AEW RESEARCH

Asia Pacific Market Perspective

Q4 2022

AEW

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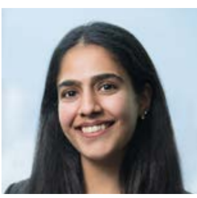

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Further into the Property Cycle Reset

ASIA PACIFIC GROWTH POSITIVE IN 2023, BENEFIT OF CHINA RE-OPENING TO BE VISIBLE BY Q2

- Asia Pacific's growth in 2023 will lose momentum but remains positive and stands as an outperformer compared to the West.
- Most major markets in the Asia Pacific region will avoid a recession this year, but higher interest rates, the global slowdown, as well as the downturn in manufacturing and semiconductor cycles remain key headwinds
- The reopening theme is still rippling through the region, with the latest relaxation on China's zero-COVID policy expected to increase tourism and consumption domestically, and in neighboring countries as the year progresses. The largest beneficiaries outside of China are expected to be Hong Kong, Australia and Singapore.

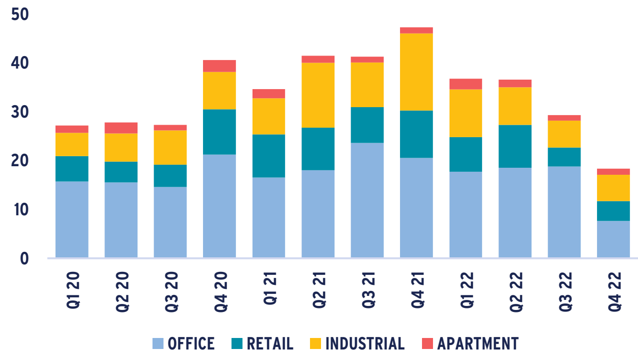
INVESTMENT ACTIVITY FALLS AS MARKETS GO THROUGH PRICE DISCOVERY, COULD SEE A PICK-UP IN TRANSACTIONS IN 2023

- Transaction volumes in 2022 across our monitored markets were down 23% year-over-year (y-o-y), a sharper decline than initial expectations. On a local currency basis, volumes were down around 15% y-o-y. While volumes held up better in the first half of the year, investment activity retreated in H2. In Q4 2022, volumes for the quarter were just USD18.3 bn, compared to a historical quarterly average of USD35 bn.
- Higher interest rates (outside of Japan and China) have resulted in negative yield spreads making it harder to achieve target returns while banks have tightened their reigns, limiting the availability of credit. Few assets have started to trade lower as a result, primarily in Australia and South Korea logistics. In contrast, Singapore has been stable. Price discovery for direct property markets in the region have been slow. Buyer-seller expectations are still wide, compelling investors to sit on the sidelines or throw low-ball bids. Related to this, the number of terminated deals has increased over the year due to lack of interest or unsatisfactory bids. Based on data from MSCI, the bulk of these failed transactions have been in South Korea.
- The capital raising environment has also been impacted – weaker pricing in public markets has created a denominator effect, depressing investor appetite for private real estate.
- With better clarity regarding interest rates in 2023, deal making should regain momentum again. No doubt this year will see assets trade at lower prices, but it also presents an attractive entry point for investors.

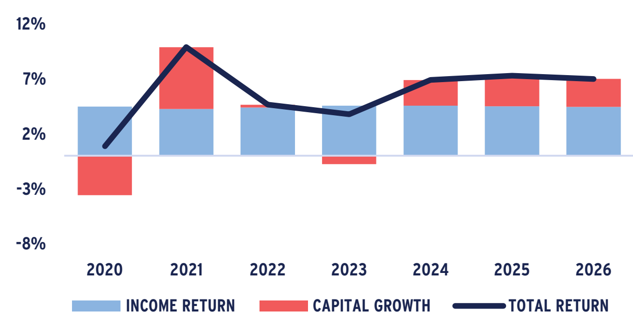
TOTAL RETURN OUTLOOK ADJUSTS DOWNWARD

- Given the lower growth environment in the short-term, the forecast for total returns have been recalibrated lower over the next five years. The most positive outlook is in logistics and multifamily, where rent growth is still positive. Total return is expected to build over the forecast period as capital growth improves.
- We expect to see yield expansion across most asset classes, for office (from 25 to 70 bps) and logistics (60 to 100 bps), peak to trough. Meanwhile, AEW believes the repricing in the retail sector has largely played out while multifamily could continue to see compression, especially in regional cities or Greater Tokyo.
- While these are significant re-ratings, the price declines should be lower than previous cycles with income growth in some markets helping to mitigate the impact of higher interest rates. Markets and assets perceived by investors to lack income growth in the near-term are likely to see a sharper yield adjustment.

ASIA PACIFIC INVESTMENT VOLUMES 2020 TO Q4 2022



ASIA PACIFIC TOTAL RETURN 2020 TO 2026F



Source: AEW Research, JLL, PMA, Real Capital Analytics
Note: Investment volumes measure income producing investments across AEW's target markets
There is no assurance that any prediction, projection or forecast will be realized.

Growth Slows in 2023, Pause in Rate Hikes by H2

GLOBAL GROWTH SLOWDOWN, ASIA PACIFIC TO AVOID RECESSION IN 2023

- Global growth is expected to slow to 2.9% y-o-y in 2023, with the U.S. expected to grow by 1.4% while Euro Area sees a smaller expansion of 0.7%. The Asia Pacific region by comparison appears favorable with a 5.3% y-o-y expansion in 2023.
- For our monitored markets, GDP growth is forecast to average 1.7% and 2.9% y-o-y in 2023 and 2024 respectively, with individual economies avoiding a recession. For Australia, a better year for commodities should provide support to growth as well.
- The December 2022 U.S. core PCE inflation print of 4.4% y-o-y showed meaningful moderation in price growth. The Fed Funds rate was increased by 25 bps in February 2023, a downshift in the current hiking cycle. At the same time the Fed Chair reaffirmed that ongoing increases would be necessary to return inflation to 2% over time. AEW keeps the view that a pause in rate hikes could come by Q2 2023 (or earlier) and that rates would be on hold till Q4 2023.

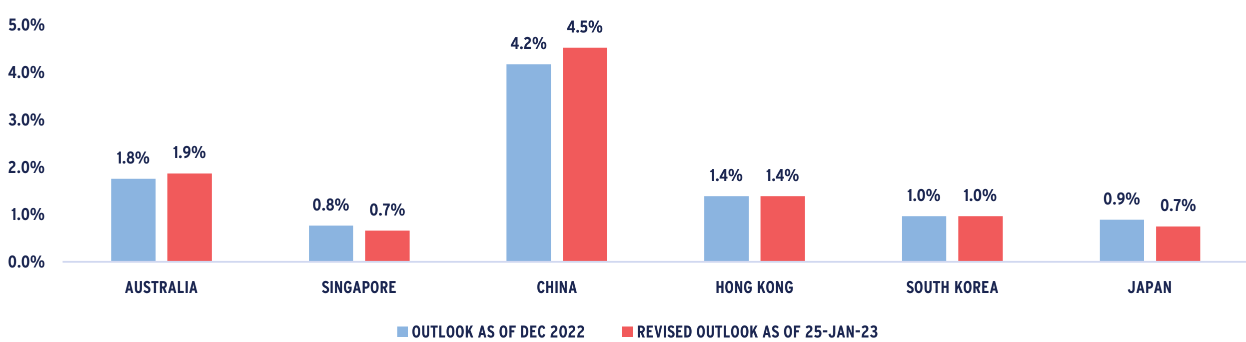
RETAIL SALES ROBUST, BUT EXPECT CONSUMER SENTIMENT TO SHIFT LOWER IN 2023, LABOR MARKETS SHOW SIGNS OF WEAKNESS

- While risks remain high; ranging from higher interest rates to geopolitical tensions, growth in the Asia Pacific region could have positive tailwinds from Q2 2023 following the removal of China's zero-COVID policy controls.
- Outside of COVID, the Chinese government is also easing previous hardline policy positions such as dialing back on the "three-red lines" policy as well as on the technology sector. While initial market sentiment has been positive on these changes, it will take time before they filter through the system.
- Retail sales are mixed, suggesting moderation in activity in Japan and South Korea, while in Singapore and Australia, sales volume hit new highs in Q4. In Australia and South Korea, e-commerce market share continued to grow driving the expansion of e-commerce players and 3PLs in Q4.
- Headline figures in labor markets (ex-China) seem reassuring, but over the last few months, several technology and financial firms have made a series of dramatic workforce reductions. Hiring intentions for the upcoming year have been reduced and we expect white collar employment to exhibit faint growth in 2023. Meanwhile in China, the youth unemployment rate sits close to 18%.

INFLATION MODERATING & CENTRAL BANKS COULD HOLD FIRM BY Q2, ASIA PACIFIC CURRENCIES IMPROVE IN Q4

- Inflation had picked up over the course of 2022 and central banks across Australia, Singapore and South Korea have been on a tightening stance. As we head into 2023, core inflation is easing in some markets and with that, there is growing consensus that rate increases could be put on hold by Q2.
- Meanwhile, the BoJ unexpectedly modified its yield curve control (YCC) in Dec 2022, allowing the 10Y JGB yield to trade higher. Markets are anticipating further widening of the YCC, despite the outgoing governor Kuroda reiterating that he expects inflation in Japan to be transitory and that easy monetary policy will be maintained to support growth.
- In Q4, local currencies rallied against the USD mostly because of improving sentiment on the slower pace of Fed rate hikes. For the JPY, the unexpected tweak to monetary policy in mid-Dec aided the USDJPY appreciation while the rally for the CNY against the USD was driven by reopening optimism.
- The major market local currencies have generally appreciated against the USD in 2023 to-date and both consensus forecasts and forward curves (as of 1 Feb 2023) show continued appreciation over the year.

ASIA PACIFIC MARKETS GDP GROWTH IN 2023



Source: Oxford Economics, as of 1 February 2023
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Macro Conditions Slow Demand and Pricing Frictions

Office

DEMAND MODERATES IN Q4 AND EXPECTED TO SLOW IN 2023

Leasing activity in Q4 fell across most markets as occupier sentiment turned more cautious (Seoul is the only exception where demand continues to be robust, led by local conglomerates). Demand in 2023 is expected to moderate further alongside the global economic slowdown as well as headcount reductions and consolidation in the finance and technology sector. For context, the technology sector has been a big driver of demand for office space in the last three years. Markets expected to be most vulnerable to these conditions are Singapore, Sydney and Melbourne. Meanwhile in Greater China, reopening and policy relaxations will be positive to overall business sentiment and leasing demand, though supply pressures will keep markets tenant favorable in 2023.

INVESTMENT APPETITE WEAK IN Q4, SIGNALS PRICE DECLINES TO COME

Higher interest rates, limited debt availability and wide differences in buyer-seller expectations pushed down enbloc office investment volumes for Q4 to USD9.2 billion for our monitored markets, the lowest quarterly level recorded since Q2 2012. The slowdown is a leading indicator of pricing weakness that we expect to filter through in the office market over the year. Not all markets will be impacted the same; stronger pricing adjustments are expected in Seoul and Australia where the run up in prices over the last two years have been the most substantial. While Singapore has seen similar increases in pricing, the market is generally more tightly held with few buyers in need of liquidity. Distress sales are also expected in Hong Kong and China, but reopening tailwinds could erase some of the downside.

Logistics

RENT GROWTH CONTINUES IN Q4, BUT EARLY SIGNALS OF DEMAND SLOWDOWN IN SOME MARKETS

E-commerce and 3PLs continue to be the driving force of leasing demand in Greater Seoul and the Australian eastern-seaboard markets. In Q4, consumer confidence and forward orders trended lower in both markets implying demand from these sectors may moderate. Australian markets have a better cushion versus Greater Seoul with high pre-commitment rates and fast-paced backfill leasing. In other markets like Singapore, Hong Kong and Japan's regional cities, demand sources are more diversified across pharmaceuticals, healthcare equipment, manufacturing and government stockpiling which could hold up better versus prior years.

INVESTORS REMAIN INTERESTED DESPITE ERRODED MARGINS

Investment volumes into the logistics sector have sharply declined from last year's record by 35% but is still about 20% above 2020 levels. Transaction evidence has shown expansion by about 70 to 80 bps over the year, mostly in Australia and South Korea. The sector continues to see interest among investors as new capacity is backlogged and demand for space continues to be stronger than other sectors. In Australia, re-leasing spreads are exceeding 30% and therefore the ability to grow income is strong.

Retail

NASCENT RECOVERY COULD BY STYMIED BY FALLING CONSUMER SENTIMENT, INVESTORS COULD TAKE A CONTRARIAN VIEW

Occupier markets for retail in Australia, Singapore and Hong Kong are indicating recovery. In the former two especially, healthy retail sales have been evident over 2022. Worsening macro conditions, falling house prices and inflation could negate local consumption over 2023, but a China re-opening theme will set positive tailwinds for tourism-related retail for all three markets as the year progresses.

While performance of non-discretionary retail has been consistent, assets with a large discretionary component have gone through an extended period of weakness in both occupier and investment markets. Average yields have expanded by 20 bps between 2017 and 2019 and a further 25 bps since the start of the pandemic. Given the attractive position of yields today, investors could take a contrarian position.

Multifamily - Japan

DEMAND FROM FOREIGNERS SUPPORT LEASING IN CENTRAL LOCATIONS, INVESTMENT APPETITE HEALTHY

Business sentiment is improving and has surpassed Dec 2019 pre-COVID levels according to the Tankan Survey. A return in foreigners to major cities have driven leasing demand in recent months and should continue to support demand for centrally located, new units.

On the investment side, transaction volumes continue to be healthy with USD6.3bn in 2022 with cross-border activity supporting 44% of that activity. We expect another year of strong cross-border investor activity, especially as fundamentals remain solid and the cost of debt stays low. Although the JPY has strengthened against the USD in recent months, its position today is still 13% below the 5-year average and presents a favorable entry point.

Office

AUSTRALIA: DEMAND SLOWS WITH GROWING UNCERTAINTY

- Expansion demand remains limited, and large incentives are being used to attract and retain tenants. A meaningful amount of sub-lease space is set to come onto the market in 2023 across Sydney and Melbourne CBDs. These spaces are typically offered at a discount to market rents and will create more competition in the leasing markets, limiting broad-based rent growth.
- Office investments across Sydney and Melbourne were down 10% y-o-y in 2022. While yields have expanded by 25bps on a valuation basis, transaction evidence to-date has been limited. Deals transacting in early 2023 could set the new benchmark rate for office assets.

SINGAPORE: OUTLOOK FOR 2023 MODERATES

- Rent growth momentum slowed in Q4 and is expected to remain muted in 2023. Demand and rent forecasts have been revised down reflecting the consolidation in the technology sector as well as the global slowdown.
- The enbloc investment market turned soft in H2 2022 and is expected to remain quiet in H1 2023. Higher financing costs and worsening business sentiment are contributing factors. Meanwhile the strata investment market has held up better – most buyers in this segment are typically HNWI's who often do not take on debt.

HONG KONG: IMPROVEMENT IN LEASING BY Q2, INVESTMENT ACTIVITY LIMITED

- The recent border reopening with mainland China will provide some positive tailwinds for office leasing, but as new supply remains high in 2023, vacancy will stay elevated, and rents are expected to weaken further from 0 to -5% in 2023.
- Investment activity was limited in 2022, with only two enbloc deals completed. While there is interest to enter the market (especially given the revaluations since 2019), the number of deals will be few in 2023. AEW understands there are smaller landlords struggling with financing that will probably test market interest, but pricing would have to be very attractive to make up for higher rates and weak income growth.

CHINA: WEAKNESS IN OCCUPIER AND INVESTMENT MARKETS

- With previous policy positions (regarding zero-COVID, technology crackdown and developer debt-levels) loosened, demand could start to pick up by Q2 2023. However, large upcoming supply in both Shanghai and Beijing will keep markets tenant-favorable and rental weakness should persist in the near-term.
- Investor interest is turning more optimistic, but most are proceeding cautiously. Domestic and RMB-dominated funds are expected to be more active over 2023 favoring stabilized assets in good locations.

SOUTH KOREA: OCCUPIER MARKET HEALTHY, BUT HIGHER DEBT COSTS IMPACT INVESTMENTS

- Occupier market conditions in Seoul continue to be healthy. Low vacancy rates across the three-core submarkets are causing spillover demand into fringe locations. As supply remains low in 2023, upward rent pressure will continue.
- After growing for four consecutive years, tighter financing conditions and mismatched pricing resulted in a 22% y-o-y pull-back in liquidity in 2022. In 2023, investment volumes are expected to moderate further with several motivated sellers accepting a discount in pricing.

JAPAN: INVESTMENT MARKETS ACTIVE DESPITE LIMITED RENTAL GROWTH

- Leasing activity gradually improved in H2 after several quarters of weakness. Tenants today are more selective, exhibiting a strong flight to quality trend. Given the large supply in 2023 in Tokyo, regional cities are expected to outperform in the near-term.
- We anticipate investment appetite for office assets to be steady with room for yields to compress further.

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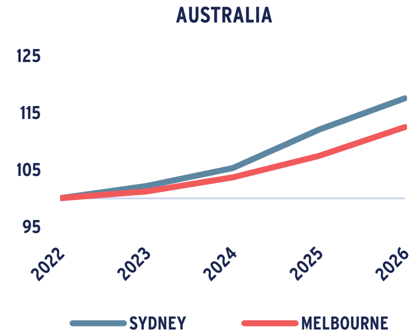
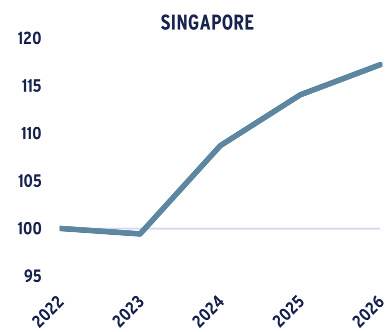
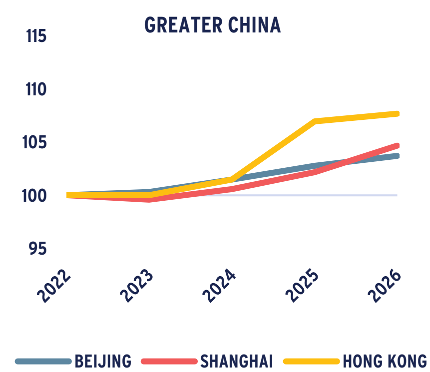
OFFICE RENT INDEX 2022=100



Source: AEW Research, JLL, Q4 2022



Source: AEW Research, JLL, Q4 2022



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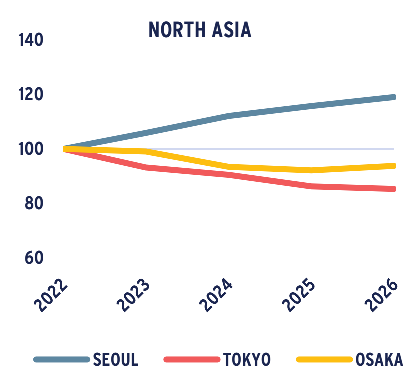

Source: AEW Research, JLL, Q4 2022

Logistics

AUSTRALIA: OCCUPIER MARKET STRENGTH, INVESTOR INTEREST FOR SHORT WALE ASSETS

- Leasing activity remained healthy in Q4 and should continue into 2023. New supply across the eastern seaboard markets are around 50% pre-committed keeping vacancy rates below 2%.
- Rents today are 20% to 40% higher compared to one year ago which has started to pinch on tenant affordability and could be met with resistance. Still, there is broad consensus that rental growth will extend into 2023, ranging from 8% to 12% for the year.
- Investment activity in the sector has moderated from 2021's highs and yields have moved out by 70 to 100 basis points over 2022.
- Short WALE assets remain in high demand and are still aggressively bid as average re-leasing spreads are around 30% making this very attractive from an income growth perspective.

SINGAPORE: HEALTHY DEMAND FOR PRIME ASSETS

- Demand for industrial and warehouse facilities remained healthy in Q4 and lack of available space meant that bulk of leasing activity was in renewals. With near-term supply limited and high pre-commitment levels, upward rental pressure should continue, albeit downgraded slightly, given macro conditions.
- Short tenures (<30 years) on industrial land have historically discouraged institutional investment, but more interest is noted today as the higher yields (6 to 7%) compared to other sectors means leverage will be accretive to performance.

HONG KONG: INVESTOR INTEREST FOR CONVERSION

- Forced relocations (from converted sites) as well as demand from a range of industries kept vacancy rates low, allowing warehouse rents to grow at 5.3% y-o-y in 2022, the fastest pace in seven years. Despite undersupplied conditions, rent growth may stall in 2023 due to rent affordability issues.
- Although transaction volumes have declined by 27% y-o-y in 2022, investor interest in the sector, especially by value-add funds are strong. New-economy conversion plays (to data centers, cold storage or self-storage) will continue to be key themes in 2023.

SOUTH KOREA: SUPPLY PEAK IN 2023, PRICING SHIFTS

- Difficulties in construction financing and supply chain disruptions continue to push out new completions. Stock increase in 2022 was lower than initially forecasted and there is a strong chance only a portion of the 35 million sq ft of new supply expected in 2023 will be delivered on time.
- While most submarkets have landlord favorable conditions, concerns on slowing demand momentum could stymie further rental growth, especially in the oversupplied cold storage segment in the Western submarket.
- Investment activity has pulled back on account of debt levels and forward-looking supply risks. Recent deals have shown yield expansion of around 70 bps y-o-y.

JAPAN: REGIONAL CITIES OUTPERFORM

- While demand in Greater Tokyo is still healthy, supply completing over the next three years is high (with limited pre-leasing) resulting in downward rental pressure in the near-term. Meanwhile regional cities are expected to outperform, given the limited new construction and sustained demand from manufacturing groups.

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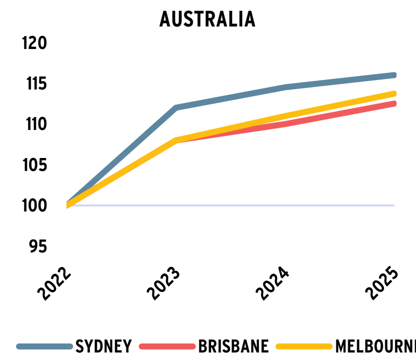
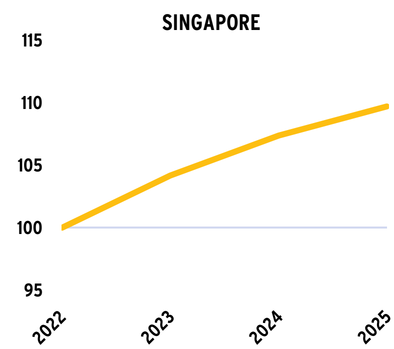
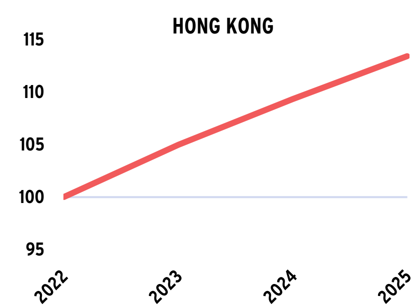
LOGISTICS RENT INDEX (2021- 2024F) 2021 =100



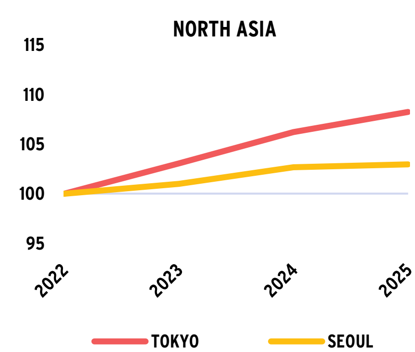
Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022

Retail

AUSTRALIA: RETAIL SALES STRONG UP TO Q4, POSITIVE YIELD SPREADS

- After rising for 11 consecutive months, retail sales fell month-on-month in December 2022, impacted by the rise in cost of living. States with the largest monthly decline in retail sales for December included Victoria and Western Australia.
- Rents for most retail categories have been flat or slightly negative y-o-y except for large format and neighborhood centers that continue to see mild increases. For prime CBD, both Sydney and Melbourne saw rents decline by more than 10% y-o-y.
- Some smaller deals were transacted in Q4, but large deals by institutional investors were limited. Over the year, investment volumes fell by more than 40% across both Sydney and Melbourne while yields expanded a further 25 to 50 bps. Today, the retail sector provides the greatest positive yield spread against debt costs.

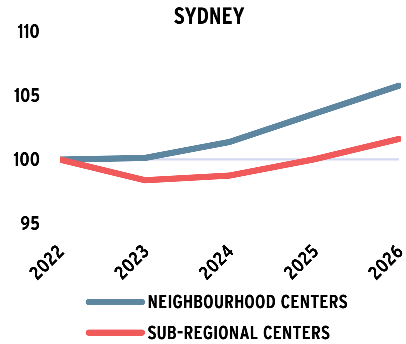
SINGAPORE: RENTS RECOVERY CONTINUES IN 2023

- The consumption and tourism recovery as well as the normalized office-based crowds have supported foot traffic and tenant sales across prime and suburban shopping centers.
- Leasing activity in H2 picked up alongside this which gave landlords the impetus to increase rents mildly (by 1 to 2% y-o-y). With the limited supply and tourism influx expected from the reopening of borders and travel surge within the region, retail rents are expected to continue to recover over 2023.
- Investment into the sector increased y-o-y in 2022 thanks to few major deals that closed over the year. In Q4, the two-asset suburban mall sale of Jurong Point and Thomson Plaza to LINK REIT was sold at a 6.5% discount to their combined appraised values. While this signals some overvaluation in the market, quality assets are limited or tightly held which will limit broad yield expansion in the sector.

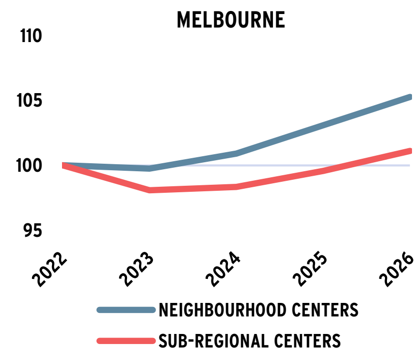
HONG KONG: TOURISM-LED RECOVERY TO FORM

- From 2019 to 2022, local consumption was the main driver of retail sales. Spending in 2022 was impacted by higher rates and restrictive measures around COVID as well as the housing market correction. Although government-issued consumption vouchers provided some cushion, retail sales volumes in 2022 were about 30% lower compared to 2018 levels.
- Moving into 2023, we expect a tourist-led recovery in retail sales. Leasing demand will be led by beauty/pharmaceutical chains, meanwhile it will probably take some time before luxury brands start to rebuild their presence in the city again.
- Domestic, non-institutional investors continue to make up the bulk of capital interested in the sector, especially for high-street shops. Investment sentiment from this group of buyers is expected to remain healthy in 2023, especially as good bargain buys are available in the market.

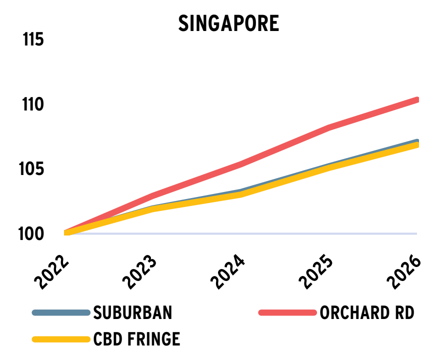
RETAIL RENT INDEX 2022 =100



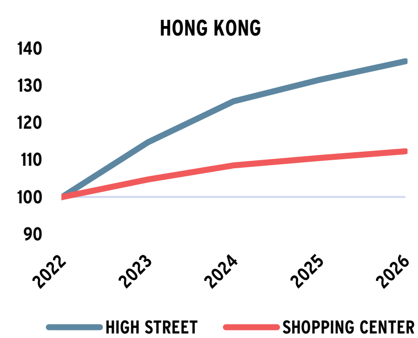
Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022



Source: JLL, as of Q4 2022

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Multifamily

JAPAN: MORE FOREIGNERS INCREASE LEASING DEMAND

- Since May 2022, there has been a monthly net increase of foreigners migrating into Tokyo's 23 Wards which has been driving leasing demand. Foreigners are partial to newer and premium units in the core areas which drove rental increases in previous quarters. At the same time, work-from-home practices remain prevalent in Tokyo, which is affecting preferences for location and unit size type for local residents.

- Vacancy rates in Tokyo 23 and Central 5 Wards have decreased since the start of the year. In the year ahead, positive migration trends and a decreasing number of available units should support rental growth, in the range of 2 to 5% y-o-y.

- Meanwhile, regional cities that held up well during the pandemic have seen a slowdown in rental increases.

- Investment interest in the sector remains strong with several large portfolio deals closing in the year. Yields compressed by about 10 bps y-o-y in 2022 and are expected to hold flat or compress mildly in the range of 5 to 10 bps in 2023.

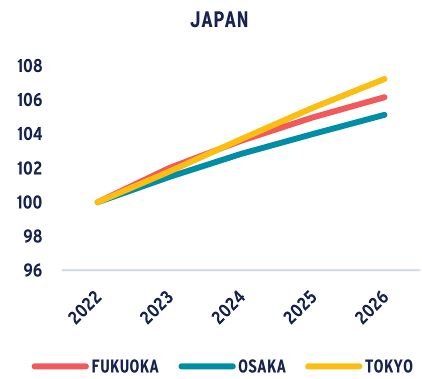
AUSTRALIA: POSITIVE FUNDAMENTALS, BULK OF NEW SUPPLY IN MELBOURNE

- With immigration trends swiftly increasing and residential vacancy low (less than 1%), there is pent-up demand for rental housing in the inner-city areas. At the same time, the surge in mortgage rates over 2022 are pushing would-be buyers into the rental market.

- Given the positive fundamentals and inflation hedging benefits (due to shorter-term leases), more investors are evaluating positions in this sector. There are around 15 major institutional investors developing close to 40 BTR projects nationwide, supplying more than 17,000 units over 2023 and 2024.

- Most BTR projects in the market today are focused on the higher end of the market and typically command a 20% rental premium to traditional rental projects.

MULTIFAMILY RENT INDEX
2022 =100



Source: PMA, as of Q4 2022

Additional Notes

NATIXIS
INVESTMENT MANAGERS