

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

KNIGHT FRANK PTE LTD CONSULTANCY & RESEARCH
26 MAY 2017

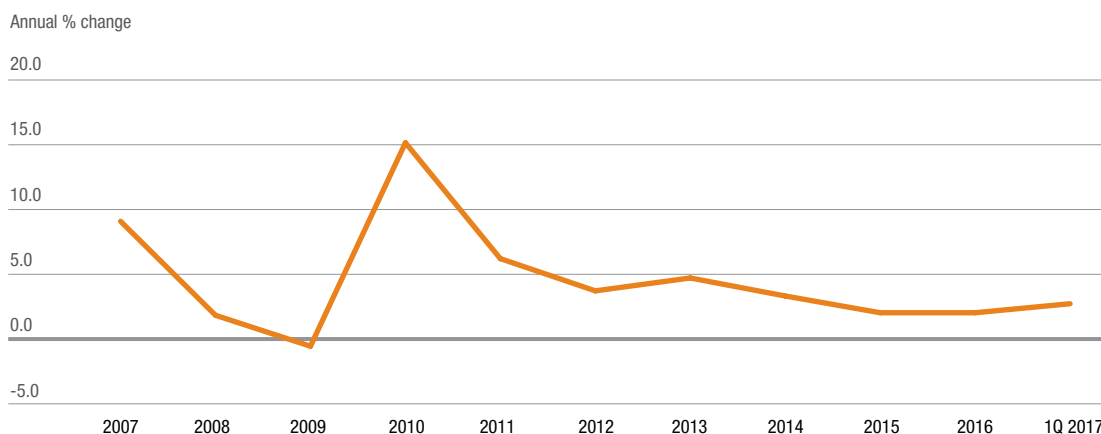
1 OVERVIEW OF THE SINGAPORE ECONOMY

1.1 Singapore Economic Performance

Singapore's Gross Domestic Product ("GDP") expanded by 2.0% in 2016, similar to the 1.9% growth in 2015. The manufacturing sector grew 3.6% in 2016, a reversal from the 5.1% decline in 2015. The strong growth was led by the electronics cluster, the biomedical manufacturing cluster and the precision engineering cluster at 15.8%, 13.6% and 0.9% year-on-year growth respectively. In contrast, the transport engineering cluster, the general manufacturing cluster and the chemicals cluster contracted by 17.2%, 2.4% and 1.0% year-on-year respectively.

According to the Ministry of Trade and Industry ("MTI"), Singapore's GDP grew 2.7% year-on-year in 1Q 2017, easing from the 2.9% growth in 4Q 2016.

Exhibit 1.1: Singapore GDP Growth Rate, 2007 to 1Q 2017*



Source: MTI, Singstat, Knight Frank Research
* Based on MTI estimates as at 25 May 2017

Singapore received close to S\$5.9 billion in total manufacturing fixed asset investment ("FAI") for the whole of 2016, 29.2% lower than the S\$8.3 billion for 2015. The cutback in investment was largely broad-based, with the most significant 64.1% annual decline from the chemicals cluster, which accounted for 22.4% of total manufacturing FAI. The electronics cluster, constituting 37.9% of total manufacturing FAI, saw investment commitments fall by 32.6% in 2016.

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

1.2 Singapore Economic Outlook for 2017

The Singapore economy is projected to grow at a relatively moderate pace for the rest of the year as sectors such as electronics, information & communications and 'other services industries' are likely to support growth, while the wholesale trade and finance & insurance sectors could continue to face external headwinds.

In the second half of 2017, Singapore's open economy remains susceptible to market volatilities largely influenced by unfolding global events. While global growth has improved slightly at the start of 2017 on the back of positive economic growth prospects in key economies such as the United States, Japan and Southeast Asia, downside risks in the global economy persist. Political risks and the lack of clarity on the policies of the new United States administration as well as uncertainties from United Kingdom's exit from European Union and rising corporate debt levels amid economic restructuring in China could affect business and consumer confidence both globally and in Singapore.

Against this macroeconomic backdrop and barring full actualisation of downside risks, MTI forecasts GDP annual growth at 1.0% to 3.0%. The manufacturing sector is forecast to see an uptick in performance with the prospect of sustained global demand for semiconductors and semiconductor equipment, while the marine & offshore engineering segment and firms supporting the oil and gas industry are likely to experience continual challenges and muted demand conditions amidst low oil prices. Externally-oriented services sectors such as finance & insurance and wholesale trade are expected to remain subdued. On potential growth sectors, information & communications and 'other services industries' are likely to continue to support growth, while tourism-related sectors such as accommodation & food services could benefit from a boost in travel demand as global economic outlook improves.

To address the uneven performances across the different sectors in 2016, the recent Singapore Budget 2017 was structured beyond the conventional stimulus with a long-term perspective and targeted more towards issues faced by different sectors. Enterprises are encouraged to develop deep capabilities, particularly in the areas of digital technology and innovation and to scale up globally and come together in partnerships within the industry. To facilitate these partnerships, the 23 industries with Industry Transformation Maps ("ITMs") are developed, which make up 80% of the Singapore economy. The ITMs are categorised under six clusters comprising the manufacturing, built environment, trade and connectivity, essential domestic services, modern services and lifestyle clusters.

2 INDUSTRIAL PROPERTY MARKET OVERVIEW

2.1 Consolidation of HDB Industrial Land and Properties Under JTC

On 19 October 2016, JTC Corporation ("JTC") announced that by 1Q 2018, some 10,700 industrial units and 540 industrial land leases under the Housing & Development Board ("HDB") will be transferred to JTC. The consolidation of all public sector industrial land and properties under a single government agency will enable the Government to better support industrialists, in particular small and medium enterprises ("SMEs"), in their business growth. According to JTC, the contracted terms and conditions of all HDB tenancies and leases will remain unchanged for the duration of the tenancies or lease contracts. With the consolidation, some 16,300 industrial units and 3,640 land leases with a total land area of 8,100 hectares will be under JTC's fold¹.

¹ Source: The Business Times: 'All HDB Industrial Space to be under JTC by Q1 2018', 20 October 2016

2.2 Industrial Government Land Sales (“IGLS”) Programme for 1H 2017

Against the backdrop of the subdued economy and muted sentiment from industrialists, only a total of six industrial sites with a combined site area of 3.27 hectares are listed on the 1H 2017 IGLS programme. Four of the six confirmed sites under the 1H 2017 IGLS programme are located in Tuas South, the West Region of Singapore. The remaining two sites are in the East and North Regions. All sites are zoned for Business 2 usage and have shorter land tenures of 20 years, to help industrialists manage their land acquisition/occupancy cost.

Exhibit 2.1: IGLS Programme for 1H 2017

IGLS Programme – 1H 2017					
Confirmed List of Industrial Sites					
Location	Site Area (ha)	Zoning	Gross Plot Ratio	Tenure (years)	Estimated Launch Month
Plot 15, Tuas South Link 3*	0.50	B2	1.4	20	January 2017
Plot 3, Tampines North Drive 3**	0.58	B2	2.5	20	February 2017
Plot 24, Tuas South Link 3*	0.49	B2	1.4	20	March 2017
Plot 18, Tuas South Link 3	0.43	B2	1.4	20	April 2017
Plot A, Jalan Lam Huat	0.80	B2	2.5	20	May 2017
Plot 10, Tuas South Link 2	0.47	B2	1.4	20	June 2017
Total	3.27				
Reserve List of Industrial Sites					
Tuas Bay Close*	2.72	B2	1.7	30	Available
Woodlands Height*	1.60	B1	2.5	30	Available
Plot 13, Tuas South Link 1*	2.40	B2	2.0	30	Available
Plot 25, Tuas South Link 3	0.47	B2	1.4	20	May 2017
Plot 21, Tuas South Link 3	0.79	B2	1.4	20	June 2017
Total	7.98				

Source: MTI, Knight Frank Research, as at 23 December 2016

* Previously in the 2H 2016 Reserve List.

** Previously in the 1H 2016 Confirmed List.

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

2.3 Industrial Prices and Investment Market

Investment sales of private factories (including business parks) totalled S\$3.14 billion² for the whole of 2016, with 1H 2016 and 2H 2016 periods registering investment sales values of S\$288.2 million and S\$2.85 billion, respectively.

Exhibit 2.2: Major Private Factory Investment Sales in 2016

Key Private Factory Investment Sales					
Property	Location	Tenure	Purchaser	GFA (sq ft)	Price (S\$)
12/14/16 Science Park Drive	12/14/16 Science Park Drive	99 years with effect from 1 June 1982	Ascendas REIT	N.A.	420,000,000
Keppel DC Singapore 3 (90% stake)	Tampines	N.A.	Keppel DC REIT	N.A.	202,500,000
Bukit Batok Connection	Bukit Batok Street 23	30 years with effect from 26 November 2012	Soilbuild Business Space REIT	403,592	96,300,000
6 Chin Bee Avenue	Chin Bee Avenue	30 years with effect from 16 October 2013	Sharikat National	324,166	87,300,000

Source: JTC, REALIS, Knight Frank Research

3 REVIEW OF MULTIPLE-USER FACTORY MARKET SEGMENT

3.1 Existing and Potential Supply

As at 1Q 2017, the total existing stock for multiple-user factory stood at approximately 115.2 million sq ft NLA, which forms 23% of total industrial stock island-wide.

The multiple-user factory stock increased by 2.5 million sq ft annually in 2016 and by another 1.4 million sq ft in 1Q 2017.

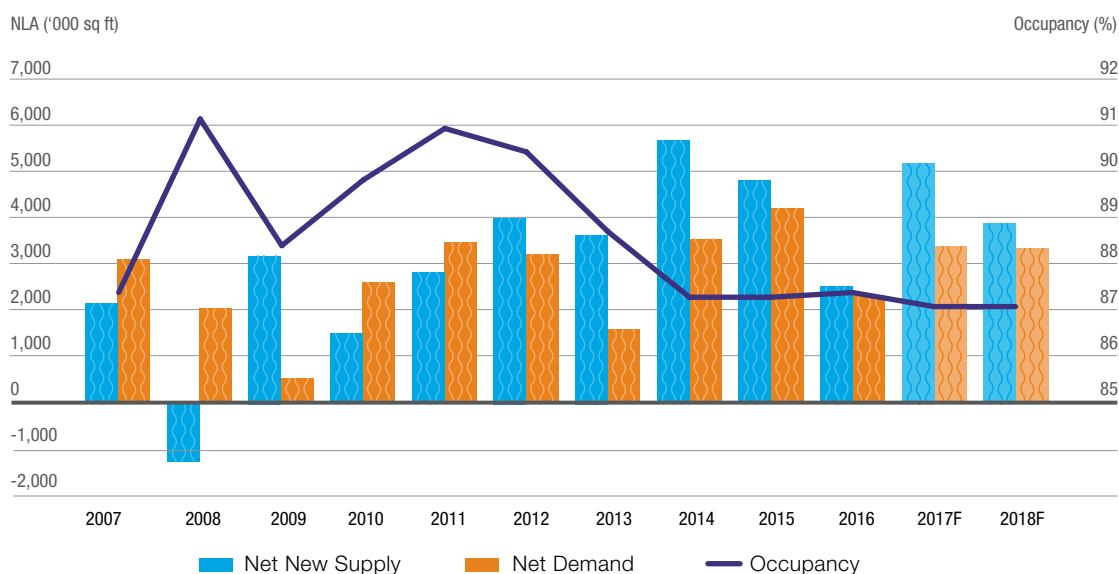
As at 1Q 2017, an estimated 7.7 million sq ft of new multiple-user factory space is slated for completion between 2017 and 2018. On average, this works out to an annual net potential supply of 3.9 million sq ft of multiple-user factory space between 2017 and 2018, which is lower compared to the last five-year average of 4.1 million sq ft per annum between 2012 and 2016.

² Estimates accurate as at 26 May 2017.
To be considered as private investment sales under Knight Frank Research definition, it must fulfil either one of the following prerequisite:-

- Investment transactions should comprise an entire building or property with a total worth of S\$10 million and above; or
- Any bulk sales within a development which amount to S\$10 million or more.

* Figures stated are based on NLA.

Exhibit 3.1: Net New Supply, Net Demand and Occupancy of Multiple-User Factory Space³



Source: JTC, Knight Frank Research

3.2 Demand and Occupancy

Net demand of multiple-user factory space declined by 46.4% year-on-year to 2.3 million sq ft in 2016, compared to 4.2 million sq ft in 2015. In 1Q 2017, 850,000 sq ft of multiple-user factory space was taken up by industrialists.

Occupancy for multiple-user factory hovered between 87.0% and 88.6% during 2014 to 2016, on the back of higher new supply of multiple-user factory space since 2012. The occupancy rate was at 87.0% in 1Q 2017.

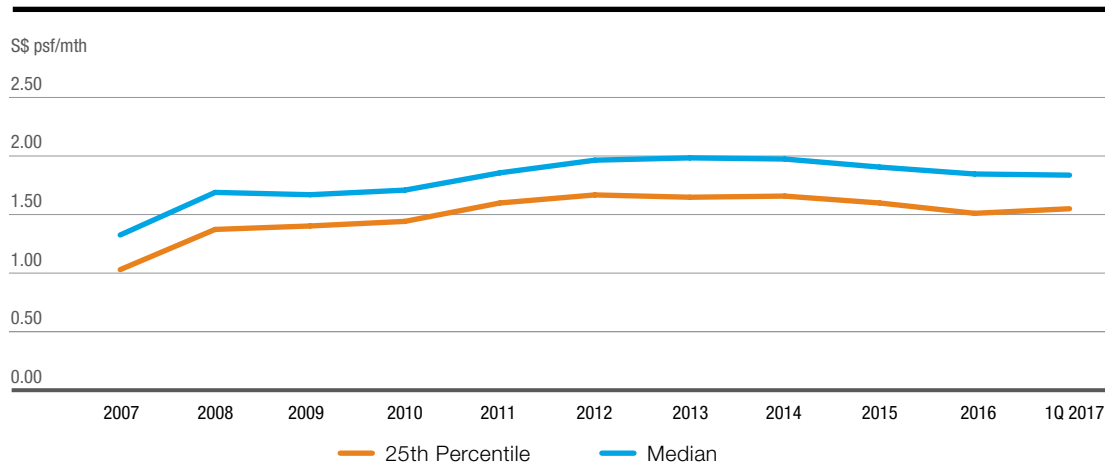
3.3 Rents

According to data from JTC, multiple-user factory rents exhibited mixed trends in 1Q 2017. Rentals rose from S\$1.51 psf/mth in 2016 to S\$1.55 psf/mth in 1Q 2017 at the 25th percentile level; rentals declined marginally from S\$1.84 psf/mth in 2016 to S\$1.83 psf/mth in 1Q 2017 at the median level. An influx of newly completed multiple-user factory developments between 2012 and 2016 has led to higher competition for tenants. As net demand fell short of net new supply in 2015 and 2016, some landlords adjusted their rents to maintain occupancy.

³ Gross potential supply is adjusted to net floor area based on Knight Frank's assumption of 85% and 90% space efficiency factors for multiple-user and single-user factory developments, respectively.

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

Exhibit 3.2: Rents of Multiple-User Factory Space



Source: REALIS, Knight Frank Research

3.4 Outlook

The confluence of various macro factors - slight improvement in outlook for the global and local economy at the start of 2017 versus continued geopolitical uncertainties - is envisaged to have a bearing on the performance of the manufacturing sector. The prospects of sustained growth in the electronics and precision engineering clusters for the rest of 2017 could provide support for related SMEs. Leasing enquiries for multiple-user factory space is observed to have increased since the end of 1Q 2017 as industrialists started to explore real estate space for their longer-term business needs. However, it remains to be seen if most of these enquiries could translate to actual space demand as cost prudence generally takes priority for SMEs. Coupled with an upcoming injection of 4.5 million sq ft GFA (estimated 3.9 million sq ft NLA) of new multiple-user factory space in the next three quarters of 2017, average rents for multiple-user factory space is envisaged to exhibit general decline of between -7% and -5% year-on-year in 4Q 2017, barring unforeseen macroeconomic circumstances and policy changes.

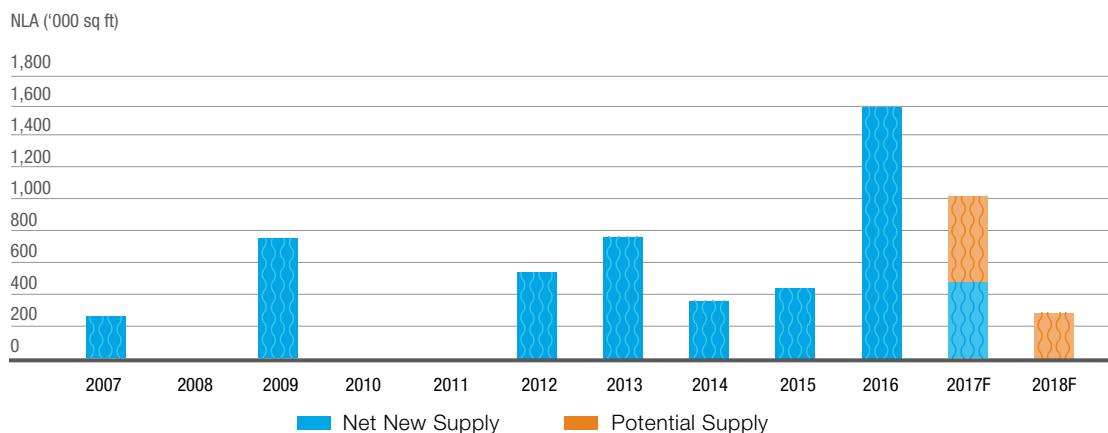
4 REVIEW OF HIGH-SPECIFICATION⁴ INDUSTRIAL SPACE

4.1 Existing and Potential Supply

There are no official statistics tracking high-specification industrial space in Singapore. Based on Knight Frank's classification, there is approximately 14.0 million sq ft of high-specification industrial space as at the end of 2016. Some projects that were completed in 2016 include JTC Space @ Tampines, Philips Electronics Headquarters at Toa Payoh and DC West data centre located at 8 Yung Ho Road. In 1Q 2017, a total of 485,000 sq ft of high-specification industrial space was completed. Another 535,000 sq ft of high-specification industrial space is due to complete by end-2017.

⁴ Knight Frank defines high-specification industrial space with higher office content for tenants in technology and knowledge-intensive sector, and may include activities such as precision engineering and data centre operations. Such developments typically house multinational companies and large Singapore firms that are anchor tenants, which incorporate their headquarters with manufacturing, research and development and engineering activities.

Exhibit 4.1: Net New Supply and Potential Supply of High-Specification Industrial Space⁵



Source: JTC, Knight Frank Research

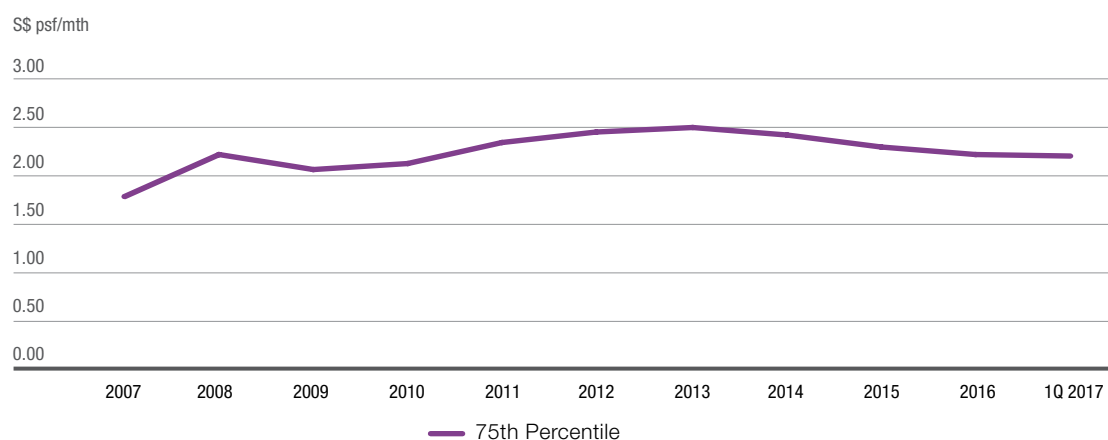
4.2 Demand and Occupancy

Occupancy for high-specification industrial space improved from 82.6% in 2015 to 86.1% in 2016. With slower global trade activities and higher business costs, some multinational companies and large Singapore firms have consolidated their office and industrial operations in business parks or high-specification industrial spaces.

4.3 Rents

Rents for high-specification industrial space ranged between S\$2.23 psf/mth and S\$5.24 psf/mth in 2016, with rental range tightening to between S\$2.20 psf/mth and S\$4.84 psf/mth in 1Q 2017. The wide spectrum of rents is largely due to the nature of the high-specification industrial space, which could range from general industrial trades to sophisticated BTS spaces catered for the research and development industries. Rents for high-specification industrial space are seen to have stabilised, albeit with modest rental declines, in 2015 and 2016 compared to steeper rental falls in 2014.

Exhibit 4.2: Rents of High-Specification Industrial Space⁶



Source: REALIS, Knight Frank Research

⁵ Gross potential supply is adjusted to net floor area based on Knight Frank's assumption of 85% space efficiency factors for high-specification industrial space.

⁶ Knight Frank assumes 75th percentile rents for multiple-user factory to be estimated rents for high specification multiple-user factory developments.

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

4.4 Outlook

With the government's continuing push to transform Singapore's manufacturing sector towards higher value-add and integrated operations, the demand for high-specification industrial space is poised to be stable in the near term. As landlords of older properties explore ways to meet the emerging needs of industrialists, more AEI could be underway to redevelop older properties with higher specifications. Demand for BTS spaces from specialised large space industrialists is envisaged to pick up as more multinational companies and established home-grown companies explore to consolidate their operations in industrial spaces with better and relevant specifications.

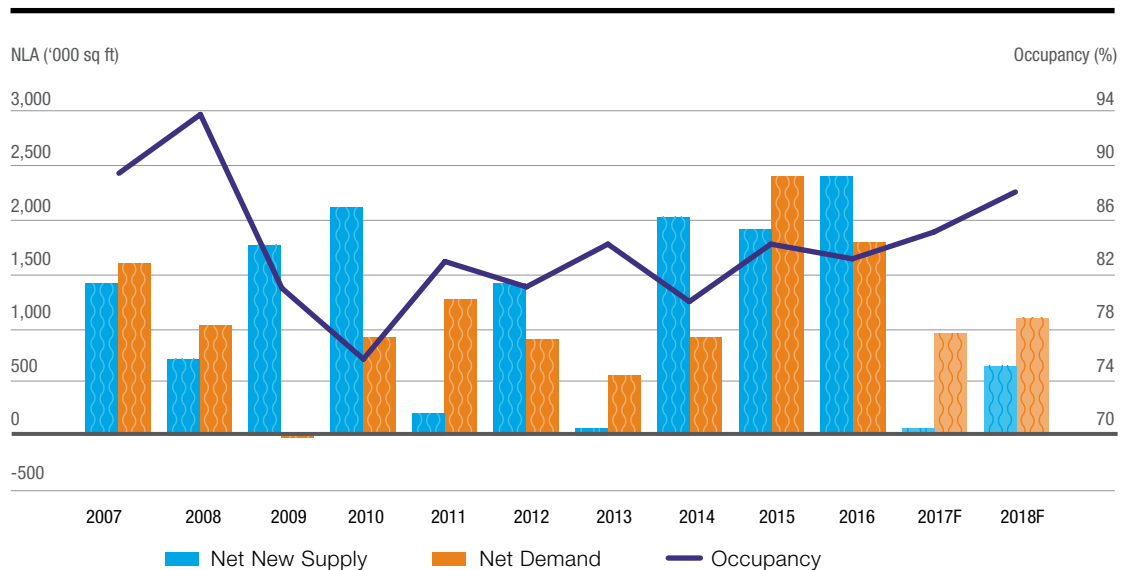
5 REVIEW OF BUSINESS PARK SPACE

5.1 Existing and Potential Supply

As at 1Q 2017, the total existing stock for business park space was approximately 23.0 million sq ft NLA.

A total of 2.4 million sq ft of business park space was completed in 2016. As at 1Q 2017, an estimated 695,000 sq ft of new business park space will be completed in 2017 and 2018. There is no new business park space beyond 2018.

Exhibit 5.1: Net New Supply, Net Demand and Occupancy of Business Park Space⁷



Source: JTC, Knight Frank Research

5.2 Demand and Occupancy

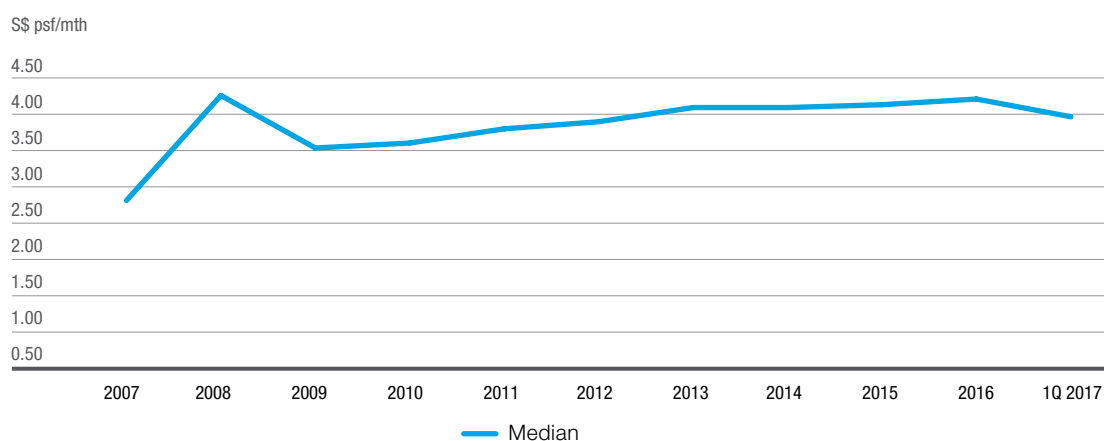
Net demand of business park space fell to 1.8 million sq ft in 2016, compared to 2.4 million sq ft in 2015. Nonetheless, with industrialists progressively shifting into the net new supply of 6.3 million sq ft of business park space that was completed between 2014 and 2016, occupancy improved from 79.8% in 2014 to 83.0% in 2016. In 1Q 2017, 237,000 sq ft of business park space was taken up by industrialists, leading to an increase in occupancy to 84.1% for the same period.

⁷ Gross potential supply is adjusted to net floor area based on Knight Frank's assumption of 85% space efficiency factors for business park development.

5.3 Rent

According to data from JTC, business park rents at the 25th percentile, median and 75th percentile levels improved between 1.3% and 4.7% year-on-year in 2016, to S\$3.90 psf/mth, S\$4.22 psf/mth and S\$4.77 psf/mth, respectively. Median rents in 1Q 2017 reached S\$3.97 psf/mth. With the completion of new and better quality business park space, largely located in the fringe area, rents for business parks have shown improvements between 2014 and 2016.

Exhibit 5.2: Rents of Business Park Space



Source: REALIS, Knight Frank Research

5.4 Outlook

Against the backdrop of potential stable demand from a larger pool of qualifying trades such as technology, media and telecommunications, medical technology and e-commerce, the outlook for business park space is envisaged to stay fairly healthy in 2017. With the improved occupancy of business park space and the sustained rental differential between office and business park rentals, the 'flight for rent savings' from office to business park spaces by qualifying tenants is envisaged to remain stable from mid-2017 moving forward.

Supported by the limited new supply of business park space beyond 2016 despite the prevailing modest economic outlook, occupancy is likely to improve further especially for better-designed and well-located business park developments in 2017. Island-wide occupancy is expected to hover between 83.0% to 85.0%, while rents may see sideway trending of between -1% to 2% year-on-year growth by 4Q 2017.

6 REVIEW OF STACK-UP⁸ FACTORY SPACE

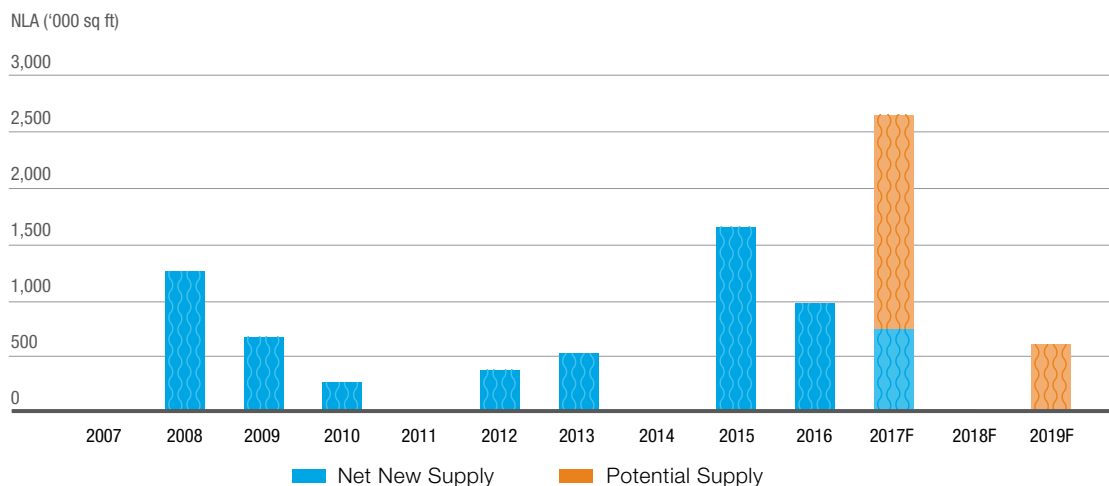
6.1 Existing and Potential Supply

There are no official statistics tracking stack-up factory space in Singapore. Based on Knight Frank's classification, there is approximately 5.6 million sq ft of stack-up factory space as at the end of 2016. In 1Q 2017, another 764,000 sq ft of stack-up factory space was completed. An additional 2.4 million sq ft of stack-up factory space is projected to complete by 2019. In particular, the JTC Space @ Tuas, which covers over 1.6 million sq ft GFA, will cater to a diverse range of industrial sectors and is projected to complete in 2017. There is no known stack-up factory new supply beyond 2019.

⁸ Knight Frank defines stack-up factory space as large floor plate multiple-user factory developments of above 150,000 sq ft NLA, and has ramp up access to upper floors.

SINGAPORE INDUSTRIAL PROPERTY MARKET OVERVIEW

Exhibit 6.1: Net New Supply and Potential Supply of Stack-Up Factory Space⁹



Source: JTC, Knight Frank Research

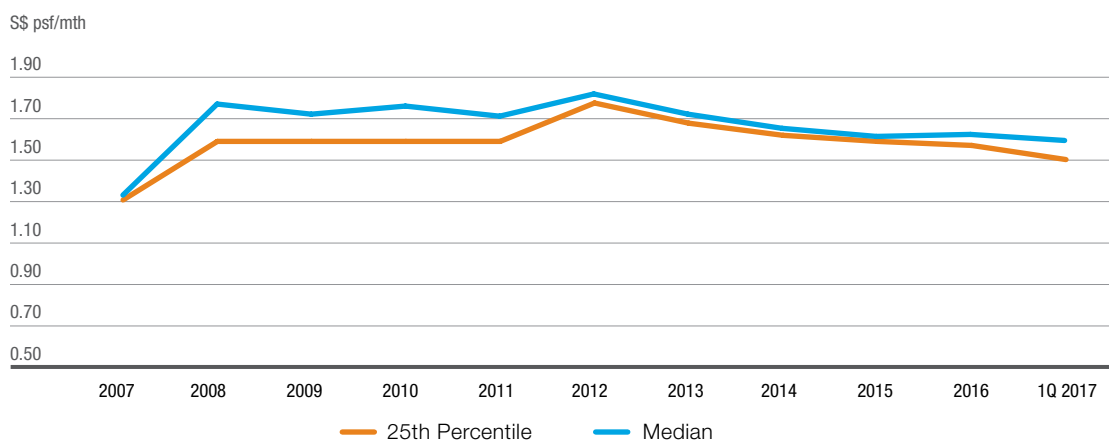
6.2 Demand and Occupancy

Occupancy of stack-up factory was approximately 86.0% in 1Q 2017. With the influx of new industrial space and coupled with relatively subdued manufacturing activities in the second half of 2016, the demand for stack-up factory space has been kept at a modest level.

6.3 Rents

The stack-up factory space median rents rose slightly by 0.6% year-on-year to \$1.62 psf/mth in 2016, and corrected slightly to \$1.59 psf/mth in 1Q 2017. Rents at the 25th percentile is estimated at \$1.50 psf/mth in 1Q 2017. Demand for better quality stack-up factory developments mainly in city fringe locations is observed to be higher from industrialists, while large-scale stack-up industrial spaces in the suburbs saw stable occupancy from mainly large-space tenants.

Exhibit 6.2: Rents of Stack-Up Factory Space



Source: JTC, Knight Frank Research

⁹ Gross potential supply is adjusted to net floor area based on Knight Frank's assumption of 85% space efficiency factor for stack-up factory development.

6.4 Outlook

Supported by an improvement in global economic outlook and an anticipated pick-up in global trade, general manufacturing activities could increase for 2017. Domestic demand for goods is tipped to rise as market sentiment improves along with stable economic growth. These potential trends are likely to benefit SMEs and larger industrialists looking to expand their industrial operations. Along with new supply this year, rents of stack-up factory space is envisaged to exhibit marginal decline or flat trends by 4Q 2017.

7 LIMITING CONDITIONS OF THIS REPORT

This report is subject to the following limiting conditions:

- a) Knight Frank's responsibility in connection with this report is limited to Mapletree Industrial Trust Management Ltd, i.e. the Client to whom the Report is addressed.
- b) It disclaims all responsibility and will accept no liability to any other party.
- c) The report was prepared strictly in accordance with the terms and for the purpose expressed therein and is to be utilised for such purpose only.
- d) Reproduction of this report in any manner whatsoever in whole or in part or any reference to it in any published document, circular or statement without the Knight Frank's prior written approval of the form and context in which it may appear is prohibited.
- e) References to any authority requirements and incentive schemes are made according to publicly available sources as at the submission date of this report. Technical and legal advice ought to be sought to obtain a fuller understanding of the requirements involved.
- f) Projections or forecasts in the course of the study are made to the best of the Knight Frank's judgment at the time of report submission. However, Knight Frank disclaims any liability for these projections or forecasts as they pertain to future market conditions, which may change due to unforeseen circumstances.
- g) Knight Frank is not obliged to give testimony or to appear in Court with regard to this Report, unless specific arrangement has been made there for.
- h) The statements, information and opinions expressed or provided are intended only as a guide to some of the important considerations that relate to the property prices. Neither Knight Frank nor any person involved in the preparation of this report give any warranties as to the contents nor accept any contractual, tortious or other form of liability for any consequences, loss or damage which may arise as a result of any person acting upon or using the statements, information or opinions in the Report.