

# APAC EMERGING OFFICE LOCATIONS

December 2021

## IN A NUTSHELL

- \_ Well connected, high quality office buildings in key emerging locations expected to benefit from enhanced transport connectivity and emerging clusters of technology, gaming or life sciences.
- \_ Gentrified locations within Melbourne and Brisbane with a high degree of vibrancy to gain advantage from major infrastructure projects that are currently underway.
- \_ Life science sector expected to advance further in light of the COVID-19 pandemic and will favor submarkets such as Macquarie Park.
- \_ South Korea's 'Silicon Valley', Pangyo and Bundang are a major IT and gaming hub with proximity to commuter towns.
- \_ Tenjin and Hakata have seen more resilient demand compared to Tokyo and are poised to become the next high-tech hub in Japan underpinned by a higher proportion of youth population.

## Why Emerging Office Locations

Many cities across APAC continue to grow at an aggressive pace. And with this growth has come the emergence of new and exciting urban locations. We see these locations offering attractive office investment opportunities with the potential for returns well in excess of the traditional city core.

These locations are often the home of rapidly expanding business clusters – centered around growth sectors such as technology, gaming or life sciences – and supported by improving infrastructure. In this paper we will provide details of emerging location in Sydney, Melbourne, Brisbane, Seoul and Fukuoka.

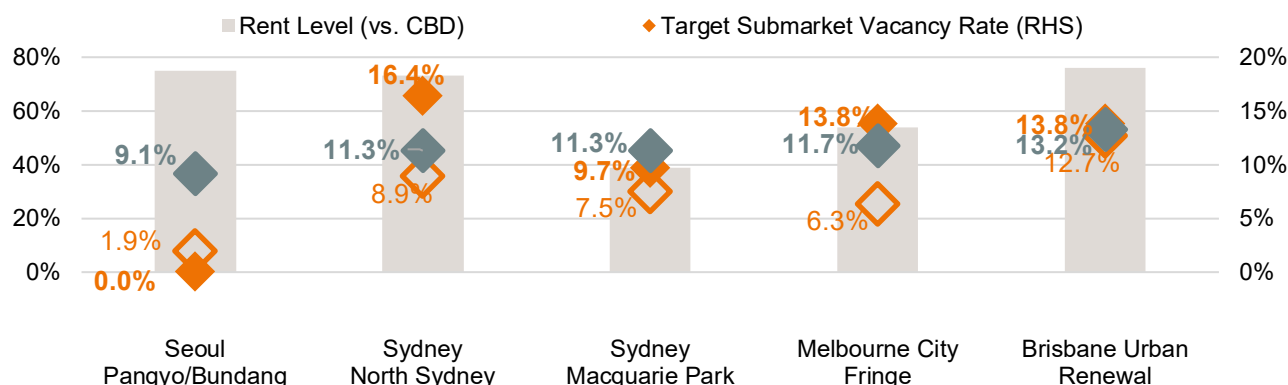
Rents for these new office areas are still relatively affordable compared to the CBD while yield convergence with the existing CBD can be expected as the submarket matures. Environmental, Social and Governance (ESG) considerations will also be at the forefront of both occupier and investment decisions with factors such as workplace wellness anticipated to underpin demand for high quality stock.

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**EXHIBIT 1: RENT LEVEL AND VACANCY RATES IN EMERGING LOCATIONS**



Source: DWS, JLL, Colliers, Miki Shoji, Sanko Estate, Mateplus. As of November 2021

Notwithstanding the current elevated vacancy rates due to the increase in supply such as in North Sydney and Melbourne City Fringe, the long-term vacancy rate generally sits below that of the CBD. In office markets such as Pangyo and Bundang in Seoul, there are no vacancies available given the sustained occupier demand particularly from technology companies.

The outlook for these office submarkets remains strong. Over the long term, vacancy rates are expected to converge towards its long-term average and with potential gains from improving infrastructure coupled with demand from new business clusters, these emerging locations are set to drive rental outperformance over time.

**EXHIBIT 2: STOCK AND RENT LEVEL**

Higher Investability		Investable				
Market		Reference		Key Factors		
Country / City	Submarket	Stock (mil qm)	Rent Level (vs CBD)	Transaction (US\$m, 5y ave.)	Remarks	
S. Korea Seoul	Pangyo/Bundang	4.1	75%	809	Korea's <b>Silicon Valley</b> with tech and gaming firms. Transaction moratorium now lifted.	
	Magok	3.5	41%	200	Emerging R&D Hub for biotech, materials and chemical.	
Australia	Sydney	Macquarie Park	0.9	39%	62	New Metro in 2024. <b>Life sciences hub</b> .
		North Sydney	0.9	73%	772	Close proximity to CBD, upcoming Metro line in 2024.
		Parramatta	0.8	57%	359	Government occupiers
	Melbourne	City Fringe	1.1	54%	49	Collingwood & Cremorne <b>digital and creative hub</b> .
		St. Kilda	0.6	44%	308	Close proximity to CBD
		Southbank	0.4	60%	295	Close proximity to CBD
	Brisbane	Urban Renewal	0.5	76%	52	<b>IT &amp; tech hub</b> , Cross River Rail in 2024
Milton		0.2	61%	23	Engineering, design and digital industries	
Japan	Tokyo	Emerging 8 Wards	11.6	72%	3,184	Relocation of HQ of mid-sized offices and satellite office demands.
		Yokohama	6.4	57%	1,667	Asset sizes tend to exceed \$400m in MM21
	Fukuoka	Tenjin & Hakata	9.6	60%	354	The fastest population growth and the highest share of <b>young generation</b> in Japan
Singapore	Decentralized	2.8	59%	412	Lower occupancy costs	

Source: DWS, JLL, Colliers, Miki Shoji, Sanko Estate, Mateplus, Genstar. As of November 2021.

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High quality office developments along with improvements in connectivity have accelerated the development of emerging office locations. New economy growth drivers such as technology and creative industries have transformed these locations into a work-live-play precinct such as the Melbourne City Fringe and Brisbane's Fortitude Valley in Australia. The growing technology and gaming sector in Pangyo and Bundang in Seoul, South Korea, have also been accelerated by the improvement in connectivity via the Shin-Bundang subway line. Rising youth population in Tenjin and Hakata in Fukuoka, Japan coupled with more resilient demand compared to Tokyo have seen the submarket emerging as the next high-tech destination.

The life science sector is anticipated to advance further as funding towards this sector increases particularly in light of the COVID-19 pandemic. As life science companies prefer to reside in clusters that foster collaboration and innovation, they are usually connected to universities and hospitals. Macquarie Park in Sydney is an example of an established life sciences cluster where the co-location of such infrastructures is important for many of the life sciences and pharmaceutical companies given the research and development (R&D) partnerships.

Higher investability of office stock and superior amenities and urban design in these emerging locations are characteristics of particular importance to a new breed of tenant. These pull factors coupled with rental affordability are expected to attract a new generation of employees through the development of innovative and flexible workspace particularly in the technology and creative hubs.

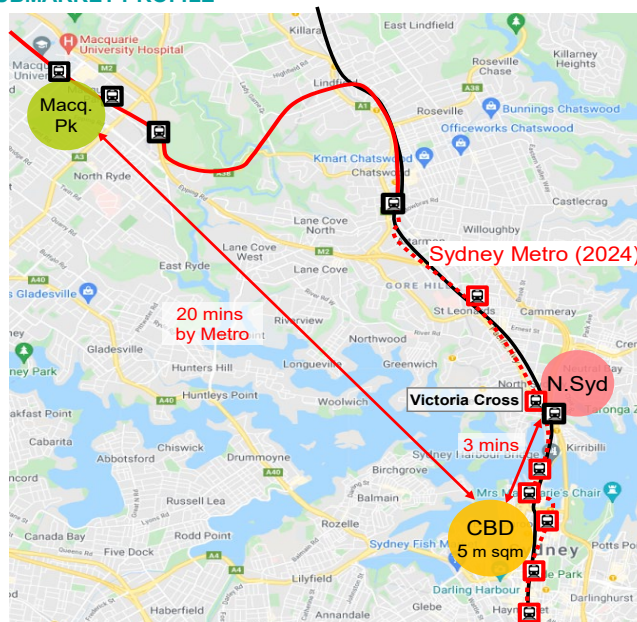
## Australia

### North Sydney and Macquarie Park

The North Sydney office market is one of the most liquid markets with a diverse investor base. Availability of good quality office stock, improving amenity and public transport accessibility such as the upcoming Sydney Metro line (Victoria Cross Station) in 2024 have strengthened North Sydney's status as a media and technology hub. Major firms including Microsoft, SAP and Nine Entertainment are examples of companies establishing their headquarters in this precinct.

Public transport accessibility and the relatively affordable rent in North Sydney makes it an attractive location for tenants. The revitalization of this precinct is already underway including the improvement in retail amenities around the new Victoria Cross station and the pedestrian's walkway along Miller Street that are expected to complete over the next four years.

**EXHIBIT 3: SYDNEY OFFICE SUBMARKET PROFILE**



Submarket	Highlights
<p><b>North Sydney</b> (stock: 0.9 mn sqm)</p>	<ul style="list-style-type: none"> <li>▪ Close proximity to CBD.</li> <li>▪ Prime rents 25% lower than Sydney CBD.</li> <li>▪ Tech and media clusters (such as Microsoft, SAP, Nine Entertainment)</li> <li>▪ Metro line (Victoria Cross Station) completing in 2024 will improve commuting time to CBD to 3 minutes.</li> </ul>
<p><b>Macquarie Park</b> (stock: 0.9 mn sqm)</p>	<ul style="list-style-type: none"> <li>▪ Established life sciences cluster and headquarters of major pharmaceutical companies including Johnson &amp; Johnson, Novartis and AstraZeneca.</li> <li>▪ Expected completion of the metro line in 2024 will reduce commuting time to 20 minutes.</li> </ul>

Source: DWS, Google. As of November 2021.

Located approximately 18km from the Sydney CBD, the total stock of the Macquarie Park office submarket is similar to North Sydney. The appeal of the submarket has been the ability to occupy large floor plate and campus-style office buildings incorporating generous car parking provisions. Development in Macquarie Park has been demand-led with purpose-built campus facilities for multi-national corporations in the pharmaceutical and education sectors.

One of the unique features of the Macquarie Park is the Macquarie University and the Macquarie University Hospital which have played a key role in attracting life sciences and pharmaceutical companies. The co-location of the hospital and the university are important for many of these companies given the research and development (R&D) partnerships. Several major pharmaceutical companies such as Johnson & Johnson, Novartis and AstraZeneca are all headquartered in the submarket.

Looking ahead, the life sciences sector is expected to accelerate further as the COVID-19 pandemic has highlighted the sovereign risk associated with being overly dependent on offshore production and imports of medical equipment and therapeutics. There is already a strong push from the Government to create a more resilient supply chain as well as increasing domestic capability relating to pharmaceutical life sciences.

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In July 2021, the New South Wales government released a 20-year strategy roadmap for Macquarie Park to further develop it into a life sciences hub. One of the major plans is to improve connectivity of Macquarie Park to other parts of Sydney and this will be via the Sydney Metro line which is expected to complete in 2024. It will reduce the travelling time to the Sydney CBD from 30 mins to 20 mins.

## Melbourne City Fringe

The Melbourne city fringe market draws tenant demand from creative industries and technology firms. The submarket is well serviced with retail amenity and connectivity to public transport networks. This submarket has undergone gentrification and it has attracted many younger employees who also reside in these inner suburbs and prefer to live and work in the same area.

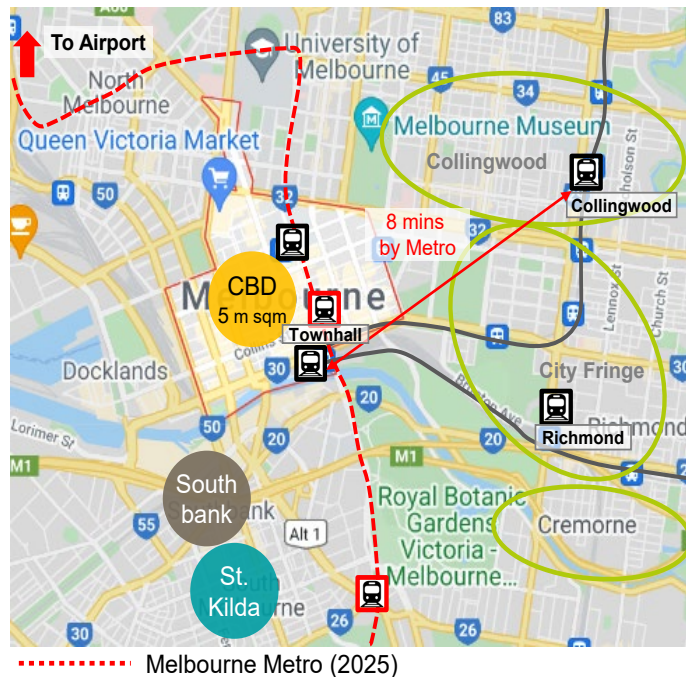
Richmond station is a major metro hub providing easy access to the population from the South East suburbs while Collingwood station provides access to residents in the North East. The new Melbourne Metro in 2025 at Townhall Station will improve connectivity given that it will have a direct link to Melbourne Airport in 2029 (via Melbourne Airport Rail).

Within the city fringe sub-market, the more established submarkets include the Richmond and Cremorne precinct which have become Melbourne's tech hub, housing a number of technology and creative companies including Tesla, MYOB, Walt Disney as well as listed advertising company REA. The presence of these major technology companies provides an anchor to the precinct supporting a wider ecosystem of start-ups and entrepreneurs.

Collingwood is expected to benefit from the existing and growing agglomeration of retail related industries. The suburb has undergone gentrification and represents an affordable alternative to Richmond and Cremorne with relatively similar demographic profile. This is exemplified by the establishment of headquarters by Swisse and most recently Australia's skincare company Aesop.

The rise of co-working spaces commonly associated with start-ups and entrepreneurs particularly in the creative and technology industries have seen a growing number of co-working spaces establishing their presence in these submarkets. For instance, Hub Australia has recently committed to taking up spaces in Richmond while The Commons has leased space in Collingwood.

**EXHIBIT 4: MELBOURNE OFFICE SUBMARKET PROFILE**



Submarket	Highlights
<p><b>City Fringe</b> (stock: 1.1 mn sqm)</p> <p>Collingwood Richmond Cremorne</p>	<ul style="list-style-type: none"> <li>City Fringe identified as clusters of <b>creative and technology</b> hub. Major companies headquartered in this precinct include Tesla, Walt Disney and REA Group.</li> <li>Gentrification of Collingwood and proximity to University of Melbourne have attracted young and well educated working population.</li> <li>Well serviced with retail amenity and connectivity to public transport networks (Collingwood &amp; Richmond Station).</li> </ul>

Source: DWS, Google. As of November 2021.

## Brisbane Urban Renewal

Urban renewal is located about 2.5 kilometers North East of the Brisbane CBD and is a natural extension of the Brisbane CBD. The submarket has undergone a significant urban renewal program which has transformed the precinct into a work-live-play area.

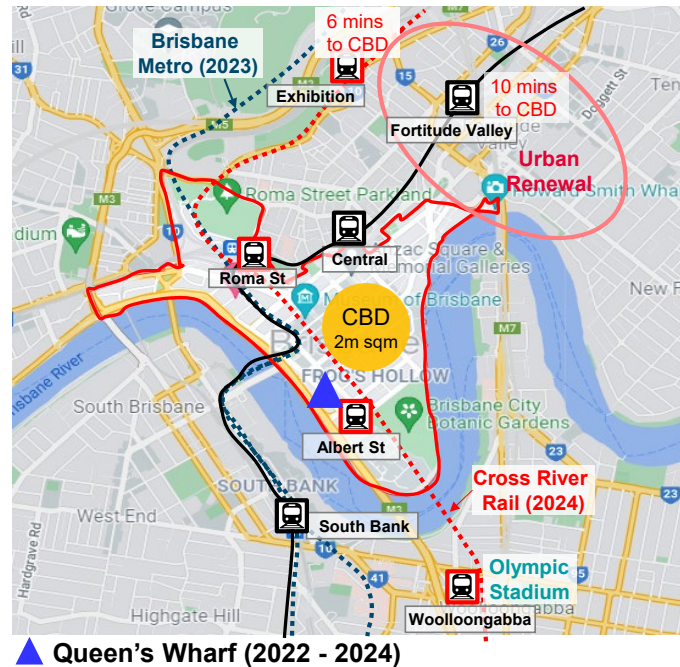
The Fortitude Valley train station is one stop away from the Brisbane Central Station and this gives businesses comfort when relocating outside of the CBD as it does not materially alter the commuting habits of its employees. Several infrastructure projects are currently underway including the Brisbane Metro in 2023 and Cross River Rail Project in 2024, improving connectivity between the north and south of Brisbane.

Greater amenity and better car parking ratios have enticed major corporates to relocate from Brisbane's CBD including engineering company Aurecon and rail transport firm Aurizon who moved out of the CBD in 2018. The major points of attraction for large corporate tenants are occupying office blocks entirely by themselves and access to a greater number of car parks.

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The Brisbane Olympics 2032 is expected to bring major economic benefit and raise the city’s profile globally. While the majority of infrastructure is already in place, some new projects could be delivered to facilitate the games. These include Brisbane Live, the main aquatic venue which will be built above the Roma station transport hub and this will likely benefit the North precinct of the Brisbane CBD given that some rejuvenation activities are expected to occur in the area.

**EXHIBIT 5: BRISBANE OFFICE SUBMARKET PROFILE**



Submarket	Highlights
<b>Urban Renewal</b> (stock: 0.5 mn sqm)	<ul style="list-style-type: none"> <li>▪ The <b>Cross River Rail</b> completing in 2024 will reduce travelling time from 10 mins to 6 mins.</li> <li>▪ This precinct has undergone significant urban renewal transformation with several new Grade A office developments.</li> <li>▪ Over A\$10bn major infrastructure projects in the Brisbane CBD are already underway with expected completion between 2022-2024.</li> <li>▪ Brisbane Olympics in 2032 is set to bring major economic benefit and raise the city’s profile globally.</li> </ul>

Source: DWS, Google. As of November 2021.

## South Korea

### Pangyo / Bundang (near Seoul or Seoul suburb)

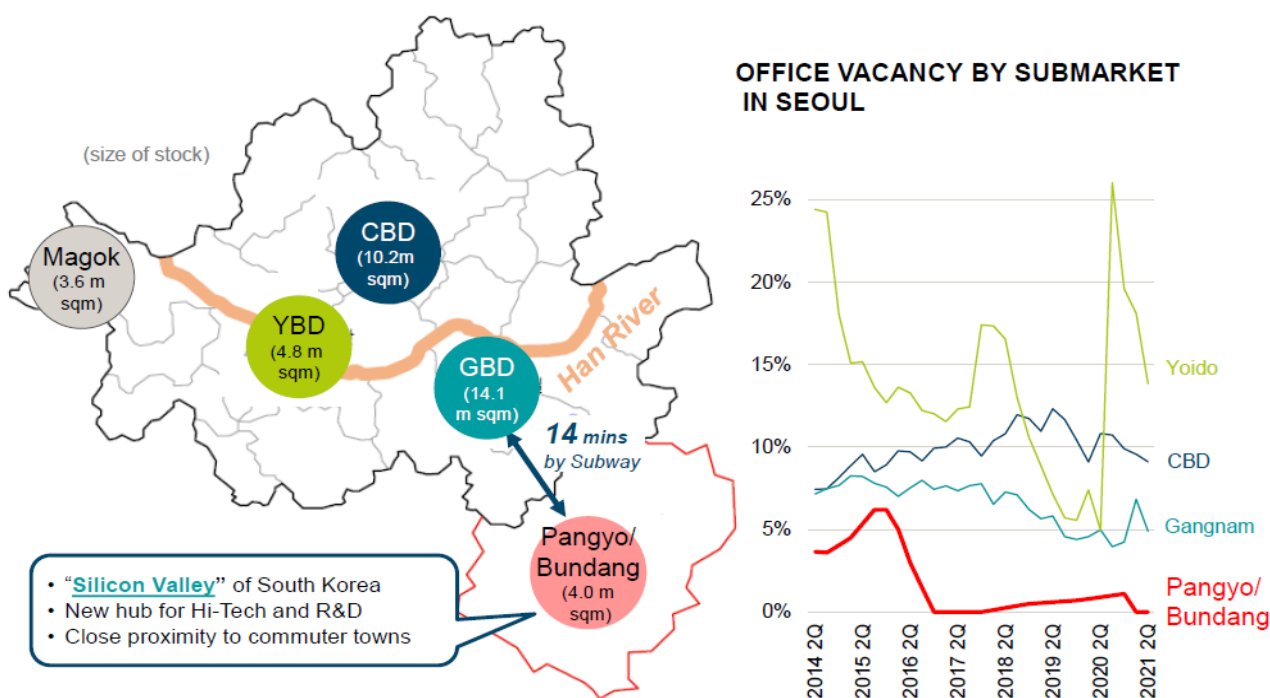
Pangyo, dubbed as the Silicon Valley of South Korea, is located 10km South East from the Gangnam area in Seoul. The office submarket has been developed by the Korean government as a hub for hi-tech and startups. Since the completion of the first office building in 2009, it has grown rapidly to become the fourth largest office submarket with 3.0 million square meters of office stock with an average building age of seven years as of 2021. The submarket is now home to more than 1,300 companies and 70,000 employees. Bundang had been the traditional office fringe area of Gangnam with 1.0 million square meters of office stock, increasingly merging with the Pangyo area to form the broader office submarket.

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Currently the Pangyo / Bundang office submarket is the most popular office location for the country's IT and gaming companies, while office and laboratory demands are also increasing from life science, automobile and manufacturing industries given its built-in next generation office specifications. Its connectivity with Gangnam and the satellite cities have been significantly improved with the opening of the Shin-Bundang subway line in 2011, shortening the travel time to Gangnam from 45 minutes to 14 minutes. Other public transportation projects are also underway to enhance the accessibility to core Seoul and Greater Seoul's key residential areas.

It is noteworthy that real estate transactions and re-leasing of owner-occupied space in the Pangyo techno valley area had been strongly regulated until recently. The Korean government has previously imposed regulations to office landlords limiting ownership change for ten years and re-leasing to third parties for 20 years from the date of registration, as a condition for tax benefits and land price discount. The transaction moratorium has also been lifted since 2020, while re-leasing restrictions will remain for another ten years to maintain office occupancy.

**EXHIBIT 6: PANGYO/BUNDANG OFFICE SUBMARKET PROFILE**



Source: DWS, Avison Yong, Colliers. As of November 2021.

## Japan

### Tenjin and Hakata in Fukuoka CBD

As the educational and economic center of Kyushu Island of 13 million inhabitants, Fukuoka metropolitan area is one of the four largest metropolitan areas in Japan following Tokyo, Osaka and Nagoya. Its economic size of USD 454 billion in 2018 in terms of annual gross production was larger than the GDP output of Singapore and Hong Kong. The population growth of Fukuoka city was fastest among major Japanese cities in the last decade with the highest share of youth population in the country. Given its geographical proximity, Fukuoka has served as a gateway to neighboring Asian countries and has become the second largest host of international convention events with the largest number of international cruise ship visits in Japan.

Fukuoka CBD has two established office submarkets, namely Tenjin and Hakata. Tenjin office submarket is the traditional business and retail hub of Fukuoka and entire Kyushu island, where the city government office, local company headquarters

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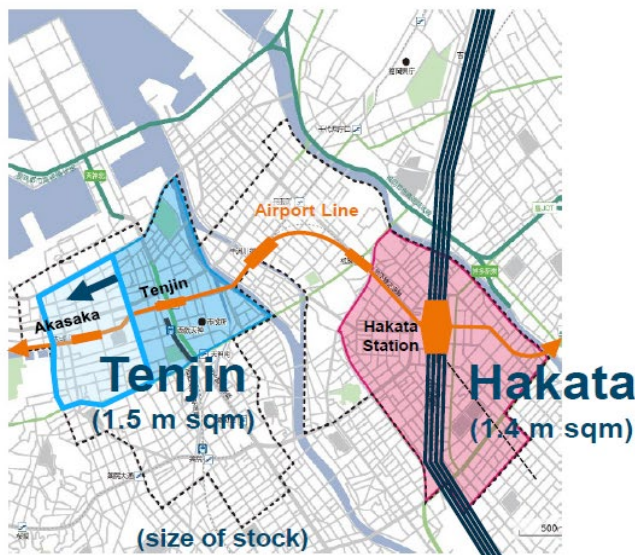


and most department stores are located. Its main avenues are usually packed with young office workers, tourists and shoppers with strong amenities and urban lifestyle experiences. On the other hand, Hakata office submarket is also the established and still growing office submarket, adjoining Hakata train station for “Shinkansen”, or the Japanese bullet train, and the Fukuoka international airport. It has increasingly become the primary choice for office tenants who want to benefit from good transportation connectivity to other metropolitan areas.

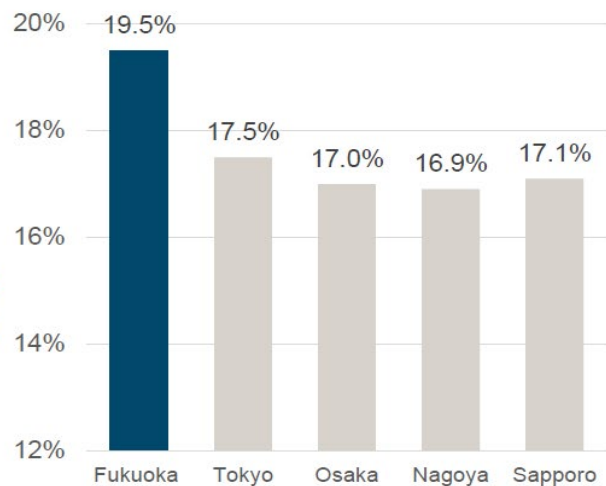
Fukuoka’s office market has been under the radar for a long time, mainly due to the lack of the investable assets and building height restrictions by the Civil Aeronautics Act. The height of office buildings in Fukuoka had been limited to 76 meters or equivalent to 16-17 floors, capping the floor area size and thus deal size suitable for the institutional investors.

However, ongoing urban revitalization projects including “Tenjin Big Bang” and “Hakata Connected” are expected to bring large amounts of office supply equivalent to 20% of the existing office stock by 2025. The office market fundamentals in Fukuoka CBD are expected to remain healthy in the mid-term, bolstered by pent-up demands for high quality office space and tenant migration from Tokyo and Osaka. In particular, recent news of Google opening its second Japan office in Tenjin after Shibuya in Tokyo indicates that the city is primed to become the next hi-tech hub in the country.

**EXHIBIT 7: TENJIN AND HAKATA OFFICE SUBMARKET PROFILE**



**RATIO OF YOUNG GENERATION (15-29 YRS OLD)**



Source: DWS, CBRE, MILT, Fukuoka City Government. As of November 2021.

**Conclusion**

Areas close to the CBD with high accessibility coupled with a “lifestyle” precinct with retail and entertainment amenities continue to remain attractive. These alternative locations in the city centre are favored amongst start-ups and technology companies with a new generation of employees who prefer to live and work in the same area. In addition, the established life sciences cluster in Macquarie Park offers large floor plate and campus-style office buildings incorporating generous car parking provisions. Above average rental growth and yield convergence in this type of location are anticipated over the long term, further supported by better-quality office stock particularly in cities such as Melbourne, Brisbane (Australia), Pango, Bundang (South Korea), Tenjin and Hakata (Japan).

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