# BOX ARTICLE 3.1 LATEST BUSINESS COST CONDITIONS IN SINGAPORE'S MANUFACTURING AND SERVICES SECTORS

# **OVERVIEW**

In 2020, the unit business cost (UBC) in the manufacturing and overall services sectors declined.







UBC for Services \*Refers to first 3 quarters of 2020

## **KEY DRIVERS**

The fall in the manufacturing UBC in 2020 was on account of declines in both unit labour cost and unit services cost.

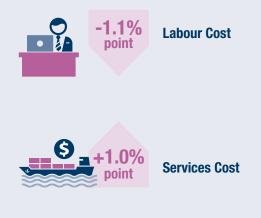
# CONTRIBUTION TO MANUFACTURING UBC IN 2020



-2.1% point

The decrease in the services UBC in 2020 came on the back of a decline in unit labour cost, which more than offset an increase in other services costs.

# CONTRIBUTION TO SERVICES UBC IN 2020



### **OUTLOOK**

Utilities

Looking ahead, the overall unit labour cost for the economy is likely to rise in 2021 in tandem with the gradual recovery of the labour market, and there may be some upward pressure on the costs of utilities, fuel and transportation due to higher oil prices. Meanwhile, industrial and commercial rentals are expected to remain largely subdued.

#### **UNIT LABOUR COST**



**UTILITIES COST** 





# LATEST BUSINESS COST CONDITIONS IN SINGAPORE'S MANUFACTURING AND SERVICES SECTORS

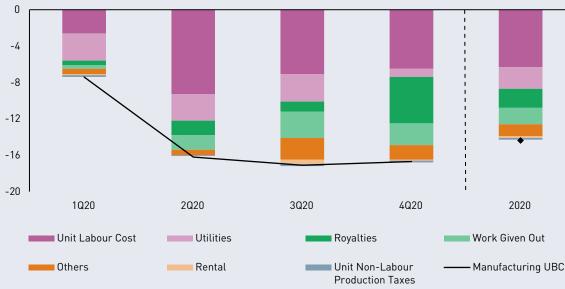
This box article highlights the latest trends in business costs for firms in Singapore's manufacturing and services sectors, as well as the outlook for key components of business costs in 2021.

### (I) UNIT BUSINESS COST<sup>1</sup>IN THE MANUFACTURING AND SERVICES SECTORS

#### Unit business costs in both the manufacturing and overall services sectors declined in 2020

In 2020, the unit business cost index for the manufacturing sector (UBCI) fell by 14.4 per cent (Exhibit 1). The main contributors to the decline were manufacturing unit labour cost (ULC), utilities cost and royalties cost<sup>2</sup>, with their contributions collectively accounting for 10.8 percentage-points (pp) of the fall in the UBCI. Meanwhile, cost components like rentals and non-labour production taxes<sup>3</sup> (e.g., property, road and other indirect taxes) had a relatively small impact on the UBCI, in part because of their low shares of total business costs. (Please refer to Annex A for the business cost structure of firms in the manufacturing and services sectors.)

#### Exhibit 1: Contribution to UBCI Changes by Key Cost Components



Contribution to yoy change, ppc

Source: Department of Statistics

Note: "Others" consists of sub-components such as professional fees, advertising, commission and agency fees, sundry expenses, etc.

Similarly, the unit business cost index for the overall services sector (UBC-Services Index)<sup>4</sup> dipped by 0.2 per cent in the first three quarters of 2020 compared to the same period a year ago (Exhibit 2).<sup>5</sup> The fall in the UBC-Services Index was due to a decline in the services ULC (-1.1pp), which more than offset an increase in other services costs (+1.0pp).<sup>6</sup>

5 Latest available UBC-Services Index is up to the third quarter of 2020.

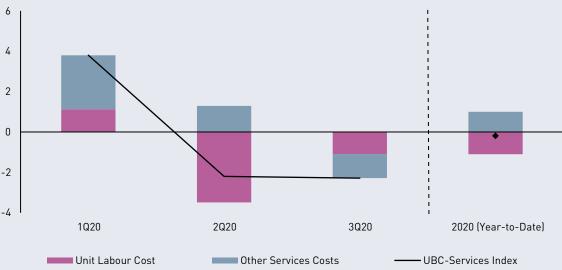
<sup>1</sup> Unit business cost measures the business costs incurred to produce one unit of output. Only operating expenses (without material costs and depreciation) are included in business costs. This follows the definition adopted by the Department of Statistics (DOS) in its computation of the Unit Business Cost for Manufacturing. See DOS' Information Paper, "Methodological Review on the Unit Business Cost Index for Manufacturing Industry (Base Year 2010=100)", at https://www.singstat.gov. sg/-/media/files/publications/economy/ip-e38.pdf.

<sup>2</sup> Royalties cost refers to payments made to another party (the licensor or franchisor who owns a particular asset) for the right to the ongoing use of that asset.

<sup>3</sup> Labour-related taxes on production (e.g., foreign worker levy) are classified under labour cost. Taxes on income (e.g., corporate income tax) are excluded.

<sup>4</sup> The UBC-Services Index is estimated by MAS to assess cost conditions in the services sector. It is a composite index of proxy cost indicators for each component of business costs, combined using weights estimated from expenditure data in DOS' Services Survey Series 2018: The Services Sector, as well as the 2016 Input-Output tables.

<sup>6</sup> The percentage-point contributions by ULC and other services costs do not sum to the overall change in the UBC-Services Index due to rounding.



#### Exhibit 2: Contribution to Overall Services UBC Changes by Cost Components

Contribution to yoy change, ppc

Notes: (1) The UBC-Services Index for 2020 refers to the average of the first three quarters; (2) Detailed cost component breakdowns for the UBC-Services Index are not available; (3) Other services costs include air & sea freight costs, cargo handling costs and warehousing & storage costs.

## (II) LATEST TRENDS AND OUTLOOK FOR KEY COST COMPONENTS

# Reflecting the fall in the ULCs for the manufacturing and overall services sectors, the ULC for the overall economy declined in 2020, driven by a reduction in total labour cost per worker as wage subsidies were provided to firms to cope with the impact of COVID-19

The ULC for the overall economy declined by 9.1 per cent in 2020,<sup>7</sup> on account of a large reduction in total labour cost<sup>8</sup> (TLC) per worker (-11.6 per cent) which outpaced a fall in labour productivity (-2.7 per cent) (Exhibit 3). In turn, the fall in TLC per worker was driven by a significant increase in the amount of wage subsidies provided by the government through support measures such as the Jobs Support Scheme, as well as the foreign worker levy (FWL) waiver and rebate granted by the government. Specifically, the increase in wage subsidies per worker and fall in FWL per worker contributed 10.9pp and 2.1pp to the decline in TLC per worker in 2020 respectively. These more than offset the contribution from the rise in remuneration per worker (+1.7pp).

At the sectoral level, most sectors experienced a decline in their respective ULCs in 2020 (Exhibit 4). In the manufacturing sector, the ULC plunged by 22.8 per cent, driven by a fall in TLC per worker as well as strong labour productivity growth. At the same time, the ULC for the overall services sector decreased by 4.9 per cent, as the decline in TLC per worker outpaced a fall in labour productivity. Among the services sectors, most saw a lower ULC, except for the transportation & storage sector, the professional services sector, and the other services industries. As for the construction sector, its ULC increased by 9.0 per cent, as a fall in labour productivity outstripped the decline in TLC per worker.

For 2021, the ULC for the overall economy is likely to increase, as the wage subsidies introduced in 2020 taper. Remuneration per worker is also expected to rise, as the labour market gradually recovers in tandem with the rebound in economic activity.

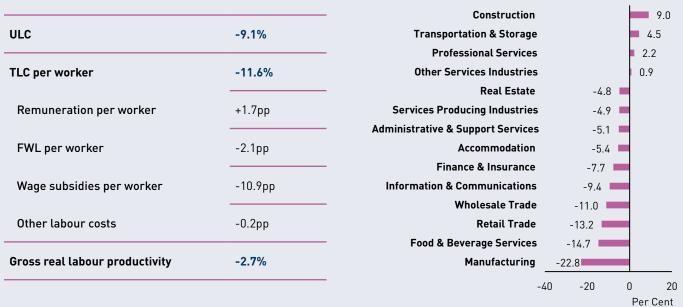
Source: Monetary Authority of Singapore

<sup>7</sup> A change in the ULC can be approximately decomposed as the change in total labour cost per worker minus the change in labour productivity (proxied by gross real value-added per worker). The approximation holds better when the changes are small.

<sup>8</sup> TLC comprises remuneration, wage subsidies and other labour-related costs, which include the skills development levy, foreign worker levy, and recruitment and net training cost. An example of the wage subsidies provided to companies was the Jobs Support Scheme, which provided wage support of up to 75 per cent of gross monthly wages to help employers retain their local employees during the COVID-19 pandemic.

#### Exhibit 3: Decomposition of ULC Growth for Overall Economy, 2020

#### Exhibit 4: ULC Change by Sectors, 2020



Source: MTI Staff estimates using data from the Department of Statistics and Ministry of Manpower Note: The pp contributions of the various types of labour costs do not sum up to the change in TLC per worker due to rounding.

#### Industrial and commercial rentals fell in 2020

Industrial rentals fell by 1.5 per cent in 2020 on the back of sluggish demand for industrial space amidst the economic uncertainty caused by the COVID-19 pandemic (Exhibit 5). Nonetheless, occupancy rate edged up over the course of the year, on account of the delays in new completions and an increase in the demand for storage space for purposes such as stockpiling and e-commerce (Exhibit 6).

For 2021, while the demand for industrial space could improve in tandem with the global and domestic economic recovery, the upcoming supply of industrial space is likely to exert some downward pressure on industrial rentals. In particular, around 2.7 million gross square metres of industrial space are expected to be completed this year (Annex B, Exhibit B1),° higher than the average annual supply of industrial space between 2015 and 2020 (approximately 1.6 million gross square metres). Taking into account both demand and supply conditions, industrial rentals are likely to remain broadly stable in 2021.



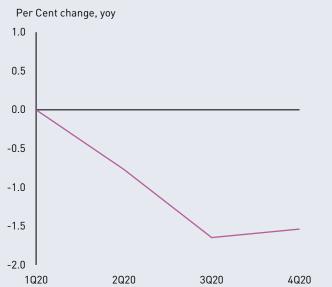
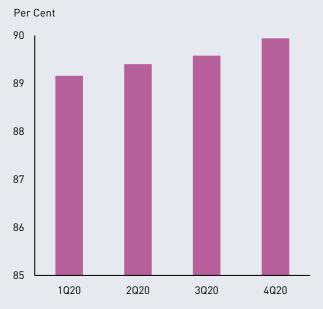


Exhibit 6: Industrial Occupancy Rate, 1020-4020



Source: JTC Corporation

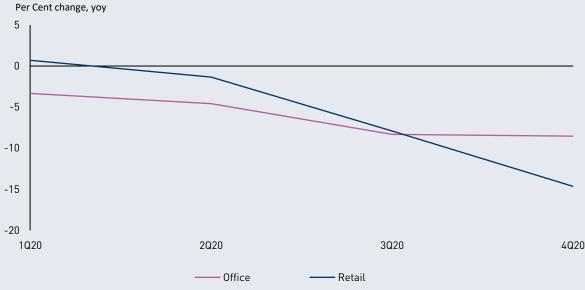
Note: Both the industrial rental index and the industrial occupancy rate cover multiple-user factory space, single-user factory space, business parks and warehouses.

9 About 0.5 million gross square metres are expected to come from completions that were delayed in 2020 due to the impact of COVID-19 on the construction sector.

In terms of commercial space, the rentals of office space declined by 8.5 per cent in 2020 in tandem with a fall in leasing demand amidst the weak economic environment (Exhibit 7). For 2021, the demand for office space is expected to improve in tandem with the economic recovery, although the extent of the increase may be modest given that businesses are likely to remain cautious in their expansion plans in view of the continued uncertainties surrounding the COVID-19 situation. At the same time, the supply of office space is expected to moderate this year. Specifically, 0.16 million gross square metres of office space are projected to come on-stream within the year, lower than the annual average of 0.21 million gross square metres completed between 2015 and 2020 (Annex B, Exhibit B2). Taken together, office rentals are likely to see a modest recovery over the course of the year.

As for retail space, rentals fell by 14.7 per cent in 2020 on account of weak leasing demand amidst the disruptions to the retail sector caused by the COVID-19 pandemic, including global travel restrictions which led to a slump in tourist arrivals and the requirement for safe distancing measures to contain the domestic outbreak. Looking ahead, the demand for retail space is expected to remain sluggish given the increased popularity of e-commerce, ongoing safe distancing measures, and the weak recovery in tourist demand. Nevertheless, business sentiments among retailers may improve over the course of the year as the domestic COVID-19 vaccine rollout continues to make progress and the labour market gradually recovers. On the supply side, an estimated 0.09 million gross square metres of retail space could come on-stream in 2021, which is lower than the annual average of 0.17 million gross square metres completed between 2015 and 2020. While the moderation in the supply of retail space and the gradual recovery in business sentiments may provide some support to retail rentals towards the end of the year, retail rentals are by and large expected to remain subdued this year.

#### Exhibit 7: Office and Retail Rental Indices, 1020 - 4020



Source: Urban Redevelopment Authority

# Costs of utilities and fuel declined in 2020

The cost of utilities borne by firms is closely linked to electricity prices,<sup>10</sup> which are in turn influenced by movements in global oil prices.<sup>11</sup> Oil prices also contribute to business costs through fuel and transportation costs.

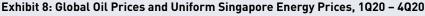
In 2020, the average wholesale electricity price<sup>12</sup> fell sharply by 28.8 per cent, in tandem with the steep decline in global oil prices (Exhibit 8). The plunge in oil prices came on the back of lower global oil demand as restriction measures taken by many countries to curb the spread of COVID-19 weighed on global economic activity, as well as curtailed international and domestic travel.

<sup>10</sup> For example, electricity cost accounts for around 83 per cent of the cost of utilities borne by firms in the manufacturing sector.

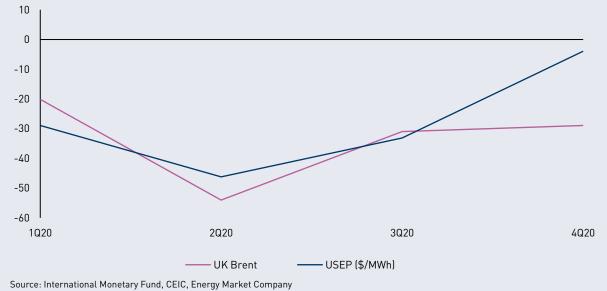
<sup>11</sup> About 96 per cent of Singapore's electricity is generated from natural gas, the price of which is indexed to oil prices. This is a common market practice in Asia.

<sup>12</sup> This refers to the Uniform Singapore Energy Price (USEP), which is the average wholesale energy price in the National Electricity Market of Singapore.

Looking ahead, global oil prices are projected to increase given the expected recovery in oil demand alongside the pickup in global economic activity, even as oil production is likely to remain restrained. Nonetheless, the current high level of global oil inventory is expected to cap upward price pressures in the near term. For 2021 as a whole, the US Energy Information Administration has forecast that global oil prices will average US\$53 per barrel (/bbl)<sup>13</sup>, which is higher than the 2020 average of US\$42/bbl but lower than the historical five-year average prior to 2020.<sup>14</sup> In turn, the modest recovery in oil prices is likely to exert some upward pressure on the costs of utilities, fuel and transportation in 2021.



Per Cent change, yoy



# Conclusion

In 2020, the unit business cost for the manufacturing sector fell, in large part due to declines in the manufacturing ULC, utilities cost and royalties cost. Meanwhile, the unit business cost for the overall services sector dipped in the first three guarters of 2020 because of a reduction in the services ULC which outweighed an increase in other services costs.

Looking ahead, the overall ULC for the economy is likely to rise in 2021 on account of a tapering of the wage subsidies introduced in 2020 and as remuneration per worker rises in tandem with the gradual recovery of the labour market. At the same time, the costs of utilities, fuel and transportation are likely to see some upward pressure due to higher global oil prices, while industrial and commercial rental costs are expected to remain largely subdued.

Contributed by:

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14 Between 2015 and 2019, global oil prices averaged \$57/bbl.

# REFERENCES

Singapore Department of Statistics (2014), "Methodological Review on the Unit Business Cost Index for Manufacturing Industry (Base Year 2010=100)" November. https://www.singstat.gov.sg/-/media/files/publications/economy/ip-e38.pdf.

U.S. Energy Information Administration (2021), "Short-Term Energy Outlook (STEO)" February. https://www.eia.gov/outlooks/steo/.

# ANNEX A: BUSINESS COST STRUCTURE OF MANUFACTURING AND SERVICES SECTORS

### **Manufacturing Sector**

In the manufacturing sector, labour cost, work given out and "others" constitute the largest components of business costs. These three components collectively account for around 86 per cent of the business costs of small- and medium-sized enterprises (SMEs) and around 77 per cent of the business costs of non-SMEs in the sector.

The remaining services cost components, including utilities, fuel, rental of building/premises and charges paid to other firms for inland transportation and ocean/air/other freight, make up a smaller share of business costs, at 22 per cent for non-SMEs and 13 per cent for SMEs. Non-labour production taxes, which include property, road and other indirect taxes, account for around 0.4 per cent and 0.7 per cent of the business costs of SMEs and non-SMEs respectively.

Details of the business cost structure of SMEs and non-SMEs in the various manufacturing clusters are in Exhibit A1.

### **Services Sector**

Like in the manufacturing sector, labour cost constitutes a major cost component for firms in the services sectors, with its share of business costs ranging from around 9 per cent for firms in the transportation & storage sector, to around 39 per cent or more for firms in labour-intensive sectors such as accommodation, food & beverage services and retail trade. Across all services sectors, except for the accommodation and transportation & storage sectors, the labour cost share of business costs is larger for SMEs than for non-SMEs.

On the other hand, utilities cost is a relatively small cost component for firms in the services sectors, accounting for less than 2 per cent of the business costs of firms in most sectors. Key exceptions are firms in the accommodation and food & beverage services sectors, where utilities cost constitutes up to 5 per cent of their business costs. Similarly, rental cost accounts for a small share of the business costs of firms in most services sectors. Key exceptions include the retail trade, accommodation and food & beverage services sectors, where the rental cost share of business costs for SMEs is 28 per cent, 15 per cent and 26 per cent respectively.

Similar to the case for the manufacturing sector, non-labour production taxes account for less than 1 per cent of the business costs of firms in most services sectors. Even for the accommodation and real estate, professional services and administrative & support services sectors, which have the highest shares of non-labour production taxes, they are relatively small, at less than 4 per cent.

Details of the business cost structure of SMEs and non-SMEs in the various services sectors are in Exhibit A2.

	Total		Electronics	S	Chemicals	-10	Biomedical Manufacturing	al Irina	Precision Engineering	DU	Transport Engineering		General Manufacturing	urina
	Non-SMEs	SMEs	Non-SMEs SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs
Labour Cost	19.5	36.6	12.5	10.1	16.9	25.9	24.1	20.4	32.5	51.2	36.3	46.1	35.6	50.7
Services Cost	80.1	62.7	87.3	89.4	82.1	73.0	75.6	79.1	66.9	48.1	63.3	53.3	63.8	48.5
Work given out	21.1	18.2	28.3	37.2	6.8	3.1	1.9	16.2	12.0	15.1	37.0	26.7	4.6	12.9
Royalties	10.7	2.7	7.8	4.0	4.7	4.3	37.4	6.3	23.4	1.2	2.5	1.2	3.2	1.4
Utilities	3.2	2.9	2.6	0.9	7.3	8.3	1.5	1.3	1.8	2.2	1.8	1.1	6.5	3.0
Fuel	5.5	1.3	0.9	0.1	30.7	5.1	0.5	0.7	0.2	0.4	0.3	0.3	3.8	1.3
Rental of building/ premises	0.4	2.4	0.3	0.7	0.2	1.4	0.5	1.0	0.7	2.5	0.5	2.0	1.9	5.2
Charges paid to other firms for inland transportation and ocean/ air/ other freight	2.2 t	4.3	1.1	0.7	5.1	14.4	1.8	5.8	3.5	2.4	1.5	1.3	6.6	3.1
Others	36.9	31.0	46.3	45.7	27.2	36.5	32.0	47.8	25.3	24.4	19.7	20.8	37.2	21.7
Non-Labour Production Taxes	0.4	0.7	0.2	0.6	1.0	1.1	0.3	0.4	0.6	0.7	0.4	0.6	0.7	0.8
Source: Economic Development Board	Ţ													

Exhibit A1: Business Cost Structure of the Manufacturing Sector by Firm Size, 2019

Source: Economic Development Board

Note: SMEs refer to enterprises with operating receipts of not more than \$100 million or employment of not more than 200 workers. Non-SMEs refer to enterprises with operating receipts of more than \$100 million and employment of more than 200 workers.

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hibit A2: Business Cost Structure of the Services Sectors by
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	Wholesale Trade Retail Trade	Trade	Retail Trad	9	Accommodation	lation	Food & Beverage Services		Transportation & Storage	ation	Information & Communications	n & ations	Finance & Insurance		Real Estate, Professional Services and Administrative & Support Services	e, nal ative & ervices
	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs
Labour Cost	19.1	19.4	36.5	41.0	51.0	39.1	43.3	49.8	12.1	6.3	16.2	26.3	10.4	13.2	29.3	30.1
Services Cost	80.4	79.8	62.3	58.3	45.4	58.0	56.1	49.8	87.5	93.4	83.2	73.4	89.5	86.5	68.6	67.2
Utilities	0.7	0.2	2.5	1.4	4.4	5.5	4.0	4.6	0.5	0.1	0.9	0.9	0.1	0.1	0.4	1.0
Freight & Transport	11.5	40.2	1.5	2.0	I	Т	2.2	0.8	50.8	61.6	I	1.4	1	Т	0.1	2.0
<b>Financial Services</b>	2.0	2.4	2.2	2.6	1.7	2.4	0.9	1.4	0.5	0.5	0.3	0.4	3.2	4.2	0.1	0.6
Communications	0.5	0.4	0.4	0.9	0.3	0.6	0.2	0.5	0.2	0.3	1.1	7.4	0.2	0.2	0.3	0.9
Renting of Premises	4.2	4.3	34.8	27.9	6.9	15.0	21.2	25.9	0.9	1.8	1.4	2.7	0.6	1.1	1.3	3.9
<b>Professional Services</b>	4.1	3.6	1.8	2.2	2.8	1.7	0.7	1.4	1.0	0.5	16.7	9.4	2.3	3.8	9.6	5.7
Other Services	57.5	28.9	19.2	21.3	29.4	32.8	27.0	15.3	33.6	28.5	62.8	51.2	83.1	77.2	56.7	53.1
Advertising & Entertainment	4.8	3.1	4.7	6.3	4.3	3.4	3.1	2.0	0.4	0.9	3.0	15.5	1.5	9.0	0.6	5.7
Admin & Management Fees	12.0	6.0	2.8	2.9	4.9	8.1	3.1	3.3	3.0	3.5	15.6	14.0	5.1	8.9	8.2	7.4
Contract labour & work given out	10.0	2.8	1.9	1.9	1.1	3.5	4.2	2.1	1.4	1.8	3.2	6.3	0.8	0.3	28.8	11.5
Commission	7.1	4.9	0.5	3.1	2.0	4.1	0.1	0.6	2.2	1.8	3.2	3.2	3.2	8.2	0.9	2.6
Royalties	17.8	2.3	1.5	0.4	2.6	0.5	9.1	1.5	0.1	т	29.3	3.2	0.5	0.3	0.5	1.2
Maintenance & repairs	1.3	0.7	3.6	2.4	3.3	4.6	3.8	2.6	4.3	1.7	1.2	1.2	0.5	0.3	1.4	2.8
Fuel	I	1.1	0.1	0.1	1	ı	0.2	0.1	16.8	12.7	I	Т	1	Т	I	0.2
Others	4.5	8.0	4.1	4.3	11.2	8.7	3.4	3.0	5.4	6.1	7.3	7.8	71.4	58.6	16.2	21.8
Non-Labour Production Taxes	0.5	0.7	1.2	0.7	3.6	2.9	9.0	0.3	0.4	0.2	0.6	0.3	0.1	0.2	2.1	2.7

Source: Department of Statistics and Monetary Authority of Singapore

Notes: 1. SMEs refer to enterprises with operating receipts of not more than \$100 million or employment of not more than 200 workers. Non-SMEs refer to enterprises with operating receipts of more than \$100 million and employment of more than 200 workers. 2. "- "refers to nil or negligible.

# **ANNEX B: SUPPLY OF INDUSTRIAL AND COMMERCIAL SPACE**

	Total	2021	2022	2023	2024	2025	>2025
Multiple-User Factory S	Space ('000 sq	m gross)					
Total	1,651	885	709	4	52	-	-
Under Construction	1,439	853	533	0	52	-	-
Planned	212	32	176	4	0	-	-
Single-User Factory Spa	ace ('000 sqm	gross)					
Total	2,014	1,140	493	218	163	-	-
Under Construction	1,440	931	262	132	115	-	-
Planned	574	209	231	86	48	-	-
Business Park Space ('0	)00 sqm gros:	s)					
Total	606	202	0	64	339	-	-
Under Construction	415	188	0	0	227	-	-
Planned	191	14	0	64	113	-	-
Warehouse Space ('000	sqm gross)						
Total	944	450	347	138	10	-	-
Under Construction	716	410	306	-	-	-	-
Planned	228	39	41	138	10	-	-
Total Industrial Space	5,215	2,677	1,549	424	565	-	-

#### Exhibit B1: Supply of Industrial Space

Source: JTC Corporation

Note: The upcoming supply figures include supply from new development and redevelopment projects. They comprise:

- projects with Provisional Permission, Outline Provisional Permission and/or Written Permission;

- developments submitted for planning approval and which are under consideration;

projects on awarded Government Land Sales (GLS) and Concept and Price Tender (CPT) sites for which plans have not been submitted for planning approval; and planned projects in the GLS (which refer to sites on the GLS confirmed list and sites on the GLS reserve list that have been triggered) and CPT sites launched for tender.

#### Exhibit B2: Supply of Commercial Space

	Total	2021	2022	2023	2024	2025	>2025
Office Space ('000 sqm gr	oss)			·			- -
Total	770	164	61	222	217	-	106
Under Construction	478	164	61	214	39	-	-
Planned	292	-	-	8	178	-	106
Retail Space ('000 sqm gr	oss)						
Total	426	89	73	62	65	19	118
Under Construction	252	89	72	42	49	-	-
Planned	174	-	1	20	16	19	118
Total Commercial Space	1,196	253	134	284	282	19	224

Source: Urban Redevelopment Authority