Singapore REITs

Industrial sub-sector: Business Parks out, Hi-Tech Buildings in

SINGAPORE | REAL ESTATE (REIT) | UPDATE

8 May 2017

- Both sector-wide rental and occupancy were lower q-o-q and y-o-y
- Expect sector's aggregate rental reversions to range at negative high-single-digit to negative low-double-digits in 2017
- We believe rents could bottom in 2017, but emphasize that negative rental reversions to persist
- Key change to our view: Switch from Business Park to Hi-Tech Buildings
- Maintaining "**Equal Weight**" view on Industrial REITs sub-sector on optimism of bottoming of rents this year, while being cognisant of the over-supply situation that is likely to persist into 2018

What is the news?

- JTC recently released its Quarterly Market Report of Industrial Properties for 1Q 2017.

Summary of Rental & Occupancy rate, as at 1Q 2017

		4Q 2016	1Q 2017	%qoq	%yoy
Rental	All Industrial	93.8	93.0	⇩(0.9)	⇩(5.0)
	Multiple-User Factory	91.7	90.7	⇩(1.1)	⇩(5.2)
	Single-User Factory	100.9	99.9	⇩(1.0)	⇩(5.7)
	Business Park	105.4	104.3	⇩(1.0)	⇧0.4
	Warehouse	91.0	90.5	⇩(0.5)	⇩(6.1)
Occupancy	All Industrial	89.5%	89.4%	⇩(0.1)	⇩(0.7)
	Multiple-User Factory	87.3%	87.0%	⇩(0.3)	⇩(0.3)
	Single-User Factory	90.9%	90.6%	⇩(0.3)	⇩(1.3)
	Business Park	83.0%	84.0%	⇧1.0	⇧2.3
	Warehouse	89.7%	89.9%	⇧0.2	⇩(0.5)

Source: JTC, Phillip Securities Research (Singapore)

Key takeaways from the quarter

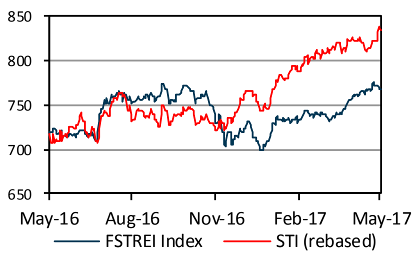
- **Negative reversions appears to be abating, with some hits and misses**
  Ascendas REIT (A-REIT) reported a positive weighted average rental reversion of +3.2% for its Singapore portfolio during the quarter. However, logistics & distribution centres in A-REIT's portfolio had a whopping -18.8% reversion. **Keppel DC REIT (KDCREIT)** managed to renew a colocation lease in a SGP DC at a marginally higher rate than previous. **Soilbuild Business Space REIT (SBREIT)** eked out +3.6% reversions on a portfolio weighted average basis (but -6.0% reversion on *forward* renewals), after a few quarters of negative reversions. **Mapletree Industrial Trust (MINT)** was a casualty this quarter, reporting a portfolio weighted reversion of -0.2%, weighed down by Stack-Up/Ramp-Up Buildings segment.
- **Key change to our view: Switch from Business Park to Hi-Tech Buildings**
  We now view Business Park space less favourably, as the rental-gap between conventional Offices is narrowing due to over-supply of Office space. We are recommending to switch from Business Park space to Hi-Tech properties for growth, and maintaining exposure to conventional factory for stability. The Committee on the Future Economy (CFE), outlines manufacturing will continue contributing 20% of gross domestic product (GDP) over the medium term (19.6% in 2016). Hi-Tech properties should benefit from the CFE's skill-up strategy of moving up the manufacturing value chain. Small and medium enterprises (SMEs) are still the backbone of the manufacturing sector and Flatted Factories (conventional factory) are the bedrock of the manufacturing sector, as it provides affordable accommodation costs to SMEs.

Equal Weight

INDEX PERFORMANCE (%)

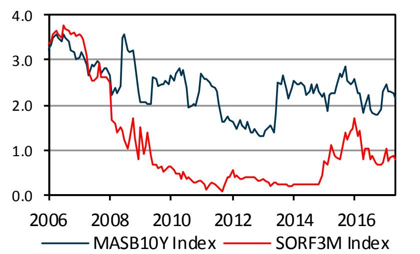
	1MTH	3MTH	1YR
FSTREI RETURN	2.2	6.2	14.2
STI RETURN	2.4	7.3	21.1

FSTREI VS. STI



Source: Bloomberg, PSR

10-year SGS (%) & 3-month SOR (%)



Source: Bloomberg, PSR

Richard Leow, CFTe, FRM (+65 6212 1848)
richardleowwt@phillip.com.sg

MCI (P) 118/10/2015
Ref. No.: SG2017_0096

Investment Actions

We are maintaining our "**Equal Weight**" view on the Industrial sub-sector, on optimism of the bottoming of Industrial rents this year, while being cognisant of the over-supply situation that is likely to persist into 2018. After our out-of-consensus call from our last report (20 February 2017), the Street has noticeably moved in line and turned upbeat on the Industrial sub-sector as well.

Industrial REITs under our coverage

	Rating	Target Price (S$)	Last Close Price (S$)
Cache Logistics Trust	Reduce	0.750	0.885
Keppel DC REIT	Neutral	1.150	1.240
Mapletree Industrial Trust	Neutral	1.800	1.810
Soilbuild Business Space REIT	Neutral	0.660	0.680

Source: Phillip Securities Research (Singapore)

Cache Logistics Trust (Cache) – High gearing of 43.1% is the key idiosyncratic impediment to inorganic growth

- "Reduce" rating from our results report on 21 April
- Limited scope for organic growth in gross revenue due to oversupply, mitigated by only 4.7% expiry by gross rental income in FY17
- Ongoing rental dispute with Schenker at 51 Alps Avenue remains unresolved
- Master lease expiry of CWT Commodity Hub in 2018 is a concern with upcoming supply of warehouse space
- We forecast 6.69/7.00 cents distribution per unit (DPU) for FY17e/FY18e, which is 8%/4% lower than consensus expectation of 7.3/7.3 cents

Keppel DC REIT (KDCREIT) – Expecting 32% year-on-year (y-o-y) higher gross revenue and 7.7% higher DPU in FY17e, driven by two acquisitions completed in FY16 and one in January 2017

- "Neutral" rating from our results report on 18 April
- We forecast 6.61/6.04 cents DPU for FY17e/FY18e, which is 8%/18% lower than consensus expectation of 7.2/7.4 cents
- Our FY18e DPU is lower than FY17e as we have assumed an equity fund raising associated with the acquisition of the mainCubes data centre in 3Q FY18e
- Resultant FY18e weighted average unit base is 2.8% larger than FY17e

Mapletree Industrial Trust (MINT) – Growth from Hi-Tech Buildings

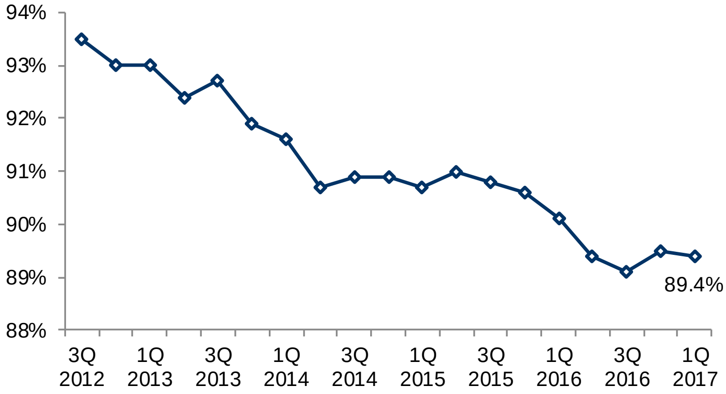
- "Neutral" rating from our results report on 26 April
- Steady addition of Hi-Tech Buildings to portfolio from 13% (4Q FY14) to 25% (4Q FY17) by net property income
- Hi-Tech Buildings pipeline: (1.) Phase Two of Hewlett-Packard (HP) build-to-suit (BTS) to contribute by 2Q CY17, (2.) 30A Kallang Place asset enhancement initiative (AEI) completing in 1Q CY18 and (3.) recently announced BTS data centre to contribute by 2H CY18
- Growth potential currently priced in; look to accumulate on temporary price weakness
- We forecast 11.29/12.00 cents DPU for FY18e/FY19e, which is 4%/3% lower than consensus expectation of 11.8/12.4 cents

Soilbuild Business Space REIT (SBREIT) – Drag from weaker than expected take-up rate at Loyang Way property

- "Neutral" rating from our results report on 13 April
- Acquisition of Bukit Batok Connection will help to cushion the negative effect of the Loyang Way vacancy; Loyang Way property size is 5.2% by portfolio value
- However, DPU will be weighed down by the higher unit base arising from the 1-for-10 Preferential Offering in September 2016
- We are expecting lower y-o-y DPU in all four quarters of FY17e
- We forecast 5.34/4.76 cents DPU for FY17e/FY18e; this is 3%/10% lower than consensus expectation of 5.5/5.3 cents

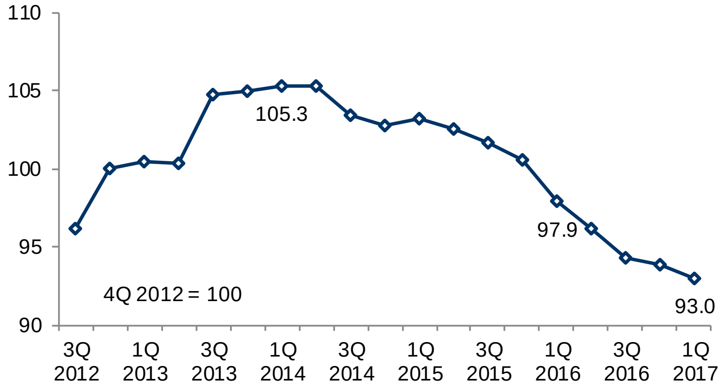
1Q 2017 JTC market data: Occupancy and Rental Index

Figure 1. Industrial sector occupancy



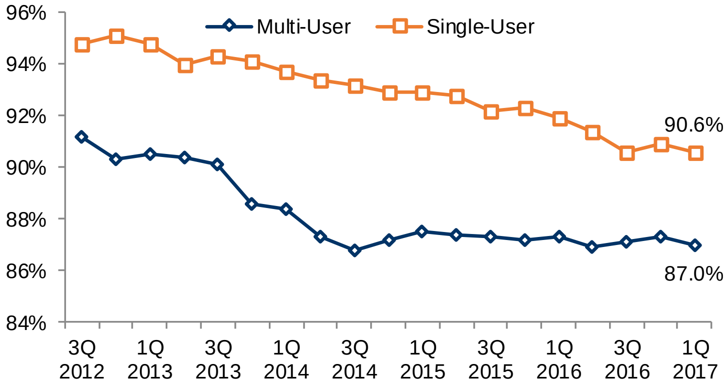
Source: JTC, Phillip Securities Research (Singapore)

Figure 2. Industrial sector Rental Index



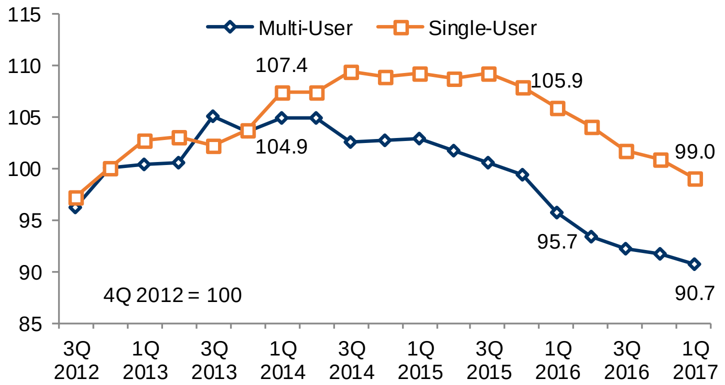
Source: JTC, Phillip Securities Research (Singapore)

Figure 3. Factory occupancy



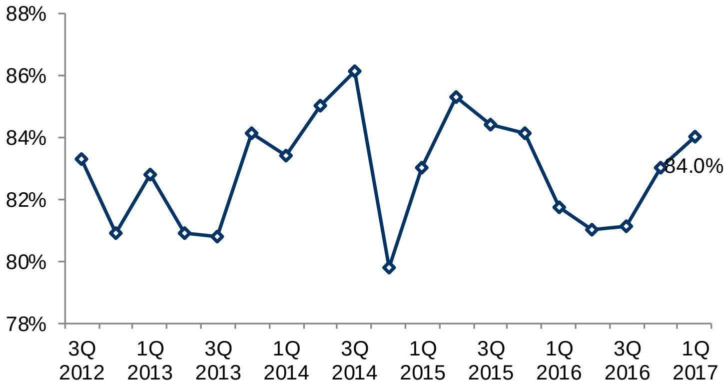
Source: JTC, Phillip Securities Research (Singapore)

Figure 4. Factory Rental Index



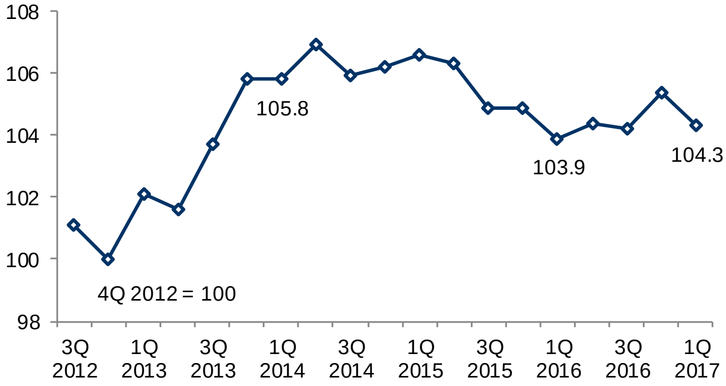
Source: JTC, Phillip Securities Research (Singapore)

Figure 5. Business Park occupancy



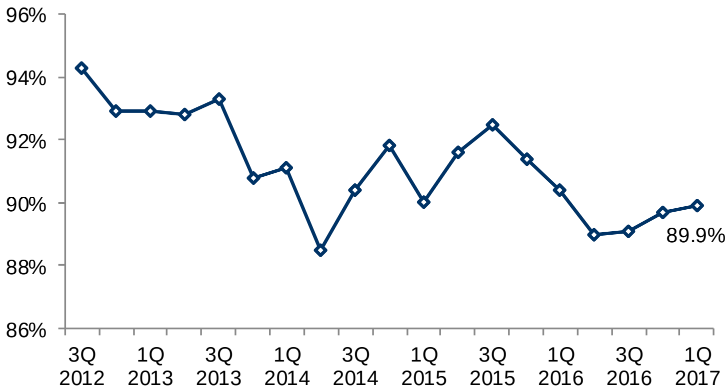
Source: JTC, Phillip Securities Research (Singapore)

Figure 6. Business Park Rental Index



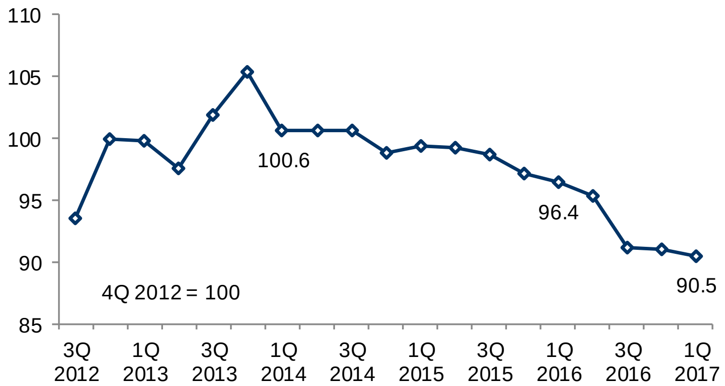
Source: JTC, Phillip Securities Research (Singapore)

Figure 7. Warehouse occupancy



Source: JTC, Phillip Securities Research (Singapore)

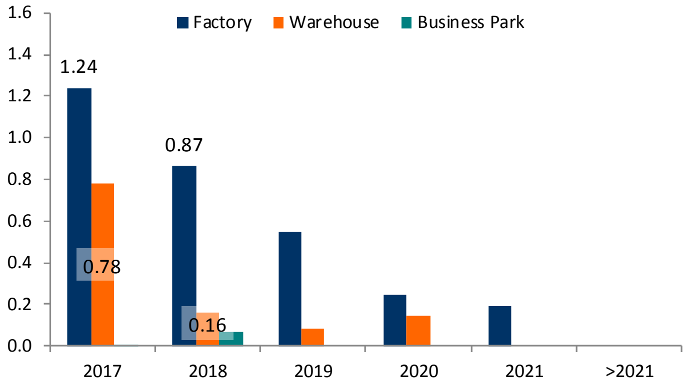
Figure 8. Warehouse Rental Index



Source: JTC, Phillip Securities Research (Singapore)

1Q 2017 JTC market data: Supply pipeline

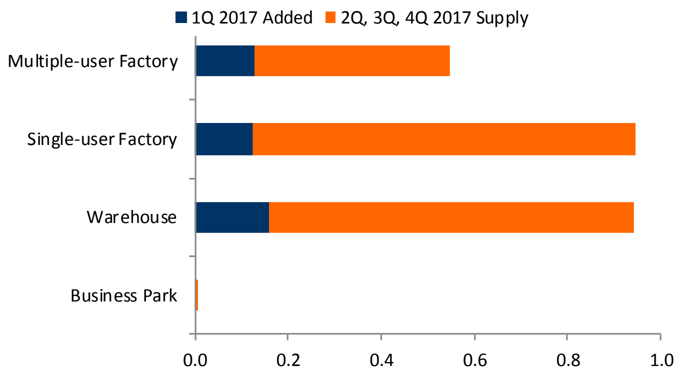
Figure 9. Supply pipeline profile, as at 1Q 2017 (million sqm)



Source: JTC, Phillip Securities Research (Singapore)

- Supply tapering off in 2018 to 1.1 million sqm, after two years of supply that is higher than the historical average.

Figure 10. Space added & Supply for 2017, as at 1Q 2017 (million sqm)



Source: JTC, Phillip Securities Research (Singapore)

- Disproportionate oversupply of new Single-user Factory in the next three quarters relative to 1Q 2017, likely to negatively impact Multiple-user Factory segment in instances where users move to their own developments.
- Negligible new supply of Business Park space for the remainder of 2017.

Supply Pipeline as a percentage of existing stock, as at 1Q 2017

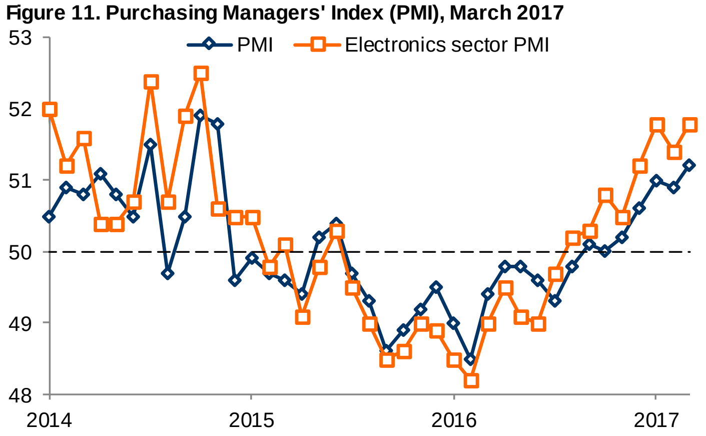
(%)	2017	2018	2019	2020	2021	>2021
Factory	3.6	2.5	1.6	0.7	0.5	0.0
Warehouse	8.1	1.7	0.9	1.5	0.0	-
Business Park	0.2	3.3	-	-	-	-
Industrial sector	**4.3**	**2.4**	**1.4**	**0.8**	**0.4**	**0.0**

Source: JTC, Phillip Securities Research (Singapore)

- Overall supply pipeline is tapering off.
- 3-year average annual supply/ demand of 1.8/1.3 million sqm respectively.

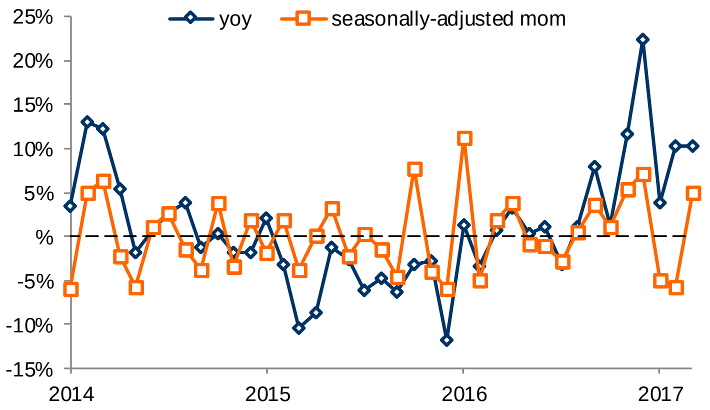
Manufacturing Indicators

Figure 11. Purchasing Managers' Index (PMI), March 2017



Source: Bloomberg, SIPMM, Phillip Securities Research (Singapore)

Figure 12. Industrial Production Index, March 2017



Source: Bloomberg, EDB, Phillip Securities Research (Singapore)

How do we view this?

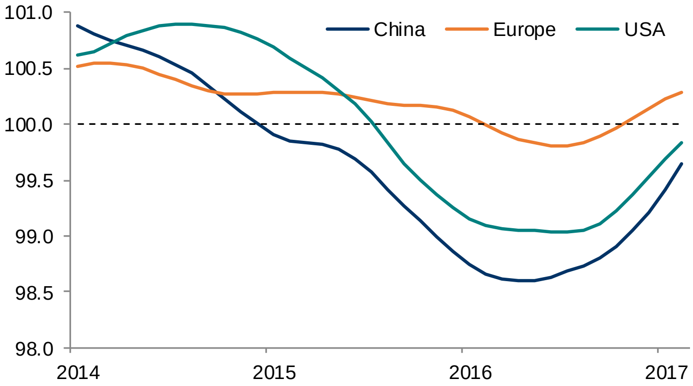
- **Uptick in Industrial activity, signalling improvement in global economy**
  We first highlighted the initial uptick in 3Q 2016 industrial activity in our report last year (11 November 2016). Since then, PMI has remained in expansionary territory in tandem with Industrial Production which peaked in December 2016. Industrial

Production has since moderated downwards and we would expect both PMI and Industrial Production to converge to more sustainable levels for continued growth.

With Singapore being a net-exporter, we are of the view that the higher industrial output has been a reflection of improving global economic sentiment that has been driven by external demand. This is supported by data from The Organisation for Economic Co-operation and Development (OECD).

- OECD Composite Leading Indicator show signs of bottoming out for the three largest economic blocs.

Figure 13. OECD Composite Leading Indicator (CLI)



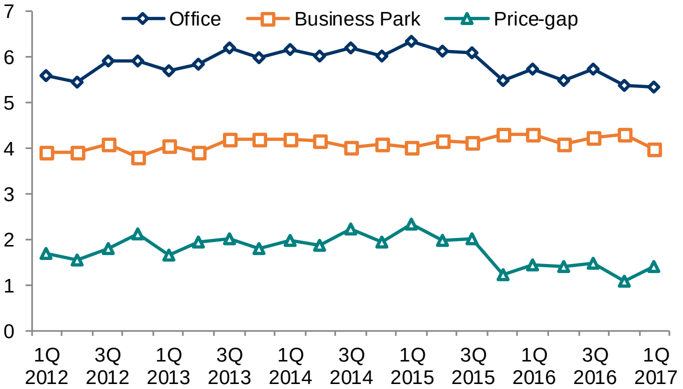
Source: OECD, Phillip Securities Research (Singapore)

While higher external demand could lead to higher demand for Industrial space, upcoming new supply is still higher than historical supply, and demand is still lower than historical demand.

- **Continued pressure due to mismatch in supply and demand**
  Notwithstanding the improvement in Industrial activity, JTC expects about 2.0 million sqm of industrial space to come on-stream in the remainder of 2017. This is about 4.3% of current available stock. The additional space coming on-stream is significantly higher than the average annual supply of around 1.8 million sqm in the past three years. Historical average demand over the past three years was 1.3 million sqm.
- **1Q 2017 aggregate reversions maintained at negative double-digits**
  1Q 2017 Rental Index (93.0) is lower than three years ago in 1Q 2014 (105.3). What this means is that lease renewals signed in 1Q 2017 were at lower rents compared to three years ago, and implying negative reversions of -11.7% in aggregate. We are expecting reversions to range between negative high-single-digit and negative low-double-digits for the remainder of 2017. Negative high-single-digit reversions would be contingent on a bottoming/stabilisation of rental level this year.
- **Oversupply in Multiple-User Factory space to persist in 2017**
  Planned supply of Factory space of 1.52 million sqm for 2017 is about 49% more than the net new supply of 1.02 million sqm in 2016. For Multi-User Factory, planned supply of 549,000 sqm in 2017 is 134% more than the net new supply of 235,000 sqm in 2016. Planned supply of Multi-User Factory in 2017 will add 5.2% to existing stock as at 4Q 2016, compared to the 2.2% added during 2016. Aggregate rental reversion for Multi-User Factory was -13.5% in 1Q 2017 and we are of the view that rental reversions will continue to be negative double-digit for the remainder of 2017.
- **Supply pressure in 2017 for Warehouse is going to be worse than 2016**
  Total planned supply for 2017 is 942,000 sqm, which is 61% higher than the net new supply of 584,000 sqm in 2016. Planned supply for 2017 represents 10% additional space to existing stock as at 4Q 2016, compared to the 6.6% that was added during 2016. We are expecting negative high-single-digit rental reversions in 2017. Warehouse occupancy has improved quarter-on-quarter (q-o-q) for three consecutive quarters and the Logistics industry was one industry the CFFE identified to have its own Industry Transformation Map (ITM).
- **Stale thesis on Business Parks, due to narrowing price-gap with Office rents**
  Consensus favourite has been Business Park assets. While there is limited new supply in 2017 and 2018 and no new supply in 2019 onwards, we do not expect a significant upward trajectory in rent. Instead, we expect Business Park rent and occupancy to remain stable q-o-q for the year ahead. With the new supply of Office space coming

on-stream, Office rent is expected to ease further, thereby negating the impetus of qualifying tenants to shift to Business Park spaces.

Figure 14. Median rent for Office & Business Park ($ psf / month)



Source: REALIS, Phillip Securities Research (Singapore)

- The price-gap between Office and Business Park median rents had shifted in 4Q 2015, due to decline in Office rent.

Strategic top-down view

- **Equal Weight on the Industrial S-REITs sub-sector on optimism of bottoming of rents**
  We expect the demand-supply imbalance to persist in 2017. Although this would apply downward pressure on rents, but we already see some stabilisation of *asking rents* and this could indicate the bottoming of rents. However, we emphasize the distinction between negative rental reversions and bottoming of rents. We expect to still see aggregate negative reversions in 2017.

Tactical bottom-up view

- **Switch out of Business Park spaces to Hi-Tech assets: MINT is our preferred choice**
  The manager of MINT has demonstrated the ability to organically grow the Hi-Tech Buildings segment of the portfolio with the HP BTS project, AEI at 30A Kallang Place and the recently announced BTS data centre.

  In addition MINT's Flatted Factories segment which contributes 46% of portfolio NPI has remained stable and maintained 75% tenant retention in 4Q FY17. MINT has achieved low-single-digit positive rental reversions in all four quarters of FY17 for its Flatted Factories segment. New supply for factory space is generally at Tuas, which is not in direct competition to MINT's portfolio of Flatted Factories which are located in the central regions, such as Toa Payoh North, Tanglin Halt, Redhill and Tiong Bahru.

Commentary for quarterly results across the Industrial REITs sub-sector

Summary of quarterly results

	Gross revenue (S$ mn)			Net property income (S$ mn)			Distributable income (S$ mn)			DPU (cents)		
Y/E Mar	**4Q17**	**4Q16**	**yoy (%)**	**4Q17**	**4Q16**	**yoy (%)**	**4Q17**	**4Q16**	**yoy (%)**	**4Q17**	**4Q16**	**yoy (%)**
AIMS AMP Capital Industrial REIT	30.6	30.3	↑ 1.1	20.0	20.4	↓ (2.0)	17.8	18.7	↓ (5.3)	2.78	2.95	↓ (5.8)
Ascendas REIT	208.9	204.0	↑ 2.4	154.1	143.5	↑ 7.4	111.9	89.1	↑ 25.5	3.852	3.410	↑ 13.0
Mapletree Industrial Trust	87.8	84.0	↑ 4.5	66.0	62.0	↑ 6.4	51.8	50.4	↑ 2.7	2.88	2.81	↑ 2.5
Mapletree Logistics Trust	96.5	88.4	↑ 9.1	80.3	72.6	↑ 10.5	46.6	44.8	↑ 4.1	1.86	1.80	↑ 3.3
Y/E Dec	**1Q17**	**1Q16**	**yoy (%)**	**1Q17**	**1Q16**	**yoy (%)**	**1Q17**	**1Q16**	**yoy (%)**	**1Q17**	**1Q16**	**yoy (%)**
Cache Logistics Trust	27.1	27.9	↓ (2.9)	20.8	22.1	↓ (5.8)	16.2	18.2	↓ (11.0)	1.800	2.039	↓ (11.7)
Cambridge Industrial Trust	27.7	28.4	↓ (2.2)	19.7	21.5	↓ (8.4)	13.1	14.5	↓ (9.7)	1.004	1.112	↓ (9.7)
Keppel DC REIT	32.2	24.8	↑ 30.1	28.8	21.2	↑ 36.1	21.8	14.7	↑ 47.6	1.89	1.67	↑ 13.2
Sabana Shari'ah Compliant REIT*												
Soilbuild Business Space REIT	22.0	20.1	↑ 9.2	19.2	17.2	↑ 11.7	15.6	14.6	↑ 6.6	1.489	1.557	↓ (4.4)
Viva Industrial Trust	27.4	21.9	↑ 24.9	20.3	15.8	↑ 28.8	17.8	14.1	↑ 25.9	1.854	1.638	↑ 13.2

Source: Various REITs, Phillip Securities Research (Singapore)

*Sabana Shari'ah Compliant REIT announcement of 1Q17 results has been delayed to 9 May due to Extraordinary General Meeting

- **Gross revenue growth driven by both inorganic and organic growth**
  Inorganic growth in gross revenue was due to acquisitions at **A-REIT**, **Mapletree Logistics Trust (MLT)**, **Cache**, **KDCREIT**, **SBREIT** and **Viva Industrial Trust (VIT)**. Organic

growth in gross revenue was due to completion of Phase One of the Hewlett-Packard BTS project at **MINT**, Mapletree Logistics Hub – Toh Guan coming back on line upon completion of the asset enhancement initiative (AEI) for **MLT** and maiden contribution from newly completed property at 30 Tuas West Road for **AIMS-AMP Capital Industrial Trust (AAREIT)**.

- **Lower DPU mainly due to higher property expenses which resulted in weaker NPI**
  This was particularly so at **AAREIT**, **Cache** and **Cambridge Industrial Trust (CIT)**. **Cache** and **CIT** were affected by conversions from single-tenancy to multi-tenancy, which eroded gross revenue at the NPI level. Weaker DPU at **SBREIT** was due to dilutive 1-for-10 Preferential Offering in 3Q FY16.

Commentary for full year results across the Industrial REITs sub-sector

Summary of full year results

	Gross revenue (S$ mn)			Net property income (S$ mn)			Distributable income (S$ mn)			DPU (cents)		
Y/E Mar	FY17	FY16	yoy (%)	FY17	FY16	yoy (%)	FY17	FY16	yoy (%)	FY17	FY16	yoy (%)
AIMS AMP Capital Industrial REIT	120	124	⇩ (3.4)	79	82	⇩ (3.5)	70	72	⇩ (2.2)	11.05	11.35	⇩ (2.6)
Ascendas REIT	831	761	⇧ 9.1	611	534	⇧ 14.5	446	378	⇧ 18.0	15.74	15.36	⇧ 2.5
Mapletree Industrial Trust	341	332	⇧ 2.7	257	245	⇧ 4.8	205	198	⇧ 3.6	11.39	11.15	⇧ 2.2
Mapletree Logistics Trust	373	350	⇧ 6.6	312	291	⇧ 7.3	186	183	⇧ 1.5	7.44	7.38	⇧ 0.8

Source: Various REITs, Phillip Securities Research (Singapore)

- **Gross revenue growth driven by both inorganic and organic growth**
  Inorganic growth in gross revenue was due to acquisitions at **A-REIT** and **MLT**. Organic growth in gross revenue was due to completion of Phase One of the HP BTS project at **MINT** and the Mapletree Logistics Hub – Toh Guan coming back on line upon completion of the AEI for **MLT**.
- **Resultant DPU were in line with gross revenue**
  Lower DPU for **AAREIT** was in line with the lower gross revenue, while the higher DPU at **A-REIT**, **MINT** and **MLT** were driven by the growth in gross revenue.

Review of Performance Measures of Industrial S-REITs

Average occupancy of 93.9% among the Industrial S-REITs was higher than the JTC sector-wide occupancy of 89.4%.

Summary of Performance Measures, as at end of March 2017

	Occupancy (%)	WALE by GRI (years)	WALE by NLA (years)	Gearing (%)	WADM (years)	WACD (%)	Interest coverage (x)
AIMS AMP Capital Industrial REIT	94.6	2.5		36.1	2.3	3.7	5.0
Ascendas REIT	90.2	4.3		33.8	3.3	3.0	5.7
Cache Logistics Trust	97.2	3.6		43.1	2.6	3.5	3.9
Cambridge Industrial Trust	95.4	3.7		37.8	2.9	3.7	3.8
Keppel DC REIT	95.1		9.2	27.9	2.9	2.2	11.6
Mapletree Industrial Trust	93.1	3.1		29.2	3.5	2.7	7.7
Mapletree Logistics Trust	96.3		4.0	38.5	3.9	2.3	5.6
Sabana Shari'ah Compliant REIT*							
Soilbuild Business Space REIT	91.8	3.3		37.5	2.6	3.4	5.0
Viva Industrial Trust	91.1	3.2		39.2	3.1	3.9	4.6
Average	93.9	3.4	6.6	35.9	3.0	3.1	5.9

Source: Various REITs, Phillip Securities Research (Singapore)

WALE: Weighted Average Lease Expiry; WADM: Weighted Average Debt Maturity; WACD: Weighted Average Cost of Debt

GRI: Gross rental income; NLA: Net leasable area

*Sabana Shari'ah Compliant REIT announcement of 1Q17 results has been delayed to 9 May due to Extraordinary General Meeting

Peer relative valuation

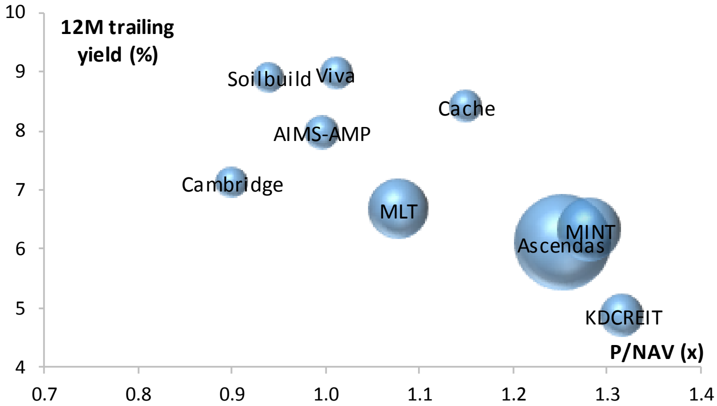
Industrial S-REITs peer relative data (arranged by Mkt. Cap.)

	Mkt. Cap. (S$ mn)	Price (S$)	Trailing P/NAV (x)	12M trailing yield (%)
Ascendas REIT	7,441	2.58	1.25	6.1
Mapletree Industrial Trust	3,244	1.800	1.28	6.3
Mapletree Logistics Trust	2,788	1.115	1.08	6.7
Keppel DC REIT	1,403	1.245	1.32	4.9
AIMS AMP Capital Industrial REIT	885	1.385	1.00	8.0
Cache Logistics Trust	803	0.890	1.15	8.4
Viva Industrial Trust	772	0.800	1.01	9.0
Cambridge Industrial Trust	744	0.570	0.90	7.1
Soilbuild Business Space REIT	707	0.675	0.94	8.9
Sabana Shari'ah Compliant REIT*	479	0.455	-	-
Average			**1.10**	**7.3**

Source: Bloomberg (Updated: 5 May 2017), Phillip Securities Research (Singapore)

*Sabana Shari'ah Compliant REIT announcement of 1Q17 results has been delayed to 9 May due to Extraordinary General Meeting

Figure 15. 12M trailing yield (%) vs. P/NAV (x)



Source: Bloomberg (Updated: 5 May 2017), Phillip Securities Research (Singapore)

Contact Information (Singapore Research Team)

Head of Research
Paul Chew – paulchewkl@phillip.com.sg

Research Operations Officer
Mohamed Amiruddin - amiruddin@phillip.com.sg

Consumer | Healthcare
Soh Lin Sin - sohls@phillip.com.sg

Property | Infrastructure
Peter Ng - peterngmc@phillip.com.sg

Macro
Pei Sai Teng - peist@phillip.com.sg

Transport | REITs (Industrial)
Richard Leow, CFTe, FRM - richardleowwt@phillip.com.sg

REITs (Commercial, Retail, Healthcare) | Property
Dehong Tan - tandh@phillip.com.sg

Technical Analysis
Jeremy Ng - jeremyngch@phillip.com.sg

Banking and Finance
Jeremy Teong - jeremyteongfh@phillip.com.sg

US Equity
Ho Kang Wei - hokw@phillip.com.sg

Oil & Gas | Energy
Chen Guangzhi - chengz@phillip.com.sg

Contact Information (Regional Member Companies)

SINGAPORE
Phillip Securities Pte Ltd
Raffles City Tower
250, North Bridge Road #06-00
Singapore 179101
Tel +65 6533 6001
Fax +65 6535 6631
Website: www.poems.com.sg

MALAYSIA
Phillip Capital Management Sdn Bhd
B-3-6 Block B Level 3 Megan Avenue II,
No. 12, Jalan Yap Kwan Seng, 50450
Kuala Lumpur
Tel +603 2162 8841
Fax +603 2166 5099
Website: www.poems.com.my

HONG KONG
Phillip Securities (HK) Ltd
11/F United Centre 95 Queensway
Hong Kong
Tel +852 2277 6600
Fax +852 2868 5307
Websites: www.phillip.com.hk

JAPAN
Phillip Securities Japan, Ltd.
4-2 Nihonbashi Kabuto-cho Chuo-ku,
Tokyo 103-0026
Tel +81-3 3666 2101
Fax +81-3 3666 6090
Website: www.phillip.co.jp

INDONESIA
PT Phillip Securities Indonesia
ANZ Tower Level 23B,
Jl Jend Sudirman Kav 33A
Jakarta 10220 – Indonesia
Tel +62-21 5790 0800
Fax +62-21 5790 0809
Website: www.phillip.co.id

CHINA
Phillip Financial Advisory (Shanghai) Co Ltd
No 550 Yan An East Road,
Ocean Tower Unit 2318,
Postal code 200001
Tel +86-21 5169 9200
Fax +86-21 6351 2940
Website: www.phillip.com.cn

THAILAND
Phillip Securities (Thailand) Public Co. Ltd
15th Floor, Vorawat Building,
849 Silom Road, Silom, Bangrak,
Bangkok 10500 Thailand
Tel +66-2 6351700 / 22680999
Fax +66-2 22680921
Website www.phillip.co.th

FRANCE
King & Shaxson Capital Limited
3rd Floor, 35 Rue de la Bienfaisance 75008
Paris France
Tel +33-1 45633100
Fax +33-1 45636017
Website: www.kingandshaxson.com

UNITED KINGDOM
King & Shaxson Capital Limited
6th Floor, Candlewick House,
120 Cannon Street,
London, EC4N 6AS
Tel +44-20 7426 5950
Fax +44-20 7626 1757
Website: www.kingandshaxson.com

UNITED STATES
Phillip Capital Inc
141 W Jackson Blvd Ste 3050
The Chicago Board of Trade Building
Chicago, IL 60604 USA
Tel +1-312 356 9000
Fax +1-312 356 9005
Website: www.phillipusa.com

AUSTRALIA
Phillip Capital Limited
Level 10, 330 Collins Street
Melbourne, Victoria 3000, Australia
Tel +61-03 9629 8288
Fax +61-03 9629 8882
Website: www.phillipcapital.com.au

SRI LANKA
Asha Phillip Securities Limited
2nd Floor, Lakshmans Building,
No. 321, Galle Road,
Colombo 03, Sri Lanka
Tel: (94) 11 2429 100
Fax: (94) 11 2429 199
Website: www.ashaphillip.net

INDIA
PhillipCapital (India) Private Limited
No.1, 18th Floor, Urmi Estate
95, Ganpatrao Kadam Marg
Lower Parel West, Mumbai 400-013
Maharashtra, India
Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969
Website: www.phillipcapital.in

TURKEY
PhillipCapital Menkul Degerler
Dr. Cemil Bengü Cad. Hak Is Merkezi
No. 2 Kat. 6A Caglayan
34403 Istanbul, Turkey
Tel: 0212 296 84 84
Fax: 0212 233 69 29
Website: www.phillipcapital.com.tr

DUBAI
Phillip Futures DMCC
Member of the Dubai Gold and
Commodities Exchange (DGCX)
Unit No 601, Plot No 58, White Crown Bldg,
Sheikh Zayed Road, P.O.Box 212291
Dubai-UAE
Tel: +971-4-3325052 / Fax: + 971-4-3328895

CAMBODIA
Phillip Bank Plc
Ground Floor of B-Office Centre,#61-64,
Norodom Blvd Corner Street 306,Sangkat
Boeung Keng Kang 1, Khan Chamkamorn,
Phnom Penh, Cambodia
Tel: 855 (0) 7796 6151/855 (0) 1620 0769
Website: www.phillipbank.com.kh

Important Information

This report is prepared and/or distributed by Phillip Securities Research Pte Ltd ("Phillip Securities Research"), which is a holder of a financial adviser's licence under the Financial Advisers Act, Chapter 110 in Singapore.

By receiving or reading this report, you agree to be bound by the terms and limitations set out below. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

The information and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this report has been obtained from public sources which Phillip Securities Research believes to be reliable. However, Phillip Securities Research does not make any representation or warranty, express or implied that such information or Research is accurate, complete or appropriate or should be relied upon as such. Any such information or Research contained in this report is subject to change, and Phillip Securities Research shall not have any responsibility to maintain or update the information or Research made available or to supply any corrections, updates or releases in connection therewith.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this report are as of the date indicated and are subject to change at any time without prior notice. Past performance of any product referred to in this report is not indicative of future results.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. This report should not be relied upon exclusively or as authoritative, without further being subject to the recipient's own independent verification and exercise of judgment. The fact that this report has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this report is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this report involve significant risks and may not be suitable for all investors, and that any decision to enter into transactions involving such products should not be made, unless all such risks are understood and an independent determination has been made that such transactions would be appropriate. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of such risks.

Nothing in this report shall be construed to be an offer or solicitation for the purchase or sale of any product. Any decision to purchase any product mentioned in this report should take into account existing public information, including any registered prospectus in respect of such product.

Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may provide an array of financial services to a large number of corporations in Singapore and worldwide, including but not limited to commercial / investment banking activities (including sponsorship, financial advisory or underwriting activities), brokerage or securities trading activities. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this report, and may have performed services for or solicited business from such issuers. Additionally, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have provided advice or investment services to such companies and investments or related investments, as may be mentioned in this report.

Phillip Securities Research or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report may, from time to time maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation in respect of the foregoing. Investments will be denominated in various currencies including US dollars and Euro and thus will be subject to any fluctuation in exchange rates between US dollars and Euro or foreign currencies and the currency of your own jurisdiction. Such fluctuations may have an adverse effect on the value, price or income return of the investment.

To the extent permitted by law, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold an interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this report. Accordingly, information may be available to Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, which is not reflected in this report, and Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may, to the extent permitted by law, have acted upon or used the information prior to or immediately following its publication. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited its officers, directors, employees or persons involved in the issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this report.

The information, tools and material presented herein are not directed, intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution, publication, availability or use would be contrary to the applicable law or regulation or which would subject Phillip Securities Research to any registration or licensing or other requirement, or penalty for contravention of such requirements within such jurisdiction.

This report is intended for general circulation only and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. The products mentioned in this report may not be suitable for all investors and a person receiving or reading this report should seek advice from a professional and financial adviser regarding the legal, business, financial, tax and other aspects including the suitability of such products, taking into account the specific investment objectives, financial situation or particular needs of that person, before making a commitment to invest in any of such products.

This report is not intended for distribution, publication to or use by any person in any jurisdiction outside of Singapore or any other jurisdiction as Phillip Securities Research may determine in its absolute discretion.

IMPORTANT DISCLOSURES FOR INCLUDED RESEARCH ANALYSES OR REPORTS OF FOREIGN RESEARCH HOUSES

Where the report contains research analyses or reports from a foreign research house, please note:

(i) recipients of the analyses or reports are to contact Phillip Securities Research (and not the relevant foreign research house) in Singapore at 250 North Bridge Road, #06-00 Raffles City Tower, Singapore 179101, telephone number +65 6533 6001, in respect of any matters arising from, or in connection with, the analyses or reports; and

(ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, Phillip Securities Research accepts legal responsibility for the contents of the analyses or reports.