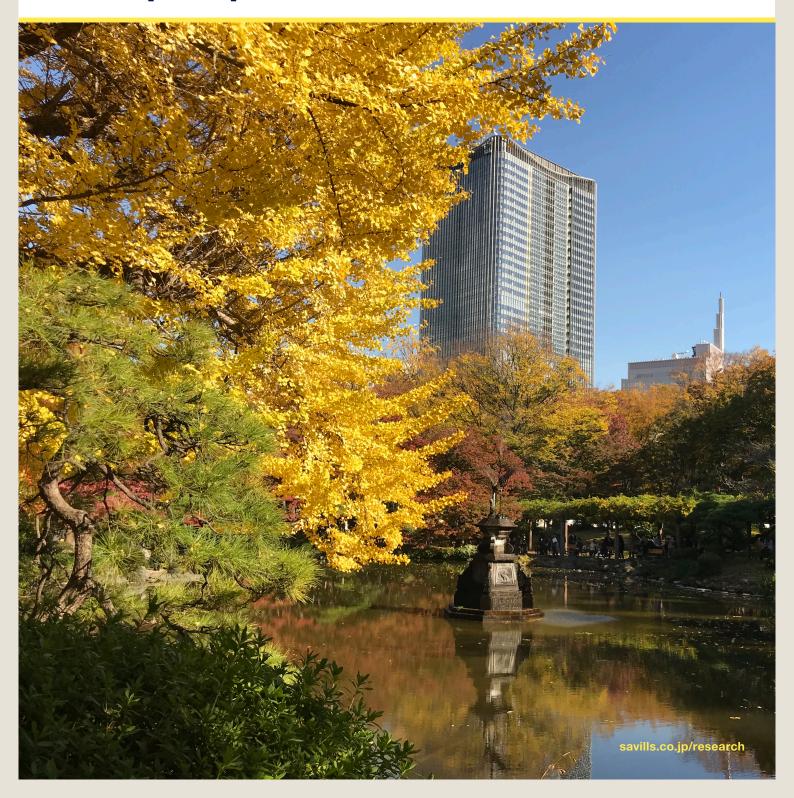


Spotlight 2017 review and 2018 prospects

January 2018



Spotlight 2017 review and 2018 prospects



Introduction

In 2017, Japanese real estate fundamentals have exhibited resilience and further growth, despite worries at the beginning of the year. Large upcoming office supply was the biggest concern, but pre-leasing activity was robust and rents continued their steady climb.

The force behind this strong performance is stable economic growth. Japan has posted seven consecutive quarters of GDP growth, and corporate profits have been breaking historical highs for years. Although wage growth is slow, the country's ever-tightening labour conditions must trigger further wage increases eventually.

Yields on core assets have been compressing below pre-recession levels and ticket prices look high. However, in a time of yield hunting, nothing looks cheap.

Globally, stocks are at record highs, including Japanese stocks. Bond valuations also remain bullish. Large investor interest in Argentina's 100year bond paying a 7% coupon and Iraq's first independent bond paying a 6.75% coupon suggests how yieldhungry investors are. In light of this new normal, Japanese real estate remains attractive, considering its favourable yield gap, stable nature, and room for rental improvement.

Low-yield environments are unlikely to change anytime soon considering global macro trends, including demographic factors that will persist for decades.

Globally, the United Nations reports that the number of persons aged over 60 is projected to double between 2015 and 2050 while the number of persons aged over 70 is projected to almost triple during the same period. This implies continuing increases in pensions and a growing need

for stable yields, which will result in downward pressure on yields and weak demand for capital.

Chinese investors are also pulling down yields by increasing investment volumes globally. The Investment category comprises over 40% of China's national GDP account. Real Capital Analytics (RCA) estimates that Chinese cross-border investment volume totalled US\$35 billion in 2016, and that the country's share of total global cross-border volumes increased from 2.4% in 2010 to 14.8% in 2016. In 2017, China's restrictions on capital outflows appear to have moderated its outbound investment. However, as the country's economy stabilises and continues to grow, Chinese crossborder investment is likely to also keep growing.

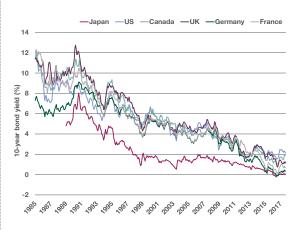
With central banks tapering off monetary easing, there will be some upward pressures on interest rates globally. However, policymakers are acting with caution to avoid disturbing the economy. Hence, any possible impact from policy changes is likely to be moderate. Japan's stable yield prospects should keep its real estate market attractive, at least through 2018.

Cap rates and investment volumes

Cap rates continued their gradual compression in 2017. Based on an in-house survey, cap rates for prime Tokyo office property tightened by 30bps to 2.9% from a year ago. Given limited investment opportunities and more capital chasing them, cap rates are expected to marginally compress by 10-20bps in 2018.

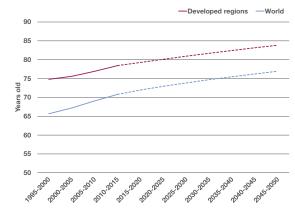
According to RCA, YTD investment in Japanese real estate totalled 2.9 trillion yen through Q3/2017, decreasing by 13% down from the same period in 2016. However, this is due to limited investment opportunities, not a lack of demand.

10 year bond yields, 1985-Q3/2017



Source: FRED Economic Data, Savills Research & Consultancy

GRAPH 2 Life expectancy, 1995—2050

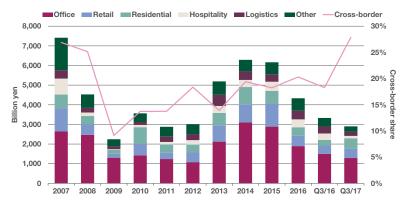


*"Developed regions" are comprised of Europe, North America, Australia & New Zealand, and Japan Source: United Nations, Savills Research & Consultancy

Cross-border investments accounted for 28% of total YTD volumes through Q3, 10 percentage points (ppts) up from the same period in 2016. Although J-REITs are still the most active players, their presence has diminished due to struggling unit prices. This trend appears as if it will continue in 2018.

As highlighted by Anbang Insurance's US\$2.3 billion portfolio acquisition,

Investment volumes and cross-border share, 2007-Q3/2017



Source: RCA, Savills Research & Consultancy

China's capital made up a large portion of cross-border investment. It is also noteworthy that Norges Bank invested over US\$800 million in five prime retail assets in Tokyo. This is the fund's first real estate investment in Asia.

In 2018, demand for Japanese real estate is likely to remain strong considering the country's positive leasing prospects and stable macro climate. A potential change in lending attitude may percipitate sales and help transaction volumes increase.

Office

Cap rates and investment volumes Cap rates for prime office property in Tokyo have compressed 30bps to 2.9%, based on an in-house survey, reflecting strengthening demand. A survey by Japan Real Estate Institute (JREI)1 puts expected cap rate premiums in Osaka, Nagoya, and Fukuoka at roughly 100bps, 130bps, and 150bps, showing continued attractive yield gaps. However, actual transaction yield gaps are typically

YTD investment in the Japan office market totalled JPY1.3 trillion yen as of Q3/2017. Overall investment declined by 14% from a year ago, but cross-border investment increased by 35%.

Outlook

much tighter.

Tokvo's office market has shown resilience, contrary to many market participants' worries at the beginning

Expected cap rates reported by JREI tend to be

of 2017. Strong pre-leasing is keeping occupancy tight, and strengthening demand has improved average rents across the central five wards (C5W).

Although a larger supply of Grade A office space is expected in 2018-2020, strong pre-leasing thus far indicates that the current growth trend is likely to continue towards late 2018 or even longer. Secondary vacancy will test the market in 2018 and become a harbinger of market direction in 2019.

Supply impact is likely to vary by submarket, as large supply is concentrated in certain areas. New, high-spec buildings are aiming to charge high rents and might have some temporary difficulty finding tenants in some areas. We are also carefully watching pre-leasing activity.

Offices in Osaka, Nagoya, and Fukuoka have exhibited strong performance in 2017. High-grade offices are performing particularly well, maintaining vacancy below 3% in all three markets. Rents in the three cities have improved 6.6%, 3.1%, and 16.5% YoY, respectively. Please refer to our December Regional Japanese Office Markets Spotlight for more details.

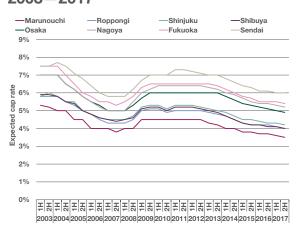
Rental levels in regional offices are growing, but the pace should slow in 2018 because of very limited available space.

Office rental index, 2007 — Q3/2017



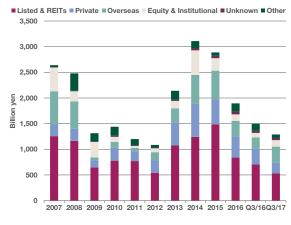
Source: Savills Research & Consultancy

GRAPH 5 Expected prime office cap rates, 2003 - 2017

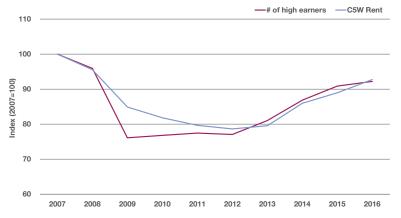


Source: JREI, Savills Research & Consultancy

GRAPH 6 Office investment volumes, 2007 — Q3/2017

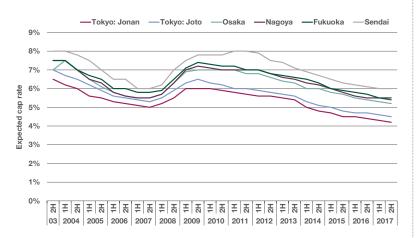


Upscale apartment rents vs number of high earners, 2007 - 2016



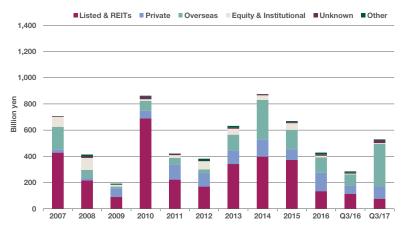
*For this analysis, high-income earners are people whose annual incomes exceed 10 million ven. Source: Ken Investment Advisors, National Tax Agency, Savills Research & Consultancy

GRAPH 8 Expected prime residential cap rates, 2H/2003—2017



Source: JREI, Savills Research & Consultancy

GRAPH 9 Residential investment volumes, 2007—Q3/2017



Source: RCA, Savills Research & Consultancy

Residential

Cap rates and investment volumes Based on an in-house survey, cap rates for mid-market residential property in the 23 wards have compressed 30bps to 3.7% from a year ago, while JREI's survey recorded 4.2% and 4.5% in Jonan and Joto areas, respectively. According to JREI, cap rates in Osaka, Nagoya, and Fukuoka also compressed at a similar pace and still exhibit premiums over Tokyo. Considering strong demand for stable yields, cap rates are expected to sharpen slightly, especially beyond Tokyo.

YTD investment in the Japan residential market totalled 530 billion yen as of Q3/2017. Cross-border investment saw a significant increase, largely due to Anbang Insurance's aforementioned portfolio acquisition. Stable yields from residential assets in Japan appear to remain attractive for investors, and buying opportunities are likely to stay limited.

Outlook

Urbanisation and preference for convenient locations continue to drive up populations and housing demand in city centres. Workforce participation – especially by women – due to tightened labour conditions improved household incomes, resulting in higher demand for convenient, central locations to ease commutes.

Rental trends have been stable and growing in Tokyo. Rents declined only 10% in the C5W after the financial crisis and have recovered to pre-recession levels. Given underlying macro trends, gradual rental growth should continue through 2018.

As the number of high-income earners gradually returns to prerecession levels, upscale apartment rents have also been improving. According to the National Tax Agency, the number of people earning over 10 million yen declined almost 25% after 2007 and bottomed out in 2009. Both this figure and upscale apartment rents have since been increasing in tandem. As of Q3/2017, the base-2007 rental index sits at 94, up by one point from 2016.

Retail

Cap rates and investment volumes According to JREI, expected cap rates for prime retail property in Ginza and Omotesando have compressed 10bps to 3.6% and 3.7%, while those in Osaka stood at 4.8%. Actual market cap rates tend to be significantly lower than those in JREI's survey; it is rumoured that prime retail properties are trading at around the mid- to high-2% range in Tokyo and 3.0% in Osaka. Although cap rates appear tight already, further compression is possible considering a massive amount of capital is going after prime assets.

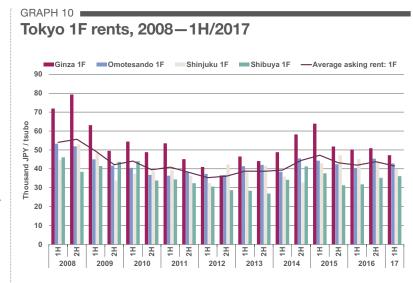
YTD investment in retail property has increased by 11% from a year ago and totals 477 billion yen. Overseas investors have more than doubled their investment volumes against the same period in 2016. This is partially due to Blackstone's acquisition of Croesus Retail Trust for about 70 billion yen.

Outlook

Prospects for urban retail are positive as consumer confidence gradually returns and income growth is slow but on track. Inbound tourists also have contributed to growth in retail sales with large purchases of cosmetics and duty-free items. As of Q3, total spending by tourists stood at 3.3 trillion yen, representing a 15% YoY increase.

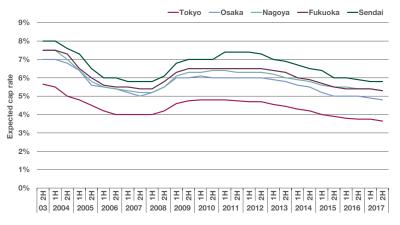
According to JREI's survey, 1F rental growth in Tokyo's prime retail areas has been generally flat in 2017 while non-1F rents have kept growing since 2013. With no significant changes expected in underlying macro factors, the trend is likely to continue in 2018.

Based on the Ministry of Economy, Trade and Industry's (METI) estimate, cross-border e-commerce export volumes from Japan to China totalled 1.04 trillion yen in 2016. iResearch, a Chinese consumer insight consultancy, reports that 35% of such buyers make cross-border purchases because they tried those items overseas, so retail locations with heavy tourist footfall may see rental premiums for their value as marketing and promotional tools.



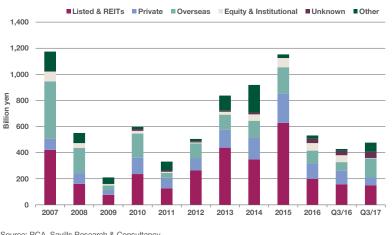
Source: JREI, BAC Urban Projects, Savills Research & Consultancy

Expected prime retail cap rates, 2H/2003-2017



Source: JREI, Savills Research & Consultancy

GRAPH 12 Retail investment volumes, 2007—Q3/2017



Source: RCA, Savills Research & Consultancy

Hotel

Cap rates and investment volumes

According to JREI, expected cap rates for hotels in Tokyo have compressed 30bps to 4.5% from a year ago. Although Osaka is a bright spot as strong inbound tourism is rapidly increasing lodging demand, it is still seeing a yield gap of 50bps over Tokyo. Cap rates for budget hotels are likely to be stable after some recent adjustments. Investors are increasingly seeing fixed-term leases on hotels as favourable tactics to retain yield spreads over office leases while still taking operator's credit risk.

YTD hotel transaction volumes totalled 121 billion yen as of Q3. Although volumes declined from a year ago, several major transactions such as Sheraton Grande Tokyo Bay Hotel and Sunroute Plaza Tokyo took place. Ballooning new supply in Osaka and Tokyo and the legalisation of peer-to-peer accommodation, or "minpaku", may somewhat soften the market.

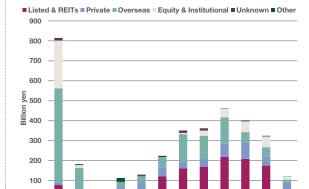
Outlook

An emerging middle-class in Asia and full support from the Japanese government have been fuelling tourism demand. The government is

Source: RCA, Savills Research & Consultancy

GRAPH 15

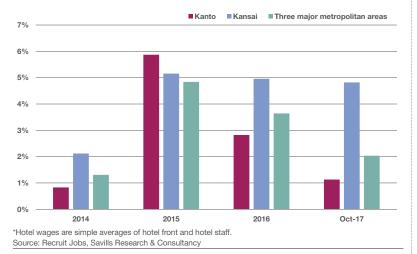
Q3/2017



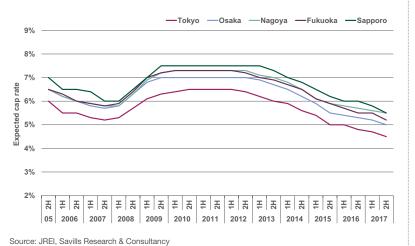
2012 2013 2014

Hotel investment volumes, 2007—

GRAPH 13 Wage growth for part-time hotel workers, 2014— Oct 2017



GRAPH 14 Expected hotel cap rates, 2H/2005-2017



earmarking a large budget to attract more tourists from diverse countries. Integrated Resort development should be another strong tailwind. The hotel sector is doubtlessly best situated to benefit toward the 2020 Olympics.

2009 2010 2011

Having said that, hotel performance growth has been slowing, after rapid improvement since 2012. While occupancy still remains high, average daily rate (ADR) growth is flattening out. An influx of budget hotel supply and competition from minpaku are likely holding back growth.

Minpaku legalisation has cleared the path for major companies such as Rakuten and Tujia, which may result in further competition. To fend off this supply impact, it is increasingly important to differentiate products through branding, renovations, service improvement, and other efforts.

Additionally, a shortage of workers is putting a strain on hotels. Wage increases in recent years and high turnover ratios in the hospitality industry add operational risk, which makes future cashflows less predictable. The balance between solid fundamentals and risk factors must be monitored even more closely in 2018.

Logistics

Cap rates and investment volumes According to JREI, expected cap rates have tightened 40bps to 4.6% in Tokyo and 50bps to 5.0% in Osaka from a year ago. Japan Logistics Fund, a J-REIT, recently estimated an NOI cap rate of 3.8% for its acquisition of the Yokohama Machida IC Logistics Centre, which indicates further compression may be possible.

YTD investment in industrial property totalled 203 billion yen in Q3/2017. There has been an investment shift to areas outside of Tokyo as illustrated by Greater Osaka's increasing share - up to 24% from 14% a year ago. The Q3/2016 figure includes CBRE Global Investors' acquisition of 170 Mitsubishi Fuso bases for over 100 billion yen, which largely contributed to a YoY decline in Q3/2017.

Outlook

Average rents in Greater Tokyo increased by 1.4% YoY as of

October, according to Ichigo Real Estate Services. On the other hand, the Greater Osaka area experienced a rental decline of 3.5% YoY as record-breaking levels of new supply

In Greater Tokyo, supply growth slowed partly due to rising land prices and diminishing availability of development sites. Some areas near new highways in Chiba and Kanagawa experienced 30%-40% increases in industrial land prices between 2012 and 2017 based on the government's Chika Koji land price report. Increasing competition is also exhausting sites available for logistics developments.

However, the government is steering towards relaxing rules that regulate conversions of agricultural land into other uses. DPL Nagareyama is the first logistics facility that will be built on one of the most strictly regulated

- including two giant projects of over 150,000 sq m - loosened vacancy to

Expected 05 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Expected logistics cap rates,

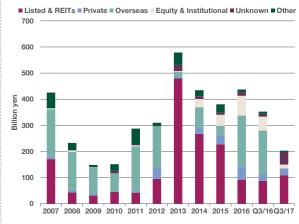
Source: JREI, Savills Research & Consultancy

GRAPH 17

GRAPH 16

2H/2005-2017

Logistics investment volumes, 2007 —

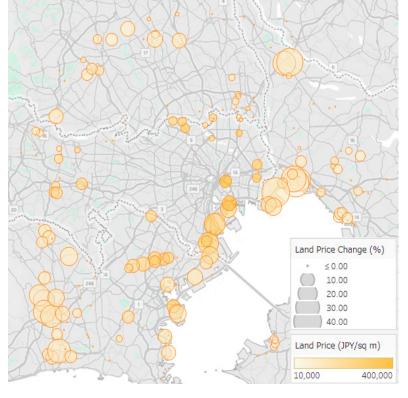


Source: RCA, Savills Research & Consultancy

categories of agricultural land. If more cases like this occur, supply growth may accelerate in some areas.

Overall, existing facilities with strong tenant profiles are likely to continue to perform well while new large properties may take time to fill space. Increasing labour cost favours sites proximate to population centres. Growing demand for satellite logistics facilities that handle last-mile delivery to end users is another factor drawing new developments nearer to population centres.

MAP 1 Industrial land price change, 2012—2017



 $\underline{ \text{Source: MLIT, } @ \text{ OpenStreetMap (www.openstreetmap.org/copyright), Savills Research \& \text{ Consultancy } } \\$

Healthcare

Cap rates and investment volumes Senior housing facilities became an investable asset class in Japan in 2013/2014. Cap rates for senior housing have significantly compressed to the mid-4% range in Tokyo and the mid-5% range in regional cities, resulting in only slim premiums over residential assets. The appraisal cap rate on the Niigata Rehabilitation Hospital, the first hospital incorporated into a J-REIT, was 7.4%.

In 2017, healthcare asset transaction volumes totalled about 23 billion yen, or a roughly 40% increase from 2016. In addition to J-REIT purchases, the Singaporean

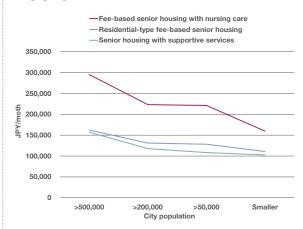
REIT Parkway Life acquired five properties for 4.8 billion yen.

Outlook

Demand for healthcare will only increase as the over-75 population balloons from 16 million to 22 million between 2017 and 2025 KPMG estimates that Japan's senior housing² market totalled 10 trillion yen as of June 2016, while the hospital market totalled 23 trillion yen. Mergers such as the one between Kenedix and Japan Senior Living may facilitate consolidation of currently fragmented markets and make healthcare a sizable investment category. The sector has

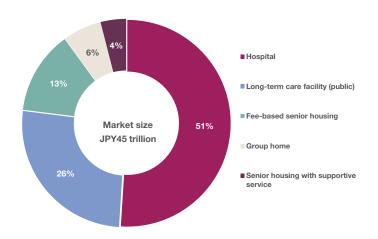
Fee-based senior housing, senior housing with supportive services, and group homes are included in the market size estimate

Total monthly fees by facility type and city population size



*Fees include housing rents, maintenance, and service fees Source: Nomura Research Institute, Savills Research & Consultancy

GRAPH 18 Healthcare real estate market share, 2016



Source: KPMG, Savills Research & Consultancy

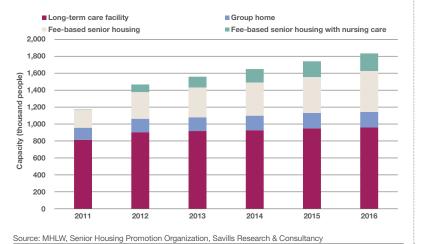
promising prospects, given its large market size and strong growth story, but it is currently too fragmented to attract much institutional attention.

A government survey indicates that occupancy for fee-based senior housing has held steady above 80%. According to a 2016 survey conducted by Nomura Research Institute, monthly fees vary widely depending on location, especially for fee-based housing with nursing care. This indicates the importance of selecting advantageous submarkets.

Inherent risks in the sector include regulatory changes; current policy limits supply growth, and a change could impact future supply and demand balance. Healthcare fees are also heavily regulated by the government, with the next revision scheduled for 2018. This could impact revenue for some facilities.

A labour shortage of care workers is also a persistent issue. Between 2013 and 2016, effective job opening-to-application ratios for care workers increased from 1.83x to 3.05x. Wage growth, increased workers from overseas, and effective use of technology are needed for stable growth in this sector.





Opportunities and risks

Opportunities

Demand for Japanese real estate remains strong and competition for quality assets is fierce. Pension funds such as GPIF and other governmentrelated entities intend to increase their exposure to real estate for diversification and improved returns. J-REITs may come back to the market in 2018 if outflows of J-REIT focused mutual funds stabilise. There may be more opportunities for various players in 2018. Below are some of our investment ideas for Japan.

Core and Core-plus

Core and Core-plus remains the most sought-after segment. Increasing demand for stable returns continues to compress yields across multiple asset classes and geographies. The office sector is performing better than initially expected and pre-leasing through the end of 2018 looks strong. Prime urban retail is also sound, as illustrated by the mid-2% cap rate in Tokyo and 3% in Osaka. Residential has seen gradual rental increases and the growth is expected to continue as labour demand strengthens.

Value add

Exponential growth of inbound tourists continues to be a driver for hotel demand. Upscale hotels are relatively insulated from supply growth and, unlike budget hotels, improved performance may be obtainable through product differentiation

Satellite logistics facilities that handle last-mile deliveries may also see demand growth, given the growth in B2C e-commerce. However, increasing land prices and scarcity of sites may limit development opportunities.

Regional offices have shown strong growth. With tight occupancy and limited supply, rental growth is likely to continue. However, very low availability also means that rental growth could take more time going forward.

Opportunistic

There were several major portfolio sales in 2017, including Astro Japan Property and Croesus Retail Trust, and such transactions may continue in 2018. J-REIT takeovers may be tougher and take more time, unless NAV discounts become significant. Additionally, shrewd investors may be able to identify underutilised assets and enhance NOI through tenant reshuffles, renovations, conversions, and service improvements.

Alternative

Although alternative assets are still facing issues in scalability and market fragmentation, first-mover advantages can be significant and the possibility of handsome yields is stirring up investment interest. Healthcare, data centers, student housing, and self-storage facilities are popular alternative asset types.

In 2017, several major players made moves in this category. A merger between Kenedix and Japan Senior Living may facilitate consolidation in the healthcare space. Digital Realty Trust and Mitsubishi Corp. launched a data centre joint venture with initial assets of 40 billion yen. Star Asia and GSA are developing their first student accommodation facility in Bunkyo, and Mizuho Bank plans to start a 10 billion yen fund to build dormitories. Additionally, Ichigo made its foray into the storage-space market with its acquisition of Storage Plus. If these companies facilitate consolidation of fragmented markets, these alternative assets could become more investable for a wider audience of institutional investors.

Risks

Interest rates

Although the Bank of Japan (BOJ) is continuing its monetary easing policy, upward pressure on interest rates is expected to grow as the Fed has started tapering, and the European Central Bank is likely to follow suit. With the BOJ's balance sheet ballooning and the bank's government bond holding at a historical high, it will be increasingly difficult for the BOJ to stave off external pressure to taper. Having said that, possible increases for 2018, if any, are likely to be no

more than 25-50bps, given Japan's political and economic stability and limited capital demand.

We have observed subtle changes on lending attitudes. In general, banks are still positive for property lending but appetite more clearly differs from bank to bank. Also, some banks have become unwilling to take on high levered deals, but mezzanine providers are available. More banks appear to be comfortable for lower levered deals. Foreign lenders recently came back to the lending market. There is no major change at this moment, but these might be harbingers of what to come next.

Overseas risks

The ruling Liberal Democratic Party solidified its position in October's snap elections, limiting the risk of domestic confusion in 2018. On the other hand, overseas instability, especially in the U.S., Europe, and China, may alter the macro climate and affect market fundamentals of Japanese real estate.

Upcoming office supply

Pre-leasing activity is strong and current secondary vacancy does not seem to be an issue at least through 2018. However, secondary vacancy becoming available in 2019 could cause some softness in the market in 2018. Additionally, large supply is concentrated in some specific areas, which may loosen vacancy in those areas.

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