



**ECONOMIC  
SURVEY OF  
SINGAPORE  
2023**

February 2024

**Ministry of Trade and Industry  
Republic of Singapore**

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# MAIN INDICATORS OF THE SINGAPORE ECONOMY

## OVERALL ECONOMY



**GDP**  
at Current  
Market Price

2022  
**\$687.2 billion**  
2023  
**\$673.3 billion**



**Real GDP**  
(YoY Growth)

2022  
**+3.8%**  
2023  
**+1.1%**



**GNI**  
Per Capita

2022  
**\$98,550**  
2023  
**\$95,455**

## STRUCTURE OF THE ECONOMY IN 2023 (% OF NOMINAL VA)



Services Producing  
Industries  
**72.7%**

Ownership  
of Dwellings  
**3.6%**

Goods Producing  
Industries  
**23.6%**

Manufacturing  
**18.6%**

Construction  
**3.5%**

### BREAKDOWN OF SERVICES PRODUCING INDUSTRIES



Wholesale  
Trade  
**22.3%**



Finance &  
Insurance  
**13.8%**



Transportation  
& Storage  
**6.8%**



Professional  
Services  
**5.7%**



Information &  
Communications  
**5.7%**



Real  
Estate  
**3.1%**



Administrative &  
Support Services  
**2.8%**



Retail  
Trade  
**1.3%**



Food & Beverage  
Services  
**0.9%**



Accommodation  
**0.8%**



Other Services  
Industries  
**9.6%**

## LABOUR MARKET



Employment  
(as at year end)

2022  
**3,893.6**  
thousand  
2023  
**4,000.7**  
thousand



Overall  
Unemployment Rate

2022  
**2.1%**  
2023  
**1.9%**



Value-Added per  
Actual Hour Worked

2022  
**-0.7%**  
2023  
**-2.4%**

## COST



Unit Labour Cost of  
Overall Economy

2022  
**+9.1%**  
2023  
**+7.5%**



Unit Business Cost  
of Manufacturing

2022  
**+9.9%**  
2023  
**+8.5%**



Unit Labour Cost  
of Manufacturing

2022  
**+9.5%**  
2023  
**+10.0%**

## PRICES



Consumer Price Index  
– All Items

2022  
**+6.1%**  
2023  
**+4.8%**



Domestic Supply  
Price Index

2022  
**+18.6%**  
2023  
**-6.7%**



Singapore Manufactured  
Products Price Index

2022  
**+14.9%**  
2023  
**-4.5%**

## MERCHANDISE TRADE



### Merchandise Exports

2022	2023
\$709,967 million	\$638,403 million
+15.6%	-10.1%



### Merchandise Imports

2022	2023
\$655,436 million	\$567,319 million
+20.1%	-13.4%

### Share of Total Merchandise Exports in 2023



55.3%  
Re-exports



27.1%  
Non-Oil Domestic Exports



17.5%  
Oil Domestic Exports

### Top Trading Partners in 2023



China



United States



Malaysia



## SERVICES TRADE



### Services Exports

2022	2023
\$464,008 million	\$440,495 million
+22.2%	-5.1%



### Services Imports

2022	2023
\$406,708 million	\$396,787 million
+22.5%	-2.4%

### Share of Total Services Exports in 2023



32.1%  
Transport Services



29.2%  
Other Business Services



13.3%  
Financial Services



7.8%  
Telecomms, Computer and Information



6.4%  
Travel Services

### Top Trading Categories in 2023



Transport Services



Other Business Services



Financial Services



CHAPTER

1

# ECONOMIC PERFORMANCE

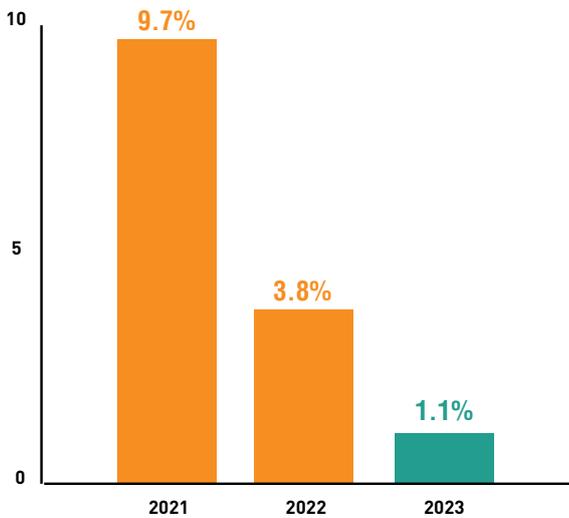




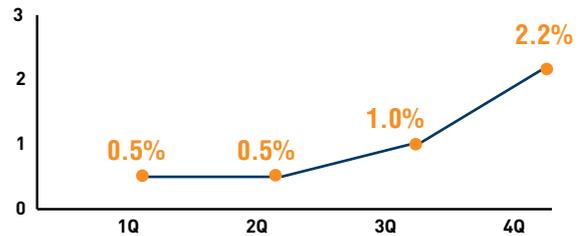
# Chapter 1

# ECONOMIC PERFORMANCE

## REAL GDP GREW BY 1.1% IN 2023



## QUARTERLY GDP GROWTH IN 2023 (YoY Growth)



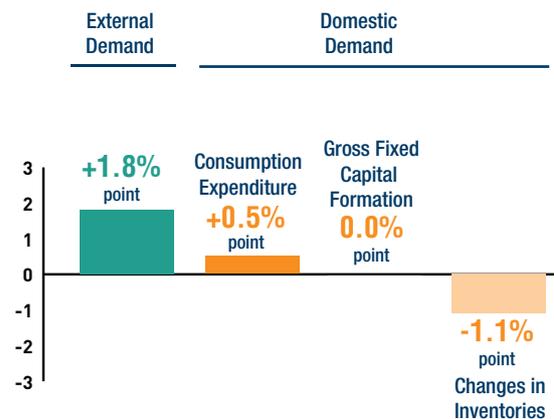
## MAIN DRIVERS OF GDP GROWTH IN 2023



## INCOME COMPONENTS OF GDP IN 2023



## SOURCES OF GROWTH IN 2023



## OVERVIEW

In the fourth quarter of 2023, the Singapore economy grew by 2.2 per cent on a year-on-year basis, accelerating from the 1.0 per cent expansion in the previous quarter. All sectors expanded during the quarter, with the exception of the administrative & support services, food & beverage services, professional services and retail trade sectors. The sectors that contributed the most to growth during the quarter were the finance & insurance, other services and transportation & storage sectors.

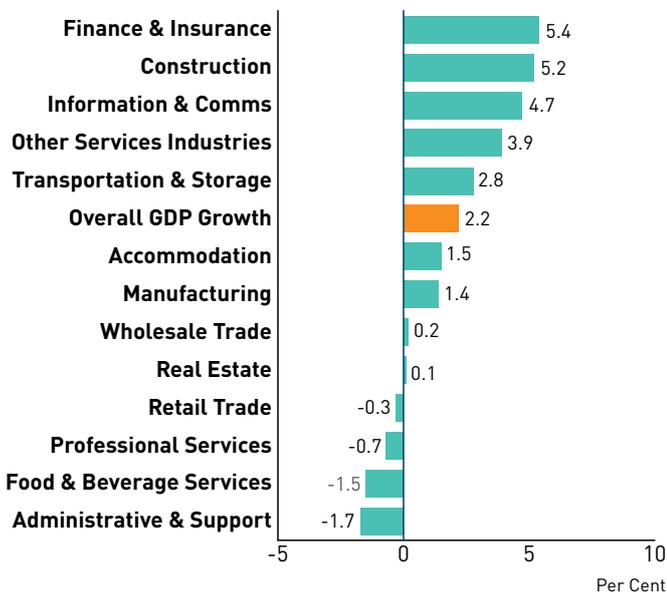
For the full year, the Singapore economy grew by 1.1 per cent, easing from the 3.8 per cent expansion in 2022. All sectors except for the manufacturing sector recorded full-year expansions, with the other services, information & communications and transportation & storage sectors contributing the most to GDP growth for the year.

## OVERALL PERFORMANCE

### Fourth Quarter 2023

The Singapore economy grew by 2.2 per cent year-on-year in the fourth quarter, accelerating from the 1.0 per cent expansion in the previous quarter (Exhibit 1.1). On a quarter-on-quarter seasonally-adjusted basis, GDP grew by 1.2 per cent, slightly faster than the 1.0 per cent growth in the third quarter.

Exhibit 1.1: GDP and Sectoral Growth Rates in 4Q 2023



The manufacturing sector expanded by 1.4 per cent year-on-year in the fourth quarter, a reversal from the 4.9 per cent contraction in the preceding quarter. All clusters within the sector recorded expansions during the quarter, except for the biomedical manufacturing, precision engineering and general manufacturing clusters.

The services producing industries collectively grew by 2.0 per cent year-on-year in the fourth quarter, easing from the 2.3 per cent growth in the previous quarter. All services sectors expanded during the quarter, except for the administrative & support services, food & beverage services, professional services and retail trade sectors. Among the sectors that grew, the finance & insurance (5.4 per cent) and information & communications (4.7 per cent) sectors posted the strongest growth.

The construction sector grew by 5.2 per cent year-on-year in the fourth quarter, faster than the 3.7 per cent growth in the third quarter. Output growth during the quarter was supported by an increase in both public sector and private sector construction works.

### Full Year of 2023

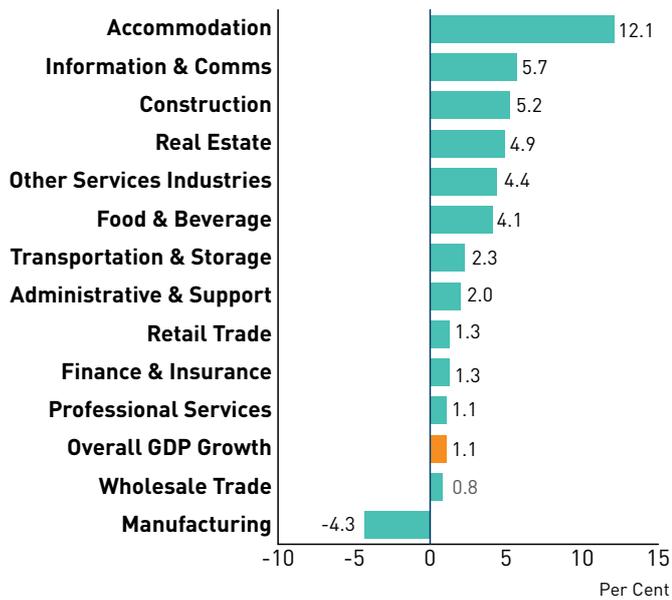
For the whole of 2023, the Singapore economy grew by 1.1 per cent, easing from the 3.8 per cent expansion in 2022 (Exhibit 1.2).

By sectors, the manufacturing sector shrank by 4.3 per cent in 2023, a reversal from the 2.7 per cent growth in the preceding year. All clusters saw a fall in output for the year, except for the transport engineering cluster.

Services producing industries posted growth of 2.3 per cent in 2023, easing from the 5.1 per cent expansion in 2022. All services sectors registered full-year expansions, with the accommodation (12.1 per cent) and information & communications (5.7 per cent) sectors recording the fastest growth in 2023.

Meanwhile, the construction sector grew by 5.2 per cent in 2023, up from the 4.6 per cent expansion in the preceding year. Both public and private sector construction output increased during the year.

**Exhibit 1.2: GDP and Sectoral Growth Rates in 2023**



**Exhibit 1.3: Percentage-Point Contribution to Growth in Real GDP in 4Q 2023 (By Sectors)**



## Contribution to Growth

In the fourth quarter, all sectors contributed positively to GDP growth, except for the professional services, administrative & support services and food & beverage services sectors (Exhibit 1.3). Among the sectors that expanded, the finance & insurance, other services and transportation & storage sectors were the top contributors to GDP growth during the quarter.

For the whole of 2023, all sectors except for the manufacturing sector recorded full-year expansions, with the other services, information & communications and transportation & storage sectors contributing the most to GDP growth for the year (Exhibit 1.4).

**Exhibit 1.4: Percentage-Point Contribution to Growth in Real GDP in 2023 (By Sectors)**



## SOURCES OF GROWTH

Total demand rose by 7.4 per cent year-on-year in the fourth quarter, a reversal from the 1.4 per cent decline in the previous quarter (Exhibit 1.5). This was due to an increase in external demand during the quarter, even as domestic demand fell.

For 2023 as a whole, total demand increased by 1.2 per cent, weakening from the 3.4 per cent growth in 2022. The increase in total demand was supported by a rise in external demand (1.8 percentage-points) even as domestic demand declined (-0.6 percentage-points).

**Exhibit 1.5: Percentage-Point Contribution to Total Demand Growth**

	2022	2023				2023
		I	II	III	IV	
<b>Total Demand</b>	3.4	1.1	-2.5	-1.4	7.4	<b>1.2</b>
<b>External Demand</b>	2.2	1.6	-1.2	-1.3	8.2	<b>1.8</b>
<b>Total Domestic Demand</b>	1.2	-0.4	-1.3	-0.1	-0.8	<b>-0.6</b>
<b>Consumption Expenditure</b>	0.9	1.0	0.4	0.4	0.4	<b>0.5</b>
Public	-0.1	0.2	0.0	0.2	0.0	<b>0.1</b>
Private	1.0	0.7	0.5	0.2	0.3	<b>0.4</b>
<b>Gross Fixed Capital Formation</b>	0.2	0.1	-0.2	-0.2	0.3	<b>0.0</b>
<b>Changes in Inventories</b>	0.0	-1.4	-1.5	-0.3	-1.4	<b>-1.1</b>

## External Demand

External demand rose by 11.0 per cent year-on-year in the fourth quarter, a reversal from the 1.8 per cent decline in the previous quarter (Exhibit 1.6). The rise in external demand could be attributed to increases in the real exports of both goods and services.

For the full year, external demand expanded by 2.4 per cent, slowing from the 3.0 per cent expansion in 2022. The increase in external demand could be attributed to a rise in real services exports, which was in turn led by higher real exports of transport services. By contrast, real merchandise exports fell, mainly due to a contraction in the real exports of machinery and transport equipment.

## Domestic Demand

Total domestic demand fell by 2.9 per cent year-on-year in the fourth quarter, worsening from the 0.5 per cent contraction in the previous quarter. The fall in domestic demand during the quarter was due to a decline in inventories, which more than offset increases in consumption expenditure and gross fixed capital formation.

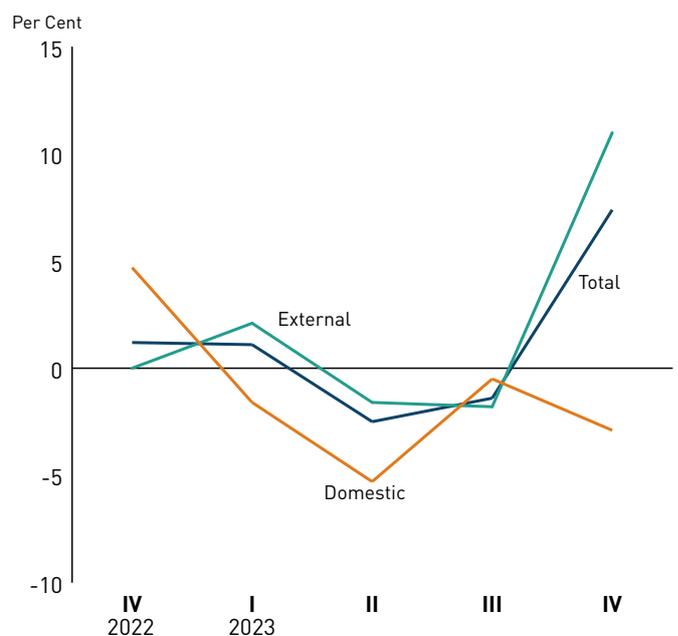
For 2023 as a whole, total domestic demand fell by 2.6 per cent, a reversal from the 4.5 per cent growth in 2022. The fall in domestic demand was due to declines in inventories and gross fixed capital formation, even as consumption expenditure rose.

## Consumption Expenditure

Total consumption expenditure rose by 2.5 per cent year-on-year in the fourth quarter, the same rate of growth as the previous quarter.

For the full year, total consumption expenditure rose by 3.5 per cent, moderating from the 5.5 per cent growth in 2022. Consumption expenditure growth was due to both private and public consumption. Private consumption rose by 3.8 per cent, led by increases in miscellaneous goods & services and recreation & culture. At the same time, public consumption rose by 2.6 per cent, a reversal from the 1.9 per cent contraction in 2022.

**Exhibit 1.6: Changes in Total Demand in Chained (2015) Dollars**



## Gross Fixed Capital Formation

Gross fixed capital formation (GFCF) rose by 3.0 per cent year-on-year in the fourth quarter, a reversal from the 1.9 per cent contraction in the preceding quarter. GFCF rose during the quarter on account of increases in public GFCF (10.6 per cent) and private GFCF (1.5 per cent).

For the full year, GFCF fell by 0.2 per cent, a reversal from the 2.5 per cent increase in 2022 (Exhibit 1.7). Private GFCF decreased by 1.1 per cent, a reversal from the 3.2 per cent growth in 2022, due to lower investment spending on machinery & equipment (Exhibit 1.8). Meanwhile, public GFCF rose by 4.0 per cent, a turnaround from the 1.1 per cent contraction in 2022. The increase in public GFCF was due to higher investment spending across all components.

**Exhibit 1.7: Annual Changes in Gross Fixed Capital Formation in Chained (2015) Dollars, 2023**

	Total	Public	Private
<b>Total</b>	-0.2	4.0	-1.1
<b>Construction &amp; Works</b>	3.3	4.3	2.7
<b>Transport Equipment</b>	9.1	2.6	9.5
<b>Machinery &amp; Equipment</b>	-11.0	6.4	-12.0
<b>Intellectual Property Products</b>	1.0	1.3	1.0

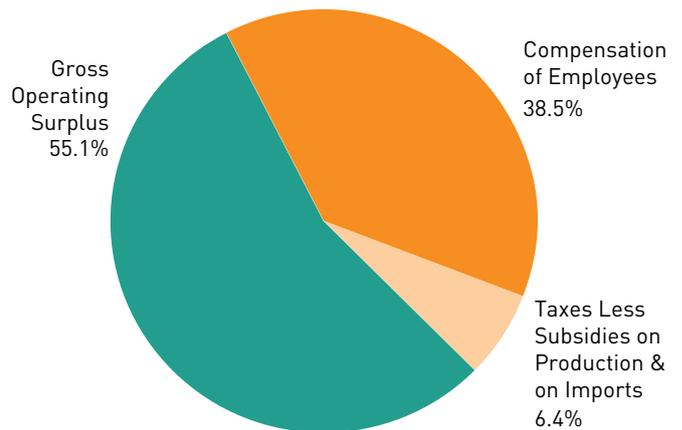
**Exhibit 1.8: Percentage-Point Contribution to Growth of Gross Fixed Capital Formation in Chained (2015) Dollars, 2023**

	Total	Public	Private
<b>Total</b>	-0.2	0.7	-0.9
<b>Construction &amp; Works</b>	1.3	0.6	0.7
<b>Transport Equipment</b>	0.6	0.0	0.6
<b>Machinery &amp; Equipment</b>	-2.4	0.1	-2.5
<b>Intellectual Property Products</b>	0.3	0.0	0.3

## INCOME COMPONENTS OF NOMINAL GDP

Singapore's nominal GDP amounted to \$673 billion in 2023, a 2.0 per cent decrease over 2022. Gross operating surplus accounted for 55.1 per cent of nominal GDP, while compensation of employees accounted for 38.5 per cent (Exhibit 1.9). Taxes (less subsidies) on production and imports made up the remaining 6.4 per cent of nominal GDP.

**Exhibit 1.9: Income Components of GDP at Current Prices**



## NATIONAL SAVING

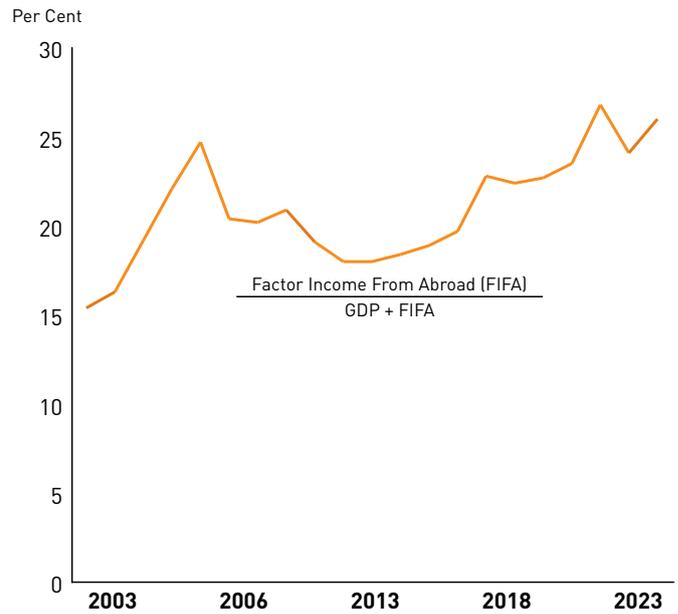
With factor income outflows exceeding inflows by \$108 billion, Gross National Income (GNI) came in at \$565 billion in 2023, lower than the \$673 billion in nominal GDP. Gross National Saving (GNS) fell by 0.9 per cent to \$275 billion in 2023. This comprised a net outflow of \$133 billion that was lent or transferred abroad, and \$142 billion in Gross Capital Formation. The national savings rate was 48.6 per cent of GNI in 2023, slightly lower than the 49.9 per cent in 2022.

## GNI AND THE EXTERNAL ECONOMY

Factor income from abroad reached \$237 billion in 2023, up from the \$218 billion in 2022. The contribution of factor income from abroad to the total economy was 26.0 per cent in 2023, slightly higher than the contribution of 24.1 per cent recorded in 2022 (Exhibit 1.10).

Based on the Department of Statistics' Survey of Singapore's Investment Abroad, the stock of direct investment abroad increased from \$1,321 billion in 2021 to \$1,385 billion in 2022.

**Exhibit 1.10: Singapore's Earnings from External Economy as a Proportion of Total Income**





CHAPTER

2

# LABOUR MARKET AND PRODUCTIVITY



## Chapter 2

# LABOUR MARKET AND PRODUCTIVITY

### EMPLOYMENT AND PRODUCTIVITY GROWTH IN 2023



### MAIN DRIVERS OF EMPLOYMENT GROWTH IN 2023

**+44,800**  
employed



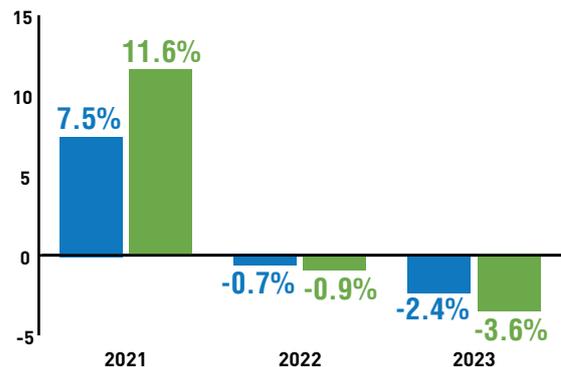
Other Services  
Industries

**+25,800**  
employed



Construction

### VA PER ACTUAL HOUR WORKED AND VA PER WORKER GROWTH



■ VA per Actual Hour Worked  
■ VA per Worker

### SECTORS WITH THE HIGHEST VA PER ACTUAL HOUR WORKED GROWTH IN 2023

**+3.8%**



Administrative &  
Support Services

**+3.3%**



Real Estate

**+3.3%**



Information &  
Communications

### UNEMPLOYMENT RATES IN 2023

Overall  
Unemployment Rate



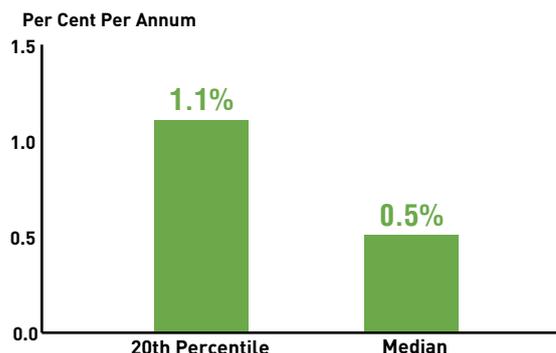
**1.9%**

Resident  
Unemployment Rate



**2.7%**

### ANNUALISED CHANGE IN REAL GROSS MONTHLY INCOME FROM WORK



Real median gross monthly income of full-time employed residents rose by **+0.5% per annum** from June 2018 to June 2023



## OVERVIEW<sup>1</sup>

Total employment grew by 107,200 in 2023, driven by gains in both resident and non-resident employment, although the pace of increase has moderated significantly from the previous year. The increase in employment was experienced across all broad sectors. Excluding Migrant Domestic Workers (MDWs), total employment grew by 89,400.

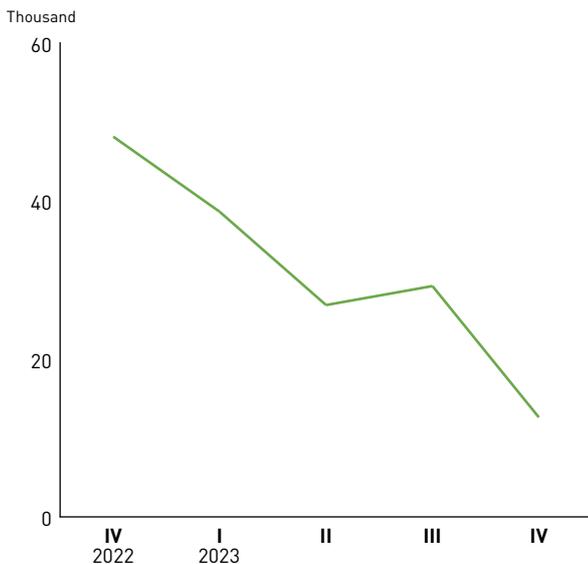
At the same time, unemployment rates remained stable and low while the number of retrenchments rose in 2023.

In the five years between 2018 and 2023, the real gross monthly income of full-time employed residents at the median and 20<sup>th</sup> percentile increased by 0.5 per cent per annum and 1.1 per cent per annum, respectively.

## EMPLOYMENT

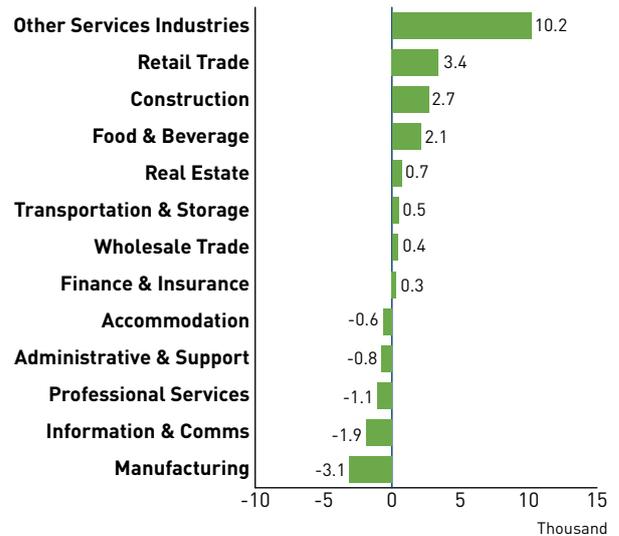
Total employment increased by 12,600 in the fourth quarter, a more moderate pace of increase as compared to the second (+26,800) and third (+29,200) quarters (Exhibit 2.1). A similar trend was observed for total employment excluding MDWs.

**Exhibit 2.1: Changes in Total Employment**



By broad sectors, employment rose in the services (+13,200) and construction (+2,700) sectors in the fourth quarter, while employment contracted in the manufacturing (-3,100) sector. Across the services sectors, employment gains were the largest in the other services and retail trade sectors (Exhibit 2.2).

**Exhibit 2.2: Changes in Employment by Industry in 4Q 2023**



<sup>1</sup> Figures for the fourth quarter of 2023 and full year of 2023 are preliminary estimates.

For the whole of 2023, total employment increased by 107,200, slower than the rebound of 250,100 recorded in 2022. Total employment expanded across the broad sectors, with the services sectors collectively (+80,500) registering the largest gains, followed by the construction (+25,800) and manufacturing (+900) sectors.

Non-resident employment accounted for most of the employment gains during the year, led by the construction sector due to robust demand for private and public sector projects. Meanwhile, resident employment growth was driven by the other services and finance & insurance sectors.

## UNEMPLOYMENT

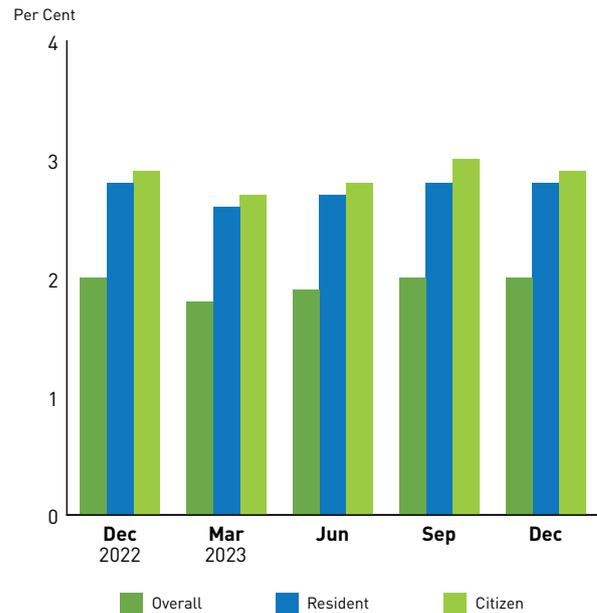
Between September and December 2023, the seasonally-adjusted unemployment rates were unchanged at the overall level (2.0 per cent) and for residents (2.8 per cent), while the citizen unemployment rate fell slightly from 3.0 per cent to 2.9 per cent (Exhibit 2.3).

In December 2023, there were 67,900 unemployed residents, of whom 59,700 were Singapore citizens. The number of unemployed residents remained unchanged from September 2023, while the number of unemployed citizens (from 60,200 to 59,700) declined over the same period.

For the full year of 2023, the annual average unemployment rate declined at the overall level (from 2.1 per cent in 2022 to 1.9 per cent), as well as for residents (from 2.9 per cent to 2.7 per cent) and citizens (from 3.0 per cent to 2.9 per cent).

In 2023, 66,100 residents, of whom 58,500 were Singapore citizens, were unemployed on average. These were lower than their respective figures in 2022 (69,500 and 61,900).

**Exhibit 2.3: Unemployment Rates (Seasonally-Adjusted)**



## RETRENCHMENTS

The number of retrenchments fell in the fourth quarter (3,200), compared to the third quarter (4,110). Over the quarter, the increase in retrenchments in the manufacturing (from 700 to 800) and construction (from 140 to 200) sectors were outweighed by the decline in retrenchments in the services (from 3,270 to 2,200) sector.

The total number of retrenchments for 2023 (14,320) as a whole rose from a record low of 6,440 in 2022. The number of retrenchments rose across the broad sectors, led by the services sectors collectively (from 4,060 to 10,160), followed by the manufacturing (from 2,100 to 3,470) and construction (from 260 to 610) sectors.

## PRODUCTIVITY

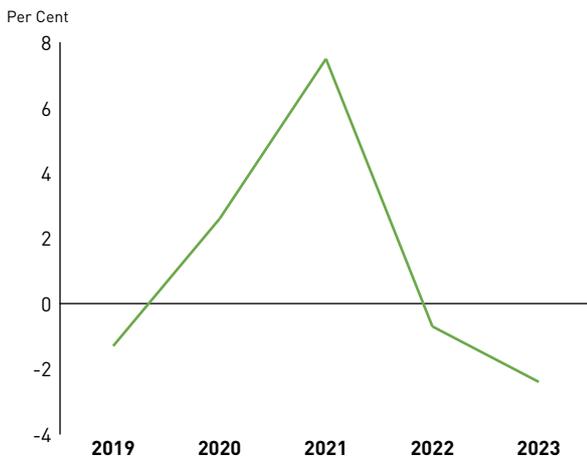
### Real Value-Added per Actual Hour Worked

Overall labour productivity, as measured by real value-added per actual hour worked, rose by 2.1 per cent in the fourth quarter, reversing the 0.7 per cent decline in the previous quarter.

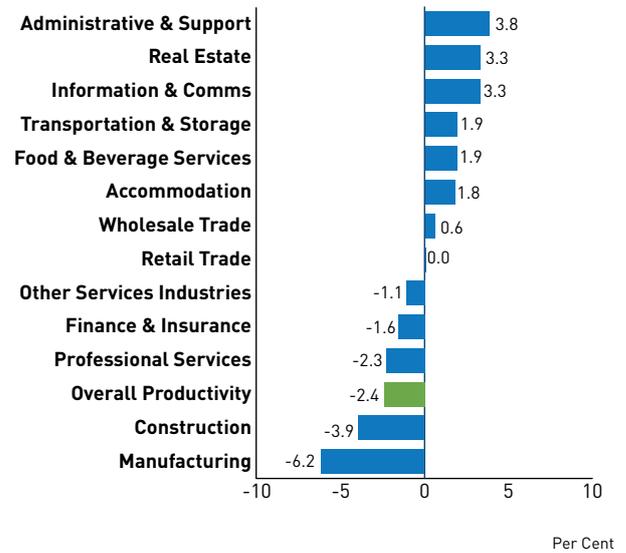
By sectors, the productivity of the information & communications, finance & insurance, manufacturing, transportation & storage, wholesale trade, construction, retail trade and other services sectors rose in the fourth quarter. On the other hand, the productivity of the real estate, food & beverage services, administrative & support services, accommodation and professional services sectors declined.

Collectively, the productivity of outward-oriented sectors increased by 4.3 per cent in the fourth quarter, while that of domestically-oriented sectors rose by 0.4 per cent over the same period.<sup>2</sup>

**Exhibit 2.4: Changes in Value-Added per Actual Hour Worked for the Overall Economy**



**Exhibit 2.5: Changes in Value-Added per Actual Hour Worked by Industry in 2023**



For the full year of 2023, real value-added per actual hour worked declined by 2.4 per cent, extending the 0.7 per cent decline in 2022 (Exhibit 2.4). While productivity performance for the overall economy in 2023 was supported by productivity gains in most sectors, it was weighed down by productivity declines in the manufacturing, construction, professional services, finance & insurance and other services sectors (Exhibit 2.5).

### Real Value-Added per Worker

Real value-added per worker fell by 0.8 per cent in the fourth quarter, moderating from the 3.1 per cent contraction in the preceding quarter.

For 2023, real value-added per worker declined by 3.6 per cent, extending the 0.9 per cent decline in 2022.

The weaker performance of real value-added per worker compared to real value-added per actual hour worked in 2023 was because of a decline in the average number of actual hours worked per worker during the year.

<sup>2</sup> Outward-oriented sectors refer to manufacturing, wholesale trade, transportation & storage, accommodation, information & communications, finance & insurance and professional services. Domestically-oriented sectors refer to construction, retail trade, food & beverage services, real estate, administrative & support services and other services industries.

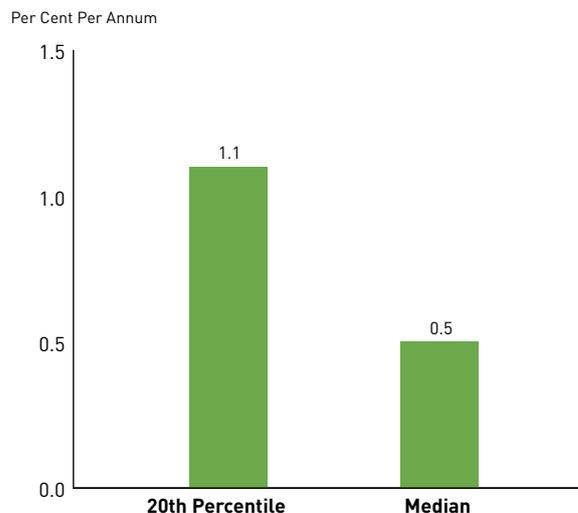
## INCOME FROM WORK

Nominal gross monthly income of resident workers continued to increase, but at a more moderate pace compared to the previous year. Median nominal gross monthly income (including employer CPF contributions) of full-time employed residents grew by 2.5 per cent to reach \$5,197, a moderation from the 8.3 per cent growth in 2022.

After adjusting for inflation<sup>3</sup>, real median income fell by 2.2 per cent in 2023. Lower-income earners also saw a decline in their incomes after taking inflation into account, with real income at the 20<sup>th</sup> percentile falling by 3.0 per cent in 2023. With WIS and related payments included, real income at the 20<sup>th</sup> percentile saw a smaller decline (-2.0 per cent).

Over the last five years (i.e., June 2018 to June 2023), real median income rose by 0.5 per cent per annum (Exhibit 2.6). During this period, real income growth at the 20<sup>th</sup> percentile exhibited stronger growth (1.1 per cent per annum), thus narrowing the income gap with the median income earner.

**Exhibit 2.6: Annualised Change in Real Gross Monthly Income from Work of Full-Time Employed Residents, 2018-2023**



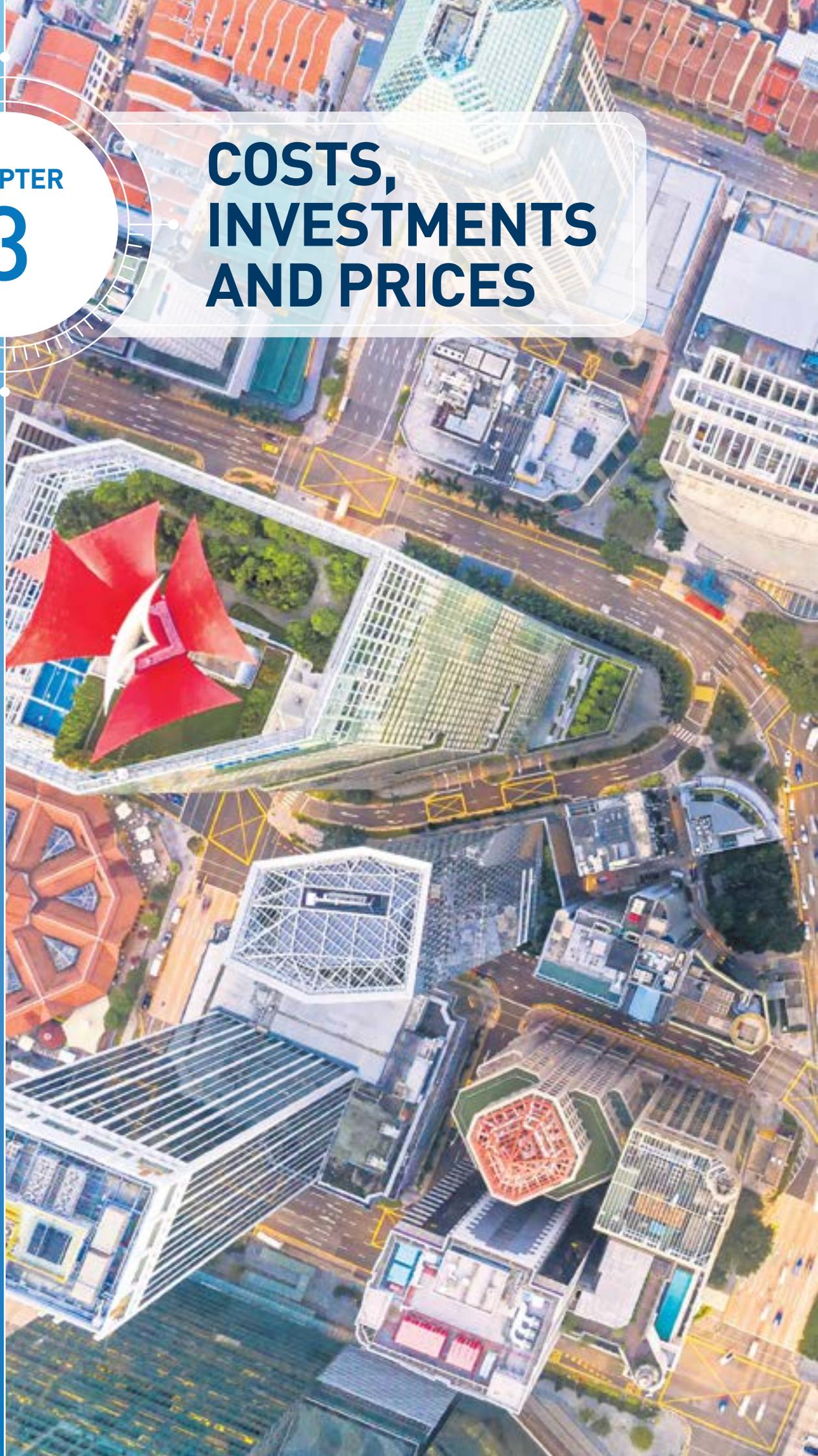
<sup>3</sup> The Consumer Price Index (CPI) for all items rose by 4.8 per cent in 2023



CHAPTER

# 3

# COSTS, INVESTMENTS AND PRICES



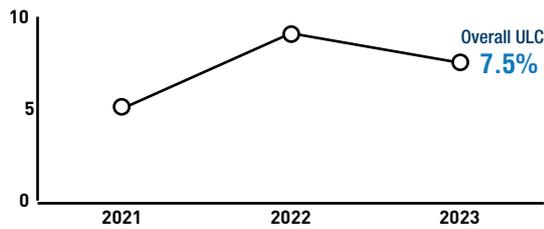


## Chapter 3

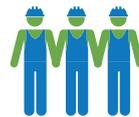
# COSTS, INVESTMENTS AND PRICES

### OVERALL UNIT LABOUR COST

(YoY Growth)



### WITHIN THE MANUFACTURING SECTOR



**10.0%**  
in 2023  
Unit Labour Cost



**8.5%**  
in 2023  
Unit Business Cost

### INVESTMENT COMMITMENTS IN 2023



Fixed Asset Investment Commitments  
**\$12.7 billion**

Total Business Expenditure Commitments  
**\$8.9 billion**

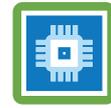
### CLUSTERS THAT ATTRACTED THE HIGHEST FIXED ASSET INVESTMENT COMMITMENTS



Chemicals



Services Clusters



Electronics

### CLUSTERS THAT ATTRACTED THE HIGHEST TOTAL BUSINESS EXPENDITURE COMMITMENTS



Headquarters & Professional Services

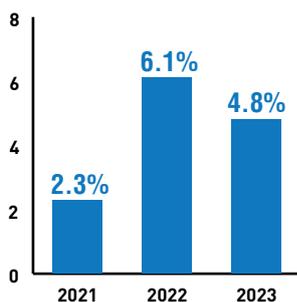


Research & Development



Electronics

### CPI-ALL ITEMS INFLATION



### IN 2023, THE INCREASE IN CPI WAS MAINLY DUE TO THE INCREASE IN PRICES OF



**1.3%**  
point contribution



**1.2%**  
point contribution

Housing & Utilities



**1.1%**  
point contribution

## OVERVIEW

Overall ULC for the economy rose by 3.2 per cent year-on-year in the fourth quarter, extending the increase of 7.9 per cent in the preceding quarter. For the whole of 2023, overall ULC rose by 7.5 per cent.

Total investment commitments attracted by EDB remained healthy in 2023. The manufacturing sector garnered a larger amount of commitments in terms of fixed asset investments (FAI) than the services sector, while the latter attracted a larger amount of total business expenditure (TBE) commitments. By clusters, the chemicals and electronics clusters within the manufacturing sector were the biggest contributors to FAI commitments, while the headquarters & professional services cluster within the services sector contributed the most to TBE commitments.

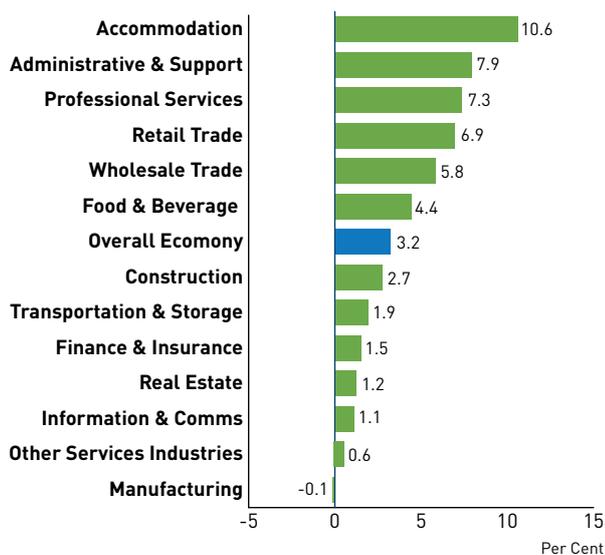
The Consumer Price Index-All Items (CPI-All Items) rose by 4.0 per cent year-on-year in the fourth quarter, moderating from the 4.1 per cent increase in the previous quarter. For 2023 as a whole, CPI-All Items inflation came in at 4.8 per cent, lower than the 6.1 per cent recorded in 2022.

Producer prices, as measured by the domestic supply price index (DSPPI), the Singapore manufactured products price index (SMPPPI) as well as the import and export price indices, all fell on a year-on-year basis in the fourth quarter. For the whole of 2023, the DSPPI, SMPPPI, as well as the import and export price indices decreased by 6.7 per cent, 4.5 per cent, 5.6 per cent and 7.6 per cent respectively.

## COSTS

Overall ULC for the economy rose by 3.2 per cent year-on-year in the fourth quarter, moderating from the increase of 7.9 per cent in the previous quarter (Exhibit 3.1). The pickup in overall ULC during the quarter came on the back of an increase in total labour cost per worker and a decrease in labour productivity (as measured by real value-added per worker).

**Exhibit 3.1: Changes in Unit Labour Cost in 4Q 2023**



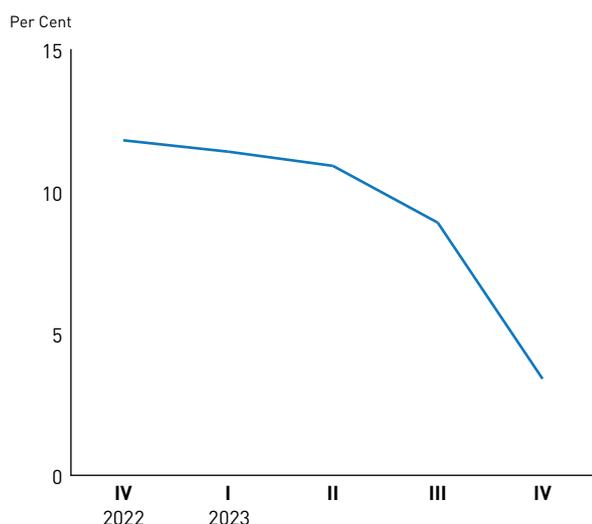
By broad sectors, the ULC of services producing industries went up by 3.6 per cent in the fourth quarter, slowing from the 6.6 per cent increase in the previous quarter. Most services sectors saw a pickup in their ULCs, with the accommodation sector registering the largest increase (10.6 per cent). The latter was on account of an increase in total labour cost per worker and a decline in labour productivity within the sector. Similarly, the construction sector registered a ULC increase of 2.7 per cent in the fourth quarter, a moderation from the 8.0 per cent increase seen in the previous quarter. The increase in ULC in the construction sector was also due to the combined effect of an increase in total labour cost per worker alongside a decline in labour productivity.

Conversely, the ULC for the manufacturing sector fell by 0.1 per cent in the fourth quarter, a reversal from the 10.4 per cent increase in the third quarter. This decline was due to an increase in labour productivity, which outpaced the increase in total labour cost per worker.

For the whole of 2023, the overall ULC rose at a slower pace of 7.5 per cent, compared to the 9.1 per cent increase in 2022. The rise in the overall ULC was due to an increase in total labour cost per worker alongside a decline in labour productivity in the economy.

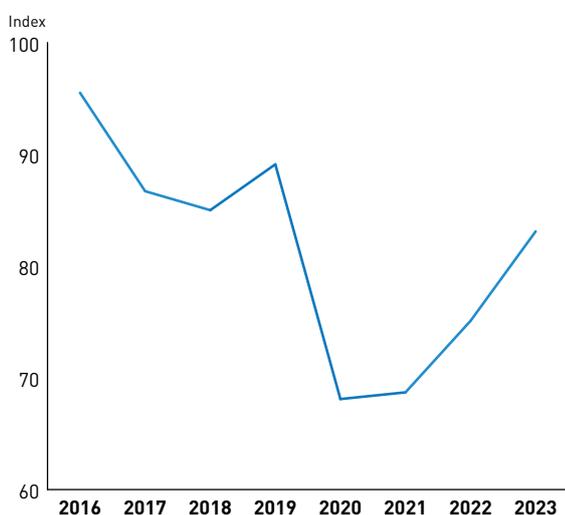
Manufacturing unit business cost (UBC) rose by 3.4 per cent year-on-year in the fourth quarter, easing from the 8.9 per cent increase in the previous quarter (Exhibit 3.2). The increase in manufacturing UBC came on the back of an increase in unit services costs (4.6 per cent) and unit non-labour production taxes (15.3 per cent), which offset the slight decline in the manufacturing ULC (-0.1 per cent). For 2023 as a whole, manufacturing UBC increased by 8.5 per cent, moderating from the 9.9 per cent increase in 2022.

**Exhibit 3.2: Changes in Unit Business Cost for Manufacturing**



Singapore's relative unit labour cost (RULC) for manufacturing – a measure of Singapore's competitiveness against 16 economies<sup>1</sup> – rose in 2023 (i.e., less competitive) as compared to 2022 (Exhibit 3.3). The deterioration in Singapore's RULC was mainly on account of an increase in Singapore's manufacturing ULC and a stronger Singapore dollar.

**Exhibit 3.3: Singapore's Relative Unit Labour Cost in Manufacturing Against Selected 16 Economies<sup>1</sup>**



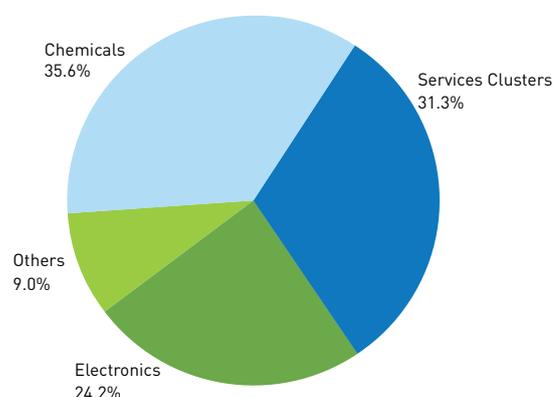
<sup>1</sup> The 16 economies are Australia, China, France, Germany, Hong Kong, India, Indonesia, Japan, Malaysia, Netherlands, South Korea, Taiwan, Thailand, the United Kingdom, the United States and Vietnam.

## INVESTMENT COMMITMENTS

EDB attracted healthy levels of investment commitments in 2023. For the full year, FAI and TBE commitments came in at \$12.7 billion and \$8.9 billion respectively.

In terms of FAI, the largest contribution came from the manufacturing sector, which garnered \$8.7 billion in commitments. Within manufacturing, the chemicals cluster attracted the largest amount of FAI commitments, at \$4.5 billion, followed by the electronics cluster, at \$3.1 billion. Within the services sector, the research & development and headquarters & professional services clusters contributed the most to total FAI commitments, with \$2.1 billion and \$1.3 billion respectively (Exhibit 3.4).

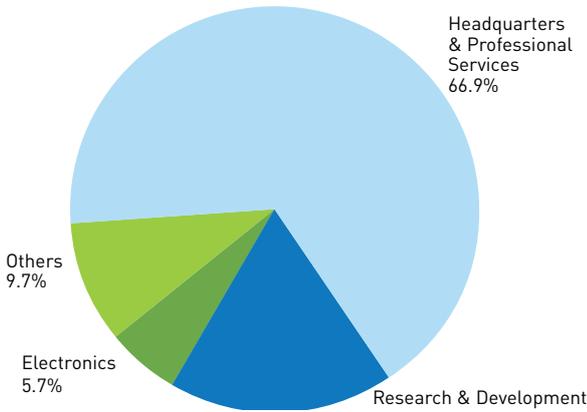
**Exhibit 3.4: Fixed Asset Investments by Industry Clusters in 2023**



Investors from the United States were the largest source of FAI commitments, with \$6.6 billion (51.9 per cent). They were followed by investors from Europe who contributed about \$3.1 billion of FAI commitments (24.8 per cent).

For TBE, the services sector attracted the highest amount of commitments, at \$7.6 billion. This was driven by the headquarters & professional services cluster, which garnered \$6.0 billion in TBE commitments, followed by the research & development cluster, with \$1.6 billion. Among the manufacturing clusters, the electronics cluster contributed the highest amount of TBE commitments, at \$508 million (Exhibit 3.5).

**Exhibit 3.5: Total Business Expenditure by Industry Clusters in 2023**



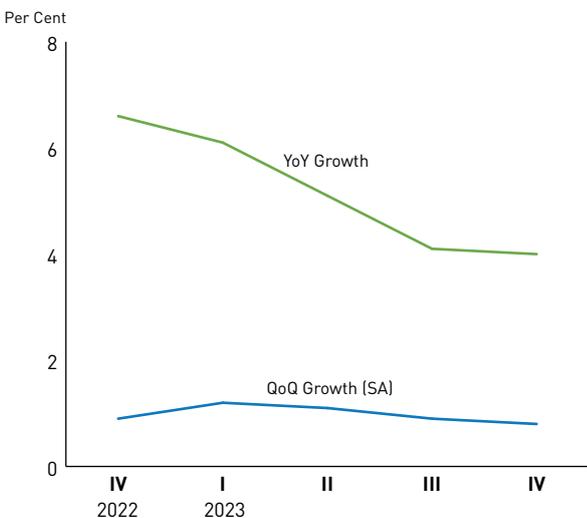
Local investors accounted for most of the TBE commitments, at \$3.1 billion (35.2 per cent).

When these projects are fully implemented, they are expected to generate \$26.7 billion of value-added per annum and create more than 20,000 jobs in the coming years.

## CONSUMER PRICE INDEX

Singapore’s CPI-All Items rose by 4.0 per cent on a year-on-year basis in the fourth quarter, moderating from the 4.1 per cent increase in the previous quarter (Exhibit 3.6). On a quarter-on-quarter seasonally-adjusted basis, CPI-All Items inflation came in at 0.8 per cent, edging down from the 0.9 per cent in the previous quarter.

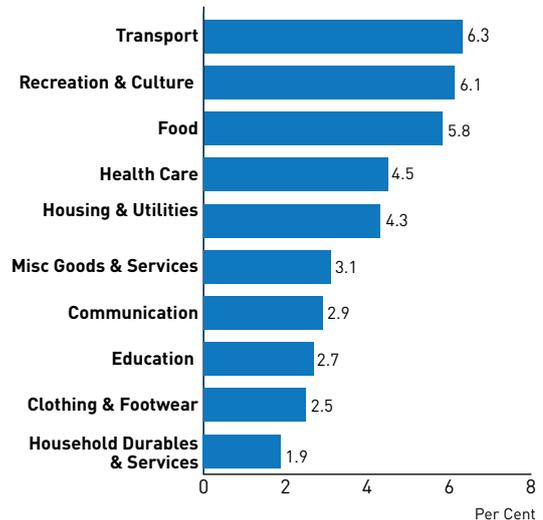
**Exhibit 3.6: Changes in Overall CPI**



For 2023 as a whole, CPI-All Items inflation came in at 4.8 per cent, lower than the 6.1 per cent recorded in 2022.

Price increases in the following CPI categories contributed positively to CPI-All Items inflation in 2023 (Exhibit 3.7). Transport costs climbed by 6.3 per cent as higher car prices, road tax and bus & train fares more than offset cheaper petrol and airfares. Recreation & culture prices rose by 6.1 per cent due to increases in the costs of holiday travel and recreational & cultural services. Food prices increased by 5.8 per cent on account of the higher costs of food serving services such as hawker food and restaurant meals, as well as non-cooked food items such as bread & cereals and meat. Healthcare costs rose by 4.5 per cent as a result of more expensive outpatient and hospital services. Housing & utilities costs increased by 4.3 per cent as accommodation costs and electricity prices picked up. Prices of miscellaneous goods & services increased by 3.1 per cent because of the higher prices of personal care items and alcoholic drinks & tobacco. Communication costs went up by 2.9 per cent due to the higher costs of telecommunication services. Education costs rose by 2.7 per cent due to higher fees at commercial institutions. Clothing & footwear prices went up by 2.5 per cent as footwear and ready-made garments became more expensive. Prices of household durables & services increased by 1.9 per cent on the back of more expensive domestic & household services and household durables.

**Exhibit 3.7: Changes in CPI by Category in 2023**

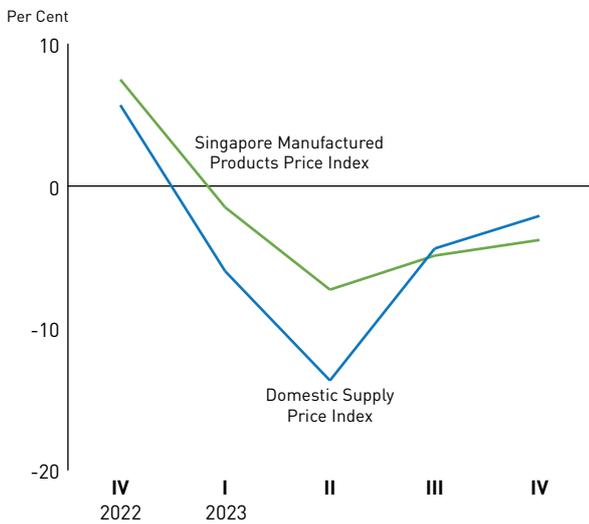


## PRODUCER PRICE INFLATION

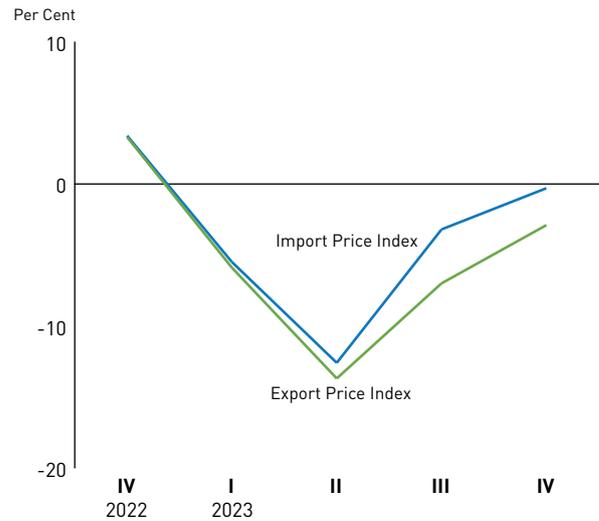
Producer prices – as measured by the DSPI, SMPPI, and import and export price indices – all fell on a year-on-year basis in the fourth quarter (Exhibits 3.8 and 3.9). The declines during the quarter came largely on the back of lower prices of integrated circuits.

For the full year, the DSPI and SMPPI decreased by 6.7 per cent and 4.5 per cent respectively, while the import and export price indices fell by 5.6 per cent and 7.6 per cent respectively. The declines are partly due to the lower prices of crude petroleum, integrated circuits and semiconductor memory chips.

**Exhibit 3.8: Changes in Domestic Supply Price and Singapore Manufactured Products Price Indices**



**Exhibit 3.9: Changes in Import and Export Price Indices**



## Box Article 3.1

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

## OVERVIEW

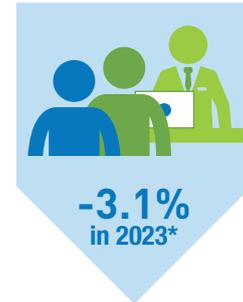
In 2023, unit business cost (UBC) in the manufacturing sector rose, while that in the overall services sector declined.

### DEFINITION OF UBC

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



UBC for Manufacturing



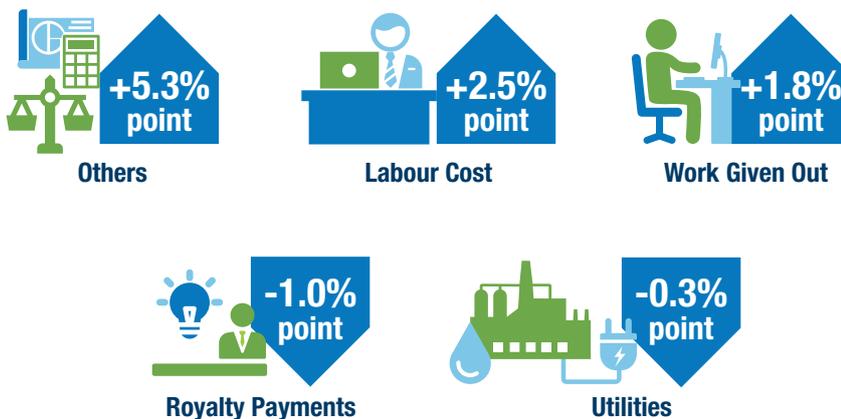
UBC for Services

\*Refers to the first three quarters of 2023

## KEY DRIVERS

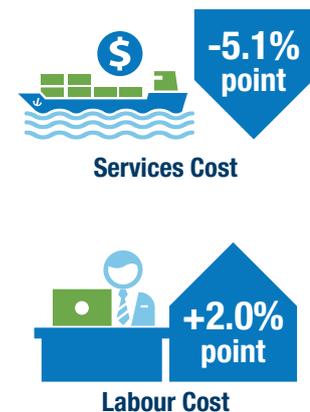
The increase in manufacturing UBC in 2023 was mainly on account of an increase in the "others" component, unit labour cost and the costs of work given out, which outweighed the declines in royalty payments and utilities cost.

### 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 Cost<sup>1</sup> 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).<sup>2</sup> The main contributors to the increase in the UBCI were the "others" cost component<sup>3</sup>, 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 payments<sup>4</sup> and utilities cost (-1.3pp contribution). Meanwhile, the remaining cost components such as non-labour production taxes<sup>5</sup> (e.g., property, road and other indirect taxes) and rental costs<sup>6</sup> 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.

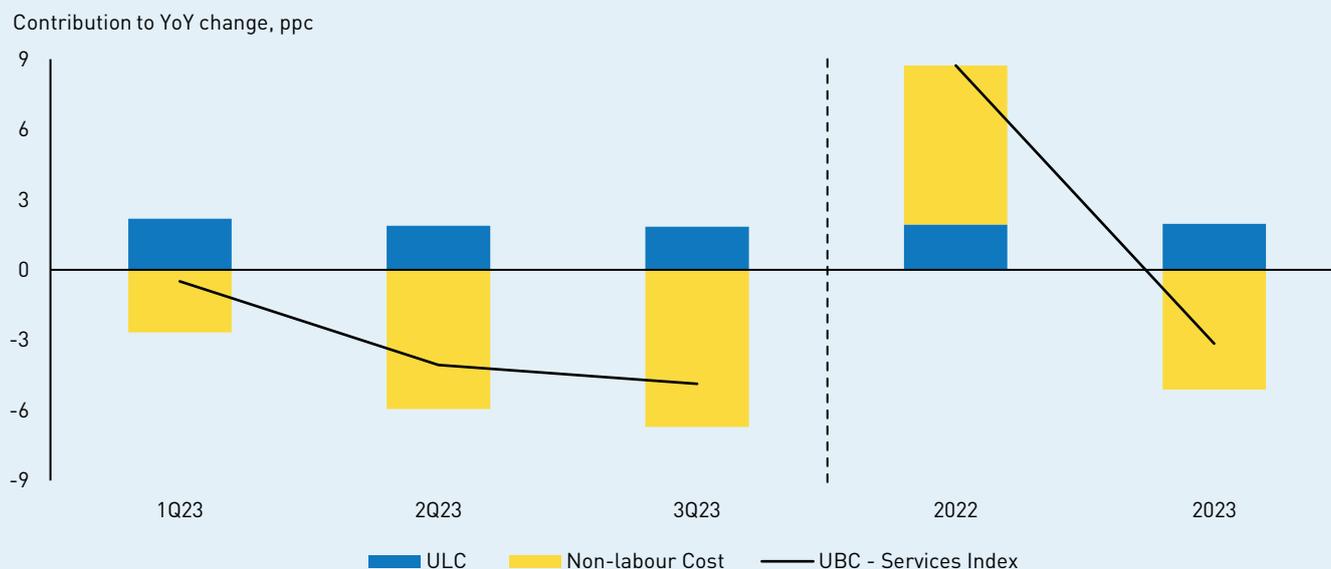
4 Royalty payments refer to payments to another party (the licensor or franchisor who owns a particular asset) for the right to the ongoing use of that asset. There could be many reasons for changes in royalty payments. For instance, royalty payments vary with company-specific licensing agreements which 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)<sup>7</sup> 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).<sup>8</sup> 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 period<sup>9</sup>.

**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.<sup>10</sup> The increase in the overall ULC was due to a rise in total labour cost<sup>11</sup> (TLC) per worker (3.6 per cent) and a decline in labour productivity<sup>12</sup> (-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.

<sup>7</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 2019: The Services Sector, as well as the 2019 Input-Output tables.

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

<sup>9</sup> 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.

<sup>10</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). This approximation holds better when the changes are small.

<sup>11</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 costs.

<sup>12</sup> 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.

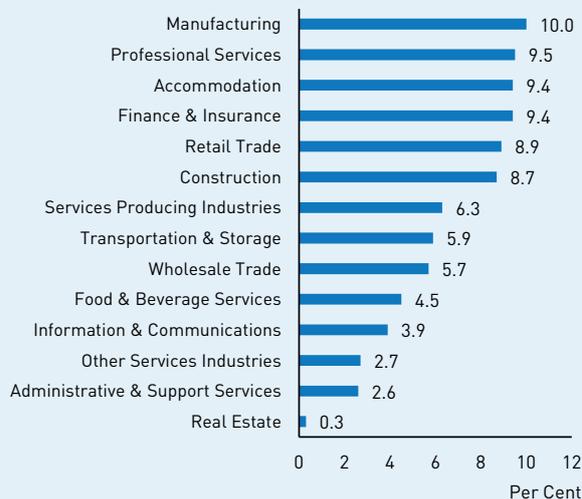
**Exhibit 3: Decomposition of ULC Growth for Overall Economy, 2023**

<b>ULC</b>	<b>7.5%</b>
<b>TLC per worker</b>	<b>3.6%</b>
<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
<b>Gross real labour productivity*</b>	<b>-3.7%</b>

\* 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,<sup>13</sup> which are in turn influenced by global oil prices.<sup>14</sup> Oil prices also contribute to business costs through fuel and transportation costs.

In 2023, the average wholesale electricity price<sup>15</sup> 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)<sup>16</sup>, 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 tax<sup>17</sup> and phased increase in water price<sup>18</sup> in 2024.

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

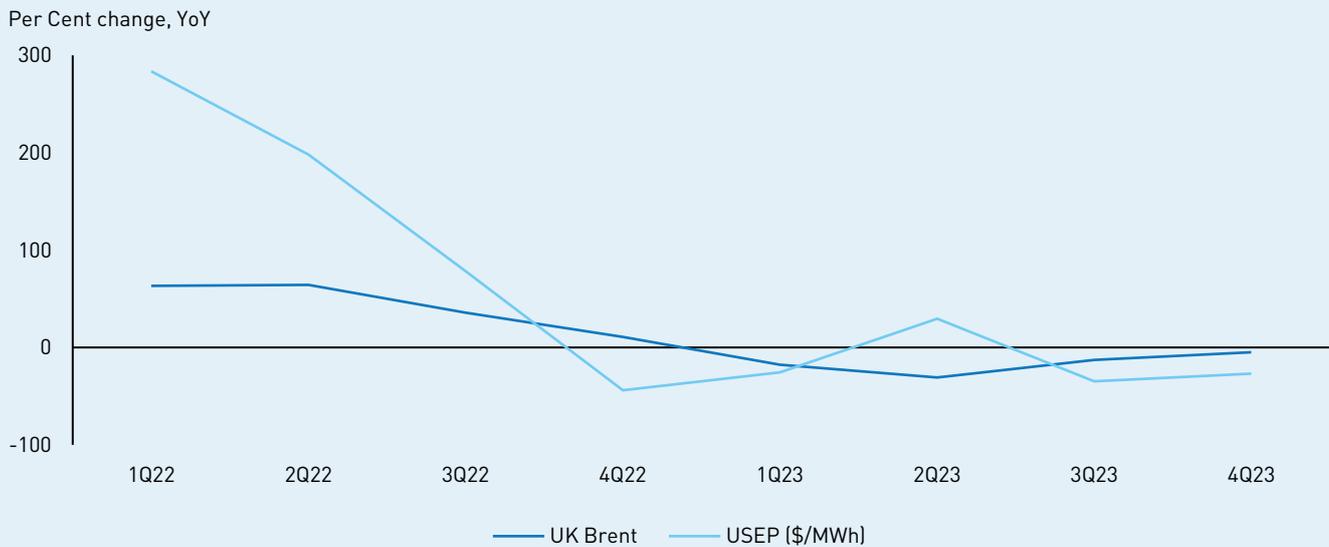
<sup>14</sup> Around 95 per cent of Singapore's electricity is generated from natural gas, the price of which is indexed to oil prices. This is a common market practice in Asia.

<sup>15</sup> 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.

<sup>16</sup> EIA Short-Term Energy Outlook Report, February 2024.

<sup>17</sup> 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.

<sup>18</sup> 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
<b>Labour Cost</b>	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
<b>Services Cost</b>	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
<b>Work given out</b>	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
<b>Royalty Payments</b>	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
<b>Utilities</b>	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
<b>Fuel</b>	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
<b>Rental of building/ premises</b>	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
<b>Charges paid to other firms for inland transportation and ocean/ air/ other freight</b>	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
<b>Others</b>	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
<b>Non-Labour Production Taxes</b>	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

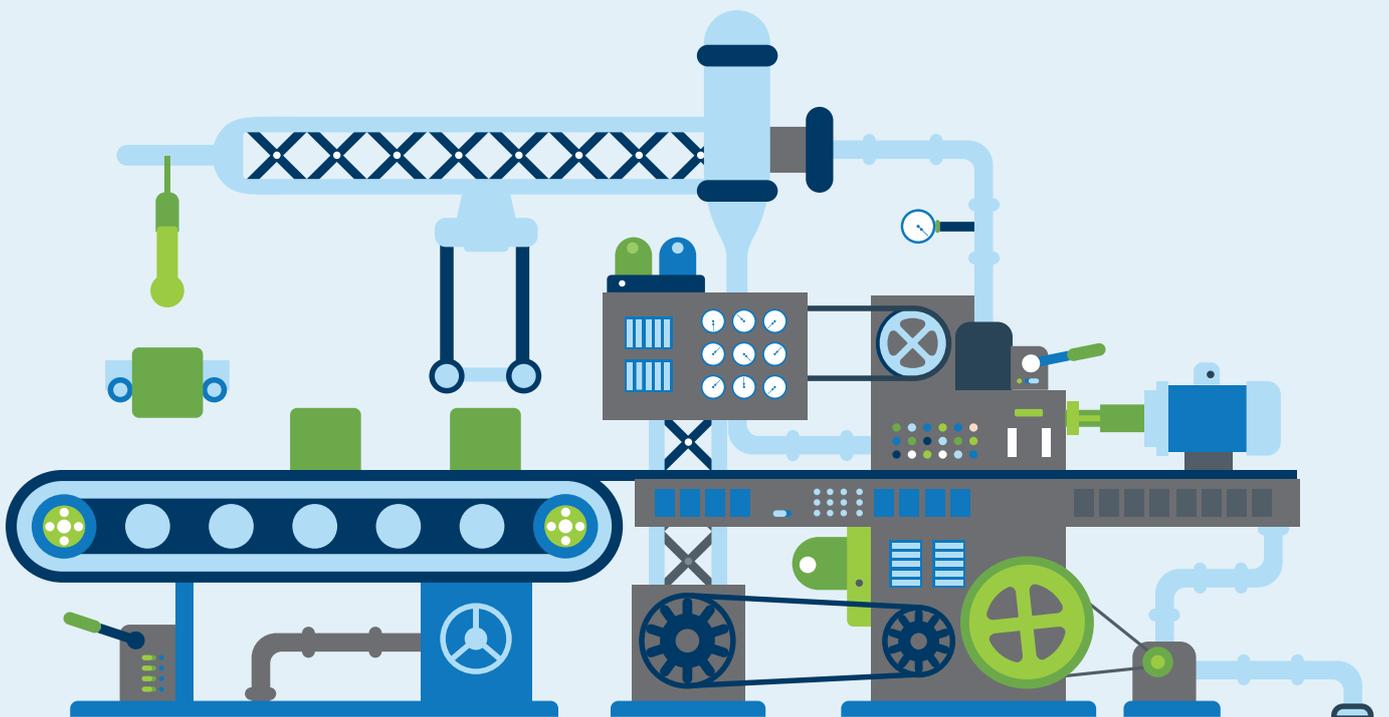
	Wholesale Trade		Retail Trade		Accommodation		Food & Beverage Services		Transportation & Storage		Information & Communications		Finance & Insurance		Real Estate, Professional Services and Administrative & Support Services	
	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs	Non-SMEs	SMEs
<b>Labour Cost</b>	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
<b>Services Cost</b>	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 &amp; 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 &amp; 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 &amp; 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 &amp; 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
<b>Non-Labour Production Taxes</b>	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.

2. "-" refers to nil or negligible.



CHAPTER

4

# INTERNATIONAL TRADE



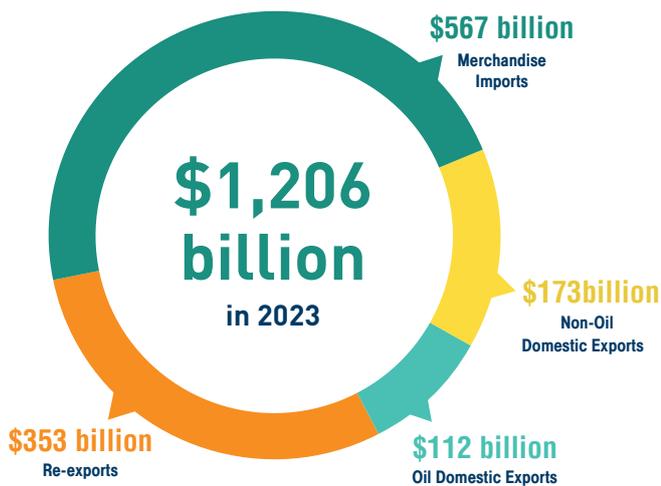


Image courtesy of PSA Singapore

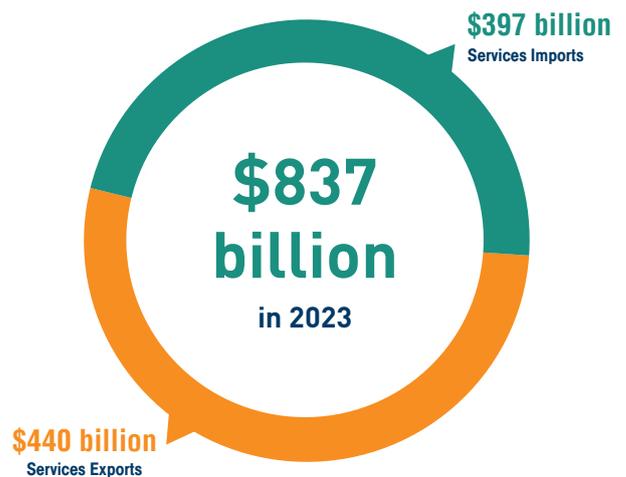
## Chapter 4

# INTERNATIONAL TRADE

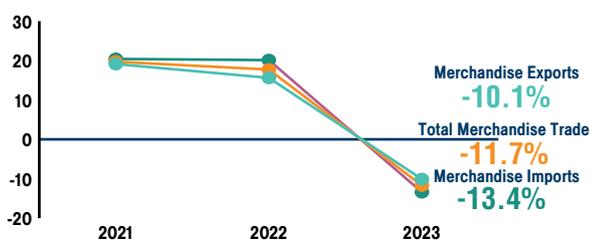
### TOTAL MERCHANDISE TRADE AMOUNTED TO...



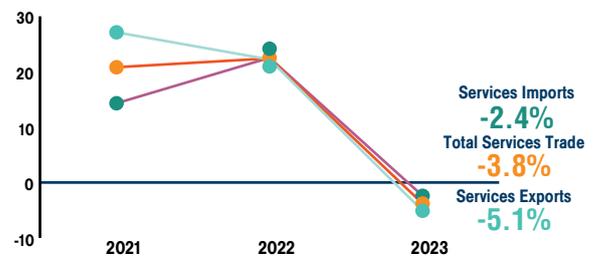
### TOTAL SERVICES TRADE AMOUNTED TO...



### GROWTH IN MERCHANDISE TRADE



### GROWTH IN SERVICES TRADE



### COMPONENTS OF MERCHANDISE EXPORTS (YoY Growth)



### THE DECREASE IN SERVICES EXPORTS WAS LED BY...



## OVERVIEW

Singapore's total merchandise trade declined by 2.1 per cent year-on-year in the fourth quarter of 2023, easing from the 16.5 per cent contraction in the previous quarter. At the same time, total services trade decreased by 2.8 per cent year-on-year, extending the 6.9 per cent decline in the third quarter.

For the whole of 2023, Singapore's total merchandise trade contracted by 11.7 per cent to \$1.2 trillion, down from \$1.4 trillion in 2022. Oil trade declined by 16.3 per cent amidst lower oil prices compared to a year ago, while non-oil trade decreased by 10.5 per cent. Merchandise exports and imports declined by 10.1 per cent and 13.4 per cent respectively.

Total services trade fell by 3.8 per cent to \$837 billion in 2023, down from \$871 billion in 2022. Services exports and imports decreased by 5.1 per cent and 2.4 per cent respectively in 2023.

## MERCHANDISE TRADE

### Merchandise Exports

Total merchandise exports rose by 0.2 per cent year-on-year in the fourth quarter, a turnaround from the 15.6 per cent decrease in the previous quarter (Exhibit 4.1). The increase was due to the growth in re-exports, which outweighed the decline in domestic exports. Domestic exports fell by 1.7 per cent, easing from the 22.6 per cent contraction in the third quarter. Meanwhile, re-exports rose by 1.8 per cent, improving from the 9.5 per cent decrease in the previous quarter.

**Exhibit 4.1: Growth Rates of Total Merchandise Trade, Merchandise Exports and Merchandise Imports (In Nominal Terms)**

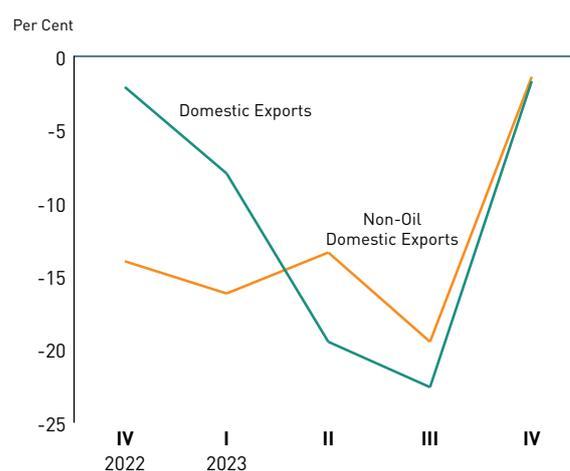
	2022	2023				2023
		I	II	III	IV	
<b>Total Merchandise Trade</b>	<b>17.7</b>	-7.9	-18.8	-16.5	-2.1	<b>-11.7</b>
<b>Merchandise Exports</b>	15.6	-6.5	-16.9	-15.6	0.2	<b>-10.1</b>
<b>Domestic Exports</b>	18.2	-8.0	-19.5	-22.6	-1.7	<b>-13.5</b>
<b>Oil</b>	52.4	8.5	-28.1	-26.9	-2.1	<b>-14.2</b>
<b>Non-Oil</b>	3.0	-16.2	-13.4	-19.5	-1.4	<b>-13.1</b>
<b>Re-Exports</b>	13.5	-5.3	-14.6	-9.5	1.8	<b>-7.1</b>
<b>Merchandise Imports</b>	20.1	-9.4	-20.8	-17.4	-4.7	<b>-13.4</b>
<b>Oil</b>	43.9	-7.0	-34.4	-25.0	-4.1	<b>-19.0</b>
<b>Non-oil</b>	14.6	-10.0	-16.6	-15.2	-4.8	<b>-11.9</b>

For the whole of 2023, total merchandise exports declined by 10.1 per cent, a reversal from the 15.6 per cent increase recorded in 2022.

### Non-Oil Domestic Exports

Non-oil domestic exports (NODX) declined by 1.4 per cent year-on-year in the fourth quarter, easing from the 19.5 per cent contraction in the preceding quarter (Exhibit 4.2). The decrease in NODX was due to a drop in electronics NODX, even as non-electronics NODX rose.

**Exhibit 4.2: Changes in Domestic Exports**

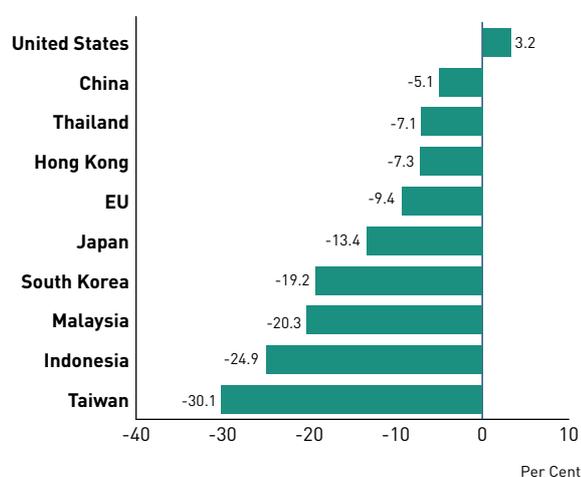


Electronics NODX declined by 9.9 per cent in the fourth quarter, moderating from the 20.1 per cent contraction in the previous quarter. The fall in electronics NODX was primarily due to a decline in the domestic exports of ICs, PCs and diodes & transistors. Non-electronics NODX rose by 1.1 per cent, rebounding from the 19.3 per cent decline in the previous quarter. The growth in non-electronics NODX was due to higher domestic exports of pharmaceuticals, non-monetary gold and miscellaneous manufactured articles.

For the full year, NODX contracted by 13.1 per cent, a reversal from the 3.0 per cent growth in 2022. The decline in NODX was due to decreased shipments of both electronics (-19.7 per cent) and non-electronics (-11.1 per cent) products.

The top 10 NODX markets accounted for 80.3 per cent of Singapore's total NODX in 2023. Singapore's NODX to all the top 10 markets declined in 2023, except for the US (Exhibit 4.3). The biggest contributors to the decline in NODX in 2023 were Taiwan (-30.1 per cent), Malaysia (-20.3 per cent) and Indonesia (-24.9 per cent).

**Exhibit 4.3: Growth Rates of Non-Oil Domestic Exports to Top 10 Markets in 2023**



NODX to Taiwan contracted mainly because of a decline in the exports of specialised machinery, ICs and measuring instruments. NODX to Malaysia decreased on the back of a decline in the exports of ICs, specialised machinery and primary chemicals. Meanwhile, non-monetary gold, petrochemicals and telecommunications equipment contributed the most to the decline in NODX to Indonesia. On the other hand, NODX to the US grew due to higher exports of pharmaceuticals, miscellaneous manufactured articles and telecommunications equipment.

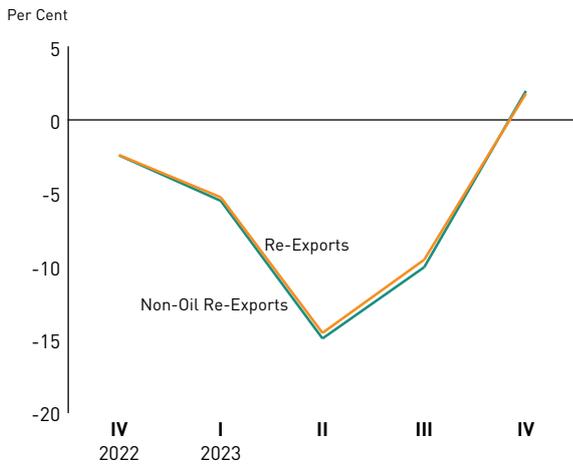
## Oil Domestic Exports

Oil domestic exports decreased by 2.1 per cent year-on-year in the fourth quarter, easing from the 26.9 per cent contraction in the previous quarter. The decline in oil domestic exports was led by lower exports to economies such as the EU 27, Hong Kong and Marshall Islands. Overall, the decrease in oil domestic exports reflected lower oil prices compared to the same quarter a year ago. In volume terms, oil domestic exports grew by 1.2 per cent, after the 16.6 per cent decline in the third quarter.

For the full year, oil domestic exports declined by 14.2 per cent, deteriorating sharply from the 52.4 per cent expansion in 2022. By economies, it was driven mainly by lower exports to Malaysia, Australia and the EU 27. The decrease in oil domestic exports was on account of lower oil prices compared to a year ago. In volume terms, overall oil domestic exports rose by 2.3 per cent in 2023, extending the 1.7 per cent increase in 2022.

## Non-Oil Re-Exports

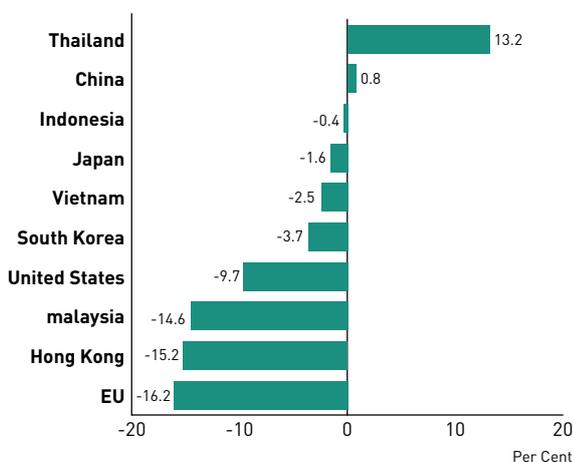
Non-oil re-exports (NORX) grew by 2.0 per cent year-on-year in the fourth quarter, a reversal from the 10.1 per cent decrease in the preceding quarter (Exhibit 4.4). The growth in NORX could be attributed to an increase in both electronics and non-electronics NORX. Electronics NORX grew by 2.8 per cent, a rebound from the 10.3 per cent contraction in the third quarter, as the re-exports of ICs, other computer peripherals and telecommunications equipment grew. Meanwhile, non-electronics NORX rose by 1.1 per cent, improving from the 9.8 per cent decrease in the preceding quarter. The increase in non-electronic NORX was mainly due to the higher re-exports of non-electric engines & motors, specialised machinery and pharmaceuticals.

**Exhibit 4.4: Changes in Re-Exports**

For the whole of 2023, NORX declined by 7.3 per cent, a reversal from the 13.4 per cent growth in 2022. The decline in NORX was due to a decrease in both electronics NORX (-11.6 per cent) and non-electronics NORX (-2.4 per cent).

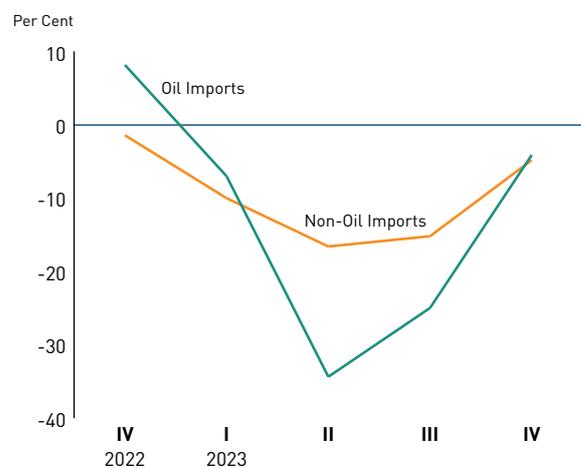
NORX to all the top 10 NORX markets declined in 2023 (Exhibit 4.5), except for Thailand and China. NORX to Hong Kong decreased on the back of a decline in the re-exports of ICs, diodes & transistors and electrical machinery. Meanwhile, lower shipments of ICs, non-monetary gold and telecommunications equipment led to a decline in NORX to Malaysia.

Re-exports to the EU 27 decreased on account of a decline in shipments of ICs, non-electric engines & motors and motorcycles.

**Exhibit 4.5: Growth Rates of Non-Oil Re-Exports to Top 10 Markets in 2023**

## Merchandise Imports

Non-oil imports registered a decline of 4.8 per cent year-on-year in the fourth quarter, easing from the 15.2 per cent contraction in the preceding quarter (Exhibit 4.6). The fall in non-oil imports was due to a decline in both electronics (-8.3 per cent) and non-electronics (-2.4 per cent) imports. In turn, the decline in electronics imports was due to a decrease in the imports of ICs, other computer peripherals and parts of PCs, whereas the decline in non-electronics imports was due to a drop in the imports of specialised machinery, electrical machinery and works of art.

**Exhibit 4.6: Changes in Merchandise Imports**

Oil imports declined by 4.1 per cent year-on-year in the fourth quarter, easing from the 25.0 per cent contraction in the preceding quarter. The decrease in oil imports was due partly to lower oil prices. In volume terms, oil imports declined by 5.4 per cent, moderating from the 19.2 per cent contraction in the third quarter.

For the full year of 2023, non-oil imports declined by 11.9 per cent, reversing the 14.6 per cent growth in 2022. Meanwhile, oil imports contracted by 19.0 per cent, a sharp pullback from the 43.9 per cent expansion in 2022.

## SERVICES TRADE

### Services Exports

Services exports fell by 3.9 per cent year-on-year in the fourth quarter, extending the 7.4 per cent contraction in the preceding quarter (Exhibit 4.7). The decrease in services exports was primarily driven by the exports of transport services, which shrank by 19.7 per cent. By contrast, the exports of travel services, other business services and financial services rose by 43.0 per cent, 2.7 per cent and 6.5 per cent respectively.

For the full year, services exports fell by 5.1 per cent, a reversal from the 22.2 per cent increase in 2022. The decrease in services exports was attributable mainly to the exports of transport services, which fell by 23.9 per cent. This was partially offset by increases in the exports of travel services (80.0 per cent), other business services (2.6 per cent) and financial services (4.7 per cent).

**Exhibit 4.7: Growth Rates of Total Services Trade, Services Exports and Services Imports (In Nominal Terms)**

	2022	2023				2023
		I	II	III	IV	
<b>Total Services Trade</b>	22.4	-0.1	-5.4	-6.9	-2.8	<b>-3.8</b>
<b>Services Exports</b>	22.2	-1.4	-7.5	-7.4	-3.9	<b>-5.1</b>
<b>Services Imports</b>	22.5	1.4	-3.1	-6.3	-1.5	<b>-2.4</b>

### Services Imports

Services imports fell by 1.5 per cent year-on-year in the fourth quarter, extending the 6.3 per cent decrease in the previous quarter. The contraction in services imports was led by the imports of transport services, which fell by 15.7 per cent. Conversely, the imports of travel services (40.6 per cent), other business services (2.3 per cent) and financial services (5.5 per cent) rose.

For the whole of 2023, services imports contracted by 2.4 per cent, a reversal from the 22.5 per cent increase in 2022. The contraction in services imports was mainly due to the imports of transport services, which fell by 19.2 per cent. By contrast, the imports of travel services (64.0 per cent), other business services (3.1 per cent) and financial services (7.6 per cent) rose.



CHAPTER

5

# BALANCE OF PAYMENTS

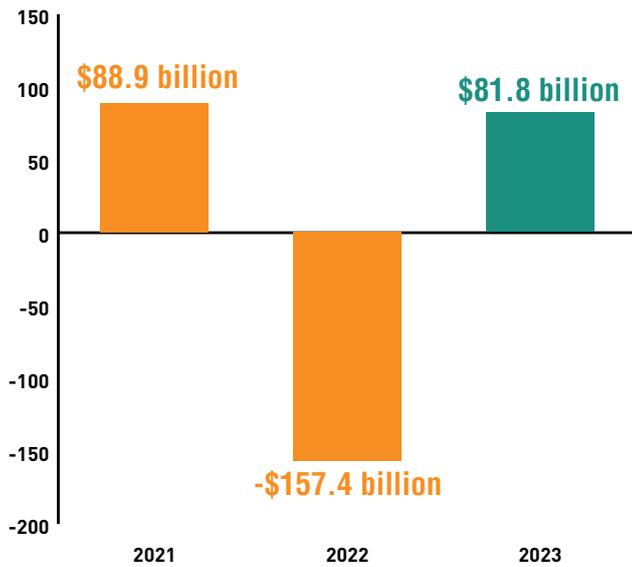




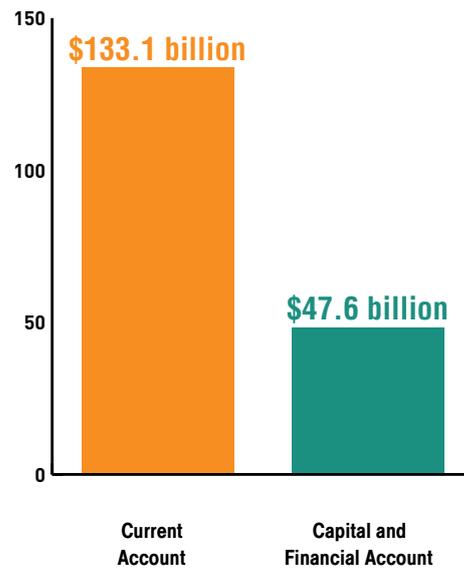
## Chapter 5

# BALANCE OF PAYMENTS

Singapore's balance of payments surplus came in at **\$81.8 billion** at the end of 2023



## BALANCE OF PAYMENTS COMPONENTS IN 2023



## COMPONENTS OF CURRENT ACCOUNT

\$207.8 billion



Goods Balance

\$43.7 billion



Services Balance

-\$108.4 billion



-\$10.0 billion



## COMPONENTS OF CAPITAL & FINANCIAL ACCOUNT

-\$150.7 billion



Direct Investment

\$128.8 billion



Portfolio Investment

\$1.3 billion



\$68.2 billion



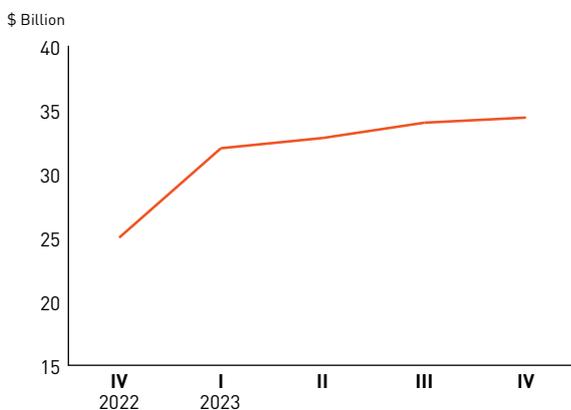
## OVERVIEW

Singapore's overall balance of payments recorded a larger surplus of \$13.2 billion in the fourth quarter of 2023, compared to \$12.2 billion in the third quarter. For the whole of 2023, the overall balance of payments registered a surplus of \$81.8 billion, a reversal from the deficit of \$157 billion in 2022. The reversal was mainly due to a significant decline in net outflows from the capital and financial account. Singapore's official foreign reserves rose to \$463 billion at the end of 2023.

## CURRENT ACCOUNT

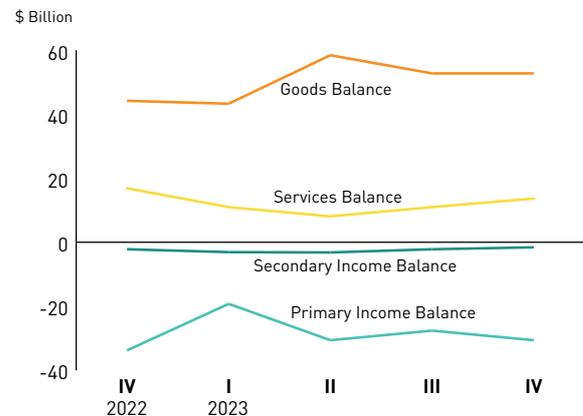
The current account surplus increased to \$34.4 billion in the fourth quarter, from \$34.0 billion in the third quarter (Exhibit 5.1). For 2023 as a whole, the current account surplus rose by \$9.4 billion to \$133 billion (19.8 per cent of GDP). The increase was driven by a narrowing of the primary income deficit and slight increase in the goods account surplus. These more than offset a fall in the services account surplus and a slight widening in the secondary income deficit.

**Exhibit 5.1: Current Account Balance**



In terms of the sub-components of the current account, the goods surplus remained at \$52.9 billion in the fourth quarter, as exports and imports rose by a similar magnitude (Exhibit 5.2). For 2023 as a whole, the goods surplus was maintained at \$208 billion.

**Exhibit 5.2: Components of Current Account Balance**



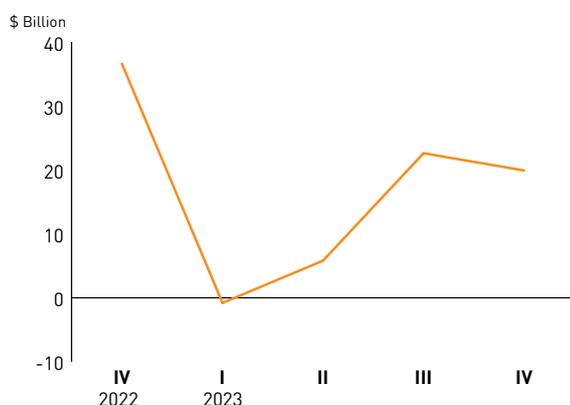
The surplus in the services balance rose to \$13.7 billion in the fourth quarter, from \$11.0 billion in the preceding quarter. For the whole of 2023, the surplus in the services balance fell to \$43.7 billion, from \$57.3 billion in 2022. This was mainly driven by a decline in net receipts for transport services as well as an increase in net payments for other business services and travel services. These more than offset the increases in net receipts for financial services and maintenance and repair services, as well as a fall in net payments for manufacturing services on physical inputs owned by others.

The primary income deficit widened by \$3.0 billion from the previous quarter to \$30.7 billion in the fourth quarter. For the year as a whole, the deficit narrowed by \$23.3 billion to \$108 billion, as receipts rose while payments declined.

## CAPITAL AND FINANCIAL ACCOUNT

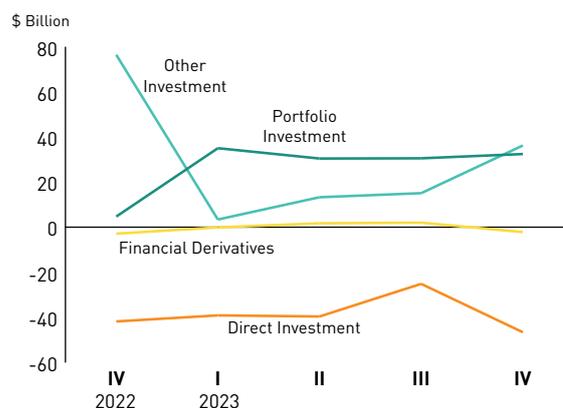
The capital and financial account registered a smaller net outflow of \$19.9 billion in the fourth quarter, compared to \$22.6 billion in the preceding quarter (Exhibit 5.3). For 2023 as a whole, net outflows amounted to \$47.6 billion (7.1 per cent of GDP), down from the \$279 billion in 2022. The decline was due to lower net outflows of “other investment” and financial derivatives, as well as a rise in net inflows of direct investment. These more than offset the rise in net outflows of portfolio investment.

**Exhibit 5.3: Capital and Financial Account Balance**



In terms of the sub-components of the capital and financial account, net outflows of “other investment” came in at \$36.3 billion in the fourth quarter, up from \$15.1 billion in the preceding quarter (Exhibit 5.4). For the full year, net outflows of “other investment” fell to \$68.2 billion, a significant decline from the \$325 billion registered in 2022. This was attributable in part to lower net outflows from resident deposit-taking corporations.

**Exhibit 5.4: Components of Financial Account (Net)**



At the same time, net inflows of direct investment reached \$46.7 billion in the fourth quarter, higher than the \$25.2 billion in the previous quarter. For 2023 as a whole, net inflows of direct investment rose by \$17.6 billion to \$151 billion, as the increase in foreign direct investment flows into Singapore exceeded that of residents’ direct investments abroad.

Financial derivatives switched to net inflows of \$2.2 billion in the fourth quarter, from net outflows of \$2.0 billion in the preceding quarter. For 2023 as a whole, financial derivatives recorded net outflows of \$1.3 billion, down from \$3.5 billion in 2022.

Net outflows of portfolio investment rose to \$32.5 billion in the fourth quarter, from \$30.6 billion in the previous quarter. For the full year, net outflows of portfolio investment increased by \$45.7 billion to \$129 billion in 2023. The step-up in net outflows was attributable to resident deposit-taking corporations as well as the resident non-bank private sector, both of which switched to net outflow positions in 2023 from net inflows in the previous year.

<sup>1</sup> Net inflows in net balances are indicated by a minus (-) sign. For more details regarding the change in sign convention to the financial account, please refer to DOS’s information paper on “Singapore’s International Accounts: Methodological Updates and Recent Developments”.



CHAPTER

6

# SECTORAL PERFORMANCE





## Chapter 6

# SECTORAL PERFORMANCE

## OVERALL ECONOMY

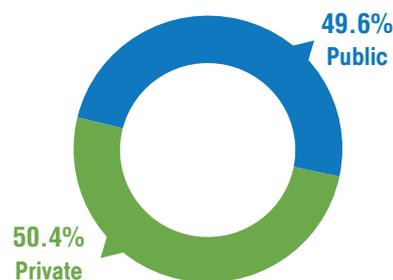
STRUCTURE OF ECONOMY	Nominal Value Added Share (%)	Real Growth (%)
<b>Total</b>	<b>100.0</b>	<b>1.1</b>
<b>Goods Producing Industries</b>	23.6	-2.9
<b>Manufacturing</b>	18.6	-4.3
<b>Construction</b>	3.5	5.2
<b>Utilities</b>	1.5	1.3
<b>Other Goods Industries</b>	0.0	2.6
<b>Services Producing Industries</b>	72.7	2.3
<b>Wholesale Trade</b>	22.3	0.8
<b>Retail Trade</b>	1.3	1.3
<b>Transportation &amp; Storage</b>	6.8	2.3
<b>Accommodation</b>	0.8	12.1
<b>Food &amp; Beverage Services</b>	0.9	4.1
<b>Information &amp; Communications</b>	5.7	5.7
<b>Finance &amp; Insurance</b>	13.8	1.3
<b>Real Estate</b>	3.1	4.9
<b>Professional Services</b>	5.7	1.1
<b>Administrative &amp; Support Services</b>	2.8	2.0
<b>Other Services Industries</b>	9.6	4.4
<b>Ownership of Dwellings</b>	3.6	2.1

## MANUFACTURING

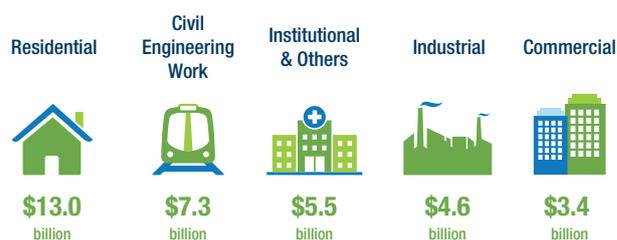
CLUSTERS	Nominal Value Added Share (%)	Real Growth (%)
 <b>Electronics</b>	38.2	-3.2
 <b>Chemicals</b>	17.3	-6.7
 <b>Biomedical Manufacturing</b>	13.7	-9.6
 <b>Precision Engineering</b>	15.7	-8.0
 <b>Transport Engineering</b>	7.9	15.0
 <b>General Manufacturing Industries</b>	7.1	-5.8

## CONSTRUCTION

### CERTIFIED PAYMENTS IN 2023



### CONTRACTS AWARDED IN 2023



## WHOLESALE TRADE



Foreign Wholesale Trade Index growth  
**+1.5%**



Domestic Wholesale Trade Index growth  
**+0.1%**

## RETAIL TRADE



Retail Sales Index Growth (Non-Motor Vehicles)  
**+0.6%**



Retail Sales Index Growth (Motor Vehicles)  
**+0.5%**

## TRANSPORTATION & STORAGE

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
Land Transport*	13.9	4.5
Water Transport*	57.5	1.8
Air Transport*	13.7	16.2
Storage & Other Support Services	12.3	-2.2
Post & Courier Activities	2.6	-6.9

\*Including supporting services



**+83.1%** Air Passengers Handled Growth



**+2.3%** Total Sea Cargo Handled Growth

## ACCOMMODATION

### PERFORMANCE OF HOTELS



Hotel Room Revenue Growth  
**+48.8%**



Gross Lettings Growth  
**+32.7%**

## FOOD & BEVERAGE SERVICES

### PERFORMANCE OF F&B (SALES GROWTH)



Food Caterers  
**+30.4%**



Cafes, Food Courts & Other Eating Places  
**+2.5%**



Fast Food Outlets  
**0.0%**



Restaurants  
**-0.7%**

## INFORMATION & COMMUNICATIONS

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
 Telecommunications	12.8	0.5
 IT & Information Services	62.3	8.8
 Others	24.9	1.4

## FINANCE & INSURANCE

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
Banking	42.7	-1.2
Activities Auxiliary to Financial Services	21.2	9.5
Fund Management	12.5	2.1
Insurance	16.1	-3.2
Others	7.5	1.5

## REAL ESTATE

### PRIVATE RESIDENTIAL



### COMMERCIAL AND INDUSTRIAL (TOTAL OCCUPIED SPACE GROWTH)



## OTHER SERVICES INDUSTRIES

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
Public Administration & Defence	26.0	0.9
Education, Health & Social Work	52.6	2.8
Arts, Entertainment & Recreation	10.2	24.2
Others	11.1	5.6

## PROFESSIONAL SERVICES

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
Legal	8.2	-4.1
Accounting	5.9	4.4
Head Offices & Business Representative Offices	34.5	0.7
Business & Management Consultancy	10.7	-0.1
Architectural & Engineering, Technical Testing & Analysis	22.1	1.8
Other Professional, Scientific & Technical Services	18.6	3.1

## ADMINISTRATIVE & SUPPORT SERVICES

SEGMENTS	Nominal Value Added Share (%)	Real Growth (%)
Rental & Leasing	45.2	1.0
Other Administrative & Support Services	54.8	3.0



## Chapter 6.1

# MANUFACTURING

## OVERVIEW

The manufacturing sector expanded by 1.4 per cent year-on-year in the fourth quarter of 2023, reversing the 4.9 per cent decline clocked in the preceding quarter. Growth was supported by output expansions in the electronics, chemicals and transport engineering clusters.

For the whole of 2023, the manufacturing sector contracted by 4.3 per cent, reversing the 2.7 per cent growth in 2022. All clusters saw a fall in output except for the transport engineering cluster.

## OVERALL MANUFACTURING PERFORMANCE

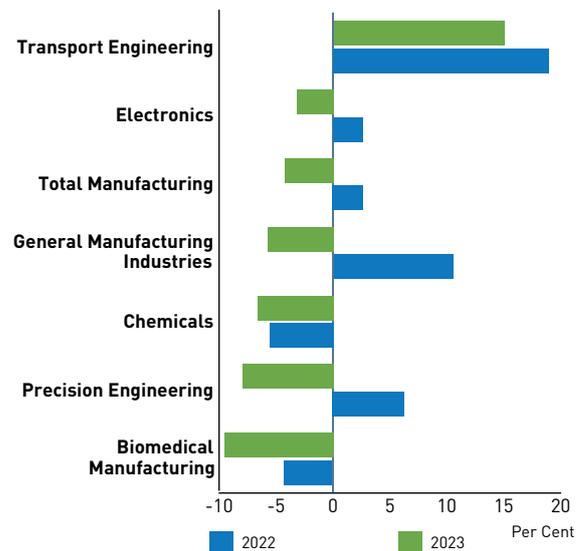
The manufacturing sector grew by 1.4 per cent year-on-year in the fourth quarter of 2023 on account of output expansions in the electronics, chemicals and transport engineering clusters (Exhibit 6.1).

For the whole of 2023, the manufacturing sector contracted by 4.3 per cent, reversing the 2.7 per cent growth in 2022. The decline in the sector was due to output contractions in all clusters except for the transport engineering cluster (Exhibit 6.2).

**Exhibit 6.1: Manufacturing Growth Rates**



**Exhibit 6.2: Manufacturing Clusters' Growth**



## PERFORMANCE OF CLUSTERS

The electronics cluster grew by 8.3 per cent year-on-year in the fourth quarter, supported by a 13.5 per cent expansion in the semiconductors segment on account of improved demand in selected end markets such as smartphones. Meanwhile, output in the computer peripherals & data storage, infocomms & consumer electronics and other electronic modules & components segments fell by 13.5 per cent, 6.4 per cent and 2.9 per cent respectively. For the whole of 2023, the electronics cluster contracted by 3.2 per cent.

Output in the transport engineering cluster rose by 7.0 per cent year-on-year in the fourth quarter on account of expansions in the marine & offshore engineering (M&OE) and aerospace segments. The M&OE segment grew by 16.0 per cent, supported by a higher level of activity in the shipyards as well as an increased production of oilfield & gas field equipment. Output in the aerospace segment grew by 7.1 per cent with a higher level of demand for aircraft parts and more maintenance, repair and overhaul (MRO) jobs from commercial airlines on the back of strong air travel demand globally. By contrast, the land segment contracted by 14.0 per cent. For the full year, the transport engineering cluster expanded by 15.0 per cent.

The chemicals cluster grew by 1.6 per cent year-on-year in the fourth quarter, supported by output expansions across all segments except the petrochemicals segment. The specialties segment grew by 17.2 per cent on account of higher level of production of mineral oil and food additives. The other chemicals segment grew 4.1 per cent with higher output in fragrances, while the petroleum segment grew 1.4 per cent. Conversely, output of the petrochemicals segment fell by 8.5 per cent on account of plant maintenance shutdowns and weak market demand. For 2023 as a whole, output of the chemicals cluster declined by 6.7 per cent.

The general manufacturing cluster contracted by 3.6 per cent year-on-year in the fourth quarter, driven by output declines in the printing (-11.8 per cent) and miscellaneous (-7.4 per cent) segments. In particular, the miscellaneous segment recorded a lower level of production of batteries and structural metal products. On the other hand, the food, beverages & tobacco segment grew by 0.5 per cent. For the whole of 2023, the general manufacturing cluster contracted by 5.8 per cent.

Output in the precision engineering cluster fell by 7.2 per cent year-on-year in the fourth quarter. The precision modules & components segment shrank by 17.4 per cent due to lower production of plastic and metal precision components, optical instruments as well as dies, moulds, tools, jigs and fixtures. Meanwhile, the machinery & systems (M&S) segment contracted by 3.8 per cent, weighed down by lower production of measuring devices and mechanical engineering works. For 2023 as a whole, output in the precision engineering cluster declined by 8.0 per cent.

The biomedical manufacturing cluster contracted by 7.5 per cent year-on-year in the fourth quarter. This was largely due to a 17.3 per cent decline in pharmaceutical output, resulting from a lower level of production of biological products and a different mix of active pharmaceutical ingredients (APIs) being produced. On the other hand, output in the medical technology segment expanded by 6.9 per cent, supported by export demand for medical devices. For the whole of 2023, the biomedical manufacturing cluster declined by 9.6 per cent.

## Chapter 6.2

# CONSTRUCTION

## OVERVIEW

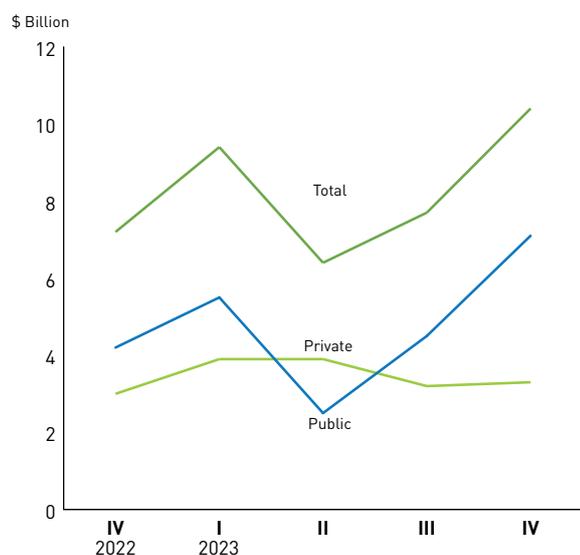
The construction sector grew by 5.2 per cent year-on-year in the fourth quarter of 2023, faster than the 3.7 per cent expansion in the previous quarter.

For the whole of 2023, the sector expanded by 5.2 per cent, faster than the 4.6 per cent growth in 2022.

## CONSTRUCTION DEMAND

Construction demand (contracts awarded) increased by 43.8 per cent year-on-year to \$10.4 billion in the fourth quarter, supported by expansions in both public and private sector construction demand (Exhibit 6.3).

**Exhibit 6.3: Contracts Awarded**



For the full year, total construction demand expanded by 13.5 per cent to \$33.8 billion (Exhibit 6.4), backed by increases of 12.8 per cent in public sector construction demand and 14.4 per cent in private sector construction demand.

**Exhibit 6.4: Contracts Awarded, 2023 (\$ Billion)**

	Total	Public	Private
<b>Total</b>	33.8	19.5	14.3
<b>Residential</b>	13.0	7.6	5.4
<b>Commercial</b>	3.4	0.0 <sup>1</sup>	3.4
<b>Industrial</b>	4.6	0.5	4.1
<b>Institutional &amp; Others</b>	5.5	4.8	0.6
<b>Civil Engineering Works</b>	7.3	6.5	0.8

## Public Sector

In the fourth quarter, public sector construction demand grew by 67.2 per cent year-on-year to \$7.1 billion. Except for commercial building construction demand which registered a contraction of -26.2 per cent, demand for all development types registered growth, ranging from 9.4 per cent for civil engineering works to 472 per cent for industrial building developments.

<sup>1</sup> In 2023, public commercial building's contracts awarded was 45 million.

For the full year, public sector construction demand increased by 12.8 per cent to \$19.5 billion (Exhibit 6.4). The expansion was supported by an increase in contracts awarded for public institutional & others (64.4 per cent), industrial (55.0 per cent) and residential building (43.0 per cent) projects. Some of the major projects awarded during the year include (i) MINDEF's NS Square; (ii) MND's Bay East Garden with a visitor centre; (iii) SLA's Chong Pang Integrated Development; and (iv) PUB's Tuas Water Reclamation Plant Contract 4B.

## Private Sector

In the fourth quarter, private sector construction demand increased by 10.6 per cent year-on-year to \$3.3 billion. Except for industrial and institutional & others building projects, which registered contractions of 35.3 per cent and 63.1 per cent respectively, demand expanded for all other types of projects, ranging from 11.1 per cent for residential building projects to 249 per cent for commercial building projects.

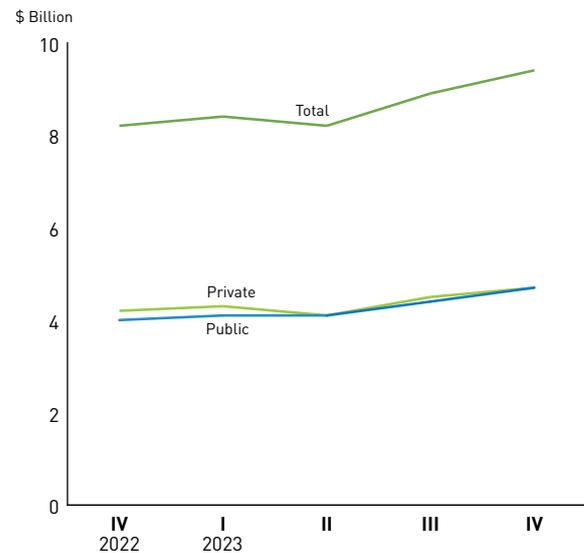
For the full year, private sector construction demand grew by 14.4 per cent to \$14.3 billion, on the back of higher demand for private commercial (120 per cent) and residential building (39.9 per cent) projects (Exhibit 6.4). Major projects awarded in 2023 include (i) redevelopment of various office premises such as Clifford Centre and PIL Building; (ii) major hotel refurbishment works at Marina Bay Sands and Resorts World at Sentosa; and (iii) development of various past en-bloc sales and GLS sites.

## CONSTRUCTION OUTPUT

Construction output (or nominal certified payments) rose by 14.9 per cent year-on-year to \$9.4 billion in the fourth quarter, supported by expansions in both public and private sector construction outputs (Exhibit 6.5).

For the full year, construction output increased by 15.4 per cent to \$34.9 billion, extending the 15.8 per cent growth in 2022.

**Exhibit 6.5: Certified Payments**



## Public Sector

Public sector construction output rose by 18.3 per cent year-on-year to \$4.7 billion in the fourth quarter. With the exception of public commercial building works, construction output for all types of works expanded, supported by public industrial (42.3 per cent), institutional & others (16.0 per cent), residential building (14.1 per cent) and civil engineering (19.3 per cent) works.

For the full year, public sector construction output increased by 14.3 per cent to \$17.3 billion, underpinned mainly by public residential (22.6 per cent), institutional & others (21.4 per cent), industrial building (13.0 per cent) and civil engineering (6.8 per cent) works. Major projects supporting the growth include (i) MOH's Woodlands Health Campus, SGH Elective Care Centre/National Dental Centre and SGH Emergency Medicine Building; (ii) SIT Campus@Punggol (Plots 1 & 2); (iii) Sport Singapore's Punggol Regional Sports Centre (iv) JTC's Punggol Digital District and Bulim Square; (v) PUB's Tuas Water Reclamation Plant for the Deep Tunnel Sewerage System (Phase 2); and (vi) LTA's Cross Island MRT Line, Jurong Region MRT Line, East Coast Integrated Depot and North South Corridor.

## Private Sector

In the fourth quarter, private sector construction output increased by 11.6 per cent year-on-year to \$4.7 billion, as all types of private sector construction works, except for institutional & others building works, expanded. These include private civil engineering (28.7 per cent), commercial (21.4 per cent) and industrial building (19.5 per cent) works.

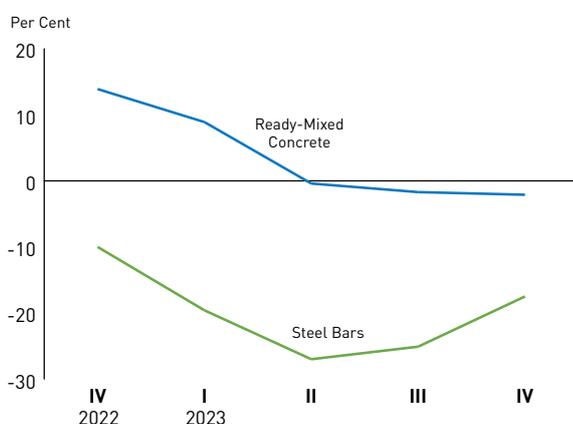
For the full year, private sector construction output increased by 16.4 per cent to \$17.6 billion. All types of private sector construction output expanded, led by private commercial (39.4 per cent), industrial (19.3 per cent) and residential building (10.7 per cent) works. Major ongoing projects include (i) mixed-used integrated developments; (ii) refurbishment of existing hotels and development of new hotels; (iii) data centres; (iv) semiconductor production plants; (v) cogeneration plants; and (vi) the redevelopment of past en-bloc sales sites and development of Government Land Sales (GLS) sites.

## CONSTRUCTION MATERIALS

In tandem with the rise in construction output, total consumption of steel rebars<sup>2</sup> rose by 31.0 per cent year-on-year to 1.5 million tonnes in 2023. Similarly, the total consumption of ready-mixed concrete increased by 4.9 per cent in 2023 to 12.3 million m<sup>3</sup>.

The average market price of Grade 40 pump ready-mixed concrete<sup>3</sup> decreased by 2.1 per cent to about \$115.7 per m<sup>3</sup> in the fourth quarter, amid easing freight and fuel costs coupled with diversified import sources of raw materials. Likewise, the average market price of steel rebars<sup>4</sup> fell by 17.5 per cent to around \$824.7 per tonne in the fourth quarter, due to softening of global steel demand (Exhibit 6.6).

**Exhibit 6.6: Changes in Market Prices of Construction Materials**



2 Rebar consumption is estimated from net imports plus local production (without factoring in stock levels).

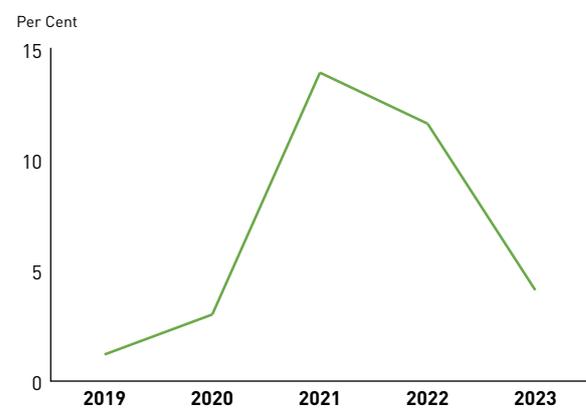
3 The market prices are based on contracts with non-fixed price and market retail price.

4 The market prices refer to 16mm to 32mm High Tensile rebars and are based on fixed price supply contracts with a contract period of 6 months or below.

## CONSTRUCTION COSTS

Based on BCA's Building Works Tender Price Index (TPI), tender prices increased by about 4.1 per cent year-on-year in 2023, a decline from the 11.6 per cent growth in 2022, following the easing of some key input costs (e.g., construction material costs) and of global inflation (Exhibit 6.7). However, there are several factors that could put upward pressure on the TPI in 2024. These include likely tighter manpower and sub-contracting resources, amid anticipated strong construction activities over the medium-term, and the possibility of a resurgence in global inflation.

**Exhibit 6.7: Changes in Tender Price Index**



## CONSTRUCTION OUTLOOK IN 2024

According to BCA, total construction demand is projected to be between \$32.0 billion and \$38.0 billion in 2024 (Exhibit 6.8). Demand from the public sector is expected to stay strong at between \$18.0 billion and \$21.0 billion, supported by a continued strong pipeline of public housing, institutional building and infrastructure projects. Meanwhile, total private sector construction demand is projected to be between \$14.0 billion and \$17.0 billion in 2024, bolstered by an anticipated increase in commercial building developments including the expansion of the two Integrated Resorts (IRs). Key upcoming projects in 2024 include (i) continued ramp-up in Build-To-Order HDB flats; (ii) development of new major mixed-used properties; (iii) high-specification industrial premises such as biomedical plants and fuel storage facilities; (iv) major public institutional building developments such as relocation of Singapore Science Centre and construction of Founders' Memorial Building and (v) remaining contracts for Cross Island MRT Line (Phase 2).

Total construction output in 2024 is projected to increase to between \$34.0 billion and \$37.0 billion, in tandem with the recovery in the construction demand since emerging from the COVID-19 pandemic.

Exhibit 6.8: Projected Construction Demand in 2024

	\$ Billion
<b>Public Sector</b>	<b>18.0 – 21.0</b>
<b>Building Construction Sub-total</b>	<b>10.7 – 12.8</b>
<b>Residential</b>	6.6 – 7.6
<b>Commercial</b>	0.1 – 0.1
<b>Industrial</b>	0.5 – 0.7
<b>Institutional &amp; Others</b>	3.6 – 4.4
<b>Civil Engineering Works Sub-total</b>	<b>7.3 – 8.2</b>
<b>Private Sector</b>	<b>14.0 – 17.0</b>
<b>Building Construction Sub-total</b>	<b>13.4 – 16.3</b>
<b>Residential</b>	3.7 – 4.5
<b>Commercial</b>	5.8 – 6.6
<b>Industrial</b>	3.0 – 4.0
<b>Institutional &amp; Others</b>	0.9 – 1.2
<b>Civil Engineering Works Sub-total</b>	<b>0.6 – 0.8</b>
<b>TOTAL CONSTRUCTION DEMAND</b>	<b>32.0 – 38.0</b>

## Chapter 6.3

# WHOLESALE TRADE

## OVERVIEW

The wholesale trade sector expanded by 0.2 per cent year-on-year in the fourth quarter of 2023, moderating from the 1.1 per cent growth in the previous quarter. Growth during the quarter came largely on the back of an increase in the volume of foreign wholesale sales of metals, timber & construction materials, petroleum & petroleum products, food, beverages & tobacco and electronic components.

For the whole of 2023, the sector grew by 0.8 per cent, slowing from the 4.0 per cent expansion in 2022.

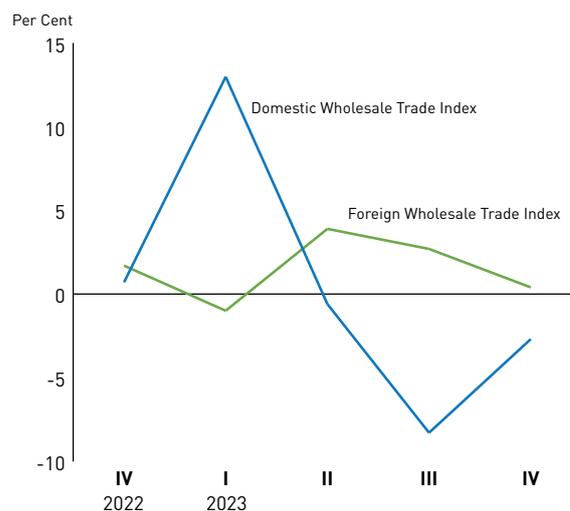
## WHOLESALE SALES

In the fourth quarter, the wholesale trade sector was supported by an increase in foreign wholesale sales volume, which more than offset the decline in domestic wholesale sales volume.

Specifically, foreign wholesale sales volume rose by 0.4 per cent year-on-year in the fourth quarter, moderating from the 2.7 per cent increase in the preceding quarter (Exhibit 6.9). Growth in sales volume was fastest in the metals, timber & construction materials (13.5 per cent), food, beverages & tobacco (9.6 per cent) and electronic components (7.8 per cent) segments, which outpaced the decline in the sales volume of the ship chandlers & bunkering (-38.1 per cent) and general wholesale trade (-16.4 per cent) segments. For the whole of 2023, the foreign wholesale trade index rose by 1.5 per cent, easing from the 3.9 per cent increase in the previous year.

Meanwhile, domestic wholesale sales volume fell by 2.7 per cent year-on-year in the fourth quarter, easing from the 8.3 per cent decline in the preceding quarter. The contraction in sales volume was the sharpest in the transport equipment (-29.3 per cent) and petroleum & petroleum products (-24.6 per cent) segments, while increases in the sales volumes of metals, timber & construction materials (88.6 per cent) and electronic components (40.5 per cent) were fastest. For the whole of 2023, the domestic wholesale trade index grew by 0.1 per cent, a reversal from the 9.7 per cent contraction posted in 2022.

**Exhibit 6.9: Changes in Wholesale Trade Index in Chained Volume Terms**



## Chapter 6.4

# RETAIL TRADE

## OVERVIEW

The retail trade sector contracted by 0.3 per cent year-on-year in the fourth quarter of 2023, reversing the 2.3 per cent growth in the previous quarter.

For the whole of 2023, the sector expanded by 1.3 per cent, moderating from the 8.5 per cent growth in 2022.

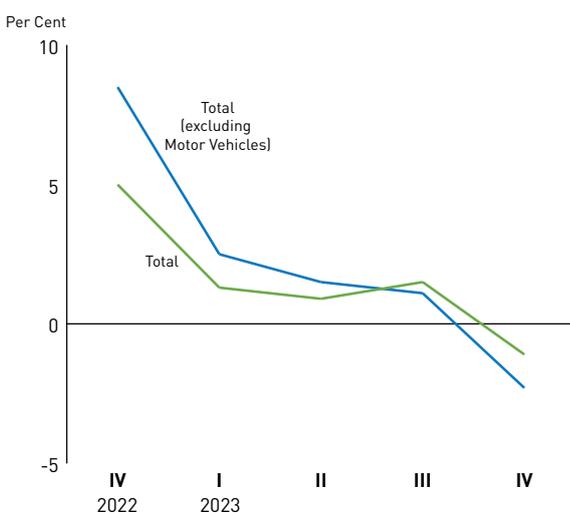
## RETAIL SALES

Overall retail sales volume decreased by 1.1 per cent year-on-year in the fourth quarter, reversing the 1.5 per cent growth in the third quarter (Exhibit 6.10). Overall retail sales were weighed down by the decrease in non-motor vehicle sales volume (-2.3 per cent). This was led by declines in the sales volumes of supermarkets & hypermarkets (-5.2 per cent), furniture & household equipment (-7.3 per cent), and minimarts & convenience stores (-6.8 per cent). On the other hand, the food & alcohol (8.1 per cent), watches & jewellery (1.2 per cent) and wearing apparel & footwear (0.7 per cent) segments grew. Meanwhile, motor vehicle sales volume grew by 11.4 per cent due to an increase in COE quotas.

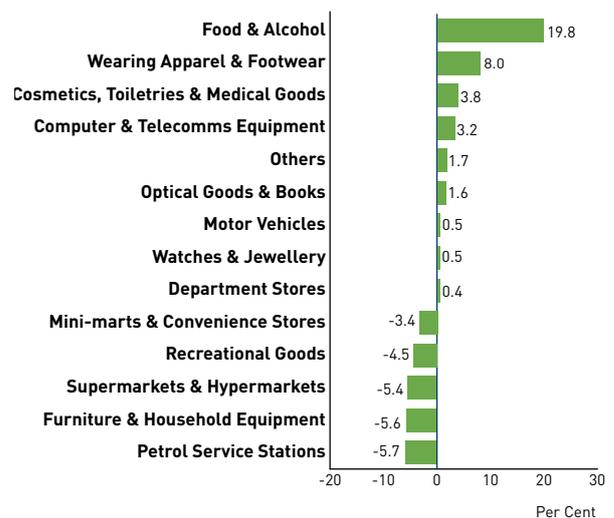
For the full year, overall retail sales volume rose by 0.6 per cent, extending the 7.2 per cent expansion in 2022.

In 2023, both non-motor vehicle (0.6 per cent) motor vehicle (0.5 per cent) sales volume increased. The growth in non-motor vehicle sales volume was led by the sales of wearing apparel & footwear (8.0 per cent), food & alcohol (19.8 per cent) and cosmetics, toiletries & medical goods (3.8 per cent). Meanwhile, the sales volumes of supermarkets & hypermarket (-5.4 per cent), furniture & household equipment (-5.6 per cent) and petrol service stations (-5.7 per cent) fell (Exhibit 6.11).

**Exhibit 6.10: Changes in Retail Sales Index in Chained Volume Terms**



**Exhibit 6.11: Changes in Retail Sales Index in Chained Volume Terms for Major Segments in 2023**



## Chapter 6.5

# TRANSPORTATION & STORAGE

## OVERVIEW

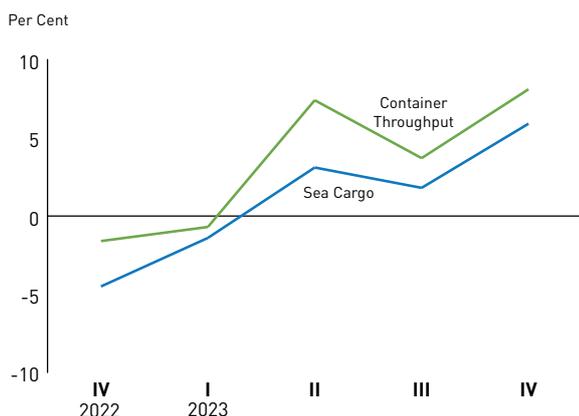
The transportation & storage sector expanded by 2.8 per cent year-on-year in the fourth quarter of 2023, picking up from the 0.9 per cent growth in the previous quarter.

For the whole of 2023, the sector grew at a slower pace of 2.3 per cent compared to the 4.9 per cent expansion recorded in 2022. The expansion of the sector was supported largely by the water transport and air transport segments.

## WATER TRANSPORT

Container throughput grew by 8.1 per cent year-on-year in the fourth quarter, accelerating from the 3.7 per cent expansion in the previous quarter (Exhibit 6.12). For the full year, the number of TEUs (Twenty-Foot Equivalent Units) handled by Singapore's ports came in at 39.0 million, representing a 4.6 per cent expansion. This was a reversal from the 0.7 per cent decline recorded in 2022.

**Exhibit 6.12: Changes in Container Throughput and Sea Cargo Handled**



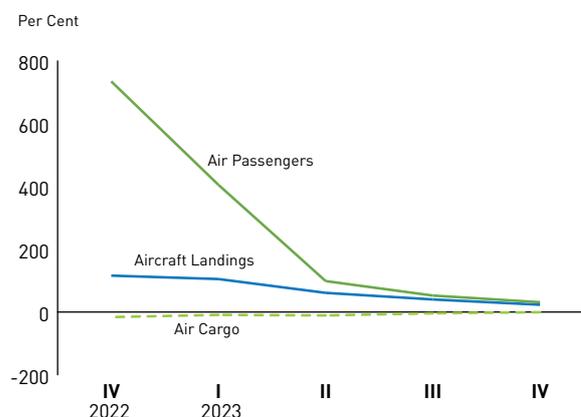
Overall sea cargo volume expanded by 5.9 per cent year-on-year in the fourth quarter, picking up from the 1.8 per cent growth in the preceding quarter. The expansion in sea cargo volume was largely due to general cargo shipments, which grew by 8.8 per cent during the quarter, an acceleration from the 4.2 per cent growth registered in the third quarter. For the whole of 2023, overall sea cargo volume grew by 2.3 per cent, reversing the 3.6 per cent decline in the previous year.

## AIR TRANSPORT

Total air passenger traffic (less transit) handled by Changi Airport climbed by 31.2 per cent year-on-year in the fourth quarter, moderating from the 52.5 per cent growth in the previous quarter (Exhibit 6.13). In absolute terms, air passenger traffic volume recovered to 90.6 per cent of the volume seen in the fourth quarter of 2019 (pre-pandemic).

For the full year, total air passenger traffic passing through Changi Airport climbed by 83.1 per cent to come in at 58.4 million, moderating from the 953 per cent surge posted in 2022.

**Exhibit 6.13: Changes in Air Transport**



On the other hand, air cargo volume fell by 0.5 per cent year-on-year in the fourth quarter, easing from the 4.0 per cent contraction in the previous quarter. In absolute terms, total air cargo volume was at 86.9 per cent of pre-pandemic levels (i.e., in the fourth quarter of 2019). For 2023 as a whole, air cargo shipments declined by 6.1 per cent, extending the 4.8 per cent contraction posted in 2022.

Meanwhile, aircraft landings climbed by 23.2 per cent year-on-year to reach 43,560 in the fourth quarter, easing from the 40.1 per cent increase in the third quarter. This brought the total number of aircraft landings in 2023 to 164,124, which was 50.2 per cent higher compared to that in 2022.

## Chapter 6.6

# ACCOMMODATION

## OVERVIEW

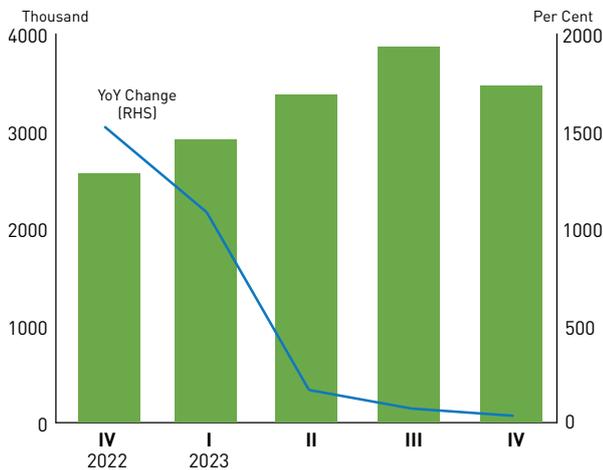
The accommodation sector grew by 1.5 per cent year-on-year in the fourth quarter of 2023, moderating from the 12.6 per cent expansion in the previous quarter.

For the whole of 2023, the sector expanded by 12.1 per cent, accelerating from the 2.2 per cent growth in 2022.

## VISITOR ARRIVALS

Singapore received around 3.5 million visitors in the fourth quarter, 35.2 per cent higher compared to the same period a year ago (Exhibit 6.14). Compared to the same period in 2019 (pre-pandemic), visitor arrivals remained 27.6 per cent lower. For the full year, visitor arrivals increased by 116 per cent, slowing from the 1,810 per cent expansion in 2022.

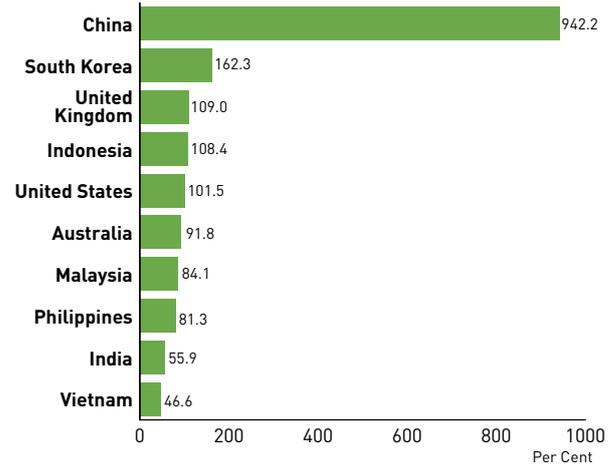
Exhibit 6.14: Visitor Arrivals



In terms of source markets, Singapore's top ten visitor-generating markets in 2023 were Indonesia (2.3 million visitors), China (1.4 million visitors), Malaysia (1.1 million visitors), Australia (1.1 million visitors), India (1.1 million visitors), the Philippines (693,000 visitors), the USA (642,000 visitors), South Korea (571,000 visitors), the UK (474,000 visitors) and Vietnam (459,000 visitors). Together, they accounted for 71.6 per cent of total visitor arrivals in 2023.

Among the top 10 visitor-generating markets, China (942 per cent), South Korea (162 per cent) and the UK (109 per cent) posted the strongest growth in visitor arrivals in 2023 (Exhibit 6.15).

Exhibit 6.15: Growth Rates of Top 10 Visitor-Generating Markets in 2023

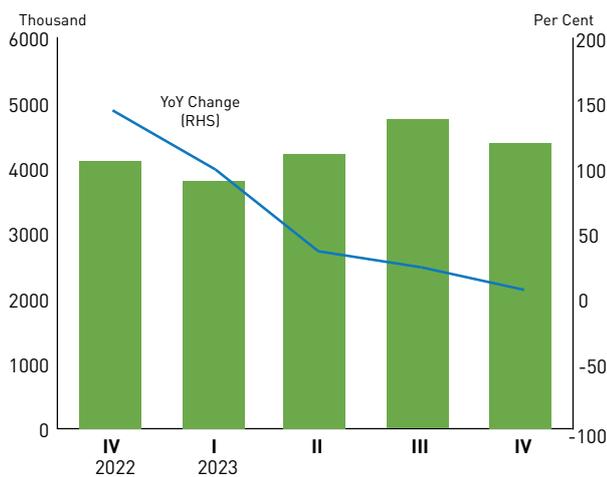


## ACCOMMODATION

In tandem with the strong recovery in visitor arrivals, gross lettings of gazetted hotel rooms grew by 6.9 per cent year-on-year in the fourth quarter, extending the 24.2 per cent growth in the previous quarter (Exhibit 6.16). Similarly, room revenue expanded by 4.9 per cent, moderating from the 40.7 per cent increase in the preceding quarter. The increase in gross lettings was partially offset by the decrease in average room rates and average occupancy rates of gazetted hotels. Specifically, the average occupancy rate fell by 5.6 percentage points, while the average room rate saw a 1.9 per cent decline to \$280 in the fourth quarter.

For 2023 as a whole, the accommodation sector grew by 12.1 per cent, driven by the recovery in tourism demand. The overall room revenue of gazetted hotels climbed by 48.8 per cent to reach \$4.8 billion in 2023, driven by a 32.7 per cent expansion in gross lettings and a 12.2 per cent increase in average daily room rates.

**Exhibit 6.16: Gross Lettings**



## Chapter 6.7

# FOOD & BEVERAGE SERVICES

## OVERVIEW

The food & beverage services sector contracted by 1.5 per cent year-on-year in the fourth quarter of 2023, reversing the 2.9 per cent growth in the previous quarter.

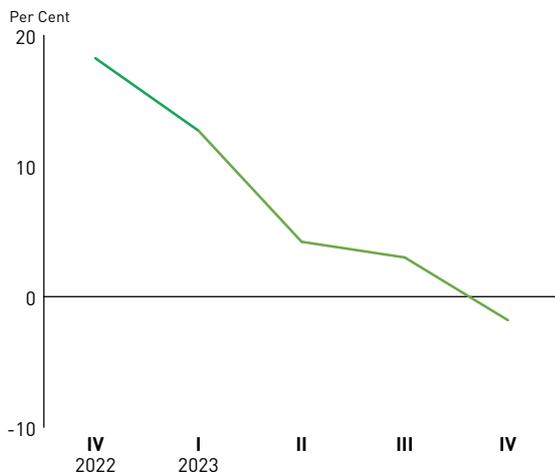
For the whole of 2023, the sector expanded at a slower pace of 4.1 per cent compared to the 15.4 per cent growth in 2022.

## FOOD & BEVERAGE SALES

Overall food & beverage sales volume declined by 1.8 per cent year-on-year in the fourth quarter of 2023, reversing the 3.0 per cent expansion in the preceding quarter (Exhibit 6.17). The decline was led by the restaurants (-7.4 per cent), fast food outlets (-7.2 per cent) and cafes, food courts & other eating places (-0.1 per cent) segments. On the other hand, sales of the food caterers segment continued to grow (8.8 per cent) due to the continued recovery in leisure, business and MICE events. All segments, except for fast food outlets, remained below pre-COVID (i.e., fourth quarter of 2019) levels.

For the whole of 2023, the food & beverage services volume index grew by 4.2 per cent. This was a moderation from the 19.6 per cent increase recorded in 2022. Nonetheless, the overall food & beverage sales volume remained 5.5 per cent lower than that in 2019. At the segment level, the sales volumes of food caterers (30.4 per cent) and cafes, food courts & other eating places (2.5 per cent) grew, while that of fast food outlets remained flat (0.0 per cent). On the other hand, the sales volume of the restaurants (-0.7 per cent) segment shrank.

**Exhibit 6.17: Changes in Food and Beverage Services Index in Chained Volume Terms**



## Chapter 6.8

# INFORMATION & COMMUNICATIONS

## OVERVIEW

The information & communications sector expanded by 4.7 per cent year-on-year in the fourth quarter of 2023, extending the 6.0 per cent growth in the previous quarter. This positive outturn was largely due to strong growth in the IT & information services and “others” segments<sup>5</sup>, while the telecommunications segment saw more modest growth during the quarter.

For the whole of 2023, the sector grew by 5.7 per cent, a slowdown from the 8.1 per cent expansion in 2022.

## IT & INFORMATION SERVICES

In 2023, the growth of the information & communications sector was led by the IT & information services segment. Specifically, the segment expanded by 8.8 per cent, driven by strong enterprise demand for digital solutions and services.

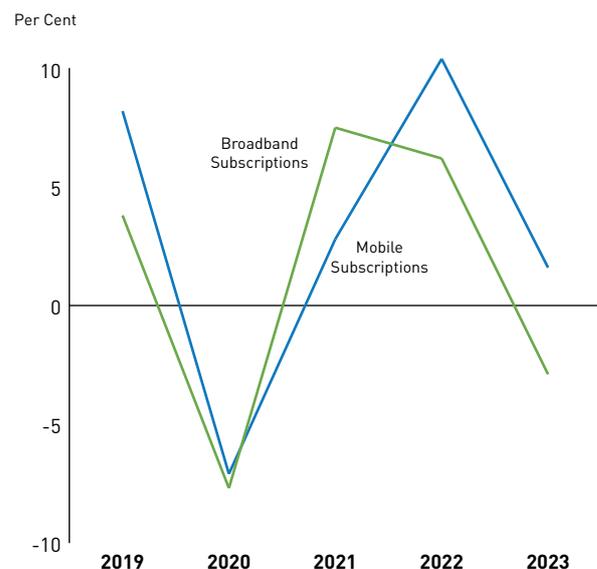
## TELECOMMUNICATIONS

The telecommunications segment grew by 0.5 per cent in 2023. In the third quarter of 2023, the latest period where data is available, fixed line subscriptions grew by 5.1 per cent.

As at September 2023<sup>6</sup>, the number of mobile subscriptions grew by 1.6 per cent compared to the same period in 2022 (Exhibit 6.18). While there was an 85.0 per cent decline in the number of 3G subscriptions to 84,000 and a 1.4 per cent decline in 4G subscriptions to 7.6 million, this was offset by the 72.5 per cent increase in 5G subscriptions to around 1.8 million.

In September 2023, the number of broadband subscriptions declined by 2.9 per cent. The decrease was driven by corporate (-0.9 per cent) and wireless broadband (-3.5 per cent) subscriptions, which were only partially offset by the increase in residential wired broadband subscriptions (1.9 per cent).

Exhibit 6.18: Information & Communications Growth



<sup>5</sup> The “others” segment consists of (i) publishing activities (including computer games and software publishing), (ii) motion picture, video and other programme production, sound recording, and music publishing activities, and (iii) radio and television broadcasting activities.

<sup>6</sup> Full-year data are not available at the time of publication. October and November data are available but subject to further revisions.

## Chapter 6.9

# FINANCE & INSURANCE

## OVERVIEW

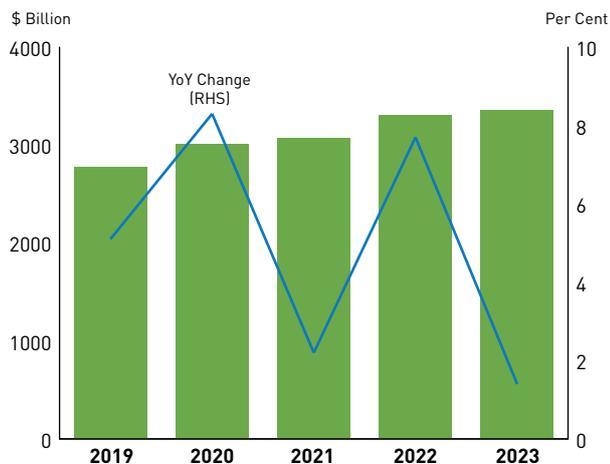
The finance & insurance sector expanded by 5.4 per cent year-on-year in the fourth quarter of 2023, improving from the 2.5 per cent growth in the previous quarter.

For the whole of 2023, the sector expanded by 1.3 per cent, up from the 0.2 per cent growth in the preceding year.

## COMMERCIAL BANKS

In 2023, total assets/ liabilities of commercial banks increased by 1.4 per cent to \$3.4 trillion (Exhibit 6.19).

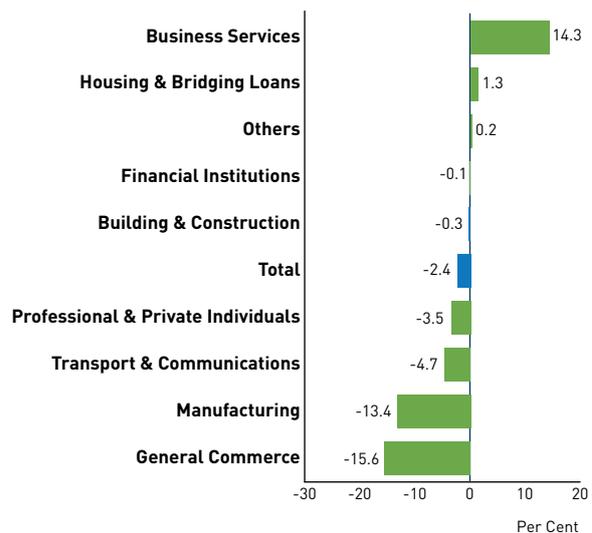
**Exhibit 6.19: Total Assets/Liabilities of Commercial Banks**



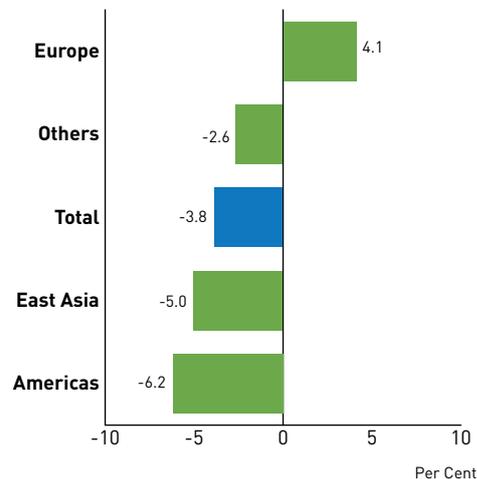
On the assets side, domestic interbank lending rose by \$32.5 billion (18.8 per cent). However, domestic credit extended to non-bank customers fell by \$37.6 billion (-2.9 per cent), with total loans and advances to residents contracting by 1.7 per cent.

Business lending shrank by 3.9 per cent, weighed down mainly by the decline in loans to the general commerce and manufacturing sectors, although this was partially offset by the growth in loans extended to the business services sector (Exhibit 6.20). In comparison, consumer lending fell by a smaller 0.1 per cent, supported largely by housing and bridging loans. Meanwhile, loans to non-residents also contracted, by 3.8 per cent, with East Asia and the Americas contributing the most to the decline (Exhibit 6.21).

**Exhibit 6.20: Loans and Advances to Residents by Industry in 2023**



**Exhibit 6.21: Loans and Advances to Non-Residents by Industry in 2023**



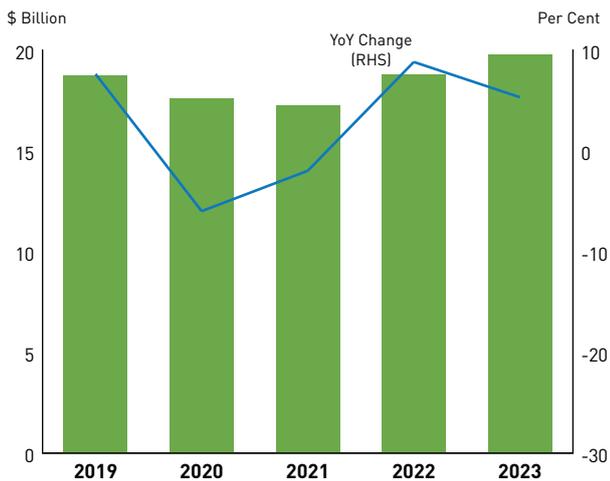
On the liabilities front, total deposits of non-bank customers grew by 4.3 per cent in 2023. As at end-2023, total non-bank deposits amounted to \$1.8 trillion, compared to \$1.7 trillion in the year before, mainly driven by the increase in fixed deposits, which rose by 15 per cent.

## FINANCE COMPANIES

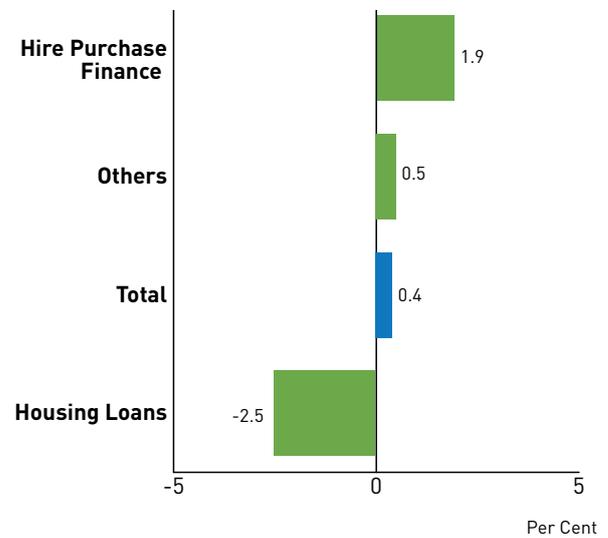
Total assets/ liabilities of finance companies grew by 5.3 per cent in 2023 to \$19.8 billion, moderating from the 8.8 per cent expansion in 2022 (Exhibit 6.22).

Non-bank lending contracted by 0.4 per cent in 2023, compared to the 8.5 per cent expansion in the previous year, as housing loans contracted (Exhibit 6.23). Meanwhile, the growth of deposits of non-bank customers also eased to 5.9 per cent in 2023, from 10.8 per cent in 2022.

**Exhibit 6.22: Total Assets/Liabilities of Finance Companies**



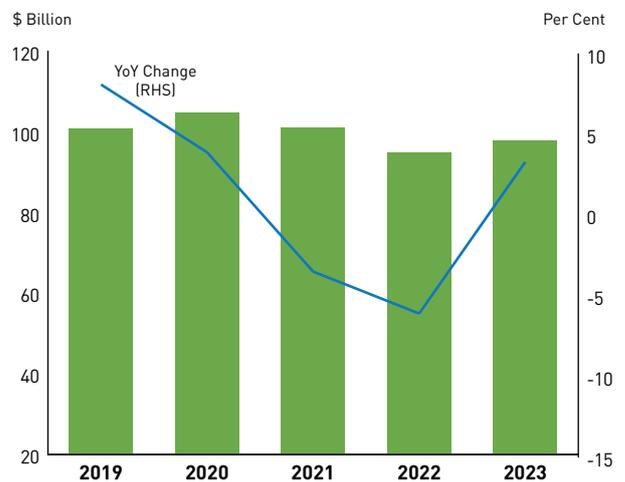
**Exhibit 6.23: Growth of Loans and Advances of Finance Companies in 2023**



## MERCHANT BANKS

Total assets/ liabilities of merchant banks grew by 3.3 per cent to \$97.9 billion in 2023, in contrast to the 6.1 per cent decline in the previous year (Exhibit 6.24). The expansion was underpinned by a rise in the holdings of securities & equities.

**Exhibit 6.24: Total Assets/Liabilities of Merchant Banks**



## INSURANCE INDUSTRY

Overall, the net income of the direct life insurance industry reversed from -\$1.5 billion in 2022 to \$2.1 billion in 2023, largely due to investment income. Meanwhile, total weighted new business premiums in the direct life insurance industry increased by 0.7 per cent from 2022 to \$6.3 billion in 2023 (Exhibit 6.25). Single premium business decreased by 33.8 per cent to \$15.6 billion and regular premium business increased by 21.4 per cent to \$4.8 billion.

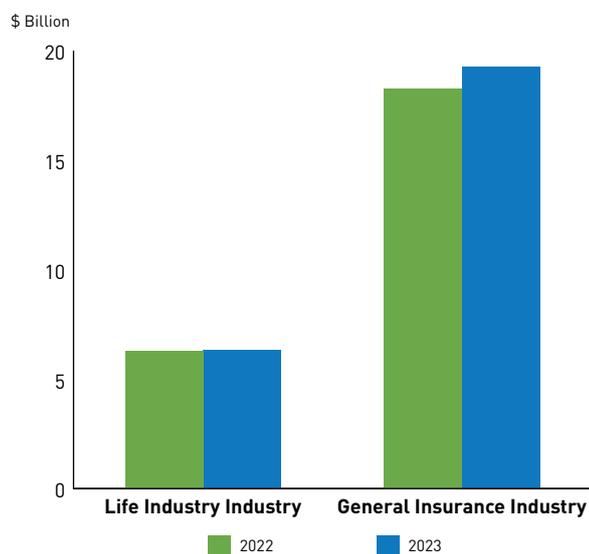
The general insurance industry recorded an operating profit of \$2.6 billion in 2023, largely due to investment income. Gross premiums increased by 5.4 per cent to \$19.3 billion in 2023, with offshore and domestic businesses accounting for \$13.9 billion and \$5.4 billion respectively.

## STOCK MARKET

The benchmark Straits Times Index (STI) staged a late turnaround in December 2023, but ended the year 0.3 per cent lower than 2022 (Exhibit 6.26).

The STI trended downwards over the first half of 2023 following a short-lived banking crisis in the US and Europe, while global interest rates remained high. Bank stocks led the decline in the STI, but quickly rebounded as domestic lenders reassured markets of their well-capitalised status and healthy liquidity positions.

**Exhibit 6.25: Premiums in the Insurance Industry**



Over the rest of 2023, a modest pickup in the external environment boosted trade-related equities in the index. Ongoing geopolitical tensions, however, weighed on risk sentiments and led to the muted performance of the STI.

## SECURITIES MARKET

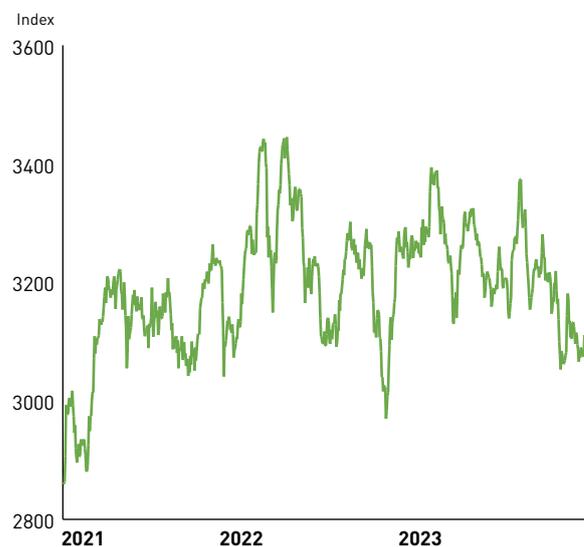
In 2023, the total turnover value of the securities market shrank by 16.2 per cent to \$259 billion, and total turnover volume fell by 3.8 per cent to 341 billion shares. This translated to a 15.9 per cent decrease in the average daily traded value to \$1.0 billion, while the average daily traded volume contracted by 3.4 per cent to 1.4 billion shares.

At the end of 2023, the total number of listed companies in Singapore was 632, with a combined market capitalisation of \$802 billion, a 3.3 per cent decrease from 2022. In 2023, there were 427 companies listed on SGX's Mainboard, with the other 205 companies listed on SGX's Catalist.

## DERIVATIVES MARKET

In 2023, SGX's derivatives market activity fell by 3.1 per cent to 252 million contracts. Compared to 2022, total futures trading volume decreased by 3.2 per cent to 242 million and options trading volume fell by 1.8 per cent to 10.0 million contracts. The most actively-traded contracts were the FTSE China A50 Index Futures, the Iron Ore 62% Futures and the USD/CNH FX Futures, which formed 59.9 per cent of the total volume traded on SGX's derivatives trading platform.

**Exhibit 6.26: Straits Times Index**



## FOREIGN EXCHANGE MARKET

In 2023, divergent inflation trends between the major economies led the US dollar to weaken against the Euro and British Pound by 3.1 per cent and 5.4 per cent respectively, and strengthen against the Japanese Yen by 7.0 per cent. Abating inflation in the US contrasted against sustained price pressures in the Eurozone and UK, prompting financial markets to expect interest rate cuts by the Federal Reserve while still seeing further rate hikes by the European Central Bank and the Bank of England. In contrast, the Bank of Japan's doubts over the sustainability of Japan's inflation led it to push back against market rate hike expectations, which in turn weakened the Japanese Yen against the major currencies.

## Chapter 6.10

# REAL ESTATE & PROFESSIONAL SERVICES

## OVERVIEW

The real estate sector expanded by 0.1 per cent year-on-year in the fourth quarter of 2023, moderating from the 3.6 per cent growth in the previous quarter. For the whole of 2023, the sector grew by 4.9 per cent, moderating from the 10.9 per cent growth in 2022.

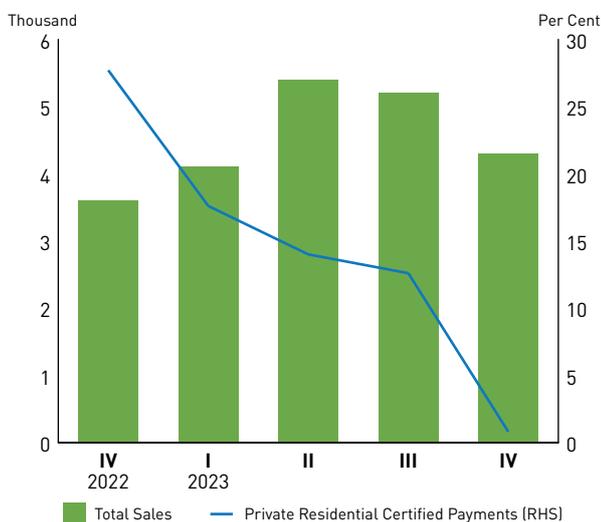
The professional services sector contracted by 0.7 per cent year-on-year in the fourth quarter of 2023, reversing the 1.4 per cent growth in the previous quarter. For the whole of 2023, the sector grew by 1.1 per cent, moderating from the 13.2 per cent growth in 2022.

## REAL ESTATE

The private residential property market expanded on a year-on-year basis in the fourth quarter, as total private residential property sales rose by 20.8 per cent, reversing the 15.4 per cent decline in the previous quarter (Exhibit 6.27). For the full year, total sales fell by 13.0 per cent to 19,044 units, from the 21,890 units sold in 2022.

Private residential certified progress payments (a proxy for developers' margins) rose by 0.8 per cent year-on-year, moderating from the 12.6 per cent increase in the preceding quarter. For the whole of 2023, private residential certified progress payments climbed by 10.7 per cent, following the increase of 24.8 per cent in 2022.

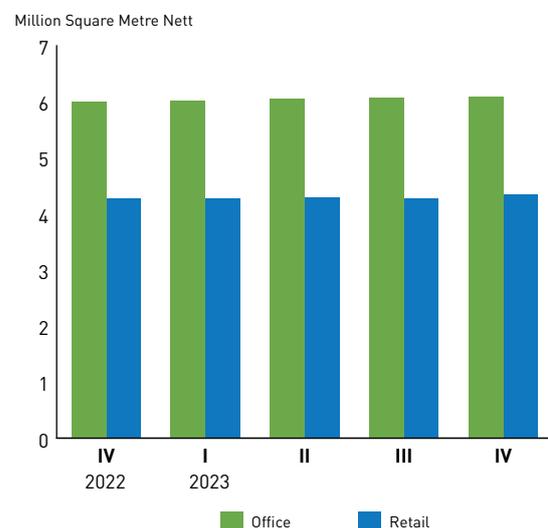
**Exhibit 6.27: Total Sales for Private Residential Units and Private Residential Certified Payments**



In the commercial space market, the performance of the commercial retail space market remained resilient in the fourth quarter. Specifically, demand for private commercial retail space (measured by total occupied space) rose by 1.7 per cent year-on-year, extending the 1.5 per cent increase in the previous quarter (Exhibit 6.28). For the full year, demand for private commercial retail space grew by 2.0 per cent, higher than the 1.2 per cent increase in 2022).

Meanwhile in the commercial office space market, demand for private commercial office space rose by 1.6 per cent year-on-year in the fourth quarter, extending the 1.6 per cent growth in the preceding quarter. For the full year, demand for private commercial office space grew by 1.5 per cent, higher than the 0.1 per cent increase in 2022.

**Exhibit 6.28: Total Occupied Space for Private Sector Commercial Office and Retail Spaces**



Lastly, in the industrial space market, overall demand for private industrial space rose by 0.8 per cent year-on-year in the fourth quarter, extending the 1.2 per cent increase seen in the previous quarter (Exhibit 6.29). Within the market, demand for multiple-user factories and warehouses increased by 2.4 per cent and 1.3 per cent respectively in the fourth quarter, whereas demand for single-user factories and business parks fell by 0.1 per cent and 1.7 per cent respectively. For the full year, demand for private industrial space rose by 0.9 per cent, extending the 1.1 per cent growth seen in 2022.

**Exhibit 6.29: Total Occupied Space for Private Sector Industrial Space**



## PROFESSIONAL SERVICES

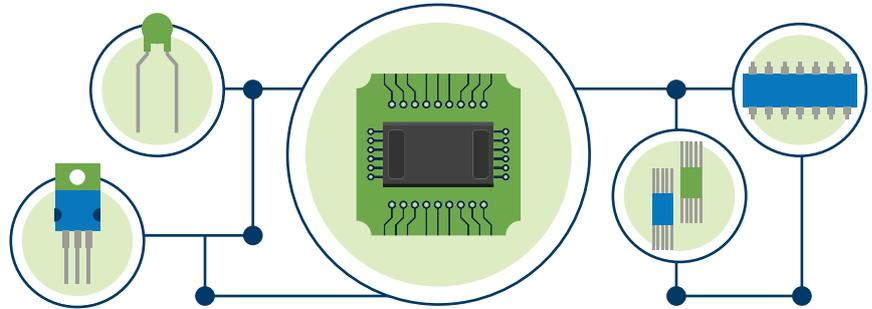
In 2023, the professional services sector expanded, with all segments registering growth except for the legal and business & management consultancy segments. Growth in the sector was largely driven by the architectural & engineering, technical testing & analysis segment, as well as the other professional scientific & technical services segment, which expanded by 1.8 per cent and 3.1 per cent year-on-year respectively.

## Box Article 6.1

# PERFORMANCE AND OUTLOOK OF THE ELECTRONICS CLUSTER IN SINGAPORE

### CHANGE IN COMPOSITION IN SINGAPORE'S ELECTRONICS CLUSTER

The nominal value-added (VA) of the semiconductors segment expanded by a compound annual growth rate of 9.3 per cent from 2000 to 2022, increasing the VA share of the semiconductors segment within the electronics cluster.



### THE DOWNTURN IN THE ELECTRONICS CLUSTER WAS DRIVEN BY A REDUCTION IN CONSUMER DEMAND AND HIGH INVENTORY LEVELS

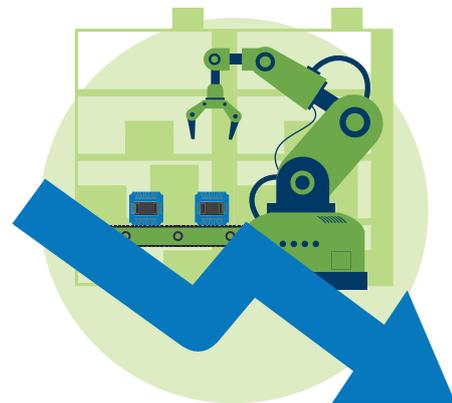
#### DRIVER 1

There was a reduction in consumer demand in the smartphone and PC markets starting in 2H22 as consumer spending on goods reversed from its pandemic-fuelled highs.



#### DRIVER 2

Original equipment manufacturers (OEMs) of consumer electronics held higher-than-normal levels of chip inventories to shore up supply chain resilience during the pandemic. With demand softening, OEMs moved to draw down their chip inventories and cancelled orders placed with semiconductor manufacturers as they lowered their production of consumer electronics.



### OUTLOOK

The electronics cluster is projected to recover over the course of 2024, driven by a restocking of depleted chip inventories and a recovery in the PC and smartphone end markets.



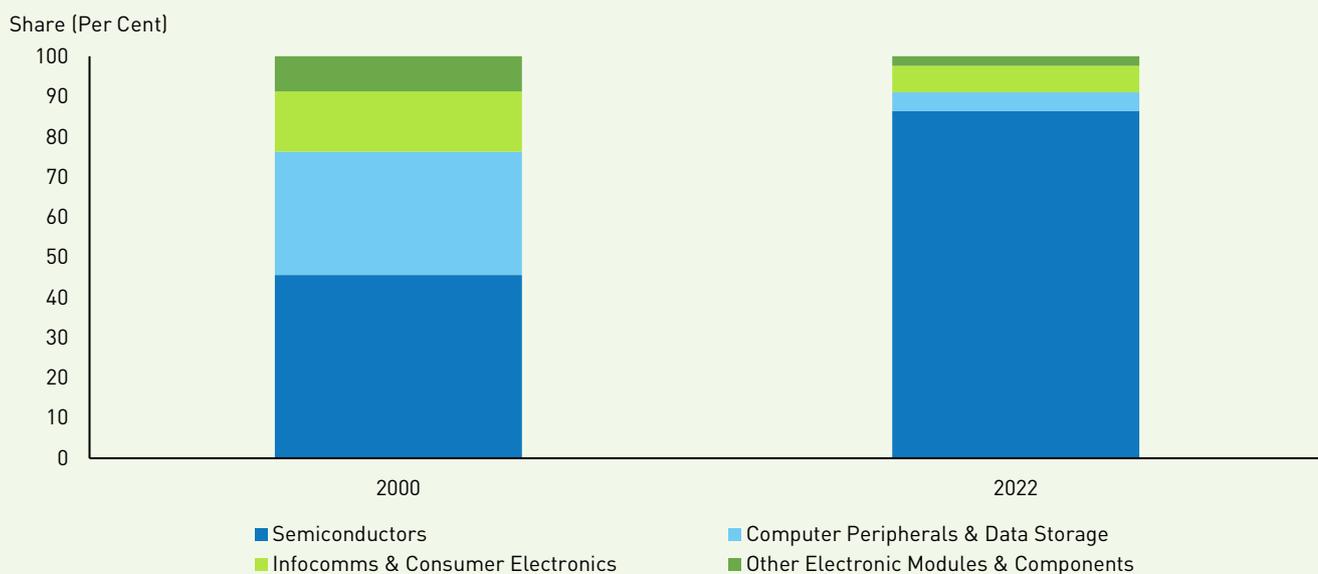
## BOX 6.1: PERFORMANCE AND OUTLOOK OF THE ELECTRONICS CLUSTER IN SINGAPORE

The electronics cluster is the largest cluster within the manufacturing sector in Singapore, accounting for 46.9 per cent of the sector's nominal value-added (VA) and 9.7 per cent of Singapore's overall nominal VA in 2022. This box article examines the composition of the electronics cluster, its recent performance<sup>1</sup>, as well as its outlook in the short and longer term.

### Singapore's electronics cluster is dominated by the semiconductors segment

The electronics cluster in Singapore is made up of four segments, namely the semiconductors, computer peripherals & data storage, infocomms & consumer electronics and other electronic modules & components segments. From 2000 to 2022, the nominal VA of the semiconductors segment expanded by a compound annual growth rate (CAGR) of 9.3 per cent, outstripping the 6.1 per cent CAGR for the electronics cluster as a whole over the same period. This reflects Singapore's success in attracting and anchoring high VA activities within the semiconductor value chain. As a result, the nominal VA share of the semiconductors segment within the cluster rose from 45.6 per cent in 2000 to 86.4 per cent in 2022 (Exhibit 1). The semiconductors segment is expected to continue to be an important contributor to the cluster's VA as semiconductor companies ramp up their production capacities in Singapore.

**Exhibit 1: Nominal value-added shares of segments in the electronics cluster, 2000 – 2022**



Source: Economic Development Board

### Over the past four years, the electronics cluster experienced an upturn followed by a downturn in line with developments in the global electronics industry

Over the period of the COVID-19 pandemic, Singapore's electronics cluster, along with those in regional economies such as Japan and South Korea, experienced a strong upcycle, driven by global consumer spending on goods during the pandemic (Exhibit 2). In particular, there was an increase in demand for electronic products, and hence the semiconductor chips used in these products, due to the growth in data centres and cloud services, as well as the greater prevalence of work-from-home practices during the pandemic.

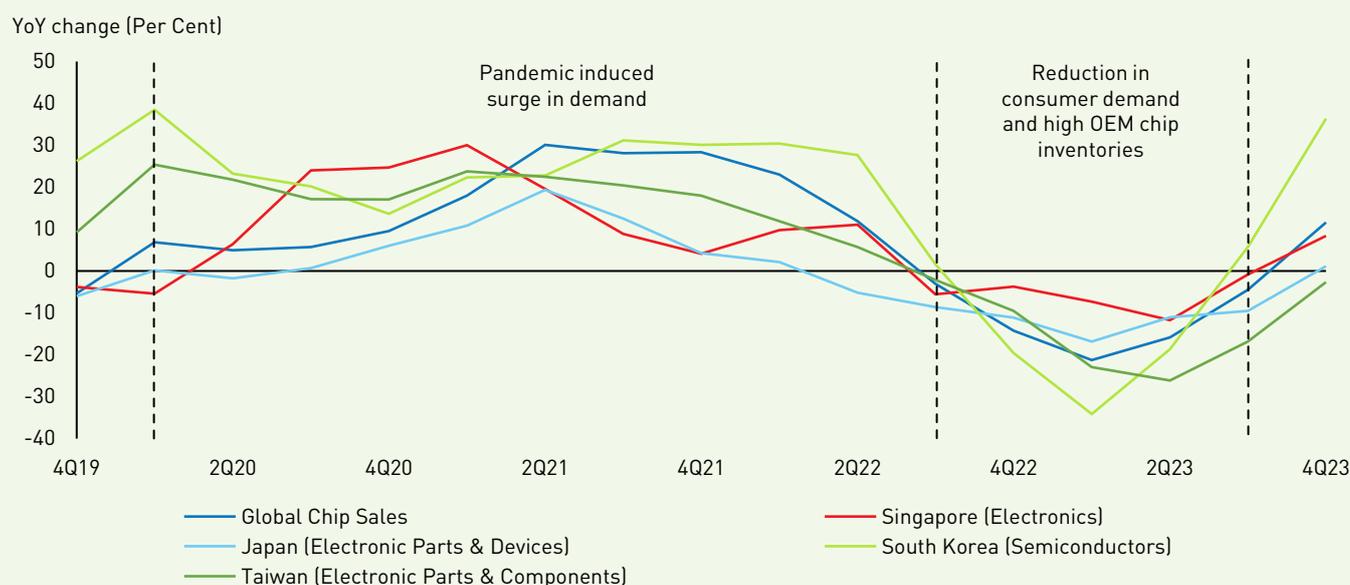
Indeed, the spike in demand, coupled with pandemic-induced supply chain disruptions (e.g., shipping delays and lockdowns), led to severe component and chip shortages globally. In response to these shortages, original equipment manufacturers (OEMs) of consumer electronics started to hold higher-than-normal levels of chip inventories to shore up supply chain resilience.

<sup>1</sup> See Kuan (2008) for a previous overview of the electronics cluster.

However, with the post-pandemic reopening, consumer spending on goods reversed from its pandemic-fuelled highs. Notably, there was a reduction in consumer demand in the smartphone and PC markets starting in 2H22. With demand softening, OEMs moved to draw down their chip inventories and cancelled orders placed with semiconductor manufacturers as they lowered their production of consumer electronics. Semiconductor manufacturers in turn slashed capacity utilisation and reduced their supply of chips to correct demand-supply imbalances along the supply chain.

Reflecting this global electronics downturn, Singapore's electronics output underwent five consecutive quarters of contraction from 3Q22 to 3Q23, with the extent of decline reaching 11.7 per cent year-on-year in 2Q23 before moderating to 0.8 per cent in 3Q23. Much of the fall in the cluster's output over this period was driven by the semiconductors segment. For the full year of 2023, electronics output registered a decline of 3.2 per cent, reversing the 2.6 per cent expansion in 2022. This electronics downturn was also seen in regional economies like Japan, South Korea and Taiwan.

**Exhibit 2: Global chip sales and electronics industrial output in Singapore, Japan, South Korea and Taiwan, 4Q19 – 4Q23**



Source: CEIC, Economic Development Board, World Semiconductor Trade Statistics

### The domestic electronics cluster is expected to recover in 2024 following the normalisation of inventory levels and an increase in demand for PC, smartphone and automotive chips

With the bottoming of the electronics downcycle<sup>2</sup>, the domestic electronics cluster is projected to recover over the course of 2024, driven by two main factors.

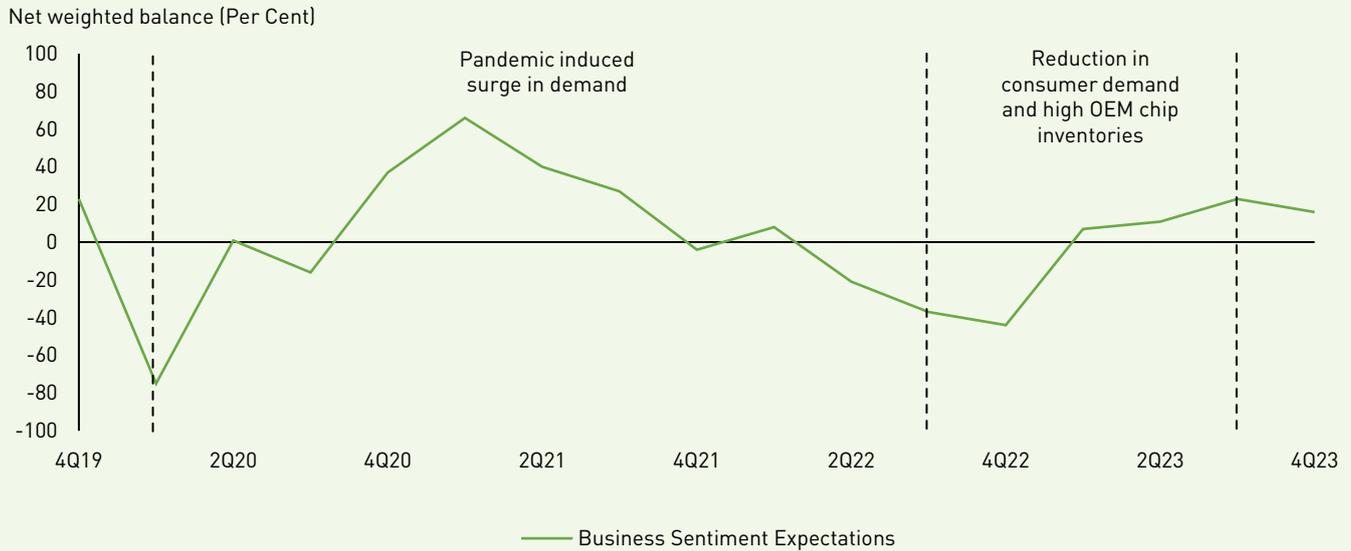
**First**, after several quarters of inventory drawdowns, semiconductor chip inventories at OEMs have trended down for several end markets. Semiconductor manufacturers also reported “rush orders” for chips as early as 3Q23, with some OEMs requiring urgent deliveries of chips after having depleted their inventories. The OEMs are expected to continue replenishing their chip inventories in the year ahead, thereby boosting the demand for chips from semiconductor manufacturers, including those in Singapore.

**Second**, shipments of both PCs and smartphones are expected to recover in 2024 after having contracted in 2023, driven by new refreshment cycles as consumers and enterprises upgrade their electronic devices. The automotive market is also projected to continue to grow, albeit at a more moderate pace as compared to 2023, underpinned by the growing market for electric vehicles (EVs). The growth in these end markets is expected to raise the demand for chips from semiconductor manufacturers, including those in Singapore.

<sup>2</sup> There were signs of improvement in the electronics cluster in 4Q23, with the cluster growing by 8.3 per cent during the quarter, reversing the 0.8 per cent contraction in the preceding quarter, supported by improved demand for smartphone and AI chips.

Reflecting domestic electronics manufacturers' positive sentiments in 2024, a net weighted balance<sup>3</sup> of 16 per cent of firms in the electronics cluster are projecting improved business prospects for the period of January to June 2024 relative to 4Q23, a sharp reversal from the net weighted balance of -44 per cent recorded over the same period in 2023 (Exhibit 3).

**Exhibit 3: Business sentiment expectations in the next six months relative to the current quarter for the electronics cluster, 4Q19 – 4Q23**



Source: Economic Development Board

**Over the longer term, while the PC and smartphone end markets are expected to mature, the automotive and artificial intelligence end markets are likely to continue to see strong growth**

The drive to meet net-zero goals has prompted governments across the globe to subsidise the adoption of EVs. The International Energy Agency expects EV sales to reach 45 million in 2030, up from 10 million in 2022, if all announced government targets on electromobility are met in full and on time, representing a CAGR of 20.7 per cent. Moreover, EVs contain a significantly higher amount of semiconductor content as compared to non-EVs. These include power semiconductors used for voltage conversion, and battery management and microcontroller chips for advanced driver assistance systems. The rapid growth of the EV market, coupled with EVs' higher semiconductor content, are expected to boost the demand for automotive chips in the longer term.

Meanwhile, with the advent of generative artificial intelligence (AI), enterprise demand for AI servers has skyrocketed as such servers are deployed in the training and operation of large language models like ChatGPT. In turn, AI servers require chips such as graphic processing units, central processing units, application-specific integrated circuits and field-programmable gate arrays. At the same time, there will be higher demand for DRAM chips given the requirement for high bandwidth memory<sup>4</sup> in AI servers, while NAND chips will also see demand growth due to the increase in storage capacities needed to support more numerous and larger datasets. As the AI ecosystem matures, the adoption of on-device generative AI<sup>5</sup> in devices such as PCs and smartphones will further support the demand for AI-related chips in the longer term.

Taken together, while the PC and smartphone end markets are likely to register lower growth in the longer term as they mature, global demand for semiconductor chips is expected to remain strong, contributed in large part by the robust growth projected for the automotive and AI end markets.

<sup>3</sup> Establishments were asked to indicate their expectations of general business conditions in terms of directional change (i.e., "up", "same" or "down"). Establishments' responses were then weighted by total output and aggregated to derive the weighted percentage for "up", "same" or "down" at the sub-cluster and cluster level. Net weighted balance was calculated by taking the difference between the weighted percentage of "up" responses and the weighted percentage of "down" responses. A positive number indicates a net positive balance or net upward movement, while a negative number denotes a net negative balance or net downward trend.

<sup>4</sup> High bandwidth memory is made up of vertical stacks of DRAM chips, which allows for greater power efficiency and higher data read speed.

<sup>5</sup> On-device generative AI will allow users to run large language models directly on their devices without the need to connect to generative AI models that are hosted on the cloud. This reduces privacy concerns while also allowing for greater customisability by taking advantage of available user data on the device.

## Singapore's electronics cluster is poised for growth in both the short and long term

Over the coming year, the domestic electronics cluster is expected to benefit from the turnaround in global semiconductor demand, driven in part by the recovery in the PC and smartphone end markets, as well as the restocking of depleted chip inventories. Over the longer term, the cluster's growth will be supported by stronger semiconductor demand in the automotive and AI end markets.

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## References

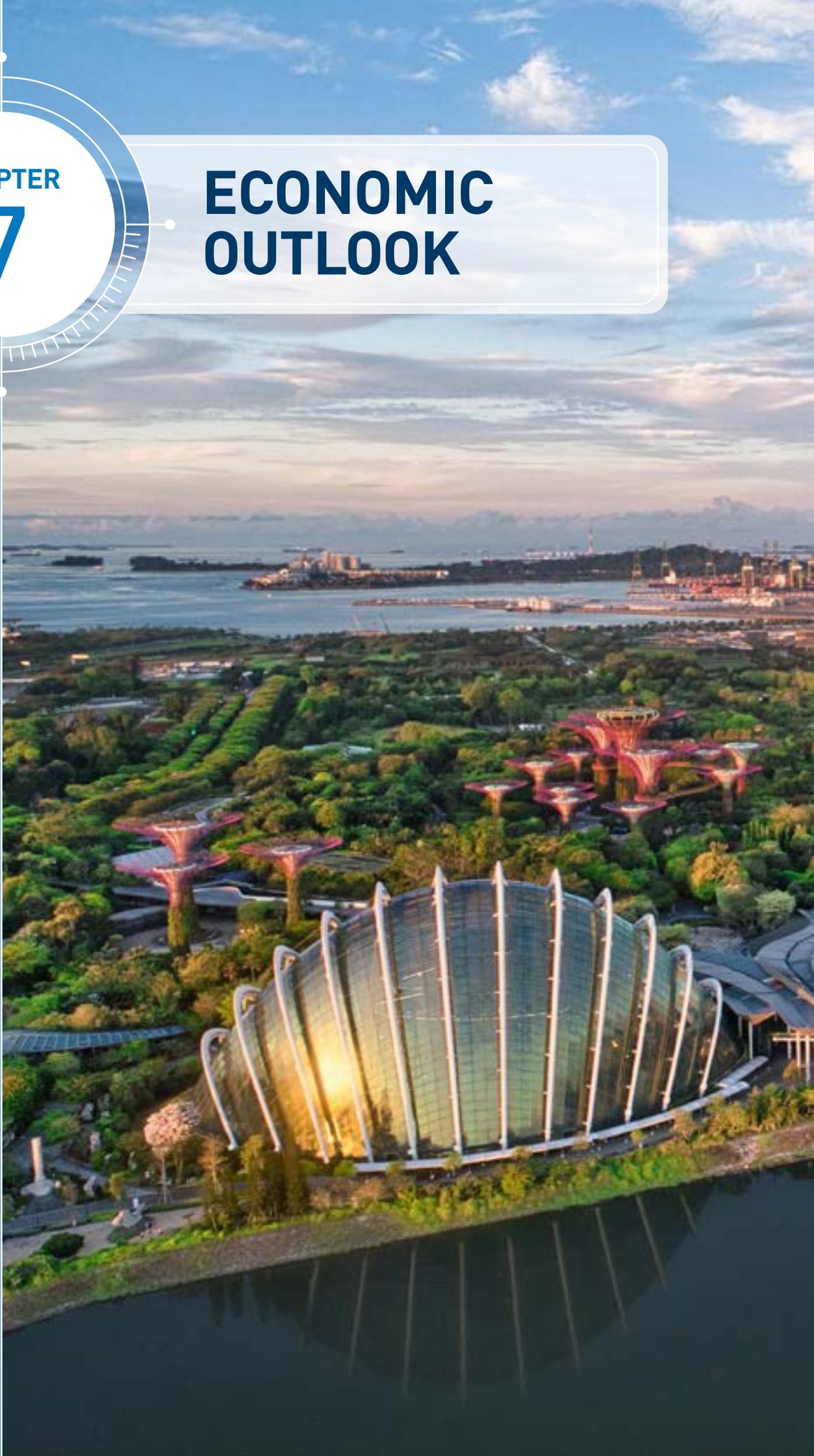
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CHAPTER

7

# ECONOMIC OUTLOOK





## Chapter 7

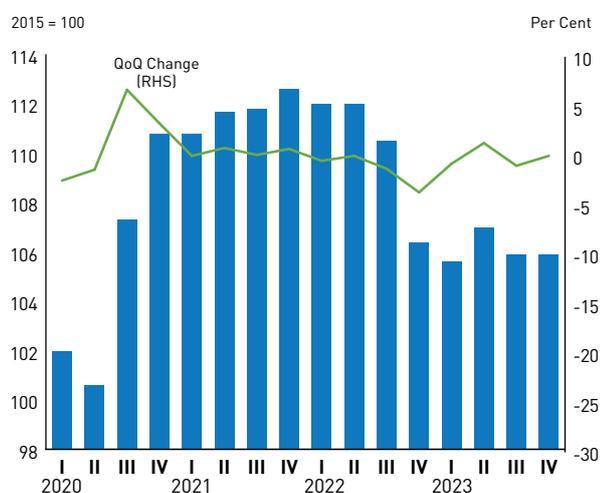
# ECONOMIC OUTLOOK

## LEADING INDICATORS

The composite leading index (CLI) for Singapore remained flat on a quarter-on-quarter basis in the fourth quarter of 2023, compared to the 1.0 per cent decline in the previous quarter (Exhibit 7.1).

Of the nine components of the CLI, five components decreased on a quarter-on-quarter basis in the fourth quarter, namely the US Purchasing Managers' Index, money supply, non-oil retained imports, stock price and new companies formed. By contrast, domestic liquidity remained flat, and the other three components – wholesale trade, the stock of finished goods and non-oil sea cargo handled – rose compared to a quarter ago.

**Exhibit 7.1: Composite Leading Index Levels and Growth Rate**



## OUTLOOK FOR 2024

Since the Economic Survey of Singapore in November 2023, Singapore's external demand outlook for 2024 has remained largely unchanged. Growth in the advanced economies is expected to moderate in the first half of the year, mainly due to continued tight financial conditions, before recovering gradually in line with an expected easing of monetary policy as inflationary pressures recede. Meanwhile, regional economies are expected to see a pickup in growth in the year ahead, supported in part by the turnaround in global electronics demand.

In the US, GDP growth is expected to continue to ease in the coming quarters amidst continued tight financial conditions, before picking up later in the year alongside a loosening of monetary policy, which will support a recovery in investment growth. Similarly, GDP growth in the Eurozone is forecast to remain subdued in the first half of the year. However, growth should improve in the latter part of the year as a further easing of inflationary pressures and anticipated policy rate cuts are likely to support a firmer recovery in private consumption expenditure.

In Asia, China's GDP growth is projected to remain lacklustre in the first half of the year due to sluggish domestic consumption and exports growth alongside weak property market conditions. Growth is likely to recover gradually in the second half in line with improvements in consumer sentiments and global demand. Meanwhile, GDP growth in the Southeast Asian economies of Malaysia and Thailand is likely to be supported by the continued recovery in tourist arrivals, as well as an anticipated pickup in global electronics demand.

At the same time, downside risks in the global economy remain significant. First, an escalation or widening of the Israel-Hamas conflict or war in Ukraine could disrupt global supply chains and commodity markets. This would weigh on global trade and growth. Second, the lagged effects of monetary tightening could trigger latent vulnerabilities in banking and financial systems, leading to stresses on regional economies with external financing needs. Third, should idiosyncratic cost shocks such as adverse weather events disrupt the global disinflation process, financial conditions could stay tight for longer, thereby weakening the economic recovery momentum.

Against this backdrop, Singapore's manufacturing and trade-related sectors are expected to see a gradual pickup in growth in tandem with the turnaround in global electronics demand. In particular, the electronics and precision engineering clusters within the manufacturing sector are projected to rebound, especially given that the recovery in semiconductor sales globally and domestically has been stronger than expected. At the same time, the machinery, equipment & supplies segment of the wholesale trade sector will benefit from higher external demand for electronic components and telecommunications & computers.

Meanwhile, the continued recovery in air travel and tourism demand will support growth in Singapore's tourism- and aviation-related sectors, including aerospace, air transport and accommodation, as well as consumer-facing sectors such as retail trade and food & beverage services. Nonetheless, the pace of growth for most of these sectors is expected to moderate from that in 2023.

Taking into account the global and domestic economic environment, the GDP growth forecast for 2024 is maintained at **"1.0 to 3.0 per cent"**.

**FEATURE  
ARTICLE**

# **IMPACT OF THE CDC VOUCHERS SCHEME**





## Feature Article

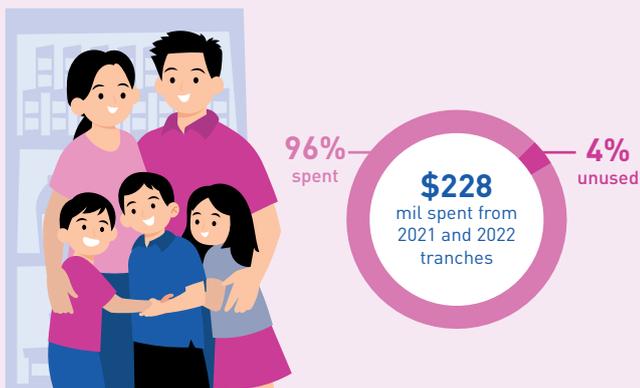
# IMPACT OF THE CDC VOUCHERS SCHEME

## OVERVIEW

The CDC Vouchers Scheme 2021 was rolled out in December 2021 to thank Singaporeans for their solidarity during the COVID-19 pandemic, and also to support local businesses at HDB estates affected by the pandemic. The second tranche of CDC Vouchers was rolled out in May 2022 to help Singaporeans with their daily expenses amidst cost-of-living pressures. Through these two tranches, every Singaporean household received \$200 in CDC Vouchers in total: \$100 from CDC Voucher Scheme 2021 and another \$100 from CDC Voucher Scheme 2022.



## FINDINGS



### Finding 1:

Over 96 per cent of the 1.22 million eligible Singaporean households claimed their CDC Vouchers from both the 2021 and 2022 tranches, with 96 per cent of the claimed vouchers eventually spent. The high utilisation rate of the CDC Vouchers shows that the CDC Vouchers have helped to alleviate the inflationary pressures faced by households as part of a broader suite of measures that address Singaporeans' cost-of-living concerns.



### Finding 2:

As at December 2022, around 20,000 heartland merchants and hawkers had been onboarded onto the CDC Vouchers Scheme, representing a sizeable proportion of all heartland merchants and hawkers in Singapore. Around 80 per cent of the participating merchants and hawkers received a total disbursement of more than \$1,000 from both tranches, while around 30 per cent received a total disbursement of more than \$10,000.



### Finding 3:

On aggregate, the 2021 and 2022 tranches of CDC Vouchers is estimated to generate up to \$312.8 million for the Singapore economy over time. This amount is equivalent to 0.05 per cent of Singapore's 2022 nominal GDP.

## EXECUTIVE SUMMARY

- ▶ The CDC Vouchers Scheme 2021 was rolled out in December 2021 to thank Singaporeans for their solidarity during the COVID-19 pandemic, and also to support local businesses at HDB estates affected by the pandemic. The second tranche of CDC Vouchers was rolled out in May 2022 to help Singaporeans with their daily expenses amidst cost-of-living pressures. Through these two tranches, every Singaporean household received \$200 in CDC Vouchers in total: \$100 from CDC Voucher Scheme 2021 and another \$100 from CDC Voucher Scheme 2022. This study examines the impact of the 2021 and 2022 tranches of CDC Vouchers on Singaporean households, local businesses and the overall economy.
- ▶ **Households.** Over 96 per cent of the 1.22 million eligible Singaporean households claimed their CDC Vouchers from both the 2021 and 2022 tranches, with 96 per cent of the claimed vouchers eventually spent. The high utilisation rate of the CDC Vouchers shows that the CDC Vouchers have helped to alleviate the inflationary pressures faced by households as part of a broader suite of measures that address Singaporeans' cost-of-living concerns.
- ▶ **Local Businesses.** As at December 2022, around 20,000 heartland merchants and hawkers had been onboarded onto the CDC Vouchers Scheme, representing a sizeable proportion of all heartland merchants and hawkers in Singapore. The vast majority (around 90 per cent) of participating merchants and hawkers received some disbursements from the 2021 and 2022 tranches of CDC Vouchers. Around 80 per cent of the participating merchants and hawkers received a total disbursement of more than \$1,000 from both tranches, while around 30 per cent received a total disbursement of more than \$10,000.
- ▶ **Overall Economy.** On aggregate, we estimate that the 2021 and 2022 tranches of CDC Vouchers could generate up to \$312.8 million for the Singapore economy over time. This amount is equivalent to 0.05 per cent of Singapore's 2022 nominal GDP.

*The views expressed in this paper are solely those of the authors and do not necessarily reflect those of the Ministry of Trade and Industry (MTI) or the Government of Singapore.<sup>1</sup>*

## INTRODUCTION

The CDC Vouchers Scheme was first launched by Prime Minister Lee Hsien Loong in December 2021 to thank Singaporeans for their solidarity during the COVID-19 pandemic, and at the same time, support heartland merchants and hawkers affected by the pandemic. Since then, three additional tranches of CDC Vouchers in 2022, 2023 and 2024 were launched by Deputy Prime Minister and Minister for Finance Lawrence Wong to help Singaporean households with their daily expenses amidst cost-of-living pressures.

This study focuses on the 2021 and 2022 tranches of CDC Vouchers which were disbursed in December 2021 and May 2022 respectively; both tranches expired on 31 December 2022. For each of the two tranches, every household with at least one Singaporean Citizen was eligible to claim \$100 worth of CDC Vouchers that could be spent at participating heartland merchants and hawkers.<sup>2</sup> CDC ambassadors and IMDA's Digital Ambassadors were deployed island-wide to help heartland merchants and hawkers onboard onto the CDC Vouchers Scheme as participating merchants and hawkers.

In this study, we examine the following: (i) the utilisation of the 2021 and 2022 tranches of CDC Vouchers; (ii) the spending patterns of the CDC Voucher claimants; and (iii) the impact of the two tranches of CDC Vouchers on participating heartland merchants and hawkers, as well as the overall economy. Our study uses anonymised data from the CDC Vouchers Scheme, as well as data from EMA, SLA and URA, which allow us to characterise the usage of the CDC Vouchers by location and property type.

<sup>1</sup> We would like to thank Ms Yong Yik Wei, Dr Andy Feng and Dr Tan Di Song for their useful suggestions and comments. We are also grateful to DOS, PA and MOF for their data support and inputs to this study. All remaining errors belong to the authors.

<sup>2</sup> CDC Vouchers are not valid for the purchase of lottery products, petrol, diesel, alcohol or cigarettes.

## FINDINGS

### (i) Utilisation of the CDC Vouchers

Our study finds that the utilisation of the CDC Vouchers across the 2021 and 2022 tranches was consistently high. Over 96 per cent of households claimed their CDC Vouchers from both tranches, with 96 per cent of the claimed vouchers eventually spent [Exhibit 1]. The percentage of claimed CDC Vouchers that were eventually spent was high across all housing types, with the spend rate being slightly higher for those living in HDB flats (96.0 to 97.2 per cent) compared to those living in private and landed properties (around 93 per cent). Across HDB estates, the spend rates of households living in HDB flats were consistently high, suggesting that it was convenient for households to access participating merchants and hawkers to spend their CDC Vouchers.

**Exhibit 1: Utilisation of 2021 and 2022 CDC Vouchers**

Tranche	Spent Vouchers (\$ million)	Unused / Voided (\$ million)	Spend Rate (Per Cent)
2021	115.4	5.1	95.8
2022	112.5	4.9	95.8
<b>Total</b>	<b>227.9</b>	<b>10.0</b>	<b>95.8</b>

The high utilisation rate of the CDC Vouchers shows that the CDC Vouchers have helped to alleviate the inflationary pressures faced by households as part of a broader suite of measures that address Singaporeans' cost-of-living concerns.

### (ii) Spending Patterns of CDC Voucher Claimants

Examining the spending patterns of households, our study finds that most of the 2021 and 2022 CDC Vouchers were spent in the households' own neighbourhoods. In particular, around two-thirds or more of the CDC Voucher expenditure by households living in HDB flats were within their own estate [Exhibit 2]. This was the case even with the relaxation of domestic COVID-19 restrictions in 2022, suggesting that households preferred to spend their CDC Vouchers near where they lived, possibly due to familiarity.<sup>3</sup>

**Exhibit 2: CDC Vouchers Spent Within the Same Estate by HDB Residents (Per Cent)**

	Hawker*		Heartland Merchants^	
	2021 Tranche	2022 Tranche	2021 Tranche	2022 Tranche
<b>TOTAL</b>	63.4	64.2	69.5	69.5

Notes:

\* A hawker refers to a stall operating in a NEA hawker centre which has been onboarded onto the CDC Voucher Scheme.

^ A heartland merchant refers to a stall operating in a HDB address which has been onboarded onto the CDC Voucher Scheme.

Furthermore, we find that 43.9 per cent and 43.2 per cent of households' CDC Voucher transactions for the 2021 and 2022 tranches respectively were "repeat transactions" at a merchant (i.e., households had spent their vouchers at the same merchant before), suggesting that CDC Voucher claimants tended to frequent merchants that they were familiar with. This finding was consistent across all HDB estates.

3 We further find that when HDB households spent their CDC Vouchers outside of their estate, they tended to favour estates close by.

### (iii) Impact of CDC Vouchers Scheme on Heartland Merchants and Hawkers

The CDC Vouchers Scheme benefitted heartland merchants and hawkers. As at December 2022, around 20,000 heartland merchants and hawkers had been onboarded onto the CDC Vouchers Scheme, representing a sizeable proportion of all heartland merchants and hawkers in Singapore.<sup>4</sup> Our study finds that the vast majority (around 90 per cent) of participating heartland merchants and hawkers had received some disbursements from the 2021 and 2022 tranches of CDC Vouchers. By disbursement amounts, around 80 per cent of the participating merchants and hawkers received a total disbursement of more than \$1,000 from both tranches, while around 30 per cent received a total disbursement of more than \$10,000.<sup>5</sup>

### (iv) Impact of CDC Vouchers Scheme on the Economy

Our findings thus far have shown that the CDC Vouchers Scheme in 2021 and 2022 had provided cost-of-living support to Singaporean households, as well as supported the business activities of heartland merchants and hawkers. In so doing, the CDC Vouchers are also likely to have a broader impact on the economy.

In particular, we assume that household consumption arising from the use of the CDC Vouchers will have multiplier effects within the economy.<sup>6</sup> We derive the impact of the CDC Vouchers on the domestic economy by accounting for these multiplier effects<sup>7</sup> and stripping out leakages arising from taxes, imports<sup>8</sup> and savings.

Based on this methodology, we estimate that the 2021 and 2022 tranches of CDC Vouchers claimed by households – which amounted to around \$237.9 million – could generate up to \$312.8 million in nominal value-added for the Singapore economy over time. This amount is equivalent to 0.05 per cent of Singapore's 2022 nominal GDP.

## CONCLUSION

In summary, our study finds that the CDC Vouchers Scheme 2021 and 2022 helped to alleviate cost-of-living pressures faced by Singaporean households, and also supported the business activities of heartland merchants and hawkers. In line with these findings, Singaporean households and heartland merchants and hawkers would likewise benefit from the support provided by the subsequent tranches of CDC Vouchers.

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<sup>4</sup> Based on data from SFA, NEA and EnterpriseSG.

<sup>5</sup> For comparison, eligible businesses under the Small Business Recovery Grant announced in Budget 2022 received \$1,000 per Singapore Citizen or Permanent Resident employee with mandatory CPF contributions, up to a cap of \$10,000. SFA-registered hawkers, market and coffeeshop stallholders were entitled to a flat payout of \$1,000.

<sup>6</sup> For instance, an increase in spending by households will lead to an increase in the sales of businesses and their suppliers, which will in turn generate income for the business owners and their employees and lead to further spending in the economy.

<sup>7</sup> Based on the latest available data from the Household Expenditure Survey 2017/28, the average propensity to consume for households in Singapore was 0.6.

<sup>8</sup> Based on data from DOS's Input Output Tables 2019 (Revision 2023), the average marginal propensity to import for Singapore was around 0.4.

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