ASIA PACIFIC REAL ESTATE STRATEGIC OUTLOOK

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The opinions and forecasts expressed are those of Asia Pacific Real Estate Strategic Outlook and not necessarily those of DWS. All opinions and claims are based upon data at the time of publication of this article (January 2020) and may not come to pass. This information is subject to change at any time, based upon economic, market and other conditions and should not be construed as a recommendation.
1 / Executive Summary

Asia Pacific economies experienced a synchronized slowdown in 2019 amid headwinds in global macroeconomic conditions, driven partially by declining regional trade flows brought about by heightened trade tensions. Regional growth remains supported by expansionary fiscal policies and stable labour conditions with unemployment rates remaining at multi-year lows across the region. Meanwhile, central banks in the region continue to adopt an easing bias with rate cuts towards the second half of 2019 in support of domestic demand. Nonetheless, risk factors persist ranging from uncertainties over global trade conflicts to a sharper-than-expected deceleration in China’s economy, which could adversely impact regional trade and export demand. Barring any significant shocks, regional economic growth is projected to remain stable at 5.1% in 2020, as compared to 5.0% in 2019.

Despite the macro headwinds, real estate performance across much of the Asia Pacific region remains healthy on the back of strong capital markets and stable occupier fundamentals. Across the region, key cities in Australia, Japan and Singapore continue to see declining office vacancies underpinned by limited new supply, while the weight of capital targeting quality assets have contributed to further cap rate compression in core markets. The office markets in Japan with healthy fundamentals appear increasingly attractive from a risk-return perspective within the context of a core strategy portfolio. Prime logistics space continues to see healthy take-up driven by e-commerce and third party logistics providers, resulting in positive rental growth trends across the region.

While property returns in recent years have been underpinned by rental growth and cap rate compression, total returns in the coming years are likely to be driven mostly by income yields with capital growth supported by low bond yields, though we believe any further decompression in yields over the next few years is unlikely to occur in a significant manner. Nevertheless, in our view, Asia Pacific commercial real estate markets may continue to deliver healthy core unlevered aggregate total returns ranging between 4.9% - 7.6% per annum (by sector) over the next five years with industrial returns outperforming office, retail and residential returns.

1 IMF World Economic Outlook, October 2019.
2 Source: DWS, as at December 2019. Refer to Exhibit 5 on page 10 for further details.
Note: f = forecast. All opinions and forecasts are based upon data at the time of publication of this article (January 2020) and may not come to pass. This information is subject to change at any time, based upon economic, market and other conditions and should not be construed as a recommendation. Past performance is not indicative of future results.
### ASIA PACIFIC REAL ESTATE KEY STRATEGIES:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sector</th>
<th>Countries/Cities</th>
<th>Main Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Locations with Strong Fundamentals</td>
<td>Office</td>
<td>Sydney, Melbourne, Osaka</td>
<td>High transaction liquidity, consistent corporate occupier demand and emerging share-office demand offering higher income security.</td>
</tr>
<tr>
<td></td>
<td>High Street Retail</td>
<td>Osaka</td>
<td>Healthy leasing demand for prime retail underpinned by high tourist footfall or local catchment, supporting sales of luxury brands.</td>
</tr>
<tr>
<td>High Yields Underpinned by Stable Cash Flows</td>
<td>Logistics</td>
<td>Japan, South Korea, Singapore, Australia</td>
<td>High income yields and forecast total returns underpinned by favourable demographic dynamics, rising e-commerce retail trends and limited speculative build.</td>
</tr>
<tr>
<td>Regional Markets</td>
<td>Office</td>
<td>Regional cities in Japan</td>
<td>Rental growth supported by historical low vacancy rate and limited supply. Low borrowing costs underpin high levered returns.</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>Brisbane</td>
<td>High entry yields and potential for market-driven returns. Cyclical office rental recovery expected with receding supply to lift vacancy pressures.</td>
</tr>
<tr>
<td>Mid-Term Opportunities</td>
<td>Office/Retail</td>
<td>Tokyo, Seoul</td>
<td>Near-term returns in central Tokyo capped by the tough competition from local J-REITs, while subdued office demand could limit near-term rental growth in Seoul CBD and Yoido submarket.</td>
</tr>
<tr>
<td>Cyclical Uplift in Recovery Markets</td>
<td>Office/Hotel Business Parks</td>
<td>Singapore</td>
<td>Cyclical rental recovery underway underpinned by diminished supply pressures over next few years.</td>
</tr>
</tbody>
</table>

### Core Plus and Value Added Strategy

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sector</th>
<th>Countries/Cities</th>
<th>Main Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Asset Management</td>
<td>Office/Retail</td>
<td>Japan, South Korea, Australia</td>
<td>Asset refurbishment or repositioning of older but well-located high street or neighbourhood retail. Leasing risks for vacant or under-rented office properties provide potential for enhanced returns.</td>
</tr>
<tr>
<td>Forward Commitments</td>
<td>Office/Retail Hotel</td>
<td>Japan, South Korea, Australia</td>
<td>Gain access and potential for higher returns compared to investments in core stabilized assets.</td>
</tr>
<tr>
<td>Logistics</td>
<td>South Korea, China</td>
<td>Build-to-core strategies provide access to modern logistics assets in markets underpinned by high e-commerce retail penetration, yet majority of stock are older and obsolete.</td>
<td></td>
</tr>
</tbody>
</table>

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3 See chapter 3 for further discussion on Core Strategy, Core Plus and Value Added Strategy.

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2 / The Economy

2.1 Regional Economic Outlook

Macroeconomic conditions in Asia Pacific experienced a synchronized slowdown in 2019 amid headwinds in global trade, particularly the ongoing US-China trade war. China – the largest trading partner for the majority of countries in the region – saw its import demand decline by 2.8% (in USD terms) in 2019, a reversal of the 15.8% growth in 2018. The resulting impact is clearly evident as regional exports and economic growth decelerated significantly, with weaker PMI readings and export growth falling in negative territory since the beginning of 2019.

EXHIBIT 1: GROWTH IN ASIA’S EXPORTS AND CHINA’S IMPORTS (Y-O-Y %)

![Graph showing growth in Asia’s exports and China’s imports (Y-O-Y %)](chart)


China’s economic growth continued to decelerate as growth in fixed asset investment and manufacturing output slowed while exports cooled significantly, particularly in the second half of 2019. Retail sales and domestic consumption weakened as well, though remain major drivers of the Chinese economy. Australia’s growth moderated below the 2% level as investment and household spending remained weak, with government spending and public investment acting as major economic drivers. In Japan, business sentiment remained weak amid sluggish manufacturing output and rising concerns over the negative impact of the consumption tax hike introduced in October 2019. Both South Korea and Singapore’s trade dependent economies experienced significant economic headwinds from lower export levels as import demand from China waned.

Downside risks have clearly increased following rising protectionism and the ongoing global trade tensions. According to IMF projections⁴, the trade tensions between the United States and China could potentially reduce global GDP growth by up to 0.8% in 2020. While both countries remain engaged in negotiations to resolve their trade disputes, a full resolution of the conflict is unlikely to be immediate and could continue to impact regional trade at least in 2020.

⁴ IMF World Economic Outlook, October 2019

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
On a positive note, domestic demand has been relatively resilient supported by the implementation of expansionary fiscal stimulus and stable labour market conditions as evidenced by the declining or stable unemployment rates in most countries with the exception of South Korea. The region’s economic performance remains partially supported by favourable monetary policies where central banks continue to balance between the risks of high asset prices and stimulating domestic demand amidst low inflationary pressures. Barring any significant shocks, Asia Pacific’s economic growth is expected to remain stable at 5.1% in 2020, compared to 5.0% in 2019.

**EXHIBIT 2: ASIA PACIFIC REAL GDP GROWTH & UNEMPLOYMENT RATES**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
<th>2020f</th>
<th>2022f</th>
<th>2024f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2.9%</td>
<td>2.8%</td>
<td>2.7%</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>China</td>
<td>6.4%</td>
<td>6.3%</td>
<td>6.2%</td>
<td>6.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3.7%</td>
<td>3.6%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.9%</td>
<td>3.8%</td>
<td>3.7%</td>
<td>3.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.5%</td>
<td>2.4%</td>
<td>2.3%</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

**Notes:** f = forecast. There is no guarantee the forecasts will materialize. Sources: DWS, Oxford Economics, Bloomberg. As of December 2019.

**Inflation and Bond Yields**

Inflationary pressures across Asia Pacific have remained largely benign on the back of weaker manufacturing activity, stable food inflation and moderating commodity prices. Inflation is expected to pick up gradually on the back of recovery in economic growth and consumption along with bond yields in the later years, albeit at a measured pace.

**EXHIBIT 3: INFLATION AND LONG TERM INTEREST RATES**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
<th>2020f</th>
<th>2022f</th>
<th>2024f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1.9%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>China</td>
<td>2.5%</td>
<td>2.6%</td>
<td>2.7%</td>
<td>2.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1.7%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>2.0%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.8%</td>
<td>0.9%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.5%</td>
<td>2.6%</td>
<td>2.7%</td>
<td>2.8%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

**Note:** f = forecast. There is no guarantee the forecasts will materialize. Sources: DWS, Oxford Economics, Bloomberg. As of December 2019.

\(^5\) IMF World Economic Outlook, October 2019. For forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. Past performance is not indicative of future returns.
Monetary policy

Against the backdrop of heightened economic uncertainties and low inflationary pressures, central banks in Asia Pacific have adopted an easing bias in their monetary policies towards the second half of 2019. Australia, New Zealand, Hong Kong, South Korea, Malaysia and Thailand implemented their first rate cuts in at least three years, while India and Indonesia have also eased key policy rates by at least 100 basis points in 2019. Elsewhere, China have stepped up efforts to boost credit growth by lowering the bank required reserve ratio (RRR) for the seventh time since 2018, while the bank of Japan maintained its negative policy rate in support of domestic demand. Going forward, central banks in the region are expected to keep monetary policies supportive in favour of growth amidst rising uncertainties over external demand.

EXHIBIT 4: POLICY RATES IN MAJOR ASIA PACIFIC ECONOMIES

<table>
<thead>
<tr>
<th>Country</th>
<th>Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan:</td>
<td>Japan’s GDP growth is expected to moderate to below 0.5% in 2020, mainly due to the sluggish manufacturing industries. Services sector remains more resilient, though concerns mount over the negative impact of the consumption tax hike introduced in October 2019. With the unemployment rate at a 26-year-low of 2.2%, core CPI remained in positive territory of 0.4% in October 2019, and is expected to remain stable going forward excluding the impact of the consumption tax hike.</td>
</tr>
<tr>
<td>South Korea:</td>
<td>South Korea’s GDP growth is forecast to be in the low 2% range in 2020, much lower than the historical average of 3.0%. Its export industries remain affected by the global trade slowdown, while further headwinds arise from escalating political tensions with Japan. The Bank of Korea cut the base rate from 1.5% to 1.25% in October 2019, the second rate cut in 2019, as pre-emptive action to the country’s worsening economic outlook, with rumours of a further rate cut in 2020.</td>
</tr>
<tr>
<td>China:</td>
<td>China’s GDP growth is projected to slow further to 5.8% in 2020. Broad economic indicators ranging from manufacturing PMI, industrial production and fixed asset investment growth continued to show slower growth, though retail sales and consumption growth provided some support. Faced with the threat of higher U.S. tariffs on imported goods from China and rising pressures on external trade, the government has stepped in to support the economy through targeted stimulus measures and selective loosening of its monetary policy. Resolution of trade issues with the U.S remain critical to its economic outlook.</td>
</tr>
</tbody>
</table>

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
**South East Asia:** Growth in ASEAN economies is expected to remain relatively resilient. Overall export activities have weakened mainly due to lower electronic imports from China, though partially mitigated by higher exports to the United States as substitutes for Chinese goods. Private investment and consumption remain major drivers of domestic demand supported by long-term structural trends of rising urbanization and household incomes. Latest projections by IMF\(^6\) forecast GDP growth of 4.5% for the leading ASEAN economies in 2020.

**Singapore:** Singapore’s GDP growth slowed from 3.1% in 2018 to below 1% in 2019 amidst a contraction in manufacturing and exports. Prospects for higher economic growth of 1.0%-1.5% in 2020 underpinned by the services sector, though the nation remains highly trade dependent to global economic conditions. Domestic interest rates remain highly sensitive to the U.S interest rate outlook, with benchmark borrowing costs declining slightly as monetary conditions remain accommodative.

**Australia:** Australia’s economy is expected to expand by 2.3% in 2020 compared to 1.8% in 2019 (estimate), with growth supported by public infrastructure spending and commodities and services exports. Notwithstanding, household spending is expected to remain modest on the back of low income growth. Following three rate cuts in 2019, the Reserve Bank of Australia (RBA) is expected to retain an easing bias. A further rate cut is expected to follow which would lower the cash rate to 0.5% by the end of the first quarter of 2020.

### 2.3 Risks to the Forecast

**Escalation of Trade Conflicts:** Despite rising domestic consumption, Asia Pacific’s economies remain highly dependent on exports trade. Risks persist, ranging from the ongoing trade war between the United States and China to geopolitical issues in relation to the pro-democracy street protests in Hong Kong which has disrupted the domestic economy as well as created strains in global relations between China and western countries. Any escalation in conflicts probably would directly reduce China’s demand for industrial exports and adversely impact trade and economic growth across the region.

**Slowdown in China:** Risks to the Asia Pacific region center on the outlook for China’s growth. Being the largest trading partner for most APAC nations from natural resources in Australia to intermediate electronic and machinery products of export dependent nations such as Singapore and South Korea, a sharper-than-expected slowdown in China’s economy would see trade flow and economic growth decline in the region. A deceleration in housing activity amid high home prices probably could weigh on investment and consumption while the relatively high debt-to-GDP ratio remains a concern.

**Interest rate volatility:** Sudden and unexpected shifts in monetary policies enforced by central banks in response to domestic and global growth conditions could significantly impact the level of interest rates, and in turn borrowings costs in the region. This effect is amplified in key REIT markets which are interest rate sensitive, and affect the broader direct real estate markets in terms of transaction volume, yields and market sentiment. Our base case forecasts real estate cap rates to remain relatively stable over the forecast horizon, though risks remain that cap rates might shift more significantly than anticipated.

**Increased Government Debt levels:** High levels of foreign debt were a major contributor leading to the Asian financial crisis in 1997-98. Though many countries in Asia Pacific are now on stronger financial footing, debt levels have generally increased across the region over the past decade. As at end-2018\(^7\), Japan’s public Debt-to-GDP ratio remains high at 215%, compared to other countries such as South Korea (39%), Australia (40%) and China (50%). In China, corporate debt-to-GDP grew rapidly in the past decade, reaching 152% in 2018. High debt levels could limit fiscal flexibility in the event of a downturn in the region.

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\(^6\) IMF World Economic Outlook, October 2019.

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\(^7\) Bank of International Settlements Data, June 2019

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3 / Strategic Real Estate Outlook

3.1 Real Estate Performance

Real estate performance across much of the Asia Pacific region has been relatively resilient on the back of healthy rental growth and sustained albeit marginal cap rate compression in key core markets. The gateway cities of Singapore, Sydney and Melbourne led office rental growth in the region, underpinned by stable occupier demand and limited new supply. Vacancy rates in Tokyo and regional cities in Japan continued to fall to historical lows on the back of healthy occupier demand and controlled supply levels. However, overall leasing demand appeared weaker towards the second half of 2019 as occupiers re-evaluate their leasing requirements in lieu of the economic uncertainties.

Core unlevered aggregate total returns in the region have moderated to an estimated 8.5% in 2019, down from 11% recorded in 2018 and the three-year average of 10.1% recorded from 2016 to 2018. The weight of capital targeting quality assets in the region has contributed to further cap rate compression, albeit less pronounced compared to the earlier years which led to significant capital gains, especially in Australia and Japan where regional cities have experienced cap rate compression trends seen in the key gateway cities. The trend was compounded by active investments from sovereign capital, pension funds and insurance firms, which have been increasing their real estate allocations. While property returns in recent years have been underpinned by rental growth and cap rate compression, total returns in the coming years are likely to be driven mostly by income yields with capital growth supported by low bond yields, though we believe any further decompression in yields over the next few years is unlikely to occur in a significant manner.

Looking ahead, near term returns are capped in Seoul CBD and Yoido (YBD) due to elevated vacancy rates. Core Australian cities and Japanese cities are projected to yield relatively good risk adjusted returns particularly for office assets, while it is also true that investment opportunities for international investors are limited in Tokyo due to strong competition from domestic institutions. In terms of sector performance, core unlevered aggregate total returns are forecasted to range between 4.9% - 7.6% annually over the next five years with the industrial sector likely to yield higher returns compared to office, retail and residential.

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9 Source: DWS Calculations, December 2019, from Colliers, Miki Shoji, JREI, BAC, CBRE, Mateplus, Cushman & Wakefield, Korea Appraisal Board.

10 Source: DWS Forecasts, December 2019.

Past performance is not a reliable indicator of future returns.
3.2 Strategic Investment Themes

The trend of cap rate compression observed in the past few years continued to persist in Japan, South Korea and Australia, albeit at a more measured pace for Australia, while cap rates remained broadly stable in China—and Singapore as interest rates remain at historically low levels. Investors are increasingly finding it challenging to secure good income producing core-type opportunities which fit their target returns in these markets, with some investors opting to move up the risk curve and/or diversify their target sectors. Notably, in spite of cap rate compression trends, spreads to long-term bond yields across some Asia Pacific markets such as Australia and South Korea remain above their historical long-term averages, providing investors some buffer in the event of rising domestic bond yields in the future.

We continue to hold the view that while cap rate compression was in part driven by expectations of rising rental reversion, other structural factors were also at play: (1) geographical diversification needs as evident from the gradual increase in cross-border transactions, and (2) a continuous amount of capital available for real estate investments with an estimated US$33 billion of dry powder available at the end of 2018 through Asia-focused closed-end private real estate funds, an increase of US$6 billion from four years ago.\[^{12}\]

We favour markets with relatively good yield spreads to mitigate risks arising from the potential widening of cap rates, and healthy leasing fundamentals to provide rental income growth to drive returns going forward. While investors are likely to retain interest in core gateway cities with good fundamentals, elevated asset prices in these locations have enhanced the appeal of quality assets in secondary locations and regional cities. As such we expect to see increasing investment activities into select secondary markets underpinned by healthy fundamentals as investors seek higher-yielding assets to pursue their returns requirements.

\[^{11}\] Japan – Tokyo (All sectors), Osaka/Yokohama/Nagoya/Fukuoka (Office); Australia – Sydney/Melbourne/Brisbane/Perth/Adelaide; China Tier 1 – Beijing/Shanghai (All sectors), Guangzhou (Office & Retail); South Korea – Seoul.

\[^{12}\] Preqin Quarterly Update: Real Estate, Q1 2019.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Vis-a-vis our previous outlook, we downgraded Australian retail to market weight as the retail outlook continues to deteriorate given the rising headwinds of slowing wage growth and household consumption. Key recommendations as detailed below:

**Core Strategy Projections**

**Core Locations with Strong Fundamentals**: Good income producing assets providing meaningful returns in key gateway cities, i.e. Sydney, Melbourne and Osaka, have continued to attract global capital. Although we project forward returns to moderate vis-à-vis the strong outperformance achieved in the past two years, this strategy continues to offer investors the potential for further income growth with stable corporate occupier demand outpacing limited supply. In Osaka, prime high street retail assets in major shopping destinations with access to high tourist footfall is underpinned by healthy leasing demand with sales growth of luxury brands accelerated by wealthy local customers.

**High Yields Underpinned by Stable Cashflows**: Investors seeking higher income returns could look out for opportunities in the logistics sector where we are projecting higher income yields over the five-year forecast horizon, given the historically steady income stream nature underpinned by favourable demographic dynamics, ongoing proliferation of online retail, and higher income yields – typically in excess of 6% (4% for greater Tokyo).13 Target markets include prime logistics centres in key transportation hubs including Japan, Korea, Singapore and Australia.

**Regional Markets with Good Fundamentals and Attractive Excess Returns**: In Japan, the ten-year government bond yield remains near zero levels and borrowing costs are extremely cheap. Vacancy rates have declined to historical lows while supply is limited in the next couple of years, which underpins future rental growth. Regional cities in Japan such as Fukuoka could provide some of the best yield spreads in the region. Similarly in Brisbane, we project higher income yields combined with improving occupier demand and receding office supply which provides the potential for market-driven returns.

**Mid-term Opportunities**: Monitor progress and look out for optimal entry timing in core investable markets with near-term returns capped by intense competitions with domestic REITs, i.e. central Tokyo, or facing short-term vacancy issues, i.e. Seoul CBD and Yoido submarket (YBD), though prime office assets in Seoul Gangnam submarket (GBD) could provide attractive total returns due to the strong leasing demand from the vibrant IT industry.

**Cyclical Uplift in Recovery Markets**: In Singapore, the office and business parks sectors are currently benefiting from a mid-cycle rental recovery following improved leasing demand from financial and business services occupiers with limited supply pipeline, providing opportunities for healthy market-driven returns.

**Core Plus and Value Added Strategy Projections**

**Active Asset Management**: Investors with higher risk appetites could consider opportunities in key cities in mature North Asian and Australian markets by taking on leasing risks for vacant office properties or refurbishment/re-positioning of older but well-located properties. Prime retail and shopping centres are also strong candidates for value-added strategies including improvements in retail footfall and repositioning of tenant mix. Investors should be mindful of the higher leasing risks involved which require asset managers with strong local networks and market knowledge to successfully create value enhancement.

**Forward Commitments**: Amid rising competition for high quality assets from yield-chasing investors, forward commitments could provide a viable access route to good real estate assets, with the potential for enhanced returns compared to investments in core stabilized assets. We see selective opportunities in commercial assets in Japan, South Korea and Australia. Such Build-to-core strategies are particularly applicable to the logistics sectors in South Korea and China, with logistics demand underpinned by high e-commerce retail penetration and rising consumption, while access to modern logistics stock is limited with the majority of stock old and obsolete. Construction risk and lease-up risk are key considerations that can potentially be mitigated through partnerships with reputable local operators and leasing agents.
3.3 Capital Markets

Transactions
Asia Pacific experienced a record transaction volume of US$170 billion in 2018, though activity has moderated in the past few quarters from the peak. This was achieved on the back of tight yields and higher asset prices underpinned by strong investor appetite. Japan, China and Australia remained the top investment destinations, while the recent few years have seen increasing capital inflows into South Korea. Investment flows in Hong Kong hit a peak in 2018 driven by Chinese capital but transactional activity slowed significantly since as Chinese buyers receded.

EXHIBIT 6: APAC REAL ESTATE TRANSACTION VOLUME BY COUNTRY

Office transaction volumes have climbed steadily in recent years to a high of US$90 billion in 2018 (53% of total volume), while Industrial transaction volumes rose strongly last year on the back of a Chinese-led consortium’s acquisition of Global Logistics Properties. On the other hand, retail volumes have been broadly stable, though declining as a share of total volumes.

EXHIBIT 7: APAC REAL ESTATE TRANSACTION VOLUME BY SECTOR
At the city level, Tokyo saw the highest investment volumes in the recent 12-month period till third quarter of 2019, while Hong Kong slipped to second after topping volumes six months ago, with Seoul and Sydney close behind. Investors constitute a major buyer group accounting for 40% - 56% of recent transaction volumes in Singapore and major Australian cities (Sydney, Brisbane), and around 30% or more for Beijing, Hong Kong and Osaka.

EXHIBIT 8: COMMERCIAL REAL ESTATE TRANSACTION VOLUME BY CITY (AS AT 2019 3Q)

Note: Figures shown based on rolling 12-month period. Exclude land transactions.
Source: DWS, Real Capital Analytics. As of December 2019.

From a global perspective, China and Australia ranked among the top ten investment destinations globally for foreign real estate buyers in the recent 12-month period till the third quarter of 2019, behind the United States and leading European nations. Japan, Singapore, Hong Kong and South Korea round up the list outside the top ten.

EXHIBIT 9: CROSS-BORDER REAL ESTATE INVESTMENTS BY DESTINATION

Notes: Commercial real estate transactions exclude non-income producing assets, such as development site transactions.
Source: DWS, Real Capital Analytics. As of December 2019.
**Investor Profile:**

Cross-border investors remain active in the region, accounting for over 30% of transaction volumes in Asia Pacific, having participated in billion dollar deals in Hong Kong and Seoul. Private investors form the next largest buy group in the region, accounting for 22% of transaction volumes, followed by domestic institutional investors (19%) and listed funds/REITs (18%).

**EXHIBIT 10: COMMERCIAL REAL ESTATE TRANSACTION IN APAC (BY INVESTOR TYPE)**

Note: Figures shown exclude land transactions.
Source: DWS, Real Capital Analytics. As of December 2019.

In recent times, Chinese investors have emerged as significant buyers globally including Asia Pacific real estate markets, particularly in Hong Kong and Australia where they accounted for a peak share of 30% and 10% of the respective market transaction volumes in 2016. However, since early 2017 after China tightened restrictions on outbound investments, Chinese investment activity in all markets (except Hong Kong) have slowed significantly. Going forward, we expect to see less participation from this group of investors, though this is unlikely to create any major distortions on transactional activities in the region.

**EXHIBIT 11: CHINA OUTBOUND REAL ESTATE INVESTMENTS IN ASIA PACIFIC**

Note: Figures shown exclude land transactions. YTD refers to first 9 months of 2019.
Source: DWS, Real Capital Analytics. As of December 2019.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
REITs
The REIT market in developed Asia Pacific is gradually approaching maturity since the introduction at the start of the millennium. Asia Pacific REITs performed well in 2019, with benchmark indices in Japan, Australia and Singapore achieving capital gains of 22.2%, 16% and 18.4% respectively for the year, supported by lower bond yields and rising expectations of dovish interest rate policies by major central banks. REITs in Hong Kong are the exception with prices correcting in the second half of 2019 reflecting investor concerns over business disruptions, particularly in the retail sector due to the ongoing street protests which affected retail spending and consumption.

EXHIBIT 12: MARKET CAPITALIZATION OF LISTED REITS IN ASIA PACIFIC

EXHIBIT 13: OFFICE SECTOR: CAP RATE SPREADS TO 10Y GOVERNMENT BOND YIELD

Note: E=Estimate, F=Forecast. There is no guarantee the forecast returns shown will materialize.

14 Benchmark Indices refer to: Tokyo Stock Exchange REIT Index, S&P/ASX 200 A-REIT Index, FTSE Straits Times REIT Index
Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. Past performance is not indicative of future returns.
Retail
Sizable institutional grade assets in the retail sector remain tightly held by local developers and REITs in markets such as Singapore and Australia, capping deal volumes. High street retail sales benefited from increasing tourist arrivals in Japan, while private wealth capital remain dominant in transactions in prime high street areas in Hong Kong, Shanghai and Tokyo, Ginza and Seoul (Gangnam) where cap rates remain extremely tight. Institutional investors have been observed to be exploring suburban assets in Japan, Australia and to a lesser degree in South Korea, where investors and REITs have tried to resuffle existing portfolios. For instance, Australia saw a number of regional and sub-regional assets being traded as REITs look to recycle their capital and reposition their portfolios.

Industrial
Investor interest in the industrial and logistics sector remains strong due to the relatively higher yields and the recent evolution and gradual maturity of the sector, though acquisition opportunities of institutional grade assets remain limited. The supply of modern facilities is slowly catching up to increasing demand with multiple large assets currently in the development pipeline in major metros in Japan, South Korea and China. Further yield compression (albeit marginal) could occur in Japan and South Korea supported by low bond yields, while yield spreads in other markets are likely to narrow over the next few years along with rising bond yields while cap rates remain stable underpinned by strong institutional demand in the sector.

Credit markets
The financing environment remains largely positive due to favorable monetary policies and supportive measures. Compared to six months ago, base reference rates and all-in financing costs have fallen in the region. With the exception of China and Hong Kong, office cap rate spreads over financing costs remain positive across core markets with the highest positive carry of circa 200-300 basis points in the Australian and Japan markets.

Note: E=Estimate, F=Forecast. There is no guarantee the forecast returns shown will materialize.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Exhibit 16: Typical commercial lending terms (Up to 5Y Swap)

<table>
<thead>
<tr>
<th>Market</th>
<th>LTV (%)</th>
<th>Base Reference rate</th>
<th>Spread (bps)</th>
<th>Financing Cost (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>50-55%</td>
<td>5Y Swap Rate : 1.0%</td>
<td>140 - 180</td>
<td>240 – 280</td>
</tr>
<tr>
<td>China</td>
<td>50-60%</td>
<td>5Y Loan Prime Rate: 4.8%</td>
<td>145 - 240</td>
<td>625 - 720</td>
</tr>
<tr>
<td>Japan</td>
<td>50-60%</td>
<td>5Y JPY swap rate + TL spread: 0.1%</td>
<td>40 - 60</td>
<td>50 - 70</td>
</tr>
<tr>
<td>Singapore</td>
<td>50-60%</td>
<td>3M Swap Rate: 1.5%</td>
<td>120 - 180</td>
<td>270 - 330</td>
</tr>
<tr>
<td>South Korea</td>
<td>50-60%</td>
<td>5Y KTB: 1.6%</td>
<td>140 - 180</td>
<td>300 - 340</td>
</tr>
</tbody>
</table>

Source: DWS, Bloomberg. Base Reference Rates are obtained from Bloomberg. As at December 2019. For illustrative purposes only. Lending terms above are indicative for core stabilized commercial assets and may differ from actual terms achieved for individual assets.

EXHIBIT 17: BASE REFERENCE RATES FOR COMMERCIAL LENDING

* Figures before Sep 2019 refer to the 1-5 year PBOC rate. Past performance is not indicative of future returns.
4 / Property Sectors and Returns 15

4.1 Office

Current Conditions: The office sector in developed Asia Pacific turned in a mixed performance in 2019, as some occupiers grew cautious over increasing economic uncertainties. In the 12-month period till the third quarter of 2019, office rental growth in Singapore ranked among the strongest in the region, while similarly in Sydney and Melbourne, rents have been on a strong upswing driven by low vacancy and limited supply, particularly in Sydney which saw significant stock withdrawals. Vacancy levels are at one of the lowest levels among major economies in the world, ranging from 1.6%-2.3% across Tokyo, Osaka and other regional cities, supporting moderate office rental growth.

On the other hand, weak occupier sentiment in China due to the slowing economy and trade uncertainties played a major factor in driving rental declines in the Tier 1 cities of Beijing, Shanghai and Guangzhou. In Hong Kong, the rally in office rents which occurred until the first half of 2019 had since reversed course, as the city experienced a technical recession owing to external headwinds and disruptions from ongoing street protests.

From an occupier perspective, structural shifts in office demand remain underway in the region, underpinned by the increasing usage of technology-related applications, rising number of millennials in the workforce, and the changing conceptualization of the typical workplace environment. Technology firms ranging from big multinational corporations to smaller local technology start-ups have been increasingly taking up office spaces in the CBD, at the same time when major financial institutions are consolidating their office space footprint, except for growing niche sectors such as Fintech and asset / wealth management.

The flexible space segment remains a major source of office demand, catering to market segments with unfulfilled needs (i.e. start-ups, small business owners and corporations looking at flexible working arrangements), as larger established operators increasingly relocate from secondary locations or lower-grade offices to higher specification offices in core locations. Foreign and local flexible space operators are now among the top tenants for office take-up in many countries across Asia Pacific. The much-publicized issues relating to WeWork have raised investor concerns over the segment, though the majority of the operators appear well positioned from the establishment of strong capital and operating partnerships with local developers and landlords with mutual interests.

Outlook: Notwithstanding the global macroeconomic headwinds, the regional office outlook remains relatively positive in the medium term. We expect the rental growth momentum in Melbourne and Sydney to continue as limited near term supply supports low vacancy levels, and similarly so for the other Australian cities and in Singapore. Rental growth in Japanese cities is supported by the historically low vacancy rates and strong corporate demand. At the other end, weak economic conditions and heightened uncertainties among office occupiers are likely to cause downward pressures on rents in Hong Kong, while Kuala Lumpur continues to face vacancy issues amidst pressures from the large office pipeline supply.

15 DWS. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect.
Combining our rental growth and vacancy projections, we expect positive occupier trends to underpin moderate to strong rental growth in Australia, China, Singapore, and the regional cities in Japan. Some markets such as Hong Kong, Kuala Lumpur and Seoul (Yoido) could see negative rental growth due to a combination of high vacancy arising from demand-supply imbalances and/or unfavourable domestic conditions.

Note: f = forecast. There is no guarantee the forecasts will materialize. All opinions and forecasts are based upon data at the time of publication of this article (January 2019) and may not come to pass. This information is subject to change at any time, based upon economic, market and other conditions and should not be construed as a recommendation. Past performance is not a reliable indicator of future returns. Source: DWS. As of December 2019.
Performance: We expect annual total returns of minus 3-8% in the APAC office sector over the next five years through to 2024, on the back of stable occupier demand and moderate supply. While the core Australian cities of Sydney and Melbourne should continue to perform well, regional cities in Japan such as Osaka, Fukuoka and Nagoya look increasingly attractive and we believe they will provide decent income and capital returns, and in turn some of the highest excess returns over the local risk free rate as well as levered returns with local financing. We believe office assets in Seoul to yield moderate returns underpinned by modest income yields. On the other hand, we expect Hong Kong to significantly underperform on the back of a significant rental correction which could drive down capital values.

EXHIBIT 20: OFFICE SECTOR: PROJECTED COMPOUNDED ANNUAL RETURN AND EXCESS RETURN (2020F – 2024F)

<table>
<thead>
<tr>
<th>City</th>
<th>Excess Return</th>
<th>Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melbourne</td>
<td>(6.3%)</td>
<td>8.0%</td>
</tr>
<tr>
<td>Sydney</td>
<td>(6.2%)</td>
<td>7.8%</td>
</tr>
<tr>
<td>Osaka</td>
<td>(7.8%)</td>
<td>7.6%</td>
</tr>
<tr>
<td>Nagoya</td>
<td>(7.3%)</td>
<td>7.2%</td>
</tr>
<tr>
<td>Brisbane</td>
<td>(5.5%)</td>
<td>6.7%</td>
</tr>
<tr>
<td>Fukuoka</td>
<td>(7.2%)</td>
<td>6.5%</td>
</tr>
<tr>
<td>Adelaide</td>
<td>(5.1%)</td>
<td>6.2%</td>
</tr>
<tr>
<td>Seoul - Gangnam</td>
<td>(3.1%)</td>
<td>6.2%</td>
</tr>
<tr>
<td>Auckland</td>
<td>(4.7%)</td>
<td>6.0%</td>
</tr>
<tr>
<td>Seoul - CBD</td>
<td>(3.8%)</td>
<td>5.7%</td>
</tr>
<tr>
<td>Yokohama</td>
<td>(5.7%)</td>
<td>5.5%</td>
</tr>
<tr>
<td>Tokyo</td>
<td>(5.8%)</td>
<td>5.3%</td>
</tr>
<tr>
<td>Singapore</td>
<td>(3.2%)</td>
<td>4.9%</td>
</tr>
<tr>
<td>Perth</td>
<td>(3.3%)</td>
<td>4.7%</td>
</tr>
<tr>
<td>Shanghai</td>
<td>(1.2%)</td>
<td>4.1%</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>(0.7%)</td>
<td>4.1%</td>
</tr>
<tr>
<td>Seoul - Yoido</td>
<td>(2.2%)</td>
<td>4.1%</td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td>(0.5%)</td>
<td>4.1%</td>
</tr>
<tr>
<td>Hong Kong - Central</td>
<td>(-1.1%)</td>
<td>2.8%</td>
</tr>
<tr>
<td>Hong Kong - Overall</td>
<td>(-1.5%)</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Note: f = forecast. Projected returns are based on compounded basis. There is no guarantee the forecast returns shown will materialize. Excess return is calculated from income return plus capital appreciation (net of capex) over the local 10 year sovereign bond rate.

4.2 Retail

Current conditions: The rise in e-commerce remains a major driver in redefining the retail landscape in Asia Pacific. Behind the rising popularity of e-commerce in Asia Pacific include structural drivers such as high levels of smartphone penetration globally, increasing adoption of digital wallets and improved online shopping experiences such as increased sophistication of purchasing processes and reduced door-to-door delivery times.

Based on data from eMarketer, the e-commerce market in Asia Pacific is estimated to have grown strongly by 25% in 2019, far outpacing the 4.4% growth in total retail sales in the region. These trends were most notably observed in China, the largest e-commerce market in the world, which currently accounts for 85% of the online retail sales in Asia Pacific. The share of e-commerce sales as a proportion of total retail sales in China had grown rapidly from approximately 15% in 2015 to 37% in 2019. Similarly, online retail sales in South Korea have grown strongly, ahead of the United States where e-commerce accounts for about 10% of retail sales.

DWS Forecasts, December 2019
eMarketer – Asia-Pacific Retail and Ecommerce Sales, December 2019.
Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
As a result, retailers are increasingly shifting towards a multi or omni-channel retailing to complement their physical store offerings. Notwithstanding, anecdotal evidence has also showed that some pure play e-commerce companies are merging their online and high street presence by venturing into bricks and mortar store operations for brand building as well as for showroom display.

The broader retail environment remains challenging for retailers across the region. A deceleration in retail sales growth has been observed in Australia due to modest wage growth, slower housing sales and consumption, as well as in China and Singapore, while Japan have performed better due to strong growth in high tourist arrivals and expenditure. The softer retail environment has filtered through the property market where rents have declined in Australia, and remain stagnant in China and Singapore as retailers face margin pressures from weaker retail spending as well as increasing labour costs.

Structural shifts in consumer shopping behavior should continue to exert pressures on retailers to divert resources from traditional bricks-and-mortar sales building up Omni-channel marketing strategies. As a result, the retail environment remains in favour of tenants as landlords are increasingly forced to offer better incentives especially in the discretionary retail space. Vacancy rates could start to inch upwards in decentralized areas on the back of growing supply while occupier demand from retailers is likely to remain stable in most markets.

**Outlook:** Over the five-year forecast horizon, we expect to see modest rental growth in the region as retailers grapple with high occupancy costs and diminished tourist spending. Rental growth should be modest in sub regional centers (SRC) in Australia, where demand could be adversely affected by e-commerce and slower wage growth.

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Note: f = forecast. RC= Regional Centres SRC= Sub-regional centres.  
1 Projected returns are based on compounded basis. There is no guarantee the forecasts will materialize. 
Source: DWS. As of December 2019.

**Performance:** Given the emergence of online retailing, there is a preference among investors toward long term leases in the retail sector. The impact from online retail is expected to be felt more keenly in the discretionary retail segments such as...
apparel and electronics, compared to the non-discretionary segments such as staple food and daily necessities. Correspondingly, the divergent trends across different retail assets is likely to intensify with a “winner-takes-all” outcome, as well-located malls with strong positioning and good tenant mix continue to command premium rents while poorly-managed malls with weak or unclear positioning face risks of lower rents unless significant repositioning or exit strategies are deployed.

Looking ahead, we expect a more modest return profile for retail assets relative to the office or industrial sectors, with returns led by the Tier 1 Chinese cities, Seoul as well as Tokyo, which appears attractive as we project with the highest projected excess returns (i.e. annual total returns minus bond yields). Notwithstanding, yield spreads in most other key retail markets in the region are projected to remain healthy at circa 2-4%. In Australia, disposal of retail assets may increase given the rising redemption requests among retail focused property funds, while capital values have shown signs of softening in the past few quarters which could continue particularly for the lower quality assets. Investors need to be mindful of the challenges facing the sector, particularly in markets such as China where high technology adoption rate shortens the life cycles on retail assets which requires heavy capital expenditures and intensive asset management.

### EXHIBIT 22: RETAIL SECTOR: PROJECTED COMPOUNDED ANNUAL RETURN AND EXCESS RETURN (2020F – 2024F)

<table>
<thead>
<tr>
<th>City</th>
<th>Excess Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuala Lumpur</td>
<td>(3.0%)</td>
</tr>
<tr>
<td>Beijing</td>
<td>(3.2%)</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>(2.9%)</td>
</tr>
<tr>
<td>Seoul</td>
<td>(3.8%)</td>
</tr>
<tr>
<td>Shanghai</td>
<td>(2.1%)</td>
</tr>
<tr>
<td>Singapore - Suburban</td>
<td>(3.3%)</td>
</tr>
<tr>
<td>Singapore - Prime</td>
<td>(2.7%)</td>
</tr>
<tr>
<td>Tokyo</td>
<td>(4.7%)</td>
</tr>
<tr>
<td>Sydney - Neighbourhood</td>
<td>(2.7%)</td>
</tr>
<tr>
<td>Sydney - RC</td>
<td>(2.7%)</td>
</tr>
<tr>
<td>Melbourne - RC</td>
<td>(2.5%)</td>
</tr>
<tr>
<td>Brisbane - RC</td>
<td>(2.5%)</td>
</tr>
<tr>
<td>Sydney - SRC</td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Adelaide - RC</td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Melbourne - SRC</td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Brisbane - SRC</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>Adelaide - SRC</td>
<td>(2.3%)</td>
</tr>
<tr>
<td>Perth - RC</td>
<td>(2.4%)</td>
</tr>
<tr>
<td>Perth - SRC</td>
<td>(2.1%)</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>(1.0%)</td>
</tr>
</tbody>
</table>

4.3 **Industrial**

**Current Conditions:** Prime logistics space across the region continues to see healthy take-up driven by e-commerce and third party logistics providers, resulting in positive rental growth trends across the region. The availability of prime development land and quality modern warehousing facilities is critical for logistics markets undergoing modernization changes coupled with rising domestic consumption, particularly for locations such as Seoul and Tier-one cities in China where the majority of existing warehouse stock is older and obsolete. In Southeast Asia, a rapidly rising middle class population and increasing smartphone adoption underpins both traditional retail and e-commerce retail consumption, driving logistics demand in these countries as well as neighbouring locations such as Singapore which serves as a regional packaging and distribution focal point.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
EXHIBIT 23: INDUSTRIAL SECTOR: NET RENT INDEX (BASE YEAR 1Q2008 = 100)


Outlook: In the industrial sector, e-commerce and third party logistics (3PL) companies are expected to remain major leasing demand drivers in the modern logistic space across the region, underpinned by rising e-commerce trends as described in the retail section. Rental growth is expected to be moderate in the region and broadly in line with inflation trends as tenants, 3PL companies, retailers and consigners remain mindful of logistics costs, particularly in some countries such as Japan and South Korea with significant incoming supply pipeline. However weak rental growth trends are projected in Perth and Adelaide where industrial conditions remain tough due to weaker leasing demand.

EXHIBIT 24: INDUSTRIAL SECTOR: PROJECTED RENTAL GROWTH (2020F – 2024F)

Note f = forecast. ¹ Projected returns are based on compounded basis. There is no guarantee the forecasts will materialize.
Source: DWS. As of December 2019.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Performance: Driven by higher income yields, increased transparency and strong underlying occupier demand, the industrial sector has provided consistently higher returns than the office and retail sectors, and remain attractive in the next five years with projected total returns exceeding 7% for most locations in our coverage (see Exhibit 5 on page 11) though investment opportunities could be limited by the limited availability of high quality completed assets in most of these markets. Investors seeking access through forward funding commitments – often the most realistic approach to gain exposure to quality assets in certain markets such as China, and to a lesser extent, South Korea – need to consider the level of development-related risks on top of lower transparency in these markets. Despite the relatively lower total return expectations, industrial assets in Tokyo remain attractive where we believe low bond yields will drive excess returns.


Excess Return

Beijing  (5.7%)
Shanghai (5.1%)
Melbourne - West (6.5%)
Sydney - South (6.5%)
Brisbane - South (6.4%)
Sydney - Central West (6.3%)
Singapore - High Tech (5.8%)
Melbourne - South East (6.2%)
Seoul (6.0%)
Adelaide - West (6.1%)
Singapore - Logistics (5.5%)
Perth - East (5.8%)
Tokyo (5.5%)
Hong Kong (-0.4%)

Note: f = forecast. Projected returns are based on compounded basis. There is no guarantee the forecast returns will materialize. Excess return is calculated from income return plus capital appreciation (net of capex) over the local 10 year sovereign bond rate.

4.4 Residential

Current conditions: Until recently, the residential sector has been described as ‘boring’, ‘too regional’ or ‘too granular’ to be a core investment target with extra regulatory risks such as rent control or socio-political demands imposed on investors. However, amid mounting uncertainties over the global economic outlook, it is increasingly appealing to institutional investors due to its low volatility and higher return profile compared to the traditional sectors. In the Asia Pacific region, Japan is regarded as the only country with a mature, sizeable and institutionalized residential market where average transaction volume in the last ten years amounted to US$5 billion annually, accounting for approximately 70% of total residential volumes in the region.

Transactional liquidity is underpinned by several listed residential J-REITs. As of October 201918, the residential sector accounted for 14.5% of the aggregate asset value of all listed J-REITs, compared to the retail (17.7%) and industrial (15.9%) sectors. Of the over 1,700 assets held by all listed REITs across Japan, greater Tokyo accounts for 77% of aggregate value (of which Tokyo 23 wards account for 67%), followed by greater Osaka (10%) and greater Nagoya (5%). Majority of these assets are standard single/family types, though the asset grades vary by quality and location. While investment appetite has
also grown for niche sectors such as student housing or co-living, these sectors are still early stages of development and lack sufficient maturity as core institutional investment targets in Japan.

The Japanese residential sector brings forth an important defensive element into investors' portfolios. It is characterised by a less cyclical occupier demand for housing with lower vacancy risks compared to the commercial sectors. Hence it is also typically less exposed to market corrections. The exception is high-end rent houses in Tokyo, the majority of which are let to expatriates or senior executives, and therefore more vulnerable to economic downturns. Nonetheless, the downside protection of the residential market is welcomed by an increasing number of investors as more commercial segments move into a mature cycle. Asset size tends to be relatively small in the residential sector, around JPY 1.6 billion or US$14 million per asset, and even smaller in regional cities, hence larger sized portfolio deals are strongly sought after by institutions, especially global investors. Since the sector requires heavy asset management involving tens or hundreds of individual tenants with frequent turnovers, many foreign investors form partnerships with local residential operators to outsource operational risks.

Outlook: The condominium unit price in Tokyo remains close to the highest level in two decades and this has helped sustain strong tenant demand in rental houses. The average for-sale condominium price per unit in greater Tokyo is around JPY60 million, or US$500,000, and the majority of potential first time buyers with affordability issues have little choice but to stick to rent houses. As such leasing demand is extremely strong in central locations in Tokyo with good access to public transportation. Vacancy rates stood at 2.7% in Tokyo, and 3.2% in Osaka during the second quarter of 2019. Prime rents in the Central 3 wards in Tokyo grew 3% per annum over the last three years; rental growth for average assets in Tokyo was more modest at 1.2%, and almost flat in other regional cities in Japan.

Forecasted growth is expected to continue, driven by a growing trend of rising prices of for-sale condominiums, as well as the growing popularity of flexible work-life concepts among millennials, demand for quality rent houses should remain strong. On the other hand, soaring construction costs and land prices nationwide in Japan limit the profitability of new residential developments, which should mitigate oversupply risks, especially in the areas near city centres. As such, average rents may see healthy growth of around 1% per annum in the next five years, slightly above inflation expectations.

Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Performance: Over the long run, the performance of the residential sector in Japan has been less volatile than other commercial sectors, while only Central Tokyo has experienced strong income growth to date. Residential total returns in Japan averaged at 10% in the last five years. Looking ahead, leasing demand for residential assets in Tokyo looks supported by elevated condominium prices and healthy social migration to urban areas, while further cap rate compression appears marginal. Total returns are forecast to be slightly below 6% per annum in the next five years, driven mainly by income returns.
5 / Risk Return Profile (office sector)

It is insufficient to compare property-level total returns on a stand-alone basis without factoring the associated risks, especially in the Asia Pacific region where a significant divergence in market maturity and transparency persists. Several factors were considered in the computation of associated risks related to each submarket such as volatility, liquidity, transparency and the effect of obsolescence, along with domestic risk free rates. The associated risks were formulated using a combination of quantitative and qualitative modeling which have been integrated in our House View forecasts.

Exhibit 29 highlights the positioning of the various markets in reference to this framework. The total forecast returns on the vertical axis are plotted against associated risks on the horizontal axis for each office market. Returns are based on the same office sector forecasts outlined on Exhibit 20. A Market Neutral zone (shaded) is added to indicate the level of attractiveness of each market from a risk-return perspective (cities above this line are deemed more attractive and vice versa). We categorize the major office markets into the following three groups:

- **Overweight**: Core target markets include major regional cities in Japan and core cities in Australia where total return forecasts look favorable compared to their associated risks. These are among the most established and mature markets in the region and core investors focused on income yields should center their portfolio investments mainly in these markets. This is broadly in line with the Core Strategy in the Strategic Investment Themes outlined on page 11.

- **Market Neutral**: Markets with a lower but nonetheless favourable risk-return profile. These cities are currently in the early to mid-stages of a market rental recovery with improving demand-supply fundamentals, such as Seoul, and Singapore. These are similar to the “Mid-Term Opportunities” and “Recovery Markets” in the Strategic Investment Themes outlined on page 11.

- **Underweight**: Markets where forecast returns lag associated risks on the back of low forecast returns, high risks or a combination of both. Hong Kong could post unfavourable returns due to a potential rental correction cycle combined with low income yields, while in Kuala Lumpur, demand-supply fundamentals remain largely in favour of tenants at the expense of office landlords.

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20 Source: DWS. All opinions and forecasts are based upon data at the time of publication of this article (January 2020) and may not come to pass. This information is subject to change at any time, based upon economic, market and other conditions and should not be construed as a recommendation. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Despite favourable performance expectations in some markets there are other challenges and constraints that should be factored for commercial real estate investments which cannot be fully captured in the risk scoring computations, especially for cross border investors.

Currency hedging costs remain relatively expensive in Australia and South Korea for Euro-denominated investors and this can be an impediment for cross border investors when competing with domestic investors, despite favourable returns projections. In Japan, local investors and developers command the upper hand due to extremely cheap borrowing costs in the local debt market, whereas access to cheap capital is limited for foreign investors.

Foreign investors also face additional regulatory and compliance risks compared to domestic investors. In China, onshore holding structures with equity investments from foreign parties require the formation of foreign-invested enterprises (FIEs) or wholly owned foreign enterprises (WOFEs). Conversion of structures is required if the existing holding structure is not in either of these forms and is subjected to regulatory approval, which introduces regulatory uncertainties. Foreign investors also have to deal with the complexities of capital controls and taxation issues which pose considerable challenges to new foreign investors.

Therefore, it is critical for investors to find capable investment managers who have a good foothold in each of these markets when making investments.
6 / Overview of Key Asia Pacific Markets

COUNTRY REAL ESTATE OUTLOOK: JAPAN

Economy: The third largest economy in the world. GDP growth is expected to moderate to below 0.5% in 2020, with concerns mounting for manufacturing companies. The unemployment rate remains below 3%, the lowest level in decades, while overseas tourist arrivals hit a historical record, more than triple over the last five years.

Real Estate Market: One of the largest real estate markets in the region. Good transparency with a well-established REIT market. Relatively healthy yield spreads attracting more cross-border investors, despite domestic investors remaining dominant due to the extremely low capital cost.

Risks: Slowdown in global trade and appreciation of Japanese Yen affecting exports

Real Estate Performance Outlook 2020-2024f

<table>
<thead>
<tr>
<th>Sector</th>
<th>Outlook</th>
<th>Summary View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>Positive</td>
<td>- Historical-low vacancy rates with limited office supply in all major cities in Japan. - Attractive real estate spreads over government bond yield. - Transaction cap rates expected to remain tight in the mid-term with steady monetary easing policy.</td>
</tr>
<tr>
<td>Retail</td>
<td>Neutral</td>
<td>- An increasing number of overseas tourists to Japan but retail sales growth in high street and suburban shopping centers moderating mainly due to headwinds from e-commerce retail sales. - Opportunities in assets with exposure to non-discretionary spending.</td>
</tr>
<tr>
<td>Industrial</td>
<td>Positive</td>
<td>- Vacancy rates remain modest in Tokyo despite the unprecedented supply in 2019, while the vacancy rate in Osaka has tightened as leasing demand remains strong.</td>
</tr>
<tr>
<td>Residential</td>
<td>Neutral</td>
<td>- Comparably large transaction volume, diverse investor profile and affluent market data provide enough depth, liquidity and transparency, while the average asset size tend to be smaller.</td>
</tr>
</tbody>
</table>

EXHIBIT 30: ECONOMIC INDICATORS (YEAR 2010 = 100)

Note: F = forecast. There is no guarantee the forecasts will materialize. *Percentage share of enterprises responding 'favourable' minus percentage share of enterprises responding 'unfavourable' over business conditions.

Source: DWS, World Bank, Bank of Japan, Miki Shoji, Mori Building, Oxford Economics. As of December 2019. Past performance is not a reliable indicator of future returns. This information is subject to change at any time, based upon economic, market and other conditions and should not be construed as a recommendation.

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COUNTRY REAL ESTATE OUTLOOK: SOUTH KOREA

Economy: The fourth largest economy in the region (after China, Japan and India). GDP growth is expected to moderate to low 2% range in 2020, with export industries remaining affected by the global trade slowdown while further headwinds arise from the escalating political tensions with Japan. The Bank of Korea has cut the base rate twice in 2019, with the likelihood of a further rate cut in 2020 being rumoured.

Real Estate Market: The market has recently been upgraded from "semi-transparent" to "transparent" amid the ongoing modernization and institutionalization. The office sector is relatively mature and more established, while other sectors have yet to be fully institutionalized. Main Target Market: Seoul.

Risks: High export dependency, Slowdown in global trade affecting exports and geopolitical risks over the denuclearization of North Korea

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</table>
| Office  | Neutral | - Vacancy rate expected to remain relatively high in Seoul CBD and YBD, due to weaker office demand, while it is expected to remain tight in GBD thanks to the healthy demand from IT industry.  
- Effective rents pressured by elevated tenant incentives, though a gradual recovery is expected in the medium term. |
| Retail  | Neutral | - High street retail sales still remain soft given the slow recovery of the employment market and tourism industry.  
- Investment opportunities are limited compared to other sectors, as the dominant big retailers prefer to hold on to their own properties. |
| Industrial | Positive | - Despite rapid institutionalization and modernization, there remains a shortage of good quality assets to meet the strong demand from e-commerce and 3PL industries.  
- Assets with strong leasing covenants are highly sought after by investors, notwithstanding the record new supply in 2018 and 2019. |

EXHIBIT 32: ECONOMIC INDICATORS (YEAR 2010 = 100)

EXHIBIT 33: SEOUL OFFICE SUPPLY AND VACANCY RATE

F = forecast. There is no guarantee the forecasts shown will materialize. *Percentage share of enterprises responding ‘favourable’ minus percentage share of enterprises responding ‘unfavourable’ over business conditions.


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COUNTRY REAL ESTATE OUTLOOK: CHINA

Economy: China’s GDP growth is projected to slow further to 5.8% in 2020. Broad economic indicators ranging from manufacturing PMI, industrial production and fixed asset investment growth continued to show slower growth, though retail sales and consumption growth provided some support. Trade tensions and negotiations with the United States remain key to determining the near-term economic outlook.

Real Estate Market: China constitutes the largest real estate market in Asia though affected by modest albeit improving transparency levels. Domestic capital remains the predominant source of funds; foreign investor participation is limited to top Tier-1 cities due to challenges from limited transparency, cash repatriation and taxation issues.

Risks: Export dependency risks to global demand, worsening of foreign relations with trade partners and buildup of excessive corporate leverage.

Real Estate Performance Outlook 2020-2024f

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<tr>
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</table>
| Office | Neutral | - Leasing demand has moderated in lieu of softer economic conditions, as firms turned more cautious with expansion plans.  
- Vacancy trends underpinned by modest supply pipelines particularly in Beijing with limited approvals for new construction. |
| Retail | Negative | - Prime retail remains driven by demand from new retail entrants, expansion and high income growth, though competition arising from growing e-commerce sales and rising supply in decentralized areas.  
- Currently one of the world’s most advanced e-commerce markets with online retail sales exceeding US$ 1.5 trillion in 2018. |
| Industrial | Positive | - Stable cashflows underpinned by growing occupier demand catering to domestic demand and high industrial yields in excess of 5%. Opportunities for foreign investors limited by small pool of investable core assets. |

EXHIBIT 34: ECONOMIC INDICATORS

EXHIBIT 35: OFFICE SUPPLY IN BEIJING AND SHANGHAI

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COUNTRY REAL ESTATE OUTLOOK: HONG KONG

Economy: Downside risk to growth in the medium term amidst domestic political unrest and US-China trade tensions. Inbound tourism, retail sales and tourist-related sectors will likely continue to contract. Notwithstanding, government stimulus measures to provide temporary relieve for small businesses, logistics and tourism sectors.

Real Estate Market: Strong transparency levels but lack of investment opportunities as institutional grade assets are tightly held by local developers and REITs.

Risks: Domestic political unrest and slowing demand from mainland China will probably remain a major drag on economic activity

Real Estate Performance Outlook 2020-2024f

<table>
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<tbody>
<tr>
<td>Office</td>
<td>Negative</td>
<td>- Increasing economic uncertainty and political outlook could see leasing demand weaken further.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Office investment activity slowed significantly as investors remain on the sidelines.</td>
</tr>
<tr>
<td>Retail</td>
<td>Negative</td>
<td>- Sharp deterioration in visitor arrivals and retail sales will probably exert further downside risk with rents expected to see a further correction in the medium term.</td>
</tr>
<tr>
<td>Industrial</td>
<td>Negative</td>
<td>- Leasing volumes are expected to remain subdued with occupiers adopting a wait and see approach given the global economic uncertainties and weaker domestic retail outlook.</td>
</tr>
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</table>

EXHIBIT 36: ECONOMIC INDICATORS

EXHIBIT 37: HONG KONG OFFICE SUPPLY AND VACANCY RATE
COUNTRY REAL ESTATE OUTLOOK: SINGAPORE

Economy: Projected GDP growth averaging 2.4% per annum over the next few years. Near-term growth outlook remains challenging with close links to global and regional trade. Growth industries include wealth management, insurance and healthcare sectors. Technology, fintech and co-working constitute other major office demand drivers.

Real Estate Market: Strong transparency levels, highly liquid market. One of the largest REIT markets after Japan and Australia. High levels of foreign investor participation.

Risks: High export dependency risks to global demand and interest rate volatility from movements in global rates.

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<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Office</td>
<td>Neutral</td>
<td>- Office leasing conditions underpinned by low supply pipeline till 2022, though demand relatively subdued due to weak economic conditions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Moderate rental growth expected along with economic recovery as vacancy projected to remain at manageable levels</td>
</tr>
<tr>
<td>Retail</td>
<td>Neutral</td>
<td>- Bifurcation of the retail market with retail malls anchored by good tenant mix and sizeable resident catchment performing better than other malls with poorer positioning and more exposed to fluctuations in discretionary spending.</td>
</tr>
<tr>
<td>Industrial</td>
<td>Positive</td>
<td>- Gradual turnaround in industrial rents expected with significantly lower supply pipeline. High industrial yields in excess of 6%.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Focus on logistics warehouses with underlying exposure to non-discretionary spending (refrigerated) or growing regional consumption.</td>
</tr>
</tbody>
</table>

EXHIBIT 38: ECONOMIC INDICATORS

EXHIBIT 39: SINGAPORE OFFICE SUPPLY AND VACANCY

F = forecast. There is no guarantee the forecasts will materialize.
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COUNTRY REAL ESTATE OUTLOOK: AUSTRALIA

Economy: GDP is expected to expand by 2.7% per annum over the next five years, supported by public infrastructure spending and exports of commodities and services. The labour market conditions remain healthy although the pace of job creation is expected to moderate to 1.6% per annum from 2020-2024.

Real Estate Market: Strong transparency levels, highly liquid with a mature Australian REIT market. High levels of foreign investor participation.

Main Target Markets: Sydney, Melbourne, Brisbane

Risks: Slowdown in the global economy particularly a sharper than expected decline in the Chinese economy.

Real Estate Performance Outlook 2020-2024f

<table>
<thead>
<tr>
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<th>Outlook</th>
<th>Summary View</th>
</tr>
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</table>
| Office  | Positive| - Positive employment and population growth to support occupier demand across major office markets.  
- Rental growth in Sydney and Melbourne to remain healthy albeit at a more measured pace. The flattening of the yield curve is expected to push out the decompression cycle to 2023. |
| Retail  | Neutral | - Prime quality retail centres which are food, entertainment and services oriented continue to be sought after, although gaining access to stock may often require partnership with an experienced retail specialist. Given the divergence in the performance within each retail sub-sector, asset selection will be necessary. |
| Industrial | Positive | - Strong demand in Sydney and Melbourne underpinned by population growth and infrastructure investment. Rising e-commerce to support demand over the medium to long term.  
- Industrial assets remained keenly sought after with increasing trends towards capital partnering and joint ventures. |

EXHIBIT 40: ECONOMIC INDICATORS

EXHIBIT 41: SYDNEY OFFICE SUPPLY AND VACANCY

F = forecast. There is no guarantee the forecasts shown will materialize. Sources: DWS, Colliers, Oxford Economics. As of December 2019

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7 / Environmental, Social, and Governance (ESG) Outlook

The trend of environmental, social and governance investing has been increasingly relevant not just in the global context, but in Asia Pacific as well. Asian real estate corporations and portfolio managers have been notably raising their attention to sustainability performances and putting in-place execution strategies, as government pension funds, sovereign wealth funds and institutional investors increasingly commit to integrating ESG practices in their investment processes.

Based on the Global Real Estate Sustainability Benchmark (GRESB) survey, the regional average GRESB score for Asia improved from 66 in 2018 to 73 in 2019\(^{21}\), highlighting the increasing commitments by real estate companies and funds to sustainability. Australia and New Zealand continue to lead the region with the highest performing score for the 9th consecutive year, with increasing focus on social sustainability such as tenant well-being and environmental sustainability particularly on achieving zero carbon emissions.

Since 2010, Australia had made mandatory rating disclosures of NABERS ratings and Building Energy Efficiency Certificates for large office spaces exceeding 1,000 square metres, with over 1,810 certified buildings as of 2019\(^{22}\). In Japan, 817 buildings (national-level) and 23,501 (prefecture-level) have been certified by CASBEE\(^{23}\), while in South Korea, 377 buildings have been certified by LEED\(^{24}\) and 12,708 buildings by G-Seed, the green building certificate initiated by the South Korean government\(^{25}\). In Singapore, about 3,000 buildings or a third of the current stock have undergone Green Mark Certification, while the government has targeted 80% of all buildings to be certified by 2030\(^{26}\).

Green and sustainability-linked financing has also gained favour in recent years with several major developers in Singapore having secured green loans to build greener buildings or refinancing existing green buildings.

Sustainability considerations are becoming an increasingly important and integral component of commercial real estate investment decisions. Investors should pay more attention to ESG investing, particularly in countries with higher proliferation of sustainability initiatives, for example Australia where office buildings with certified sustainability initiatives are the norm rather than differentiating factor.

\(^{21}\) GRESB Global Real Estate Sustainability Benchmark 2019
\(^{22}\) NABERS Annual Report 2018/2019
\(^{23}\) CASBEE website, January 2020
\(^{24}\) USGBC website, January 2020.
\(^{25}\) G-Seed Homepage January 2020
\(^{26}\) Building and Construction Authority Singapore, June 2019

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- Adverse changes in economic conditions including changes in the financial conditions of tenants, buyer and sellers, changes in the availability of debt financing, changes in interest rates, real estate tax rates and other operating expenses;
- Adverse changes in law and regulation including environmental laws and regulations, zoning laws and other governmental rules and fiscal policies;
- Environmental claims arising in respect of real estate acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established;
- Changes in the relative popularity of property types and locations;
- Risks and operating problems arising out of the presence of certain construction materials; and
- Currency / exchange rate risks where the investments are denominated in a currency other than the investor’s home currency.
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