW

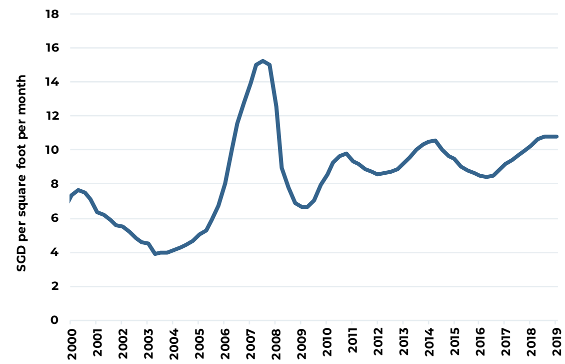
The office market had an extremely active transaction year in 2019 with about USD6.4 billion in deals. In a period of much volatility, Singapore has emerged as a desired location with its relatively stable political and economic system. Affirming this, in the recent ULI-PWC Emerging Trends Report for 2020, the city was voted top for investment prospects in the coming 12 months. Thus, with a steady weight of capital and lack of stock available for sale in 2020, we expect the office yield compression cycle to extend for the next 12-months.

RETAIL RENTAL GROWTH CHALLENGED

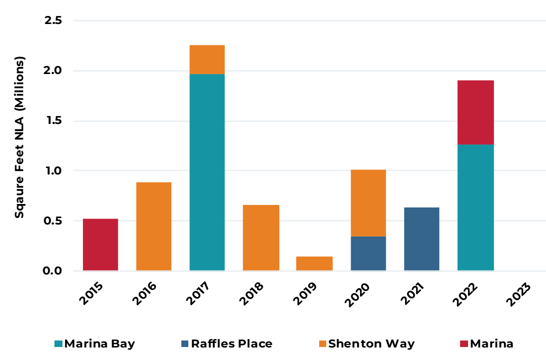
The sector remains rent-sensitive with little or no growth in the last 12-months. New demand is limited as retailers delay expansion plans in the uncertain climate. In Q3, new leases signed mostly stemmed from the food and beverage (F&B) industry.

Like the office sector, any rental growth appears challenged in the near term. However, the lack of major supply up to 2022 could support rental growth, after economic conditions stabilize.

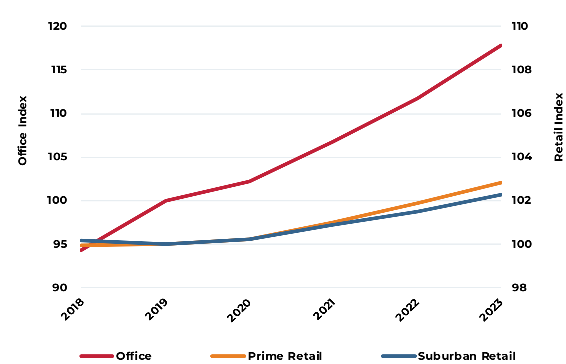
CBD OFFICE GROSS RENTS
2000 TO 2019



CBD OFFICE SUPPLY AND VACANCY RATES
2015 TO 2023F



COMMERCIAL RENTAL OUTLOOK
Q4 2019= 100



Sources: JLL, as of December 2019

Australia

Sydney metro offices have better growth potential, healthy leasing market in Melbourne

SYDNEY

INCENTIVES INCREASE IN THE CBD

Prime and secondary effective rents in Sydney's CBD have increased by 60% to 90% between 2016 and 2019. With rents at an all-time high today, rental growth is expected to slow, especially as new supply currently under construction is delivered between 2020 to 2022.

Landlords are increasingly offering larger incentives to attract and retain tenants. Incentives in the CBD are now 21%, up from the ten-year low of 18% at the start of 2018. Although face rents are still projected to increase, on an effective basis, rental growth will be minimal as incentives continue on a slight upwards course. Net effective rents are expected to grow between 1.0 to 1.5% p.a. over the next three years.

SYDNEY METRO MARKETS SEE GOOD FUNDAMENTALS

Outside the CBD, smaller commercial precincts like Parramatta, North Shore (North Sydney, St Leonard's) and Pyrmont are becoming more institutionalized with newer office buildings, significant transport infrastructure developments and the growing adoption of the hub and spoke model. More occupier demand is also drawn to these precincts also because of rental affordability. While the North Shore and Pyrmont have seen a clustering of technology occupiers, Parramatta has benefited alongside the New South Wales Government's "decade of decentralization plan". Effective rental growth in these submarkets should outpace the CBD in the next two years, up by between 2 to 3% p.a.

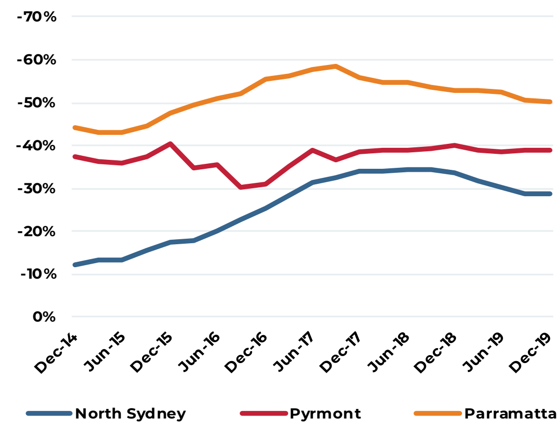
MELBOURNE

FAVOURABLE OUTLOOK IN MELBOURNE CBD

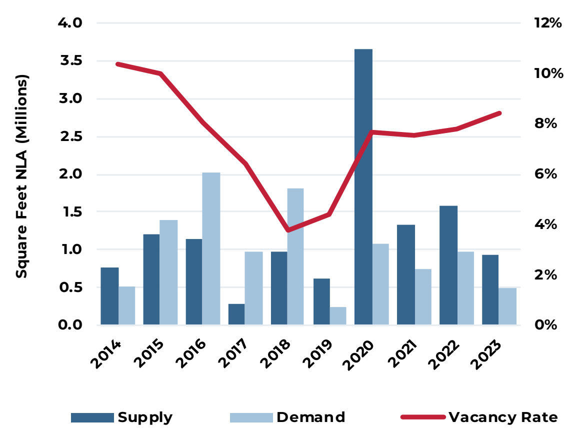
Despite the on-going supply cycle, healthy demand continues to push Melbourne CBD's vacancy rate down further to 3.4%, less than half of the 7.8% long-term average. As a result, markets stayed landlord favorable and effective rents were up about 8.0% for the year, stronger than initially anticipated.

There are another ten new projects under construction and meant to complete between 2020 and 2021, amounting to 5.0 million square feet (already 85% pre-committed). As a number of these pre-commitments are relocations, the volume of the associated backfill will increase leasing competition in the near-to medium-term. AEW understands this is not an immediate concern as backfill leasing has been active, plus more stock withdrawals are anticipated in the coming year. Effective rental growth is expected to continue, in 2020, up about 4% to 5% for the year before slowing to 1% to 2% between 2021 and 2022.

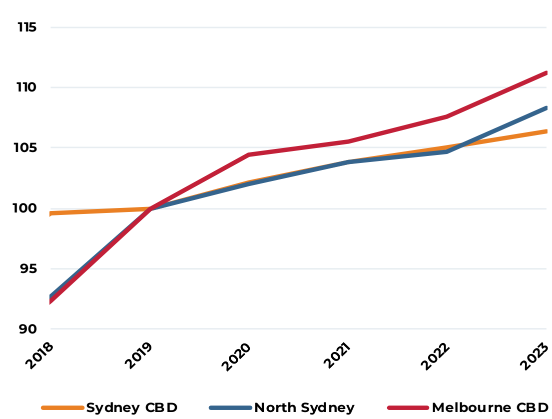
SYDNEY METRO RENT DISCOUNT TO CBD
2014 TO Q3 2019



MELBOURNE CBD NEW SUPPLY & VACANCY
2014 TO 2023F



OFFICE RENTAL OUTLOOK
Q4 2019=100



Sources: JLL, as of December 2019

Capital Markets

TRANSACTION MARKETS STAYED ACTIVE IN 2019

Although near-term income growth in many Asia Pacific markets are challenged in the current economic climate, investment into real estate continues to be active due to attractive yield spreads, low cost of debt and the large weight of capital looking to be placed. Investors have generally remained more focused on the major gateway cities which represent more “safe haven” and liquid destinations. Looking at only office and retail assets, the top ten major cities comprised about 77% of all transactions in Asia Pacific in 2019.

Transaction volume (including deals announced and closed) across major cities in Asia Pacific reached $132.9 billion in 2019, about 5% higher than volume recorded in the previous year. Most major cities ended 2019 with higher or similar volumes to 2018, except for Hong Kong which recorded a 40% decline year-on-year in volumes. Meanwhile, Beijing, Osaka and Singapore, were stand out performers in 2019, with transactions volumes increasing by 73%, 48% and 24%, respectively, on the back of healthy fundamentals in the office sector.

For Hong Kong, both offshore and domestic capital have been sitting on the sidelines since the protests began in the city in June 2019. At the same time, many Hong Kong-based investors have rerouted capital to other Asia Pacific markets. In 2019, outbound capital from Hong Kong more than doubled from the previous year.

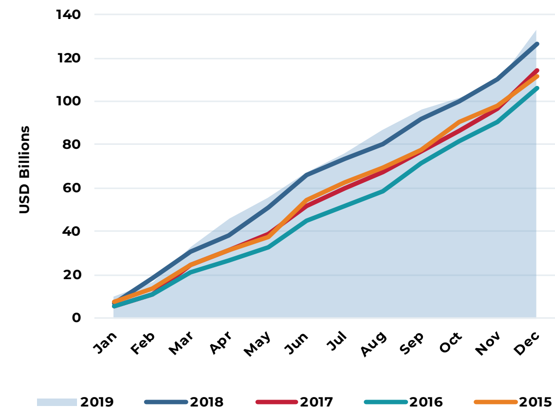
CROSS BORDER MOMENTUM INCREASED IN 2019

Cross-border activity remained a key driver for deals throughout the year, with overall share increasing to 36% by the end of 2019, a ten-year high. Most active sources originated from the United States, Hong Kong, Singapore, Canada and Germany. Some of the major deals completed by cross border capital in the last quarter of 2019 included AMP Capital’s purchase of Wynyard place ($1.4 billion) on behalf of Hong Kong Monetary Authority in Sydney; GIC’s purchase of AZIA Tower ($859 million) in Beijing; Angelo Gordon’s purchase of Bugis Junction Tower ($403 million) in Singapore; and a joint venture between IGIS and KKR for Namsan Square ($428 million) in Seoul.

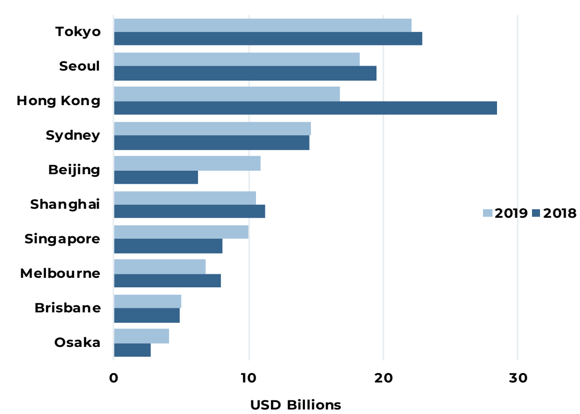
INVESTMENT DEMAND TO STAY HEALTHY

We expect the investment market to continue to be healthy in 2020 with purchasing activity led by closed-end private equity funds which have an estimated $51.0 billion in capital to deploy over the next two to three years. Further, other sources of capital active in Asia Pacific such as open-ended funds and Asian REITs, with an estimated additional $103 billion in dry powder will ensure markets and pricing remain competitive.

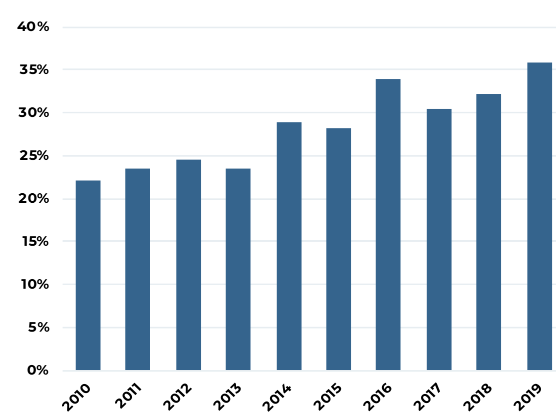
CUMMULATIVE TRANSACTION ACTIVITY 2015 TO 2019



TRANSACTION VOLUME BY MAJOR MARKET 2018 AND 2019



CROSS-BORDER SHARE 2010 TO 2019



Source: RCA
Note: Transaction volumes in charts above include only income producing assets in the following markets: Beijing, Brisbane, Hong Kong, Melbourne, Osaka, Seoul, Shanghai, Singapore, Sydney and Tokyo