

Box Article 3.1

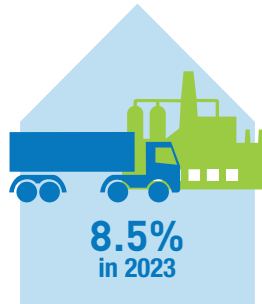
BUSINESS COST CONDITIONS IN SINGAPORE'S MANUFACTURING AND SERVICES SECTORS

OVERVIEW

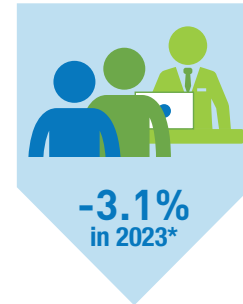
In 2023, unit business cost (UBC) in the manufacturing sector rose, while that in the overall services sector declined.

DEFINITION OF UBC

$$\text{UBC} = \frac{\text{Total Business Cost}}{\text{Gross Real Value-Added}}$$



UBC for Manufacturing



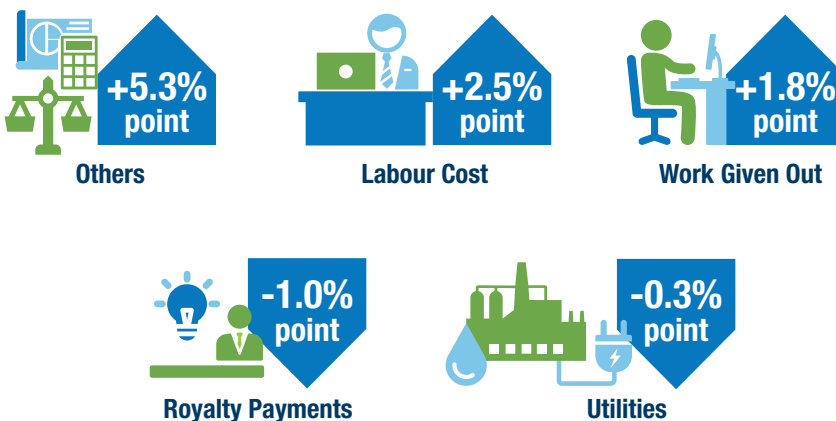
UBC for Services

*Refers to the first three quarters of 2023

KEY DRIVERS

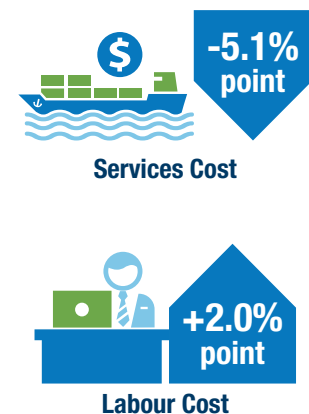
The increase in manufacturing UBC in 2023 was mainly on account of an increase in the "others" component, unit labour cost and the costs of work given out, which outweighed the declines in royalty payments and utilities cost.

CONTRIBUTION TO MANUFACTURING UBC IN 2023



The fall in services UBC in 2023 came on the back of a decline in non-labour costs, which more than offset an increase in unit labour cost.

CONTRIBUTION TO SERVICES UBC IN 2023



OUTLOOK

Looking ahead, the overall unit labour cost for the economy is expected to continue to rise in 2024, albeit at a more moderate pace as compared to 2023 given that the growth in remuneration per worker is likely to soften amidst easing labour market tightness. At the same time, the costs of utilities, fuel and transportation are expected to remain broadly stable, in line with the outlook for global oil prices in 2024.

BOX 3.1: BUSINESS COST CONDITIONS IN SINGAPORE'S MANUFACTURING AND SERVICES SECTORS

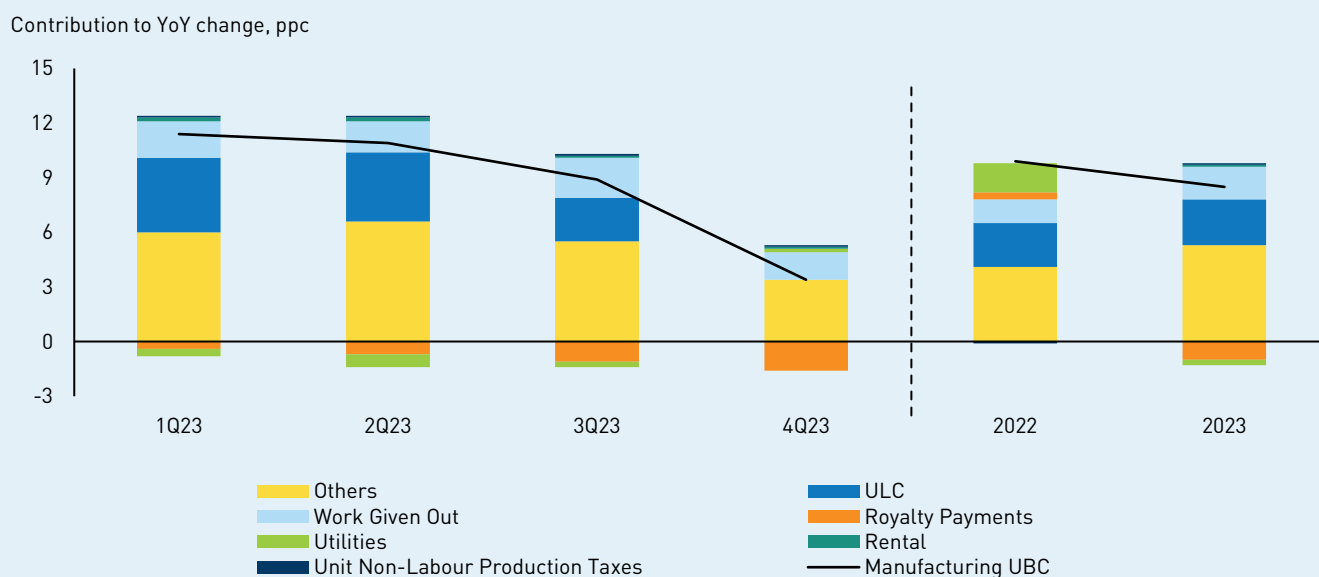
This box article highlights the latest trends in business costs for firms in Singapore's manufacturing and services sectors, as well as the outlook for the key components of business costs in 2024.

(I) Unit Business Cost¹ in the Manufacturing and Services Sectors

In 2023, unit business cost in the manufacturing sector rose, while unit business cost in the overall services sector declined

In 2023, the unit business cost index for the manufacturing sector (UBCI) rose by 8.5 per cent, easing from the 9.9 per cent increase in 2022 (Exhibit 1).² The main contributors to the increase in the UBCI were the "others" cost component³, manufacturing unit labour cost (ULC) and the costs of work given out. Collectively, they accounted for 9.6 percentage-points (pp) of the increase in the UBCI, more than offsetting the declines in royalty payments⁴ and utilities cost (-1.3pp contribution). Meanwhile, the remaining cost components such as non-labour production taxes⁵ (e.g., property, road and other indirect taxes) and rental costs⁶ had a relatively small impact on the UBCI, in part due to their small shares in overall business costs. (Please refer to the Annex for the business cost structure of firms in the manufacturing and services sectors.)

Exhibit 1: Contribution to the UBCI Change by Key Cost Components



Source: Department of Statistics

1 Unit business cost measures the costs incurred to produce one unit of output. Only operating expenses (i.e., excluding materials costs and depreciation) are included based on the definition adopted by the Department of Statistics (DOS) in its computation of the Unit Business Cost for Manufacturing. See DOS's 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>.

2 Business costs tend to increase when firms produce a higher amount of output to meet demand. Unit business cost accounts for the change in output by measuring the business costs incurred to produce one unit of output.

3 "Others" costs consist of sub-components such as professional fees, advertising, commission & agency fees, sundry expenses etc.

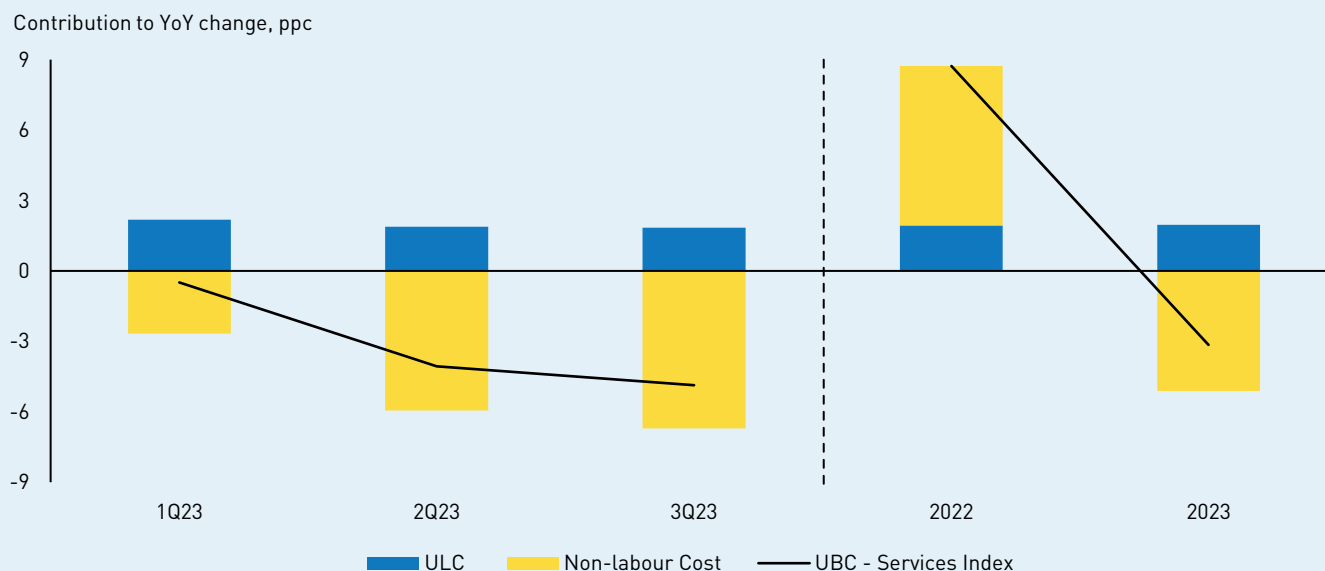
4 Royalty payments refer to payments to another party (the licensor or franchisor who owns a particular asset) for the right to the ongoing use of that asset. There could be many reasons for changes in royalty payments. For instance, royalty payments vary with company-specific licensing agreements which could differ from year to year. Furthermore, royalties are usually computed as a percentage of sales, which could be volatile each year.

5 Labour-related taxes on production (e.g., foreign worker levy) are classified under labour cost. Taxes on income (e.g., corporate income tax) are not included in business costs.

6 Industrial rentals rose by 8.9 per cent in 2023 amidst inflationary pressures, higher than the 6.9 per cent increase in 2022.

As for the overall services sector, its unit business cost index (UBC-Services Index)⁷ fell by 3.1 per cent year-on-year in the first three quarters of 2023, a reversal from the 8.7 per cent increase recorded over the same period last year (Exhibit 2).⁸ This was due to a decline in non-labour costs (-5.1pp contribution), which more than offset an increase in the services ULC (+2.0pp). In turn, the fall in non-labour costs was due to lower freight & transport charges and fuel costs compared to the first three quarters of 2022, which outweighed higher rental costs over the same period⁹.

Exhibit 2: Contribution to UBC-Services Index Changes by Cost Components



Source: Monetary Authority of Singapore

Notes: (1) The 2022 and 2023 figures refer to the average of the index for the first three quarters of the respective years; (2) Detailed cost component breakdown of the UBC-Services Index is not available; (3) Non-labour costs include air & sea freight costs, cargo handling costs and warehousing & storage costs.

(III) Latest Trends and Outlook for Key Cost Components

The pace of increase in the ULC for the overall economy slowed in 2023, and could moderate further in 2024

The ULC for the overall economy rose by 7.5 per cent in 2023, moderating from the 9.1 per cent increase in 2022.¹⁰ The increase in the overall ULC was due to a rise in total labour cost¹¹ (TLC) per worker (3.6 per cent) and a decline in labour productivity¹² (-3.7 per cent) (Exhibit 3). In turn, the increase in TLC per worker was mainly driven by a pickup in remuneration per worker, which contributed 2.4pp to the rise in TLC per worker.

At the sectoral level, all sectors experienced an increase in their ULCs in 2023 (Exhibit 4). The ULCs for the manufacturing (10.0 per cent) and construction (8.7 per cent) sectors increased on the back of a rise in TLC per worker, alongside a decline in labour productivity.

Meanwhile, among the services sectors, the professional services (9.5 per cent), accommodation (9.4 per cent) and finance & insurance (9.4 per cent) sectors registered the largest increases in their ULCs. For these three sectors, the increases in their ULCs were due to the combined effects of an increase in TLC per worker and a fall in labour productivity.

⁷ 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 2019: The Services Sector, as well as the 2019 Input-Output tables.

⁸ Latest available UBC-Services Index is up to the third quarter of 2023.

⁹ Rentals of office space increased by 16.5 per cent in the first three quarters of 2023 compared to the same period a year ago, even as rentals of retail space fell by 1.5 per cent over the same period.

¹⁰ 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). This approximation holds better when the changes are small.

¹¹ TLC comprises remuneration, wage subsidies and other labour-related costs, which include the skills development levy, foreign worker levy, and recruitment and net training costs.

¹² Labour productivity in this decomposition exercise is proxied by real gross value-added per worker.

For 2024, the ULC for the overall economy is expected to continue to rise, albeit at a more moderate pace as compared to 2023 given that the growth in remuneration per worker is likely to soften amidst easing labour market tightness.

Exhibit 3: Decomposition of ULC Growth for Overall Economy, 2023

ULC	7.5%
TLC per worker	3.6%
<i>Remuneration per worker</i>	+2.4pp
<i>FWL per worker</i>	+0.5pp
<i>Wage subsidies per worker</i>	+0.4pp
<i>Other labour costs</i>	+0.3pp
Gross real labour productivity*	-3.7%

* Measured as real gross value-added per worker.

Source: MTI Staff estimates using data from the Department of Statistics and Ministry of Manpower

Exhibit 4: ULC Change by Sectors, 2023



Costs of utilities, fuel and transportation are likely to remain broadly stable in 2024

The cost of utilities borne by firms is closely linked to electricity prices,¹³ which are in turn influenced by global oil prices.¹⁴ Oil prices also contribute to business costs through fuel and transportation costs.

In 2023, the average wholesale electricity price¹⁵ declined by 14 per cent as global oil prices moderated from the high base in 2022 amidst weakness in the global economic environment (Exhibit 5).

Notwithstanding potential upside risks from the Israel-Hamas conflict, global oil prices are projected to remain stable in 2024 as production cuts by the Organisation of Petroleum Exporting Countries and selected non-member countries (OPEC+) are likely to be offset by slowing global demand. For 2024 as a whole, the US Energy Information Administration (EIA) has projected that global oil prices will average US\$82 per barrel (/bbl)¹⁶, in line with the 2023 average of US\$82/bbl.

In turn, domestic fuel and transportation costs are expected to remain broadly stable in 2024. Meanwhile, the domestic cost of utilities will pick up slightly following the increase in carbon tax¹⁷ and phased increase in water price¹⁸ in 2024.

¹³ For example, electricity cost accounts for around 82 per cent of the cost of utilities borne by firms in the manufacturing sector.

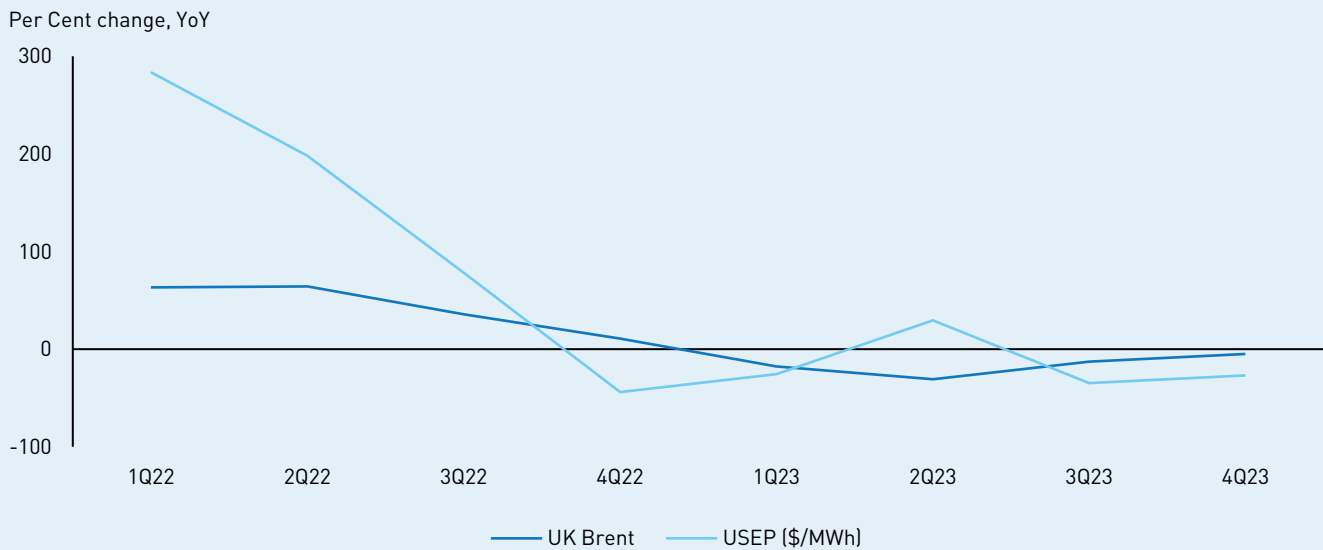
¹⁴ Around 95 per cent of Singapore's electricity is generated from natural gas, the price of which is indexed to oil prices. This is a common market practice in Asia.

¹⁵ This is based on the average half-hourly Uniform Singapore Energy Price (USEP), which is a proxy for average wholesale energy prices in the National Electricity Market of Singapore.

¹⁶ EIA Short-Term Energy Outlook Report, February 2024.

¹⁷ The National Climate Change Secretariat (NCCS) has estimated that every \$5 increase in carbon tax could cause household electricity tariffs to rise by a corresponding 1 per cent.

¹⁸ As announced earlier, to meet the higher costs of supplying and producing water, the potable water price will increase by 50 cents per cubic metre in two phases over 2024 and 2025. This represents an increase in the water price of about 2.5 per cent per year since the last price revision which was announced in 2017.

Exhibit 5: Global Oil Prices and Uniform Singapore Energy Prices, 1Q22 – 4Q23

Source: International Monetary Fund, CEIC, Energy Market Company

Note: The elevated USEP in 2Q23 was attributable to higher demand for electricity and maintenance of generation facilities.

Conclusion

In 2023, the UBCI for the manufacturing sector rose, in large part due to increases in the “others” cost component, manufacturing ULC and the costs of work given out, which outweighed the declines in royalty payments and utilities cost. On the other hand, the UBC-Services Index fell in the first three quarters of 2023 on account of a fall in non-labour costs, which more than offset an increase in the services ULC.

Looking ahead, the overall ULC for the economy is expected to continue to rise in 2024, albeit at a more moderate pace as compared to 2023 given that the growth in remuneration per worker is likely to soften amidst easing labour market tightness. At the same time, the costs of utilities, fuel and transportation are expected to remain broadly stable, in line with the outlook for global oil prices in 2024.

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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 (2024), “Short-Term Energy Outlook (STEO)” February. <https://www.eia.gov/outlooks/steo/>.

ANNEX: BUSINESS COST STRUCTURE OF MANUFACTURING AND SERVICES SECTORS IN 2022

Manufacturing Sector

In the manufacturing sector, labour cost, work given out and “others” constituted the largest components of business costs. These three components collectively accounted for around 83 per cent of the business costs of small- and medium-sized enterprises (SMEs) and around 74 per cent of the business costs of non-SMEs in the sector in 2022.

The remaining cost components, including utilities, fuel, rental of building/premises and charges paid to other firms for inland transportation and ocean/air/other freight, made up a smaller share of business costs, at around 17 per cent for SMEs and 25 per cent for non-SMEs in 2022. Non-labour production taxes, which include property, road and other indirect taxes, accounted for around 0.6 per cent and 0.4 per cent of the business costs of SMEs and non-SMEs respectively over the same period.

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

Services Sectors

Labour cost constituted a major cost component for firms in the services sectors, with its share of business costs ranging from around 6 per cent for firms in the transportation & storage sector, to around 37 per cent or more for firms in labour-intensive sectors such as food & beverage services, accommodation and retail trade sectors in 2022. Across all services sectors, except for the accommodation, real estate, professional services and administrative & support services, wholesale trade and transportation & storage sectors, the labour cost share of business costs was larger for SMEs than for non-SMEs.

On the other hand, utilities cost was a relatively small cost component for services firms, accounting for less than 3 per cent of the business costs of firms in most services sectors in 2022. Key exceptions were firms in the accommodation and food & beverage services sectors, where utilities cost constituted around 7 per cent or less of their business costs. Similarly, rental cost accounted for a small share of the business costs of firms in most services sectors. Key exceptions included the retail trade and food & beverage services sectors, where the rental cost share of business costs for SMEs was 25 per cent and 21 per cent respectively.

Similar to the manufacturing sector, non-labour production taxes accounted for less than 1 per cent of the business costs of firms in most services sectors.

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

Exhibit A1: Business Cost Structure of the Manufacturing Sector by Firm Size, 2022

	Total		Electronics		Chemicals		Biomedical Manufacturing		Precision Engineering		Transport Engineering		General Manufacturing	
	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs
Labour Cost	17.9	30.6	11.5	8.0	14.1	25.6	26.7	12.9	30.7	47.5	33.7	47.0	32.5	47.2
Services Cost	81.7	68.8	88.3	91.9	85.0	73.6	72.9	86.7	68.9	51.6	65.8	52.4	67.1	52.1
Work given out	19.2	21.8	25.0	45.2	4.3	3.2	4.7	21.9	11.8	15.5	38.8	21.8	5.2	13.5
Royalty Payments	12.1	5.2	14.1	5.9	4.9	5.2	31.4	18.1	7.6	1.2	2.4	2.0	8.9	0.9
Utilities	4.1	3.2	3.3	0.7	9.2	11.2	1.9	0.8	2.0	3.0	2.5	1.8	7.5	3.6
Fuel	5.6	1.4	1.2	-	29.2	6.5	0.7	0.2	0.1	0.4	0.4	0.4	3.9	2.2
Rental of building/premises	0.3	1.7	0.1	0.2	0.2	1.3	0.8	0.5	0.6	1.7	0.6	2.1	1.1	4.4
Charges paid to other firms for inland transportation and ocean/ air/ other freight	3.2	5.2	1.5	1.6	6.6	15.5	5.5	7.7	5.6	3.0	1.8	1.6	6.0	4.8
Others	37.2	30.3	43.2	38.3	30.5	30.6	28.0	37.5	41.2	26.8	19.3	22.7	34.5	22.7
Non-Labour Production Taxes	0.4	0.6	0.2	0.1	0.9	0.8	0.3	0.4	0.5	0.9	0.4	0.6	0.4	0.7

Source: Economic Development Board

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. "Others" consists of sub-components such as professional fees, advertising, commission and agency fees, sundry expenses, etc.
3. "-" refers to nil or negligible.

Exhibit A2: Business Cost Structure of the Services Sectors by Firm Size, 2022

	Wholesale Trade		Retail Trade		Accommodation		Food & Beverage Services		Transportation & Storage		Information & Communications		Finance & Insurance		Real Estate, Professional Services and Administrative & Support Services	
	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	16.5	11.4	36.9	37.4	49.9	40.8	41.9	45.7	12.2	3.6	13.5	20.4	10.5	14.3	38.5	32.4
Services Cost	82.4	88.1	62.3	61.8	47.1	56.6	57.7	54.0	87.6	96.3	86.1	79.2	89.4	85.6	59.1	65.1
Utilities	0.3	0.2	3.2	1.6	6.8	7.4	5.2	5.9	0.9	0.1	0.6	1.1	-	0.1	0.8	1.2
Freight & Transport	22.2	48.7	4.8	2.7	-	0.1	2.1	1.3	50.8	72.5	0.4	0.4	-	-	1.1	1.0
Financial Services	1.5	2.2	2.4	2.4	1.3	2.1	0.7	1.7	0.3	0.3	1.2	2.0	4.0	5.3	0.1	0.8
Communications	0.4	0.3	0.3	0.8	0.3	0.8	0.2	0.5	0.4	0.2	1.1	8.6	0.2	0.3	0.2	0.4
Renting of Premises	1.5	3.9	28.7	24.5	8.0	12.0	18.9	21.4	1.3	1.0	1.3	2.6	0.6	1.1	2.4	3.5
Professional Services	7.0	3.7	2.1	2.5	2.7	2.9	1.0	1.6	1.1	0.5	14.9	11.6	2.3	5.6	11.9	6.7
Other Services	49.6	29.1	20.8	27.2	28.0	31.2	29.7	21.7	32.7	21.7	67.6	52.9	82.2	73.3	42.6	51.5
<i>Advertising & Entertainment</i>	6.2	5.4	4.6	7.0	3.0	4.0	4.0	2.8	0.6	0.8	5.8	15.3	1.5	1.2	0.6	4.6
<i>Admin & Management Fees</i>	12.3	5.4	3.3	3.4	5.5	7.3	2.9	3.8	1.1	1.5	13.3	10.9	4.5	9.3	4.5	10.0
<i>Contract labour & work given out</i>	12.1	2.1	0.4	1.8	1.4	1.7	4.4	2.1	0.6	0.7	6.1	5.9	0.3	0.3	27.3	13.0
<i>Commission</i>	2.0	4.5	1.2	4.2	0.9	3.2	1.5	3.1	3.3	1.3	1.8	2.4	3.1	7.7	1.0	3.9
<i>Royalties</i>	11.7	4.3	1.2	1.0	3.3	0.6	7.6	2.3	-	-	36.7	5.7	0.1	0.2	0.5	0.5
<i>Maintenance & repairs</i>	1.2	0.6	2.9	1.9	4.0	6.7	5.8	2.6	3.0	1.1	0.5	1.2	0.5	0.3	2.0	3.7
<i>Fuel</i>	-	0.7	0.1	0.1	-	-	0.4	0.1	19.7	12.9	-	-	-	-	-	0.2
<i>Others</i>	4.2	6.3	7.1	7.8	9.8	7.7	3.1	5.0	4.5	3.5	3.4	11.4	72.2	54.4	6.6	15.6
Non-Labour Production Taxes	1.0	0.5	0.9	0.8	3.0	2.6	0.4	0.3	0.3	0.1	0.3	0.4	0.1	0.1	2.3	2.5

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.

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