



**ECONOMIC
SURVEY^{OF}
SINGAPORE**
THIRD QUARTER 2025

November 2025

Ministry of Trade and Industry
Republic of Singapore

website: www.mti.gov.sg

email: mti_email@mti.gov.sg

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MAIN INDICATORS OF THE SINGAPORE ECONOMY

OVERALL ECONOMY

Real Gross Domestic Product
(YoY Growth)



Period	YoY Growth
2Q25	+4.7%
3Q25	+4.2%

Gross Domestic Product
at Current Market Prices



Period	Value (billion)
2Q25	\$188.3
3Q25	\$188.5

PRICES

Consumer Price Index — All Items
(YoY Growth)



Period	YoY Growth
2Q25	+0.8%
3Q25	+0.6%

Domestic Supply Price Index
(YoY Growth)



Period	YoY Growth
2Q25	-2.9%
3Q25	+0.8%

LABOUR MARKET

Change in Employment
(QoQ Change)



Period	Change (thousand)
2Q25	+12.9
3Q25	+29.9

Overall Unemployment Rate



Period	Rate (%)
Jun25	2.0%
Sep25	2.0%

Value-Added per Actual Hour Worked
(YoY Growth)



Period	YoY Growth
2Q25	+2.2%
3Q25	+1.8%

COSTS

Unit Labour Cost of Overall Economy
(YoY Growth)



Period	YoY Growth
2Q25	+0.1%
3Q25	+1.0%

Unit Business Cost of Manufacturing
(YoY Growth)



Period	YoY Growth
2Q25	+1.0%
3Q25	+2.4%

Unit Labour Cost of Manufacturing
(YoY Growth)



Period	YoY Growth
2Q25	-1.1%
3Q25	-1.0%

MERCHANDISE TRADE

Merchandise Exports



Period	Value (million)	YoY Growth
2Q25	\$183,750	+11.6%
3Q25	\$183,339	+8.2%

Merchandise Imports



Period	Value (million)	YoY Growth
2Q25	\$157,512	+2.0%
3Q25	\$165,404	+8.8%

SERVICES TRADE

Services Exports



Period	Value (million)	YoY Growth
2Q25	\$131,999	+2.9%
3Q25	\$137,924	+0.9%

Services Imports



Period	Value (million)	YoY Growth
2Q25	\$117,826	+1.6%
3Q25	\$120,380	+0.8%

CHAPTER

1

THE SINGAPORE ECONOMY





Chapter 1

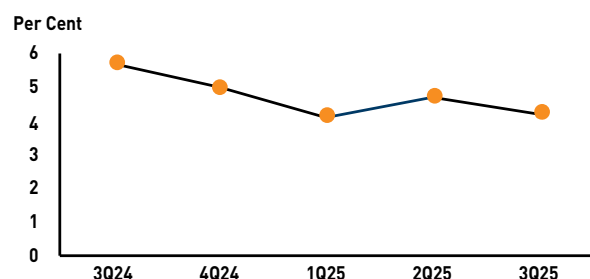
THE SINGAPORE ECONOMY

ECONOMIC PERFORMANCE

Real GDP grew by
4.2% in 3Q25



Quarterly Growth (YoY)



Main Drivers of Growth in 3Q25

Manufacturing



0.8%-point
contribution

Wholesale Trade



0.7%-point
contribution

LABOUR MARKET

Resident Unemployment Rate



2.8%
in September 25

Employment (QoQ Change)



+29,900
employed in 3Q25

PRODUCTIVITY

(YoY Growth)

Value-Added per Actual Hour Worked increased by

1.8% in 3Q25



Sectors with the Highest Employment Growth in 3Q25

+13,700
employed



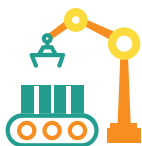
Construction

+13,100
employed



Other Services Industries

+5,400
employed



Manufacturing

Sectors with the Highest Growth in Value-Added per Actual Hour Worked in 3Q25

7.9%



Real Estate

6.1%



Information & Communications

4.8%



Wholesale Trade

COSTS (YoY Growth)

Overall Unit Labour
Cost increased by

1.0% in 3Q25



Within the Manufacturing Sector

2.4%



Unit Business
Cost

-1.0%



Unit Labour
Cost

PRICES (YoY Growth)

The Consumer Price
Index (CPI) rose by

0.6% in 3Q25



Categories with Largest Price Increases

2.6%



Transport

2.0%



Health

1.1%



Food

INTERNATIONAL TRADE (YoY Growth)

Total Merchandise
Exports increased by

8.2% in 3Q25



Total Services
Exports increased by

0.9% in 3Q25



17.7%



Re-Exports

-3.3%



Non-Oil
Domestic
Exports

-6.4%



Oil
Domestic
Exports

Services Exports increase was led by...

1.5%-pt



Other Business
Services

1.0%-pt



Financial
Services

0.7%-pt



Travel

OVERVIEW

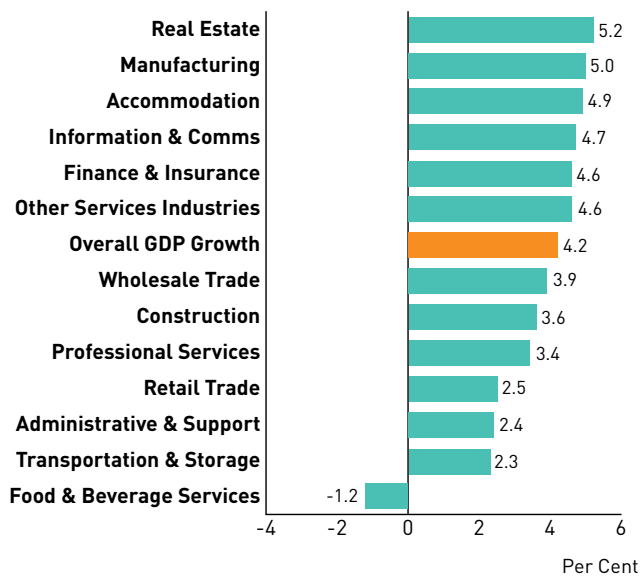
In the third quarter of 2025,

- The Singapore economy grew by 4.2 per cent on a year-on-year basis. The sectors that contributed the most to GDP growth during the quarter were the manufacturing, wholesale trade and finance & insurance sectors.
- The seasonally-adjusted unemployment rates were stable at the overall level and for residents, but edged up slightly for citizens. Meanwhile, there was a slight moderation in the number of retrenchments over the same period.
- Total employment rose by 29,900 on a quarter-on-quarter basis, higher than the gains in the preceding quarter. Excluding Migrant Domestic Workers (MDWs), total employment increased by 24,800 on the back of employment gains for both residents and non-residents.
- The Consumer Price Index-All Items (CPI-All Items) inflation was 0.6 per cent year-on-year, moderating from 0.8 per cent in the preceding quarter.

OVERALL PERFORMANCE

The Singapore economy grew by 4.2 per cent on a year-on-year basis in the third quarter of 2025, extending the 4.7 per cent growth in the previous quarter (Exhibit 1.1). On a quarter-on-quarter seasonally-adjusted basis, the economy expanded by 2.4 per cent, faster than the 1.7 per cent expansion in the preceding quarter.

Exhibit 1.1: GDP and Sectoral Growth Rates in 3Q 2025

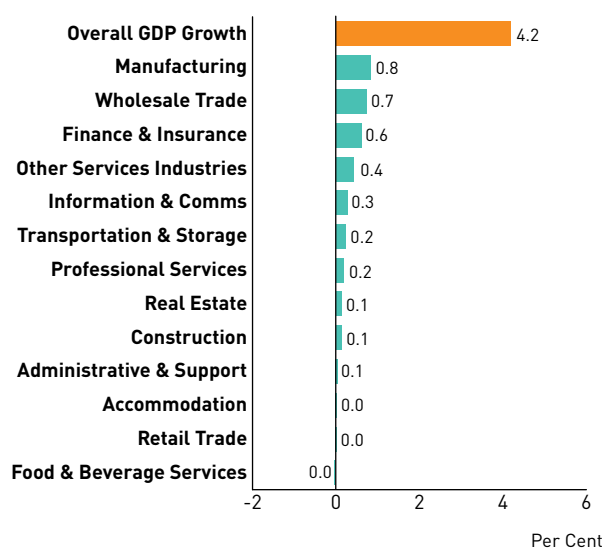


The manufacturing sector expanded by 5.0 per cent year-on-year, following the 5.1 per cent growth in the previous quarter. Growth in the sector was driven by output expansions in the transport engineering (16.1 per cent), biomedical manufacturing (8.9 per cent) and electronics (6.1 per cent) clusters.

The services producing industries grew by 3.9 per cent year-on-year, moderating from the 4.7 per cent growth in the previous quarter. Growth was supported by expansions in all the services sectors except for the food & beverage services sector. Among the services sectors, the real estate (5.2 per cent), accommodation (4.9 per cent) and information & communications (4.7 per cent) sectors posted the fastest growth.

The construction sector grew by 3.6 per cent year-on-year, easing from the 6.2 per cent growth in the previous quarter. Both public and private sector construction output increased during the quarter.

The top three positive contributors to GDP growth in the third quarter were the manufacturing, wholesale trade and finance & insurance sectors (Exhibit 1.2).

Exhibit 1.2: Percentage-Point Contribution to Growth in Real GDP in 3Q 2025 (By Sectors)

SOURCES OF GROWTH

Total demand increased by 7.5 per cent year-on-year in the third quarter of 2025, the same pace of growth as in the previous quarter (Exhibit 1.3). The growth in total demand was supported by increases in both external and domestic demand during the quarter.

External demand rose by 8.4 per cent year-on-year, moderating from the 10.0 per cent increase in the previous quarter. Meanwhile, total domestic demand rose by 5.1 per cent year-on-year, accelerating from 0.8 per cent expansion in the preceding quarter.

Within domestic demand, consumption expenditure rose by 3.4 per cent year-on-year, slower than the 4.1 per cent increase in the preceding quarter. The increase in consumption expenditure was supported by both private (3.6 per cent) and public consumption expenditure (3.0 per cent).

Meanwhile, gross fixed capital formation (GFCF) rose by 5.5 per cent year-on-year, picking up from the 4.3 per cent increase in the previous quarter. The increase in GFCF during the quarter was due to increases in both public sector (8.6 per cent) and private sector GFCF (4.7 per cent). Public sector GFCF rose due to higher investments in public transport equipment, construction & works, machinery & equipment and intellectual property products. Meanwhile, private sector GFCF increased on the back of higher investments in private machinery & equipment, construction & works, intellectual property products and transport equipment.

Exhibit 1.3: Changes in Total Demand*

Per Cent

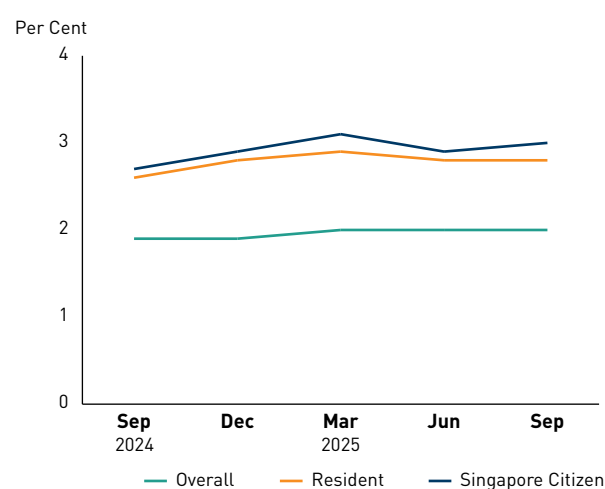
	2024		2025		
	III	IV	I	II	III
Total Demand	5.1	4.4	5.3	7.5	7.5
External Demand	4.4	3.2	5.5	10.0	8.4
Total Domestic Demand	7.6	8.9	4.7	0.8	5.1
Consumption Expenditure	6.9	5.3	0.0	4.1	3.4
Public	8.3	16.2	-8.5	5.7	3.0
Private	6.4	2.2	3.3	3.7	3.6
Gross Fixed Capital Formation	4.7	4.9	5.9	4.3	5.5
Changes in Inventories	0.9	2.2	1.8	-2.1	0.6

* For inventories, this refers to the contribution to GDP growth.

LABOUR MARKET

Unemployment and Retrenchment¹

Compared to June 2025, the seasonally-adjusted unemployment rates in September 2025 were stable at the overall level (at 2.0 per cent) and for residents (at 2.8 per cent) and rose slightly for citizens (from 2.9 per cent to 3.0 per cent) (Exhibit 1.4).

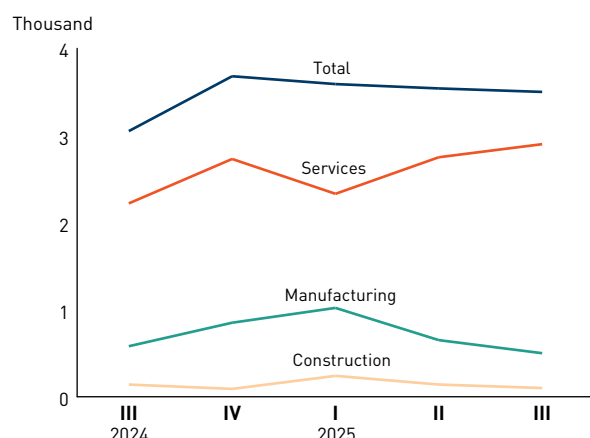
Exhibit 1.4: Unemployment Rate (Seasonally-Adjusted)

¹ Unemployment and retrenchment figures are based on preliminary data. Retrenchment figures pertain to private sector establishments with at least 25 employees and the public sector.

In September 2025, an estimated 68,500 residents, including 61,500 Singapore citizens, were unemployed. These were higher than the number of unemployed residents (67,500) and citizens (58,600) in June 2025.²

Total retrenchments fell slightly to 3,500 in the third quarter of 2025, from 3,540 in the preceding quarter (Exhibit 1.5). The decline was due to a fall in retrenchments in the manufacturing (from 650 to 500) and construction (from 140 to 100) sectors, while retrenchments rose in the services (from 2,750 to 2,900) sector.

Exhibit 1.5: Retrenchments



Employment³

Total employment expanded by 29,900 on a quarter-on-quarter basis in the third quarter of 2025, larger than the gains (+12,900) in the preceding quarter (Exhibit 1.6). Excluding MDWs, total employment rose by 24,800 and was supported by an increase in both resident and non-resident employment.

Total employment growth was driven by gains across the construction (+13,700), services (+10,300; +5,200 excluding MDWs) and manufacturing (+5,400) sectors. The growth in the services sector was supported by gains in the other services (+13,100; +8,000 excluding MDWs), finance & insurance (+2,100) and accommodation (+1,000) sectors (Exhibit 1.7).

Exhibit 1.6: Change in Total Employment, Quarter-on-Quarter

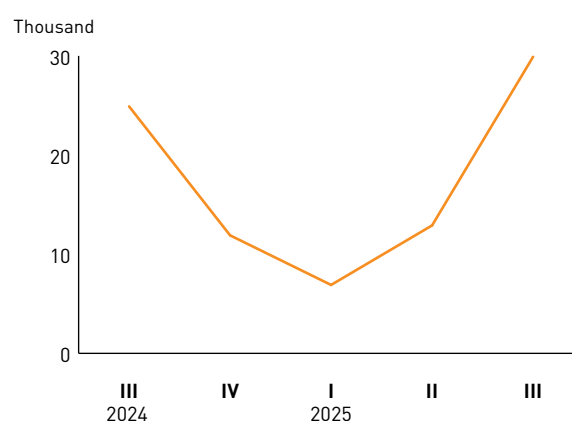
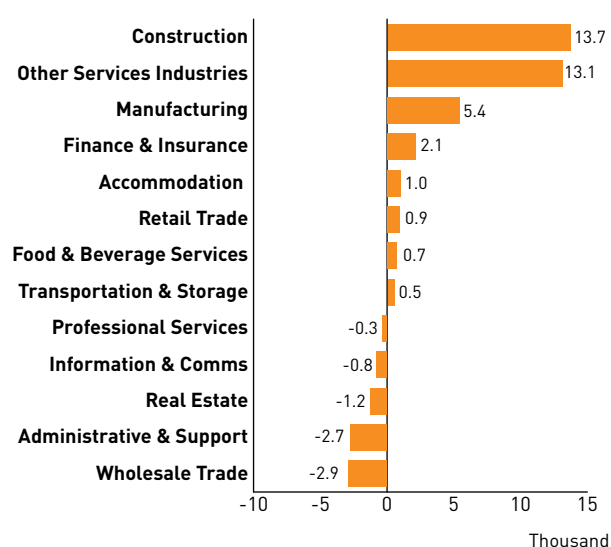


Exhibit 1.7: Changes in Employment by Sector in 3Q 2025



² Counts of unemployed persons are based on seasonally-adjusted data on the number of unemployed persons.

³ Employment figures are based on preliminary data.

Hiring Expectations

According to EDB's Business Expectations Survey for the Manufacturing Sector, hiring expectations in the sector were neutral. Specifically, a net weighted balance of 0 per cent of manufacturers expected to hire more workers in the fourth quarter of 2025 as compared to the third quarter. Firms in the computer peripherals & data storage segment of the electronics cluster were the most optimistic, with a net weighted balance of 47 per cent of firms expecting to increase hiring in the fourth quarter. By contrast, firms in the land segment of the transport engineering cluster were the most pessimistic, with a net weighted balance of 20 per cent of firms expecting to reduce hiring in the fourth quarter.

Similarly, hiring expectations for services firms were positive. According to DOS' Business Expectations Survey for the Services Sector, a net weighted balance of 10 per cent of services firms expected to increase hiring in the fourth quarter of 2025 as compared to the third quarter. Among the services sectors, firms in the accommodation sector had the strongest hiring sentiments, with a net weighted balance of 25 per cent of firms expecting to increase hiring in the fourth quarter. On the other hand, firms in the real estate sector were the most pessimistic, with a net weighted balance of 3 per cent of firms expecting to hire fewer workers in the fourth quarter.

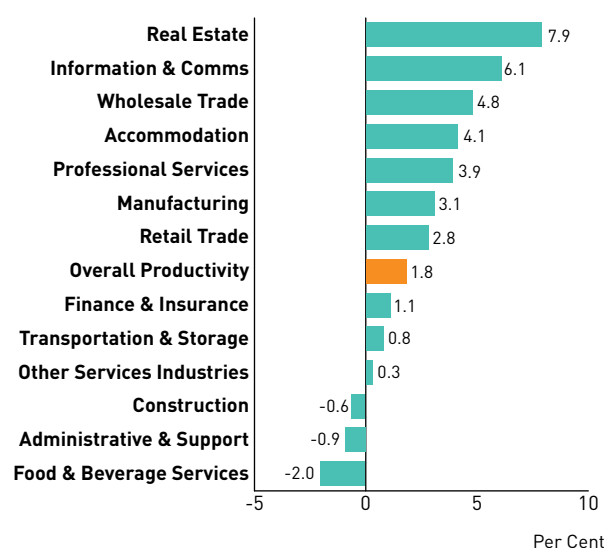
COMPETITIVENESS

Productivity

Overall labour productivity, as measured by real value-added per actual hour worked, rose by 1.8 per cent year-on-year in the third quarter of 2025, slower than the 2.2 per cent increase in the previous quarter (Exhibit 1.8).⁴

Among the sectors, the real estate (7.9 per cent) and information & communications (6.1 per cent) sectors recorded the largest productivity gains in the third quarter. The wholesale trade (4.8 per cent), accommodation (4.1 per cent), professional services (3.9 per cent), manufacturing (3.1 per cent), retail trade (2.8 per cent), finance & insurance (1.1 per cent), transportation & storage (0.8 per cent) and other services (0.3 per cent) sectors also saw productivity improvements. By contrast, productivity declines were observed in the food & beverage services (-2.0 per cent), administrative & support services (-0.9 per cent) and construction (-0.6 per cent) sectors.

Exhibit 1.8: Changes in Value-Added per Actual Hour Worked for the Overall Economy and Sectors in 3Q 2025



In the third quarter, the productivity of the outward-oriented sectors as a whole rose by 3.3 per cent year-on-year, unchanged from that in the previous quarter.⁵ Meanwhile, productivity for the domestically-oriented sectors as a whole rose by 0.5 per cent year-on-year, moderating from the 1.1 per cent increase in the preceding quarter.

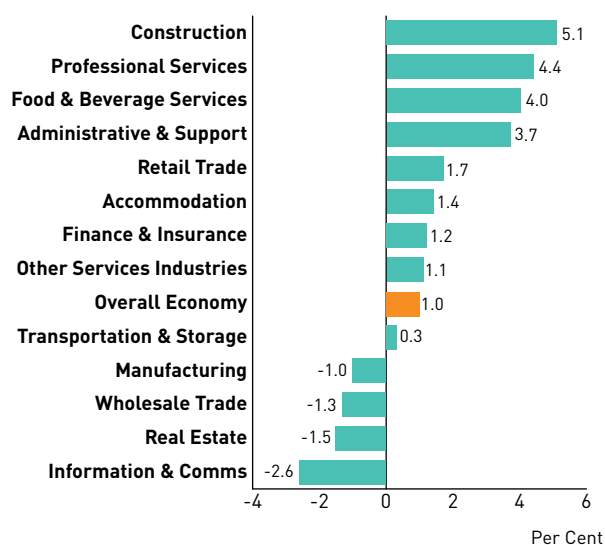
⁴ Overall labour productivity, as measured by real value-added per worker, grew by 2.7 per cent in the third quarter of 2025, slower than the 3.3 per cent increase in the preceding quarter. Real value-added per actual hour worked grew slower than real value-added per worker in the third quarter of 2025 because the average number of hours worked per worker grew by 0.9 per cent on a year-on-year basis.

⁵ Outward-oriented sectors refer to the manufacturing, wholesale trade, transportation & storage, accommodation, information & communications, finance & insurance and professional services sectors. Domestically-oriented sectors refer to the construction, retail trade, food & beverage services, real estate, administrative & support services and other services sectors.

Unit Labour Cost and Unit Business Cost

Overall unit labour cost (ULC) for the economy rose by 1.0 per cent on a year-on-year basis in the third quarter of 2025 (Exhibit 1.9), picking up from the 0.1 per cent increase in the previous quarter. The rise in overall ULC during the quarter was due to an increase in total labour cost per worker which outpaced gains in labour productivity, as measured by real value-added per worker.

Exhibit 1.9: Changes in Unit Labour Cost in 3Q 2025



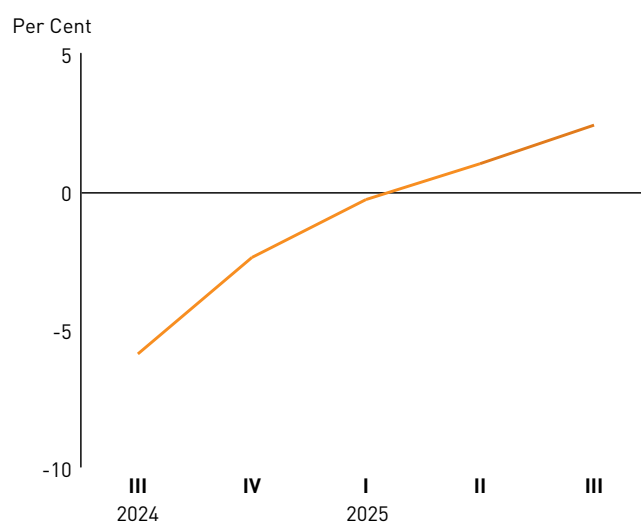
By sectors, the ULC for the construction sector was 5.1 per cent higher year-on-year in the third quarter due to a fall in labour productivity alongside a rise in total labour cost per worker.

The ULC for the services sector as a whole rose by 0.9 per cent year-on-year. Among the services sectors, ULC increased the most in the professional services sector (4.4 per cent) as the increase in total labour cost per worker was greater than the increase in labour productivity. Meanwhile, ULC fell in the information & communications sector (-2.6 per cent), which experienced high productivity growth which outstripped the increase in total labour cost per worker.

Over the same period, the ULC for the manufacturing sector fell by 1.0 per cent year-on-year. The decline in the sector's ULC was due to an improvement in labour productivity that exceeded the increase in total labour cost per worker.

Manufacturing unit business cost (UBC) rose by 2.4 per cent year-on-year in the third quarter, extending the increase of 1.0 per cent in the previous quarter (Exhibit 1.10). The increase in manufacturing UBC came on the back of an increase in unit services costs (+3.6 per cent), which outstripped the declines in unit labour costs (-1.0 per cent) and unit non-labour production taxes (-3.0 per cent).

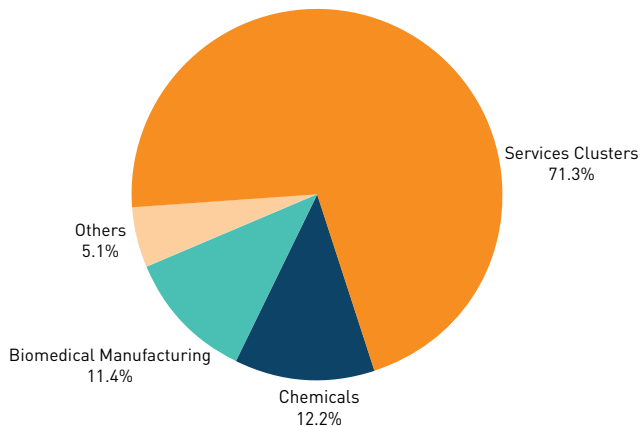
Exhibit 1.10: Changes in the Manufacturing Unit Business Cost



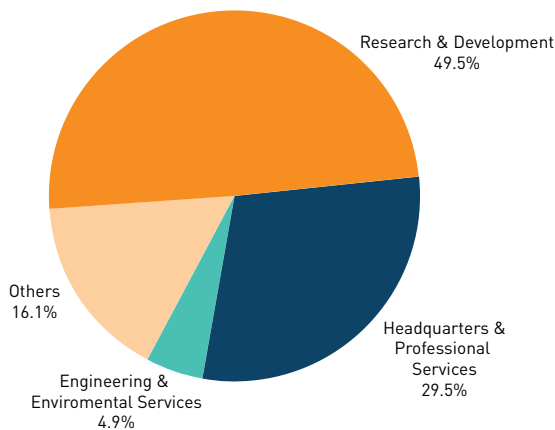
Investment Commitments

Investment commitments garnered by the Economic Development Board (EDB) in terms of Fixed Asset Investments (FAI) and Total Business Expenditure (TBE) amounted to \$250 million and \$661 million respectively in the third quarter of 2025 (Exhibit 1.11 and Exhibit 1.12).

For FAI, the largest contribution came from the services sector, which attracted \$178 million worth of commitments. Of this, the research & development (R&D) cluster accounted for \$170 million worth of commitments in the third quarter. Meanwhile, the manufacturing sector garnered \$71.9 million worth of commitments. Investors from the United States contributed the most to total FAI, at \$164 million (or 65.3 per cent).

Exhibit 1.11: Fixed Asset Investments by Industry Cluster in 3Q 2025

For TBE, the services sector attracted the highest amount of commitments, at \$611 million. Within the sector, the R&D cluster garnered the most TBE commitments, at \$327 million. Among the manufacturing clusters, the precision engineering and biomedical manufacturing clusters attracted the largest amounts of TBE commitments, at \$25.7 million and \$21.7 million respectively. Investors from the United States were the largest source of TBE commitments, with commitments of \$376 million (or 56.9 per cent).

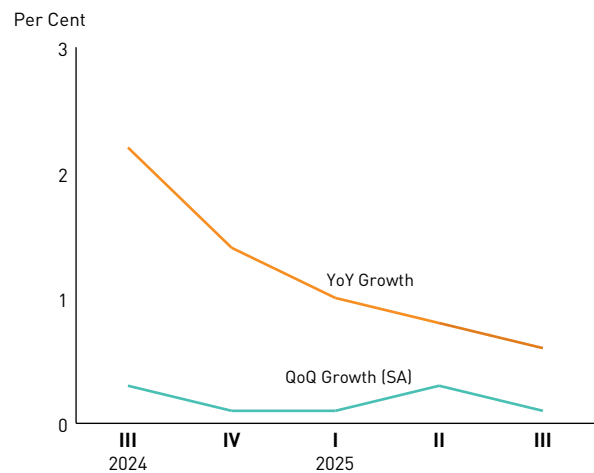
Exhibit 1.12: Total Business Expenditure by Industry Cluster in 3Q 2025

When these projects are fully implemented, they are expected to generate \$1.9 billion of value-added and create more than 2,400 jobs in the coming years.

PRICES

Consumer Price Index

The Consumer Price Index-All Items (CPI-All Items) rose by 0.6 per cent on a year-on-year basis in the third quarter of 2025, slowing from the 0.8 per cent increase in the preceding quarter (Exhibit 1.13). On a quarter-on-quarter seasonally-adjusted basis, CPI-All Items inflation eased to 0.1 per cent, from 0.3 per cent in the preceding quarter.

Exhibit 1.13: Changes in CPI

Some CPI categories saw price increases on a year-on-year basis in the third quarter of 2025, thus contributing positively to CPI-All Items inflation during the quarter (Exhibit 1.14). Food prices rose by 1.1 per cent on account of an increase in the costs of food & beverage serving services such as hawker food and restaurant meals, as well as non-cooked food items such as rice & cereal products. Housing & utilities costs increased by 0.3 per cent because of higher accommodation costs and a rise in water prices. Healthcare costs went up by 2.0 per cent on the back of more expensive health insurance. Transport prices climbed by 2.6 per cent due to higher car prices and bus & train fares. Education costs picked up by 0.8 per cent as a result of higher fees for private tuition & other educational courses, as well as at overseas universities.

The price gains in the above CPI categories were partially offset by year-on-year price declines in the following categories. Clothing & footwear prices fell by 0.8 per cent, mainly due to cheaper ready-made garments and footwear. Prices of household durables & services dipped by 0.5 per cent as the prices of household textiles and appliances fell. Information & communication costs declined by 2.4 per cent on account of cheaper information & communication services and equipment. Recreation, sport & culture prices dropped by 2.1 per cent because of the lower costs of holiday travel. Prices of miscellaneous goods & services edged down by 0.4 per cent due to a fall in the costs of social services.

Exhibit 1.14: Percentage Changes in CPI over Corresponding Quarter of Previous Year

Per Cent

	2024		2025		
	III	IV	I	I	III
All items	2.2	1.4	1.0	0.8	0.6
Food	2.6	2.4	1.3	1.2	1.1
Clothing & Footwear	-0.5	-1.6	-1.0	-1.6	-0.8
Housing & Utilities	3.3	2.5	1.3	1.0	0.3
Housing Durables & Services	0.5	0.1	-0.4	-0.4	-0.5
Health	3.8	2.4	1.7	2.7	2.0
Transport	-0.2	-0.4	2.3	1.9	2.6
Information & Communication	0.7	0.0	-0.9	-2.1	-2.4
Recreation & Culture	4.2	0.9	-0.9	-1.9	-2.1
Education	3.2	2.6	0.3	0.5	0.8
Miscellaneous Goods & Services	0.9	0.9	-0.2	-0.3	-0.4

INTERNATIONAL TRADE

Merchandise Trade

Singapore's total merchandise trade increased by 8.5 per cent on a year-on-year basis in the third quarter of 2025, following the 7.0 per cent growth in the preceding quarter (Exhibit 1.15). The increase in total merchandise trade was due to the growth in non-oil trade (+11.5 per cent) while oil trade declined (-6.0 per cent).

Exhibit 1.15: Growth Rates of Total Merchandise Trade, Merchandise Exports and Merchandise Imports (In Nominal Terms)

Per Cent

	2024			2025		
	III	IV	ANN	I	II	III
Merchandise Trade	5.3	6.8	6.6	4.7	7.0	8.5
Merchandise Exports	5.7	5.1	5.7	3.6	11.6	8.2
Domestic Exports	5.4	-6.0	0.5	-1.9	-4.3	-4.5
Oil	-0.2	-17.9	1.0	-9.2	-19.6	-6.4
Non-Oil	9.0	2.4	0.2	3.3	7.0	-3.3
Re-Exports	5.9	13.9	9.8	7.8	24.2	17.7
Merchandise Imports	5.0	8.7	7.8	5.9	2.0	8.8
Oil	-7.7	-9.5	-0.3	-8.0	-20.3	-4.7
Non-Oil	8.3	13.7	9.9	9.6	7.7	11.8

Total merchandise exports expanded by 8.2 per cent in the third quarter, easing from the 11.6 per cent expansion in the preceding quarter. This was due to the increase in re-exports (+17.7 per cent) which outweighed the decline in domestic exports (-4.5 per cent).

The decline in domestic exports was due to the decrease in both oil and non-oil domestic exports (NODX). In particular, oil domestic exports contracted by 6.4 per cent. In volume terms, oil domestic exports increased by 4.6 per cent.

Meanwhile, NODX fell by 3.3 per cent in the third quarter, a reversal from the 7.0 per cent growth in the previous quarter. The fall in NODX was due to the decrease in non-electronics domestic exports, even as electronics domestic exports grew.

Total merchandise imports increased by 8.8 per cent in the third quarter, picking up from the 2.0 per cent growth in the previous quarter. The growth in imports was due to the increase in non-oil imports which outweighed the decline in oil imports. Specifically, non-oil imports grew by 11.8 per cent due to higher electronics and non-electronics imports, while oil imports declined by 4.7 per cent.

Services Trade

Total services trade expanded by 0.8 per cent on a year-on-year basis in the third quarter, slowing from the 2.3 per cent expansion in the previous quarter (Exhibit 1.16). Both the exports and imports of services saw positive year-on-year growth during the quarter.

Services exports rose by 0.9 per cent in the third quarter, easing from the 2.9 per cent growth in the preceding quarter. The growth in services exports was largely attributable to the exports of other business services, financial services and travel services. Meanwhile, services imports rose by 0.8 per cent, slower than the 1.6 per cent growth in the previous quarter. The growth in services imports was largely due to the imports of other business services, financial services and telecommunications, computer & information services.

Exhibit 1.16: Growth Rates of Total Services Trade, Services Exports and Services Imports (In Nominal Terms)

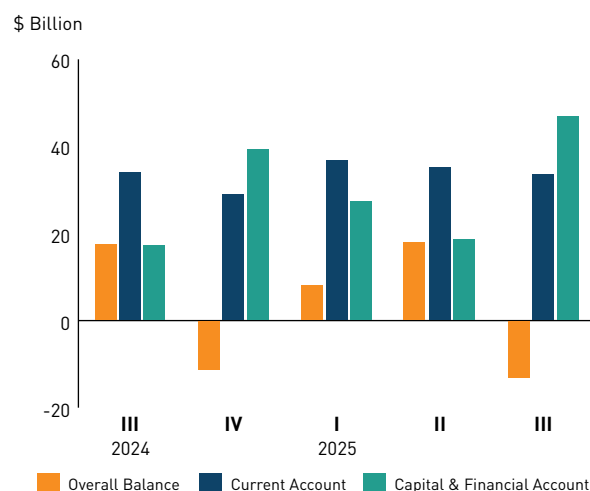
Per Cent

	2024			2025		
	III	IV	ANN	I	II	III
Total Services Trade	10.8	7.4	8.6	4.1	2.3	0.8
Services Exports	12.0	8.4	9.9	4.3	2.9	0.9
Services Imports	9.5	6.4	7.1	3.7	1.6	0.8

BALANCE OF PAYMENTS

Singapore recorded an overall balance of payments deficit of \$12.9 billion in the third quarter of 2025, a reversal from the surplus of \$17.7 billion in the preceding quarter (Exhibit 1.17).

Exhibit 1.17: Balance of Payments



Current Account

The current account surplus decreased to \$33.4 billion in the third quarter of 2025, from \$35.1 billion in the second quarter driven by a narrowing goods account surplus and a widening secondary income account deficit, which more than offset the fall in the primary income account deficit and the increase in the services account surplus.

In terms of the components of the current account, the surplus in the goods account fell to \$47.0 billion in the third quarter, from \$55.0 billion in the preceding quarter, as goods imports rose by more than the increase in goods exports.

At the same time, the secondary income account deficit widened by \$0.7 billion from the previous quarter to \$3.8 billion in the third quarter, as secondary income payments rose more than secondary income receipts.

In comparison, the surplus in the services account widened to \$17.5 billion in the third quarter, from \$14.2 billion in the preceding quarter. This was mainly due to an increase in net receipts for transport services and financial services, as well as a decrease in net payments for travel services which more than offset the decrease in net receipts for other business services.

The primary income account deficit narrowed by \$3.7 billion from the second quarter to \$27.3 billion in the third quarter, as primary income receipts rose while primary income payments fell.

Capital and Financial Account⁶

The capital and financial account registered a larger net outflow of \$46.8 billion in the third quarter, compared to \$18.5 billion in the preceding quarter. This was due to smaller net inflows of direct investment, larger net outflows of “other investment” and a switch from net inflows to net outflows for financial derivatives. These more than offset the decline in net outflows of portfolio investment.

Net inflows of direct investment fell to \$23.1 billion in the third quarter, from \$39.0 billion in the previous quarter, as foreign direct investment into Singapore fell and residents’ direct investment abroad rose.

Meanwhile, net outflows of “other investment” rose to \$36.0 billion in the third quarter, from \$29.5 billion in the preceding quarter, as resident deposit-taking corporations turned from a net inflow position to a net outflow position. This exceeded the slight decline in net outflows from the non-bank private sector.

At the same time, financial derivatives recorded a net outflow of \$3.9 billion in the third quarter, a reversal from the net inflow of \$4.3 billion in the second quarter.

By contrast, net outflows of portfolio investment fell to \$30.0 billion in the third quarter, from \$32.3 billion in the preceding quarter, as the decline in net outflows from the resident non-bank private sector outweighed the increase in net outflows from deposit-taking corporations.

⁶ 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

2

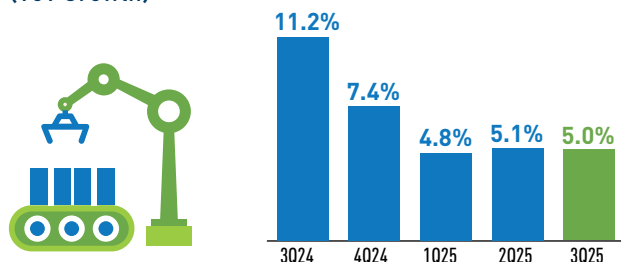
SECTORAL PERFORMANCE



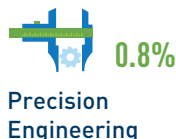
Chapter 2

SECTORAL PERFORMANCE

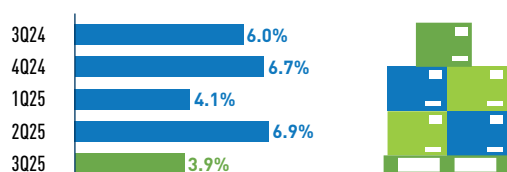
MANUFACTURING (YoY Growth)



CLUSTERS IN MANUFACTURING SECTOR



WHOLESALE TRADE (YoY Growth)

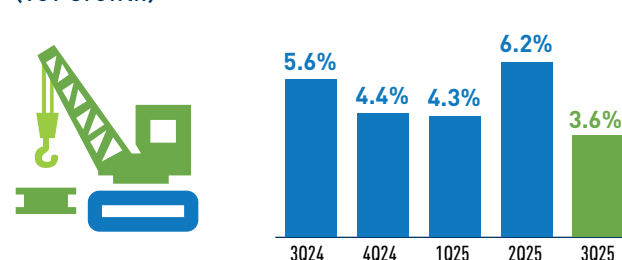


Domestic Wholesale Trade Index Growth 10.2%



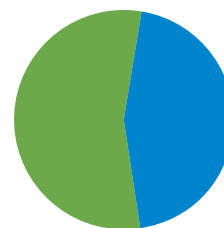
Foreign Wholesale Trade Index Growth 2.1%

CONSTRUCTION (YoY Growth)



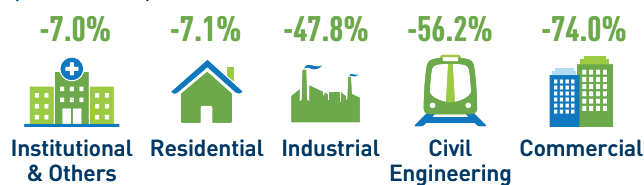
CERTIFIED PAYMENTS (% Share)

54.8%
Public

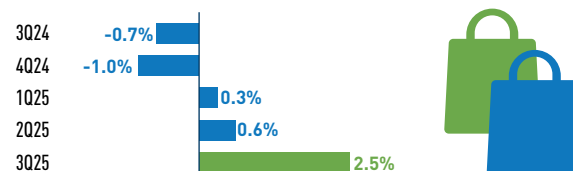


45.2%
Private

CONTRACTS AWARDED (YoY Growth)



RETAIL TRADE (YoY Growth)

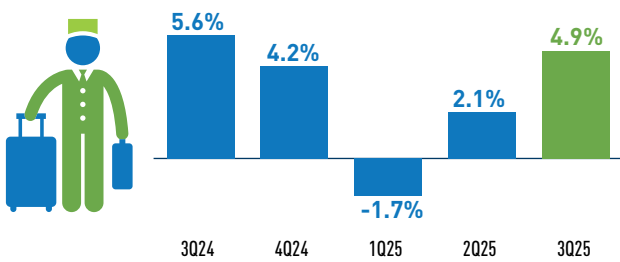


Retail Sales Index Growth (Motor Vehicles) 11.2%

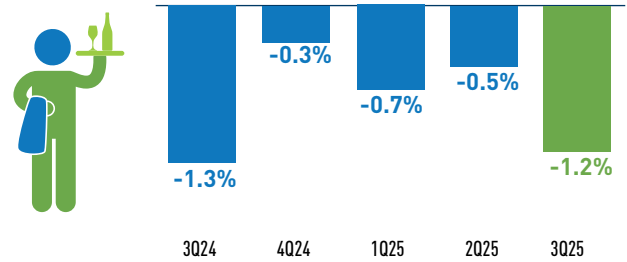


Retail Sales Index Growth (Non-Motor Vehicles) 2.2%

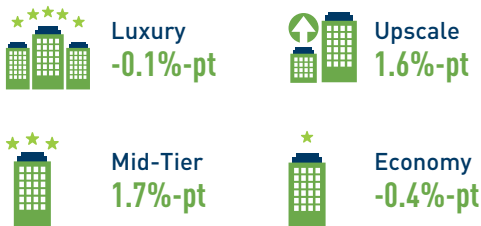
ACCOMMODATION (YoY Growth)



FOOD & BEVERAGE SERVICES (YoY Growth)



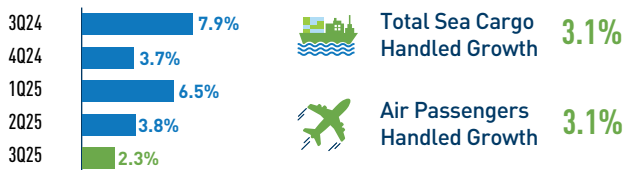
OCCUPANCY RATES OF HOTELS (YoY Change)



FOOD & BEVERAGE SALES INDEX GROWTH (YoY Growth)



TRANSPORTATION & STORAGE (YoY Growth)

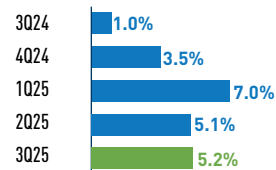


Total Sea Cargo
Handled Growth **3.1%**

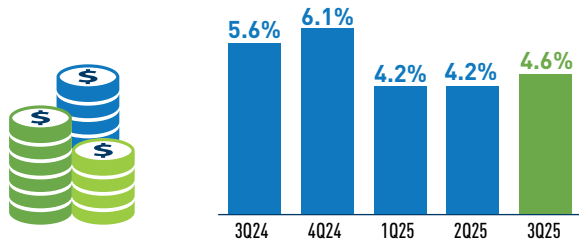


Air Passengers
Handled Growth **3.1%**

REAL ESTATE (YoY Growth)



FINANCE & INSURANCE (YoY Growth)



PRIVATE RESIDENTIAL REAL ESTATE



OVERVIEW

In the third quarter of 2025,

- The manufacturing sector expanded by 5.0 per cent year-on-year, extending the 5.1 per cent growth in the preceding quarter. All clusters except the general manufacturing cluster recorded increased output.
- The construction sector expanded by 3.6 per cent year-on-year, moderating from the 6.2 per cent expansion in the previous quarter.
- The wholesale trade sector expanded by 3.9 per cent year-on-year, easing from the 6.9 per cent expansion recorded in the preceding quarter.
- The retail trade sector expanded by 2.5 per cent year-on-year, picking up from the 0.6 per cent growth recorded in the previous quarter.
- The transportation & storage sector posted growth of 2.3 per cent year-on-year, moderating from the 3.8 per cent growth in the previous quarter.
- The accommodation sector grew by 4.9 per cent year-on-year, extending the 2.1 per cent growth in the previous quarter.
- The food & beverage services sector shrank by 1.2 per cent year-on-year, following the 0.5 per cent decline in the previous quarter.
- The finance & insurance sector expanded by 4.6 per cent year-on-year, extending the 4.2 per cent gain in the preceding quarter.
- The real estate sector expanded by 5.2 per cent year-on-year, extending the 5.1 per cent growth in the previous quarter.
- The professional services sector grew by 3.4 per cent year-on-year, extending the 2.9 per cent expansion in the previous quarter.

MANUFACTURING

The manufacturing sector expanded by 5.0 per cent on a year-on-year basis in the third quarter of 2025, extending the 5.1 per cent growth in the previous quarter (Exhibit 2.1). All clusters except the general manufacturing cluster recorded increased output (Exhibit 2.2).

Exhibit 2.1: Manufacturing Sector's Growth Rate

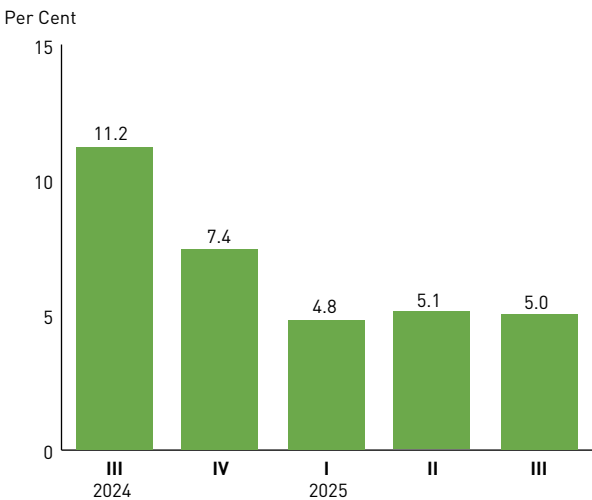
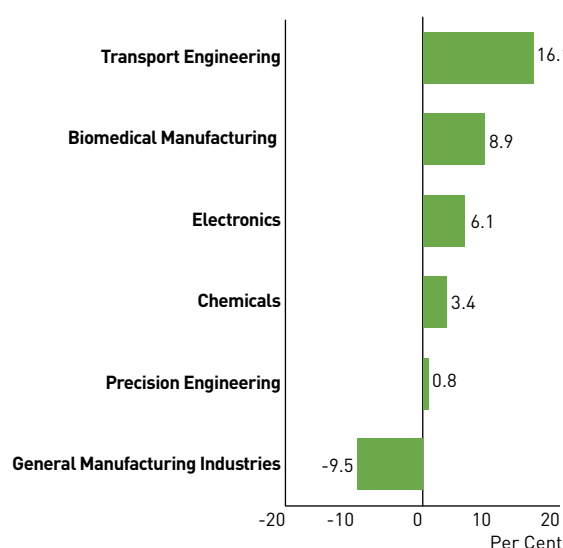


Exhibit 2.2: Manufacturing Clusters' Growth Rates in 3Q 2025

The transport engineering cluster expanded by 16.1 per cent year-on-year in the third quarter. Growth was led by the aerospace segment, which grew by 29.8 per cent on account of higher production of aircraft parts, as well as ongoing maintenance, repair and overhaul jobs from commercial airlines. The marine & offshore engineering segment grew by 4.5 per cent, supported by a higher level of activity in the shipyards. By contrast, the land segment contracted 22.6 per cent.

The biomedical manufacturing cluster grew by 8.9 per cent year-on-year in the third quarter, supported by output expansions in both the pharmaceuticals and medical technology segments. The pharmaceuticals segment grew by 8.5 per cent, driven by a higher production of biological products as well as a different mix of active pharmaceutical ingredients being produced. Output in the medical technology segment grew by 5.1 per cent on the back of sustained export demand for medical devices.

The electronics cluster grew by 6.1 per cent year-on-year in the third quarter, supported by output expansions across all segments except for the computer peripherals & data storage segment. The infocomms & consumer electronics segment expanded by 67.6 per cent, driven by the higher production of servers and server-related products. Output in the other electronic modules & components and semiconductors segments also grew by 2.6 per cent and 1.5 per cent respectively, while the computer peripherals & data storage segment contracted 13.0 per cent.

The chemicals cluster expanded by 3.4 per cent year-on-year in the third quarter, supported by output growth in all segments except for the petrochemicals segment. Growth was led by the petroleum segment which grew by 8.6 per cent from a low base last year due to plant maintenance shutdowns. The specialties segment grew by 6.4 per cent on account of a higher production of biofuels as well as electronic chemicals, materials and laminates. The other chemicals segment grew by 4.9 per cent with a higher production of fragrances. On the other hand, output of the petrochemicals segment contracted by 9.5 per cent due to plant maintenance shutdowns.

Output of the precision engineering cluster expanded by 0.8 per cent year-on-year in the third quarter. The precision modules & components segment grew by 6.4 per cent, bolstered by a higher production of plastic precision components and electronic connectors. However, the machinery & systems segment contracted by 0.6 per cent due to lower production of front-end semiconductor equipment and measuring devices, which weighed on the overall growth of the cluster.

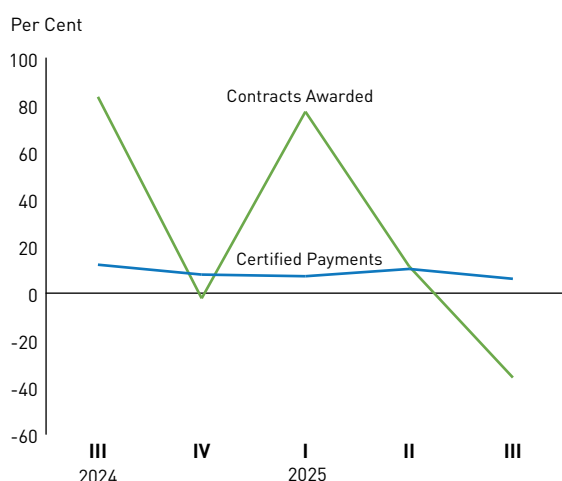
The general manufacturing cluster contracted by 9.5 per cent year-on-year in the third quarter, with output contractions across all segments except the printing segment. The food, beverage & tobacco segment declined by 13.1 per cent, led by a lower production of beverage and bakery products. The miscellaneous industries segment contracted by 5.3 per cent, with a lower output of structural metal products, batteries as well as paper & paperboard containers and boxes. By contrast, the output of the printing segment grew by 0.1 per cent.

CONSTRUCTION

The construction sector expanded by 3.6 per cent year-on-year in the third quarter of 2025, moderating from the 6.2 per cent expansion in the previous quarter.

In the third quarter, nominal certified progress payments, a proxy for construction output, rose by 6.1 per cent year-on-year, moderating from the 10.3 per cent expansion recorded in the previous quarter (Exhibit 2.3). The increase in certified progress payments was supported by expansions in both the public (9.3 per cent) as well as the private (2.4 per cent) sector construction works. The increase in public certified progress payments was due to expansions in civil engineering (19.4 per cent) and public institutional & others (31.2 per cent) building works. Meanwhile, the increase in private certified progress payments was due to growth in private residential building (7.4 per cent) and civil engineering (13.8 per cent) works.

Exhibit 2.3: Changes in Contracts Awarded and Certified Payments



Construction demand in terms of contracts awarded fell by 35.9 per cent year-on-year in the third quarter, a reversal from the 11.4 per cent increase in the previous quarter (Exhibit 2.3). The decrease in contracts awarded during the quarter was due to lower public (-14.2 per cent) and private (-58.7 per cent) sector construction demand. The fall in public sector contracts awarded was led by public civil engineering (-51.0 per cent) and public institutional & others (-6.6 per cent) building works, while the fall in private sector contracts awarded was due to private commercial (-86.4 per cent) and industrial (-54.7 per cent) building works.

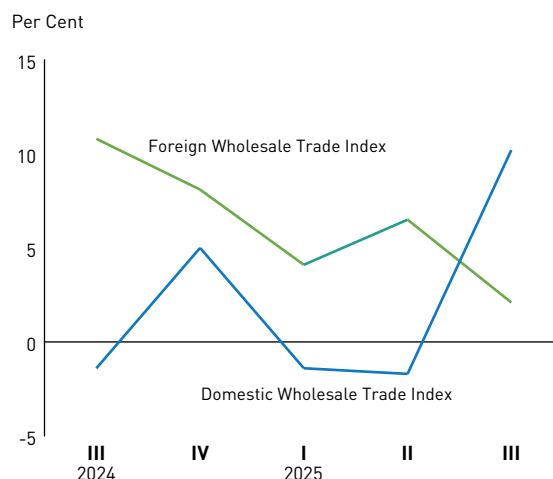
WHOLESALE TRADE

The wholesale trade sector grew by 3.9 per cent year-on-year in the third quarter of 2025, easing from the 6.9 per cent expansion in the previous quarter.

The expansion in the sector was supported by a 2.1 per cent year-on-year growth in foreign wholesale trade sales volume (Exhibit 2.4), easing from the 6.5 per cent increase recorded in the previous quarter. Growth was led by expansions in the sales volumes of electronic components (52.8 per cent) and telecommunications & computers (16.2 per cent), which more than offset declines in the wholesale sales of metals, timber & construction materials (-12.7 per cent) and petroleum & petroleum products (-3.7 per cent).

Meanwhile, the domestic wholesale trade sales volume expanded by 10.2 per cent year-on-year, a turnaround from the 1.7 per cent contraction in the previous quarter. The expansion was led by the increase in sales volume of petroleum & petroleum products (20.6 per cent), telecommunications & computers (16.9 per cent) and other wholesale trade¹ (15.1 per cent).

Exhibit 2.4: Changes in Wholesale Trade Index in Chanined Volume Terms



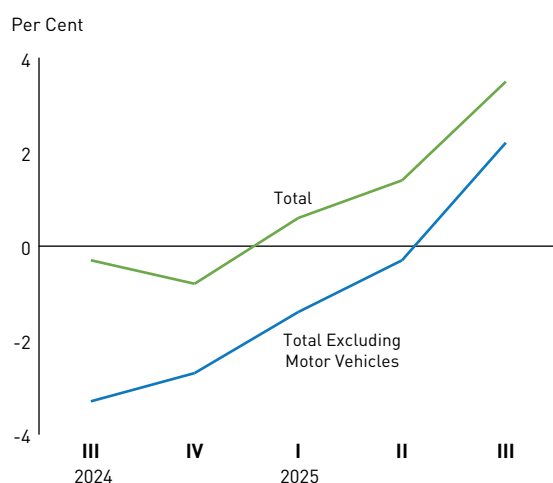
¹ The "other wholesale trade" segment consists of a diverse range of products that includes agricultural raw materials and live animals, tropical produce, personal effects and medicinal and pharmaceutical products, among others.

RETAIL TRADE

The retail trade sector expanded by 2.5 per cent year-on-year in the third quarter of 2025, picking up from the 0.6 per cent growth in the previous quarter.

In the third quarter, overall retail sales volume grew by 3.5 per cent year-on-year, extending the 1.4 per cent growth in the preceding quarter (Exhibit 2.5). The expansion in overall retail sales volume in the third quarter of 2025 was driven by growth in both non-motor vehicle sales (2.2 per cent) and motor vehicle sales (11.2 per cent). Non-motor vehicle sales volume was supported primarily by growth in the computer & telecommunications (9.1 per cent), supermarkets & hypermarkets (7.2 per cent) and cosmetics, toiletries & medical goods (6.2 per cent) segments. By contrast, sales volumes of petrol service stations (-4.8 per cent) and wearing apparel & footwear (-1.9 per cent) segments shrank.

Exhibit 2.5: Changes in Retail Sales Index in Chained Volume Terms

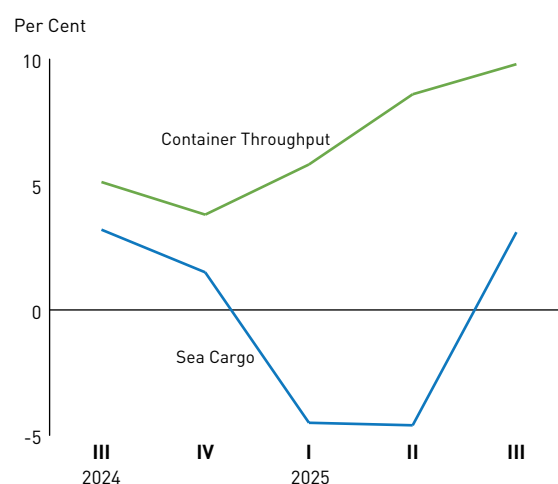


TRANSPORTATION & STORAGE

The transportation & storage sector expanded by 2.3 per cent year-on-year in the third quarter of 2025, easing from the 3.8 per cent growth posted in the previous quarter. The water transport and air transport segments expanded during the quarter, while the land transport segment contracted.

In the water transport segment, the volume of sea cargo handled grew by 3.1 per cent year-on-year in the third quarter, a turnaround from the 4.6 per cent decline in the previous quarter (Exhibit 2.6). The expansion in sea cargo volume handled was due to the increase in bulk cargo (10.9 per cent), led by growth in oil-in-bulk cargo (12.7 per cent), which more than offset the decline in general cargo (-0.9 per cent). At the same time, container throughput grew by 9.8 per cent during the quarter.

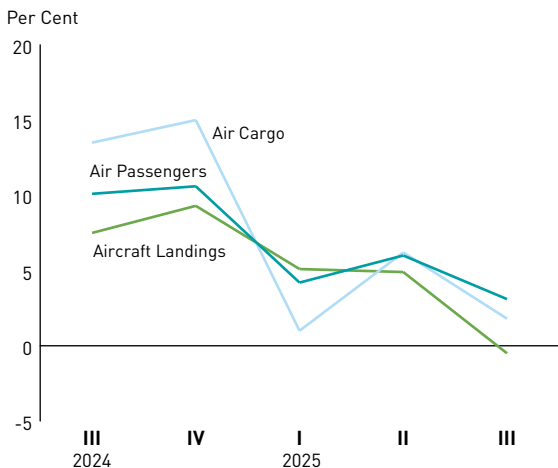
Exhibit 2.6: Changes in Container Throughput and Sea Cargo Handled



In the air transport segment, the volume of air passenger traffic (less transit) handled at Changi Airport rose by 3.1 per cent year-on-year in the third quarter, moderating from the 6.0 per cent growth posted in the previous quarter (Exhibit 2.7).

The number of aircraft landings contracted by 0.5 per cent year-on-year to reach 45,792 in the third quarter of 2025, reversing the 4.9 per cent increase in the preceding quarter. Meanwhile, total air cargo shipments handled at Changi Airport rose by 1.8 per cent in the third quarter, easing from the 6.2 per cent expansion in the previous quarter.

Exhibit 2.7: Changes in Air Transport

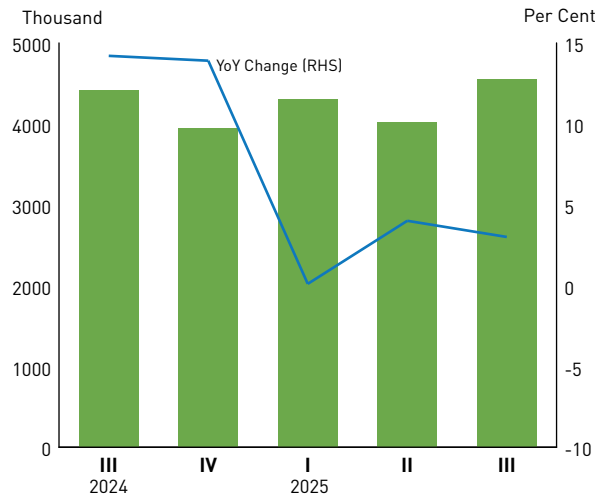


ACCOMMODATION

The accommodation sector grew by 4.9 per cent year-on-year in the third quarter of 2025, extending the 2.1 per cent growth in the preceding quarter.

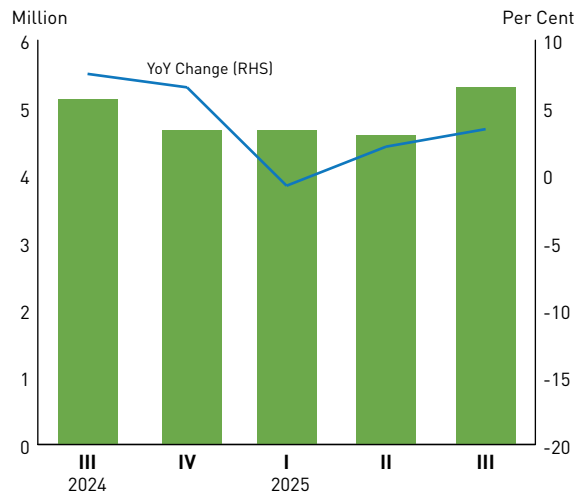
In the third quarter, total visitor arrivals grew by 3.0 per cent year-on-year, slightly easing from the 4.0 per cent growth in the previous quarter (Exhibit 2.8). The number of visitor arrivals in the third quarter of 2025 was around 4.5 million, reaching 90.8 per cent of the 5.0 million visitor arrivals recorded in the third quarter of 2019 (i.e., pre-COVID level).

Exhibit 2.8: Visitor Arrivals



Reflecting the recovery in visitor arrivals, gross lettings at gazetted hotels grew by 3.4 per cent year-on-year in the third quarter, extending the 2.1 per cent growth in the previous quarter (Exhibit 2.9). Meanwhile, the average occupancy rate of gazetted hotels rose by 0.8 percentage-points year-on-year to 87.6 per cent in the third quarter of 2025. This represented an increase over the 77.8 per cent recorded in the previous quarter.

Exhibit 2.9: Gross Lettings at Gazetted Hotels



FOOD & BEVERAGE SERVICES

The food & beverage services sector shrank by 1.2 per cent year-on-year in the third quarter of 2025, worse than the 0.5 per cent decline in the previous quarter.

Overall food & beverage sales volume declined by 0.8 per cent year-on-year in the third quarter, a reversal from the 0.3 per cent expansion in the previous quarter (Exhibit 2.10). The contraction in overall food & beverage sales volume was due to declines in the restaurants (-6.4 per cent), fast food outlets (-1.0 per cent) and cafes, food courts & other eating places (-0.4 per cent) segments. On the other hand, sales volume of food caterers grew by 12.3 per cent.

Exhibit 2.10: Changes in Food & Beverage Services Index in Chained Volume Terms



FINANCE & INSURANCE

The finance & insurance sector expanded by 4.6 per cent year-on-year in the third quarter of 2025, extending the 4.2 per cent gain in the preceding quarter.

The stronger performance during the quarter was underpinned by the banking and other auxiliary activities segments. The former was supported by expansion in credit intermediation activity, with overall loans increasing by 5.8 per cent year-on-year compared to 3.8 per cent in the previous quarter. This was in turn underpinned by a broad-based expansion in resident loans and a surge in lending to the Americas (Exhibits 2.11 and 2.12). Further, growth in banks' net fees and commissions, partly earned from the increase in market trading activity, strengthened after moderating over the last few quarters, likely reflecting improved business and investor sentiment amid some reduction in uncertainty in the global economic environment.

Meanwhile, the other auxiliary activities segment, comprising mostly the payments players, likely benefited from a boost in payment transaction volumes domestically and in the region.

Exhibit 2.11: Growth of Bank Loans & Advances to Non-Bank Residents by Industry in 3Q 2025

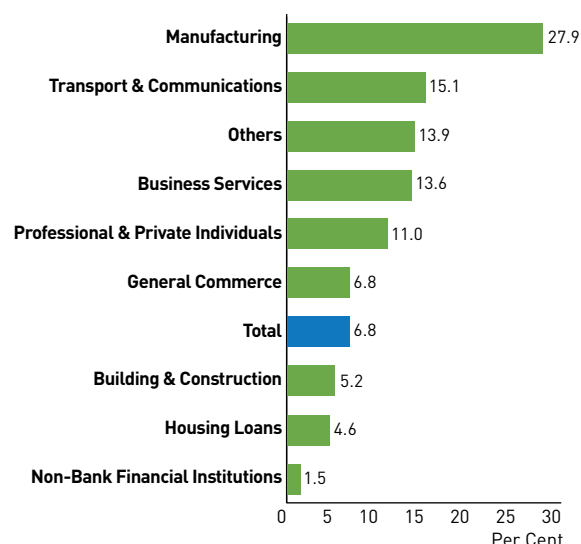
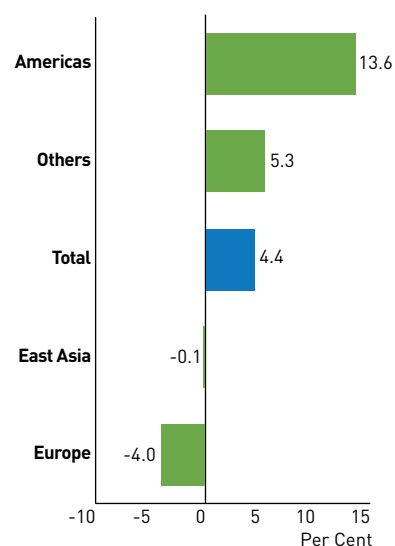


Exhibit 2.12: Growth of Bank Loans & Advances to Non-Bank Non-Residents by Region in 3Q 2025

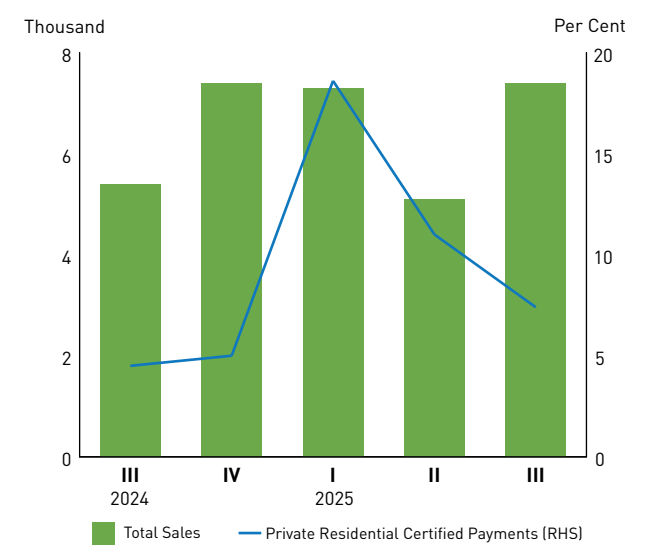


REAL ESTATE

The real estate sector expanded by 5.2 per cent year-on-year in the third quarter of 2025, extending the 5.1 per cent growth in the previous quarter. Growth in the sector was due to expansions in all segments of the property market.

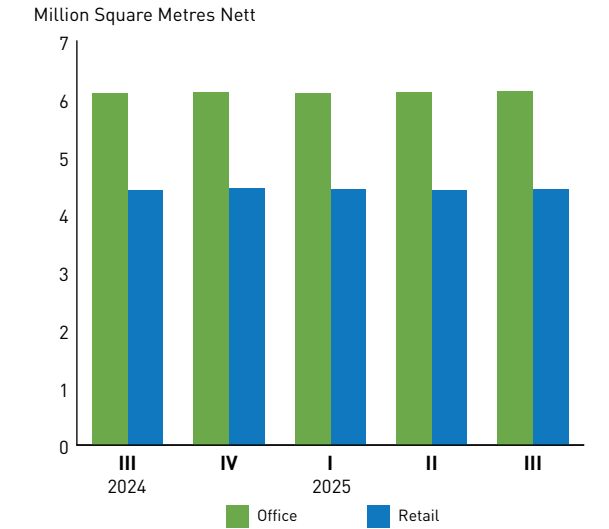
Private residential certified payments² grew by 7.4 per cent year-on-year in the third quarter, moderating from the 11.0 per cent expansion in the previous quarter. Total private residential property sales rose to 7,404 units in the third quarter of 2025, from 5,372 units in the same quarter of 2024 (Exhibit 2.13).

Exhibit 2.13: Total Sales for Private Residential Units and Private Residential Certified Payments



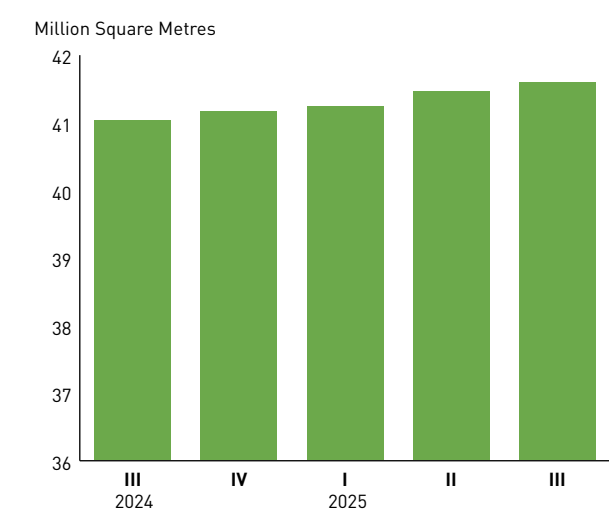
Demand for private commercial office space, as measured by total occupied space, rose by 0.5 per cent year-on-year in the third quarter, following the 0.7 per cent growth in the preceding quarter. Meanwhile, in the private commercial retail space market, demand rose by 0.3 per cent the third quarter, continuing the 0.4 per cent expansion in the previous quarter (Exhibit 2.14).

Exhibit 2.14: Total Occupied Space for Private Sector Commercial Office and Retail Spaces



Within the private industrial space market, demand rose by 1.4 per cent year-on-year in the third quarter, following the 1.1 per cent increase in the preceding quarter (Exhibit 2.15).

Exhibit 2.15: Total Occupied Space for Private Sector Industrial Space



2 Private residential certified payments is a proxy for the growth of the private residential property segment.

PROFESSIONAL SERVICES

In the third quarter of 2025, the professional services sector grew by 3.4 per cent year-on-year, extending the 2.9 per cent expansion in the previous quarter. Growth was mainly supported by expansions in the head offices & business representative offices, and other professional, scientific & technical services segments.³

³ The professional services sector is made up of the following segments: (i) legal, (ii) accounting, (iii) head offices & business representative offices, (iv) business & management consultancy, (v) architectural & engineering, technical testing & analysis, and (vi) other professional, scientific & technical services.

Box Article 2.1

RECENT PERFORMANCE OF TOURISM IN SINGAPORE

Tourism is a key pillar of Singapore's economy, contributing to the value-added of a range of sectors such as the accommodation, arts, entertainment & recreation, food & beverage (F&B) services, retail trade and transportation & storage sectors. In 2024, tourism is estimated to have contributed 6.0 per cent of Singapore's exports in services¹. Beyond its direct contribution to Singapore's economy, tourism also plays a critical role in strengthening Singapore's global connectivity and reputation as a premier destination for business and leisure, which in turn enhances our status as a key node in the flow of people and ideas.

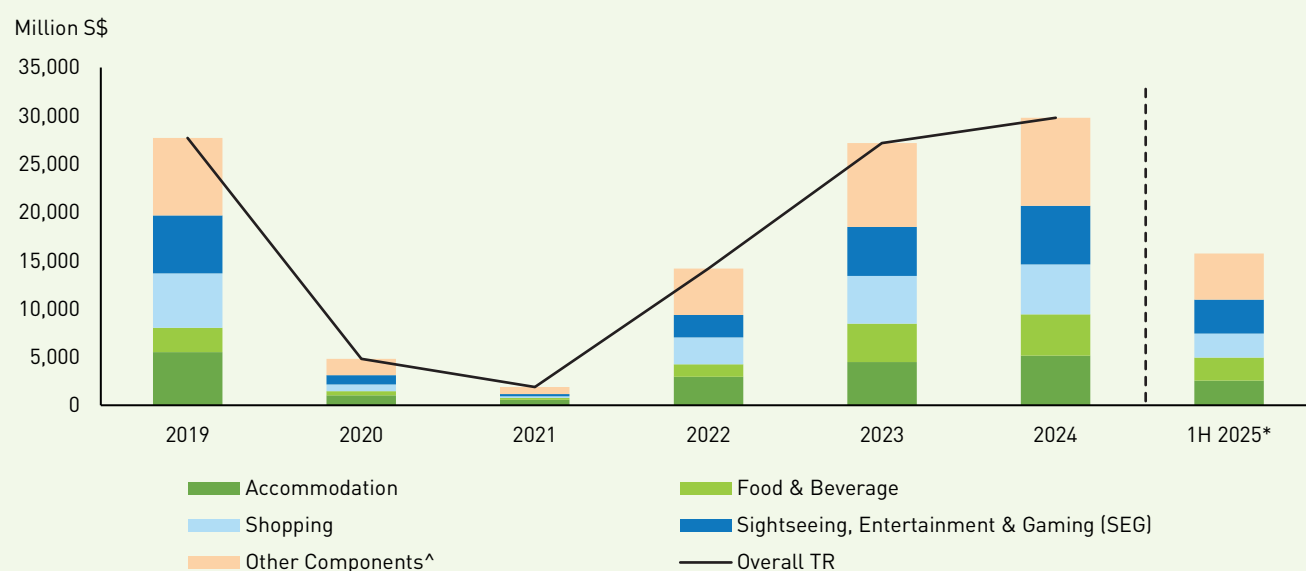
This article examines the recent performance of and outlook for international visitor arrivals (IVA) and tourism receipts (TR) in Singapore.

Singapore's IVA and TR plunged in 2020 and 2021 due to the COVID-19 pandemic before rebounding in 2022

The onset of the COVID-19 pandemic caused a sharp decline in tourism activity globally as stringent public health measures, including border closures, were implemented across the world to limit the spread of the virus. In Singapore, our TR (Exhibit 1) and IVA (Exhibit 2) likewise plummeted in 2020 and 2021. In particular, TR fell sharply to \$4.8 billion in 2020 from the \$27.7 billion posted in 2019, and contracted further to \$1.9 billion in 2021.² This came on the back of a slump in IVA from 19.1 million in 2019 to around 2.7 million and 330,000 in 2020 and 2021, respectively.

With the stabilisation of the COVID-19 situation domestically, Singapore launched the Vaccinated Travel Lanes in September 2021 and then transitioned to the Vaccinated Travel Framework in April 2022.³ In line with this, TR and IVA rebounded to \$14.2 billion and 6.3 million in 2022, or 51.2 per cent and 33.0 per cent of 2019 levels, respectively.

Exhibit 1: Tourism Receipts by Major Components, 2019 – 1H2025



Source: Singapore Tourism Board

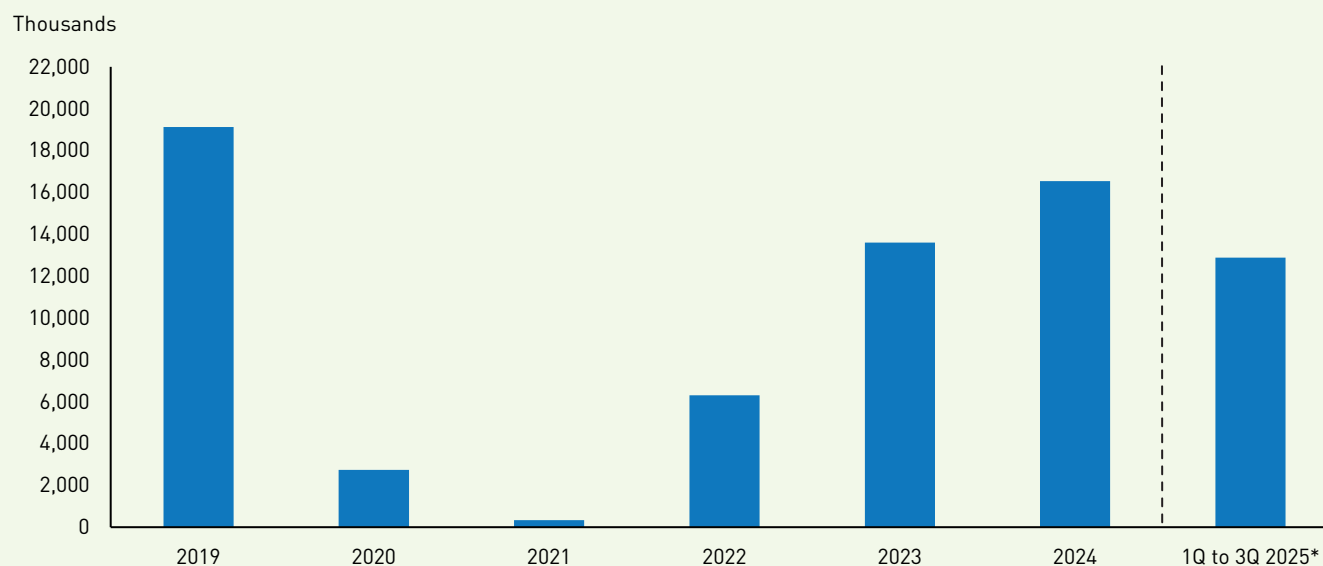
*TR data for 2025 is available up to the second quarter of 2025 at the time of publication.

^Other components include expenditure on airfares on Singapore-based carriers, port taxes, local transportation, business, medical, education, transit visitors and COVID-19 related costs.

1 This is the total value of exports of travel services as a share of Singapore's total value of exports of services in 2024. Travel services cover the range of goods and services consumed by travellers during their visits to Singapore for less than one year.

2 Singapore closed its borders on 23 March 2020 to short-term visitors and selected work pass holders. While the air travel pass and reciprocal green lanes were implemented for selected economies in late 2020, they were interrupted by stricter border measures from 1 May 2021 in response to the emergence of the Delta variant of the virus.

3 Under Vaccinated Travel Lanes (VTL), fully-vaccinated travellers from selected countries were allowed to enter Singapore without quarantine, subject to testing and other health safeguards. The Vaccinated Travel Framework (VTF) replaced the VTL and came into effect on 1 April 2022. The VTF allowed all fully vaccinated travellers (and children aged 12 and below) to enter Singapore without quarantine, subject to a pre departure COVID 19 test, provided they had not visited any country on the "Restricted" list in the past seven days.

Exhibit 2: International Visitor Arrivals, 2019 – 3Q2025

Source: Singapore Tourism Board

*IVA data for 2025 is available up to the third quarter at the time of publication.

TR continued to grow in the next two years, and by 2024, had surpassed its pre-pandemic level

Post-pandemic, TR continued to recover steadily. In 2023 and 2024, TR grew by 91.5 per cent and 9.7 per cent, respectively. By 2024, TR reached \$29.8 billion, surpassing its level in 2019 by 7.6 per cent.

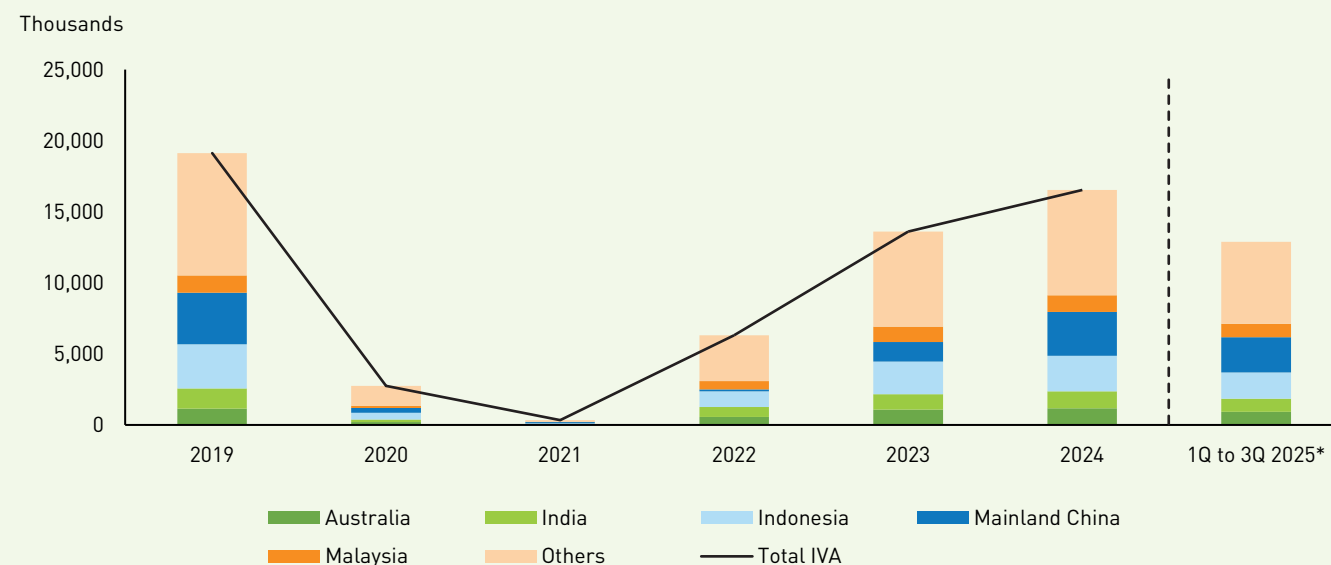
The increase in TR in 2024, compared to 2023, was driven by robust growth in major spending components, including sightseeing, entertainment & gaming (SEG) (19.8 per cent growth) and accommodation (15.0 per cent growth). This surge in spending was supported largely by a strong line-up of events (e.g., concerts and marquee leisure events) during the year. Compared to 2019 levels, TR in F&B and SEG in 2024 were 71.0 per cent and 1.2 per cent higher respectively, even though TR in accommodation and shopping remained 7.0 per cent and 7.8 per cent lower respectively.

The strong momentum in TR growth carried into the first half of 2025, with overall TR growing by 5.3 per cent year-on-year to reach \$15.7 billion. This continued growth reflected Singapore's diversified tourism offerings, as higher spending on F&B (16.0 per cent), SEG (5.0 per cent) and accommodation (4.8 per cent) more than offset a decline in spending on shopping (-2.5 per cent).

The robust recovery in TR came on the back of IVA growth amidst a vibrant line-up of entertainment and business events

The robust recovery in TR in 2024 came on the back of continued growth in IVA of 21.5 per cent over the same period. The latter brought IVA in 2024 to 16.5 million, or 86.5 per cent of 2019's level. In turn, the sharp increase in IVA in 2024 was supported by a vibrant line-up of entertainment and business events, including concerts by Coldplay and Taylor Swift, as well as Meetings, Incentives, Conferences & Exhibitions (MICE) events such as the Rotary International Convention, the Forum of Young Global Leaders and CeMAT Southeast Asia.

The pickup in IVA continued into 2025, albeit at a more moderate pace. In the first three quarters of the year, IVA grew by 2.3 per cent year-on-year to reach 12.9 million (or 89.9 per cent of 2019's level over the same period), spurred by continued growth in visitor arrivals from our key source markets. For instance, IVA from our key source markets of Australia, India, Mainland China and Malaysia grew by 7.1 per cent, 2.8 per cent, 0.8 per cent and 6.5 per cent year-on-year respectively over this period (Exhibit 3).

Exhibit 3: IVA by Key Source Markets, 2019 – 3Q2025

Source: Singapore Tourism Board

*IVA data for 2025 is available up to the third quarter at the time of publication.

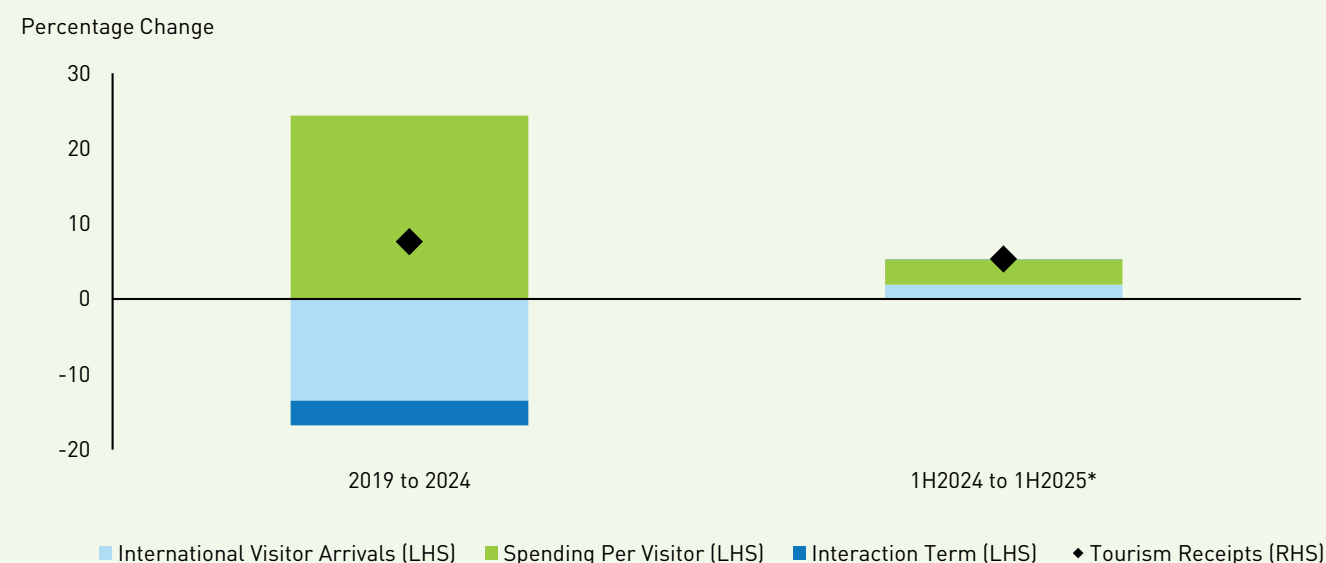
It should be noted that while Singapore's overall IVA has yet to recover to 2019's level, its recovery trend is broadly in line with that of key tourism destinations in the Asia-Pacific region⁴ (APAC). On aggregate, the IVA of all 14 APAC destinations (including Singapore) in 2024 reached 89.7 per cent of its level in 2019. Singapore has also maintained its market share of total IVA to these destinations at around 6.0 per cent since 2019.

The increase in TR in 2024, compared to 2019, was led by growth in spending per tourist

Growth in TR can be decomposed into (i) growth in IVA, (ii) growth in spending per IVA, and (iii) the interaction between (i) and (ii) – see equation (1) below. Between 2019 and 2024, the cumulative growth in TR (7.6 per cent) was supported by an increase in spending per IVA (24.4 per cent), which more than offset the decline in IVA (-13.5 per cent) (Exhibit 4). In the first half of 2025, growth in spending per IVA (3.3 per cent year-on-year) continued to contribute to the growth in TR (5.3 per cent year-on-year), while growth in IVA (1.9 per cent year-on-year) over the same period also contributed to the TR growth.

$$TR = IVA \times \text{Spending per IVA}$$

$$\Rightarrow \% \Delta TR = \% \Delta IVA + \% \Delta \text{Spending per IVA} + \text{Interaction Term} \quad [\text{Equation 1}]$$

Exhibit 4: Decomposition of Tourism Receipts Growth, 2019 to 2024 and 1H2024 to 1H2025

Source: Singapore Tourism Board, MTI Staff Estimates

*TR data for 2025 is available up to the second quarter of 2025 at the time of publication.

⁴ Based on 14 markets identified as key tourism destinations: Australia, Hong Kong, Indonesia, India, Japan, Macau, Malaysia, New Zealand, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam. The data is extracted from various National Tourism Organisations' websites.

Looking ahead, the long-term prospects of Singapore's tourism industry remain favourable, even as near-term headwinds may pose a drag on its growth

For 2025, the Singapore Tourism Board (STB) has projected that TR will hit \$29.0 to \$30.5 billion, while IVA will reach between 17.0 million and 18.5 million,⁵ supported by a steady pipeline of events and experiences that will bolster tourism demand in Singapore. There is, however, a risk that elevated global economic uncertainty and ongoing trade frictions could weigh on consumer confidence and dampen tourism demand in the near term. Other factors that could weigh on visitor arrivals to Singapore include the continued strength of the Singapore dollar, visa liberation policies by competitor destinations,⁶ as well as initiatives to boost domestic tourism in our key source markets such as Mainland China.⁷

In the longer term, under STB's Tourism 2040 roadmap, TR is expected to grow to \$47.0 billion to \$50.0 billion by 2040. As part of this roadmap, STB will focus on driving Singapore's next bound of quality tourism growth with strategies to attract higher-yield visitors and enhance Singapore's appeal as a premier destination for both leisure and business travel. Working closely with industry partners, STB will continue to strengthen Singapore's offerings in areas such as events, lifestyle and experiential tourism, while building industry capabilities and accelerating digital transformation to future-proof the tourism industry. These efforts will ensure that our tourism industry remains competitive and a key driver of Singapore's economic growth in the years to come.

Contributed by:

Ms Ngoh Jia Hui
Economist
Economics Division
Ministry of Trade and Industry

Mr Abdul Mateen
Economist
Economics Division
Ministry of Trade and Industry

With input from:

Singapore Tourism Board

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⁵ These are based on STB's forecasts released in February 2025.

⁶ For instance, Malaysia and the Philippines have made visa-free travel available to travellers from India.

⁷ According to China's Ministry of Culture and Tourism, domestic trips in China grew by 18 per cent year-on-year in the first three quarters of 2025 to reach around 5.0 billion, with spending by domestic tourists rising by 11.5 per cent to reach 4.85 trillion RMB. This was likely supported by the government's active promotion of domestic tourism, including digital coupons and entrance ticket discounts. Additionally, the expansion of the high-speed rail system and the rise of online travel applications have made domestic travel within China more accessible and convenient.

CHAPTER

3

ECONOMIC OUTLOOK





Chapter 3

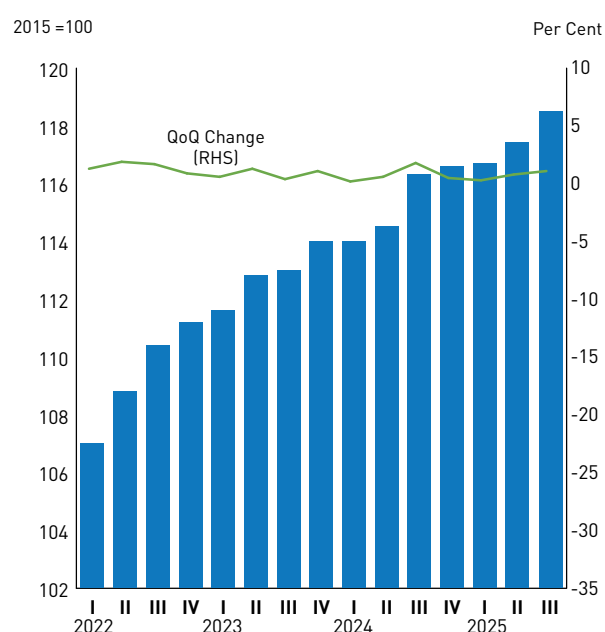
ECONOMIC OUTLOOK

COMPOSITE COINCIDENT INDEX

On a quarter-on-quarter basis, the composite coincident index (CCI) rose by 0.9 per cent in the third quarter of 2025, extending the 0.6 per cent expansion in the previous quarter (Exhibit 3.1).

Of the five components of the CCI, four components rose on a quarter-on-quarter basis, namely gross domestic product, the index of industrial production, the retail sales index excluding motor vehicles and total employment. On the other hand, non-oil domestic exports fell as compared to the previous quarter.

Exhibit 3.1: Composite Coincident Index Levels and Growth Rate

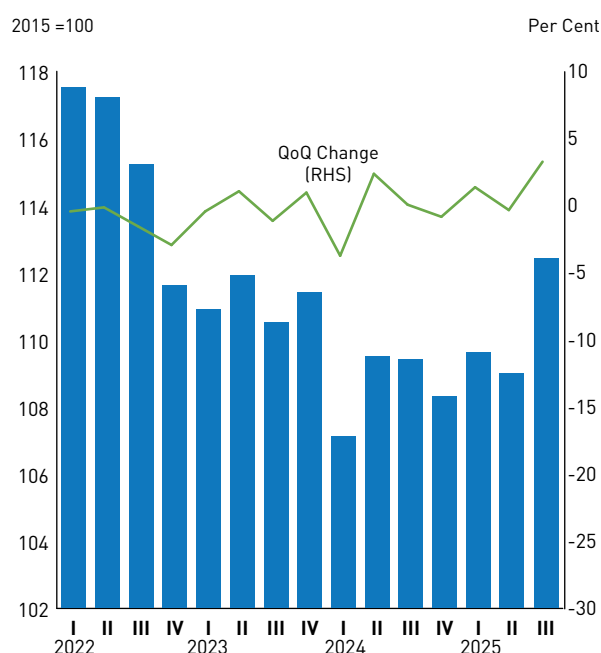


COMPOSITE LEADING INDEX

On a quarter-on-quarter basis, the composite leading index (CLI) rose by 3.1 per cent in the third quarter of 2025, a turnaround from the 0.5 per cent contraction in the previous quarter (Exhibit 3.2).

Of the nine components of the CLI, six components rose on a quarter-on-quarter basis, namely business expectations for wholesale trade, non-oil retained imports, money supply, stock price, new companies formed and non-oil sea cargo handled. By contrast, the US Purchasing Managers' Index, business expectations for the stock of finished goods and the domestic liquidity indicator, fell as compared to the preceding quarter.

Exhibit 3.2: Composite Leading Index Levels and Growth Rate



OUTLOOK FOR 2025

In August, MTI upgraded the GDP growth forecast for 2025 to “1.5 to 2.5 per cent”, on account of strong front-loading activities in the second quarter of 2025 due to the pause in the US’ reciprocal tariffs, as well as an improvement in the outlook for Singapore’s external demand due to the de-escalation in trade tensions between the US and several of its trading partners.

At that time, MTI had expected global growth to slow down in the second half of the year, with the dissipation of the boost from front-loading activities and the reinstatement of the US’ reciprocal tariffs after the temporary pause.

However, global economic conditions have turned out to be more resilient than expected. In particular, GDP growth in most of Singapore’s key trading partners came in better than expected in the third quarter of 2025. For regional economies such as China and Vietnam, exports growth remained robust amidst ongoing trade diversion and supply chain adjustments.¹ At the same time, the stronger-than-anticipated AI boom provided support for US economic growth, and for the exports of AI-related semiconductors from the region.

There have also been further de-escalations in trade tensions in recent months. Notably, the US-China trade truce has been extended to November 2026 with a reduced US tariff rate on China.² Meanwhile, the rollout of the sectoral tariffs on semiconductors and pharmaceuticals has been slower than earlier anticipated.

In view of these positive developments, the full-year GDP growth outlook of our key trading partners has improved.

Against this backdrop, the Singapore economy performed better than expected in the third quarter of 2025. In particular, trade-related sectors such as the manufacturing, wholesale trade and transportation & storage sectors outperformed expectations, supported by the resilience of our trading partners and global trade,³ as well as the strong global demand for AI-related semiconductors, servers and server-related products.⁴ In turn, this generated positive spillovers to other sectors of the economy, including outward-oriented services sectors such as information & communications and professional services. The latter also benefitted from resilient demand for services from regional economies.

For the rest of the year, demand for AI-related electronics should continue to support our manufacturing and wholesale trade sectors. Growth in outward-oriented services sectors such as information & communications, professional services and finance & insurance is also projected to remain resilient.

Taking into account the better-than-expected performance of the Singapore economy in the third quarter of the year (i.e., 4.2 per cent year-on-year growth), as well as the latest global and domestic situations, **MTI has upgraded the GDP growth forecast for 2025 from “1.5 to 2.5 per cent” to “around 4.0 per cent”.**

¹ For example, China’s exports growth came in at 6.5 per cent year-on-year in the third quarter of 2025, faster than the 6.1 per cent growth in the second quarter of 2025. Similarly, Vietnam’s exports growth was 18.2 per cent year-on-year in the third quarter of 2025 compared to 18.1 per cent in the second quarter of 2025.

² On 30 October 2025, the US and China announced a trade truce whereby the US would lower its fentanyl-related tariffs imposed on Chinese imports from 20 per cent to 10 per cent. The US would also continue to suspend the higher reciprocal tariff rate applicable to China until 10 November 2026, although imports from China are still subject to the 10 per cent baseline tariff rate. On its part, China agreed to suspend its retaliatory tariffs on the US, although the 10 per cent tariff hike on all US goods would still be in place.

³ For example, our domestic exports to Taiwan, South Korea and Vietnam increased by 26.8 per cent, 13.9 per cent and 4.7 per cent year-on-year in the third quarter of 2025. Similarly, our total re-exports rose by 17.7 per cent year-on-year in the third quarter of 2025, mainly supported by our re-exports to the US and regional economies such as Taiwan, Thailand, Hong Kong and Vietnam.

⁴ Another factor contributing to the stronger-than-expected GDP growth in the third quarter was the higher-than-expected level of production of a key high-value active pharmaceutical ingredient in the biomedical manufacturing cluster.

OUTLOOK FOR 2026

Looking ahead to 2026, GDP growth for most of Singapore's key trading partners is likely to be lower than that in 2025 as the impact of the US' tariffs is expected to be more pronounced. In particular, China's GDP growth is forecast to moderate on the back of slower exports growth and the boost provided by the consumer goods trade-in scheme fades. GDP growth in the Eurozone is also projected to slow as industrial activity weakens due to the US' tariffs. The slowdown in growth in major economies will moderate the demand for exports from Southeast Asia. Consequently, GDP growth among key Southeast Asian economies is expected to ease, although stable domestic demand should provide some support. Meanwhile, the US economy is expected to remain relatively resilient, supported by sustained AI-related investment even as domestic consumption growth moderates amidst cooling labour market conditions.

Downside risks remain in the global economy. First, while global economic uncertainty has receded since the first half of 2025, it remains elevated. A renewed escalation in tariff actions or geopolitical tensions could lead to a resurgence in economic uncertainty, which would weigh on sentiments and cause businesses and households to pull back on hiring, investment and spending. Second, an escalation in risk-off sentiments could trigger sharp corrections in global financial markets, with potential spillovers to broader economic growth.

Against this backdrop, the manufacturing and trade-related services sectors in Singapore are projected to expand at a slower pace in the year ahead compared to 2025. Within the manufacturing sector, the electronics cluster is expected to be supported by the demand for AI-related semiconductors, servers and server-related products. This will have positive spillover effects on the machinery, equipment & supplies segment of the wholesale trade sector. Meanwhile, the ongoing shift towards higher-value maintenance, repair & overhaul works in the aerospace segment as well as strong order books in the marine & offshore engineering segment will drive growth in the transport engineering cluster.

However, semiconductor equipment makers in the precision engineering cluster could face headwinds in the near term. In particular, semiconductor firms may take longer to commit to new capacity investments until there is greater certainty with respect to the US' tariffs on semiconductors. At the same time, output from the biomedical manufacturing cluster is expected to ease from the high levels seen in 2025.

Among the outward-oriented services sectors, both the information & communications and finance & insurance sectors are expected to register steady growth. This reflects resilient enterprise demand for digital solutions and services, and supportive financial and macroeconomic conditions respectively.

For domestically-oriented sectors, the construction sector is forecast to continue growing, supported by expansions in public residential building and civil engineering works. On the other hand, growth in consumer-facing sectors such as retail trade and food & beverage services is likely to remain subdued.

Taking these factors into account, the Singapore economy is expected to grow by **"1.0 to 3.0 per cent"** in 2026.



**FEATURE
ARTICLE**

ESTIMATING THE SPILLOVER EFFECTS FROM EDB-SUPPORTED FIRMS



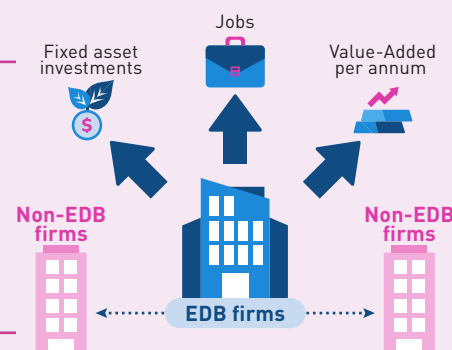


Feature Article

ESTIMATING THE SPILLOVER EFFECTS FROM EDB-SUPPORTED FIRMS

OVERVIEW

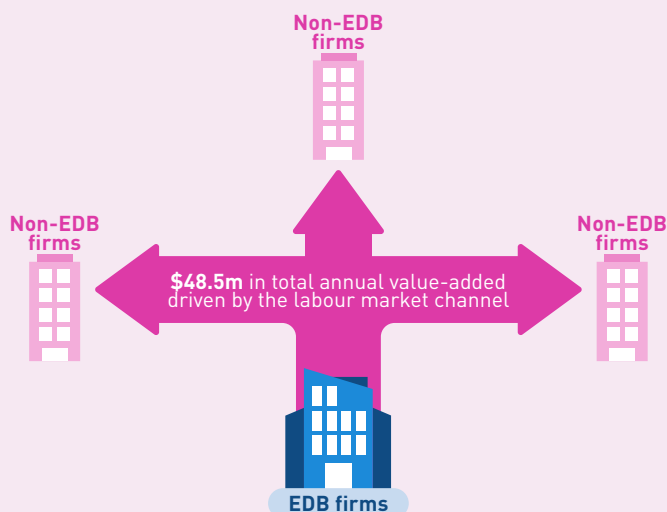
Singapore's Economic Development Board (EDB) was set up to undertake investment promotion and industry development. In 2024, EDB attracted \$13.5 billion in fixed asset investments, which are expected to create 18,700 jobs over the next five years and generate \$23.5 billion in value-added per annum (3.2% of nominal GDP in 2024). In addition to their direct contributions, EDB firms also have indirect spillover effects to the broader economy.



FINDINGS

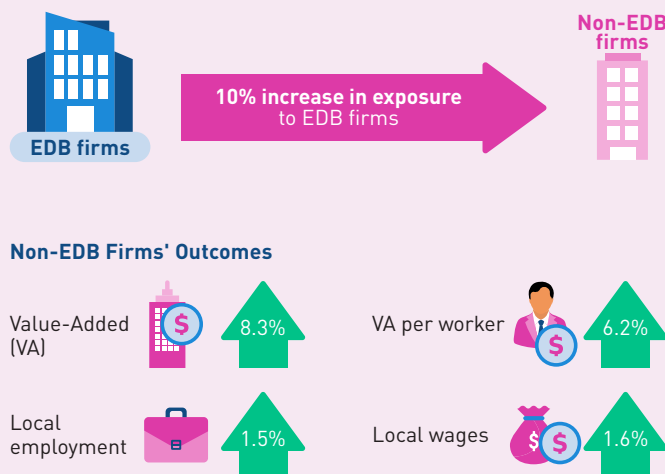
Finding 1:

Between 2012 and 2019, we estimate that the net spillover benefits that each EDB firm brought to non-EDB firms amounted to \$48.5 million in value-added annually. The positive spillover effects were driven largely by the labour market channel with EDB firms helping to improve the quality of the workforce in Singapore that in turn benefitted non-EDB firms.



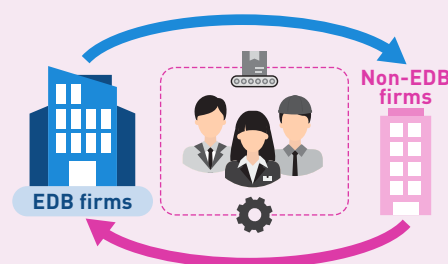
Finding 2:

Exposure to EDB firms was found to improve the performance of non-EDB firms across four outcomes. Specifically, a 10% increase in exposure to EDB firms improved the value-added (VA), VA per worker, local employment and local wages of non-EDB firms by 8.3%, 6.2%, 1.5% and 1.6% on average, respectively.



POLICY TAKEAWAY

There is scope for policymakers to explore mechanisms to strengthen the positive spillovers while mitigating the negative effects across the various spillover channels. This could include supporting capability building programmes for non-EDB firms and their employees to enhance their ability to attract skilled labour and benefit from knowledge spillovers through the labour market, while implementing supplier development initiatives to help them capitalise on increased business opportunities from EDB firms. This would ensure that Singapore captures maximum economic value from its strategic investments in high-quality firms.



EXECUTIVE SUMMARY

- The Economic Development Board (EDB)'s strategy of attracting foreign multinational corporations (MNCs) and developing high-potential local companies has generated economy-wide benefits. Besides their direct contributions to Singapore's economy, this study finds that EDB-supported firms (or EDB firms for short) also have net positive spillover effects on non-EDB firms.
- In particular, exposure to EDB firms was found to improve the performance of non-EDB firms across four outcomes. Specifically, a 10 per cent increase in exposure to EDB firms improved the value-added (VA), VA per worker, local employment and local wages of non-EDB firms by 8.3 per cent, 6.2 per cent, 1.5 per cent and 1.6 per cent on average, respectively. These positive spillover effects were driven largely by the labour market channel, with EDB firms helping to improve the quality of the workforce in Singapore that in turn benefitted non-EDB firms. By contrast, EDB firms had a small negative impact on non-EDB firms that were upstream to EDB firms (i.e., negative backward spillovers), likely reflecting constraints that limit non-EDB firms' ability to supply inputs to EDB firms and hence gain from the increase in demand generated by EDB firms.
- Overall, we estimate that between 2012 and 2019, the net spillover benefits that each EDB firm brought to non-EDB firms amounted to \$48.5 million in value-added (VA) annually. This represents 41 per cent of the total (i.e., direct and spillover) economic contributions of EDB firms to Singapore.
- While the overall net impact of EDB firms on non-EDB firms is positive, there is scope for policymakers to explore mechanisms to strengthen the positive spillovers while mitigating the negative effects across the various spillover channels. This could include supporting capability building programmes for non-EDB firms and their employees to enhance their ability to attract skilled labour and benefit from knowledge spillovers through the labour market, while implementing supplier development initiatives to help them capitalise on increased business opportunities from EDB firms. This would ensure that Singapore captures maximum economic value from its strategic investments in high-quality firms.

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 or the Government of Singapore¹

INTRODUCTION

In many countries, governments have comprehensive strategies to attract multinational companies (MNCs) as well as develop high-potential local companies in order to bring about economy-wide benefits. In Singapore, the Economic Development Board (EDB) was set up to undertake investment promotion and industry development. In 2024, EDB attracted \$13.5 billion in fixed asset investments, which are expected to create 18,700 jobs over the next five years and generate \$23.5 billion in value-added (VA) per annum (3.2 per cent of nominal GDP in 2024).

While the direct economic contributions of EDB-supported firms (or EDB firms for short) are clear, their indirect impact on the broader economy (i.e., non-EDB firms) has not been quantified previously. This study addresses this gap by estimating the indirect impact of EDB firms on non-EDB firms through various transmission channels.

¹ We would like to thank Ms Yong Yik Wei, Dr Andy Feng and Dr Kuan Ming Leong for their useful suggestions and comments, as well as the Singapore Economic Development Board (EDB) for their inputs to this study. All remaining errors belong to the authors.

LITERATURE REVIEW

Studies have found that MNCs generate direct and indirect benefits to the economy (Alfaro-Urena et al., 2021; Setzler and Tintelnot, 2021). Specifically on indirect benefits, a review of the literature suggests that there are various transmission channels through which MNCs could have an effect on other firms, such as the production, labour market and technology space channels.

For the production-related channels, a meta-analysis of studies on the spillovers from foreign direct investment (FDI) by Havranek and Irsova (2011, 2013) identified three commonly studied channels – horizontal, forward and backward spillovers. Horizontal spillovers refer to the effects of FDI on the outcomes of firms in the same industry, while forward and backward spillovers refer to the effects of MNCs on the outcomes of their customers and suppliers in other industries, respectively. Across these channels, studies have generally found the effects of horizontal and forward spillovers to be negligible, while that of backward spillovers to be positive and larger.

In Singapore, a study by Guo and Yuen (2012) on productivity spillovers from FDI to other manufacturing firms found that local-owned firms in industries that were upstream to foreign-owned firms were more likely to experience productivity gains (i.e., positive backward spillovers). At the same time, they found that the presence of foreign-owned firms had no clear productivity impact on local-owned firms in the same industry (i.e., insignificant horizontal spillovers).

Apart from the production-related channels, MNCs and other firms also interact in labour markets. A study by Alfareno et al. (2021) found that MNCs in Costa Rica had a positive impact on the wages of workers in other firms through their impact on labour demand. In particular, as MNCs offered jobs that paid a premium, they improved the outside options of workers in other firms by altering both the level and composition of labour demand. Finally, MNCs and local firms also interact in the technology space, where Bloom et al. (2013) found that positive knowledge spillovers dominated the negative effects of increased competition from their technological rivals.

While the existing literature provides valuable insights into the spillover effects of MNCs, most of these studies focussed on individual channels (e.g., labour market) or specific outcomes (e.g., productivity) in isolation. This fragmented approach may underestimate the net impact of MNCs as positive effects through one channel could offset the negative effects through another. Few studies have examined the relative importance of the different spillover channels or assessed the overall net impact of MNCs on the wider economy. Our study addresses these gaps by simultaneously estimating the effects of multiple spillover channels and quantifying MNCs' total economic contributions to Singapore.

In particular, this study estimates the impact of EDB firms on non-EDB firms through five spillover channels viz. i) labour market, ii) technology space, iii) horizontal spillovers, iv) backward spillovers, and v) forward spillovers. Exhibit 1 elaborates on these channels and their possible positive or negative effects.

Exhibit 1: Spillover channels from EDB firms to non-EDB firms**(i) Labour Market Spillovers**

- (+) Non-EDB firms benefit from direct knowledge transfers when they hire workers formerly from EDB firms, as well as from labour quality improvements in the ecosystem due to the presence of EDB firms.
- (-) Non-EDB firms face increased competition for labour and talent.

(ii) Technology Space Spillovers

- (+) Non-EDB firms improve their production and organisational processes by learning from EDB firms.
- (-) EDB firms face increased competition from EDB firms in the same technology space.

(iii) Horizontal Spillovers

- (+) Non-EDB firms in the same industry as EDB firms improve their competitiveness due to greater competitive pressures.
- (-) Non-EDB firms in the same industry as EDB firms lose market share amidst stiffer competition from EDB firms.

(iv) Backward Spillovers

- (+) Non-EDB firms that supply production inputs to EDB firms benefit from greater demand and new business opportunities.
- (-) Non-EDB firms in upstream industries closer to EDB firms may possess less market power in the sales of their output to EDB firms, potentially becoming price takers with reduced margins.

(v) Forward Spillovers

- (+) Non-EDB firms benefit from higher-quality production inputs supplied by EDB firms.
- (-) Non-EDB firms in downstream industries closer to EDB firms may possess less market power in their purchases of production inputs from EDB firms, potentially becoming price takers with higher input costs.

Note: The (+) and (-) symbols represent the potential positive and negative spillover effects from EDB firms to non-EDB firms through the respective channels.

DATA AND EMPIRICAL METHODOLOGY

Our study uses an anonymised dataset that tracks individual firms annually from 2011 to 2019. The dataset contains firm-level characteristics, such as the revenue of the firm, the remuneration paid out by the firm, the characteristics of the employees in the firm, and the industry that the firm is in. This dataset is supplemented by EDB data on the firms that it supports, and IPOS and Orbis data on patent applications in Singapore.

Using a similar approach as Bloom et al. (2013), we compute a spillover variable, which measures the exposure of each non-EDB firm (n) to all EDB firms (e). Each spillover variable is constructed with three component variables:

$$\text{Spillover variable}_{n,t} = \sum_e (\text{EDB support}_{e,t} \times \text{firms' closeness}_{n,e,t} \times \text{duration of exposure}_{n,e,t})$$

EDB Support

This is a dummy variable² that denotes whether the EDB firm received any form of government support³ (i.e., monetary or non-monetary). This is to capture when the EDB firm was likely to have started generating spillovers to the non-EDB firms.

Firms' Closeness

This component measures the distance between each non-EDB firm (n) and each EDB firm (e) for the channel being examined [Exhibit 2]. The variable is constructed such that a higher value indicates a greater degree of closeness between the non-EDB firm (n) and EDB firm (e).

Duration of Exposure

This component measures the overlap in the years of establishment between the non-EDB firm (n) and each EDB firm (e), and ranges from 0-1.⁴






2 This variable equals to 1 starting from the first year a firm appears in EDB's list of supported firms and remains equal to 1 in subsequent years. Otherwise, the variable equals 0.

3 Government support can be in the form of monetary (i.e., grants and tax incentives) and/or non-monetary support (e.g., business facilitation services such as providing information on doing business in Singapore, connecting firms with potential partners and providing insights on the region).

4 Specifically, the duration of exposure is capped at 1 if the EDB firm is older and will be less than 1 if the EDB firm is younger.

The product of these three component variables (viz. EDB support, firms' closeness and duration of exposure) is then summed across all EDB firms (e) for each non-EDB firm (n) such that the resulting spillover variable measures the "exposure" of each non-EDB firm to all EDB firms. Intuitively, the greater the "exposure" that a non-EDB firm has to EDB firms, the more likely that the presence of the EDB firms would have spillover impact on the firm. As there are five spillover channels in which to measure firms' closeness, we construct five different spillover variables.

Exhibit 2: Measure of distance between each non-EDB firm and each EDB firm for the five spillover channels⁵

	Labour Market Spillovers Correlation between each non-EDB firm and EDB firm based on the composition of their workforce across 40 bands (age, gender and wages)
	Technology Space Spillovers Correlation between each non-EDB firm and EDB firm based on the distribution of their patents across 35 technology classes
	Horizontal Spillovers Equals to 1 if the non-EDB firm and EDB firm are in the same industry in DOS' input-output (IO) tables and 0 otherwise (proxy for being in the same product market)
	Backward Spillovers Share of intermediate output of the non-EDB firm's IO industry that is <u>sold</u> to the EDB firm's IO industry (non-EDB firm is the seller)
	Forward Spillovers Share of intermediate inputs <u>purchased</u> by the non-EDB firm's IO industry from the EDB firm's IO industry (non-EDB firm is the buyer)

We use a fixed effects regression model to estimate the spillovers from EDB firms to non-EDB firms' outcomes: β_1, β_2

$$\begin{aligned}
 asinh(Y_{nt}) = & \beta_1 asinh(Labour\ Market\ spillover_{n,t}) \\
 & + \beta_2 asinh(Technology\ Space\ spillover_{n,t}) \\
 & + \beta_3 asinh(Horizontal\ spillover_{n,t}) \\
 & + \beta_4 asinh(Backward\ spillover_{n,t}) \\
 & + \beta_5 asinh(Forward\ spillover_{n,t}) \\
 & + \gamma X_{nt} + H_n + \theta_t + \varepsilon_{nt}
 \end{aligned}$$

Where:

- Y_{nt} is an outcome of non-EDB firm (n) in time t . The outcomes examined are value-added (VA), productivity (VA per worker), local employment and local wage outcomes;
- $spillover\ variable_{nt}$ measures the exposure of non-EDB firm (n) to all EDB firms (e). As explained earlier, there are five different spillover variables;
- X_{nt} is a vector of non-EDB firm (n)'s controls such as age, firm size and ownership;
- H_n denotes non-EDB firm (n) time-invariant firm fixed effects;
- θ_t is a vector of year dummies that captures effects that are common to all firms in the specific year; and
- ε_{nt} is the error term assumed to be uncorrelated with the independent variables in all time periods.

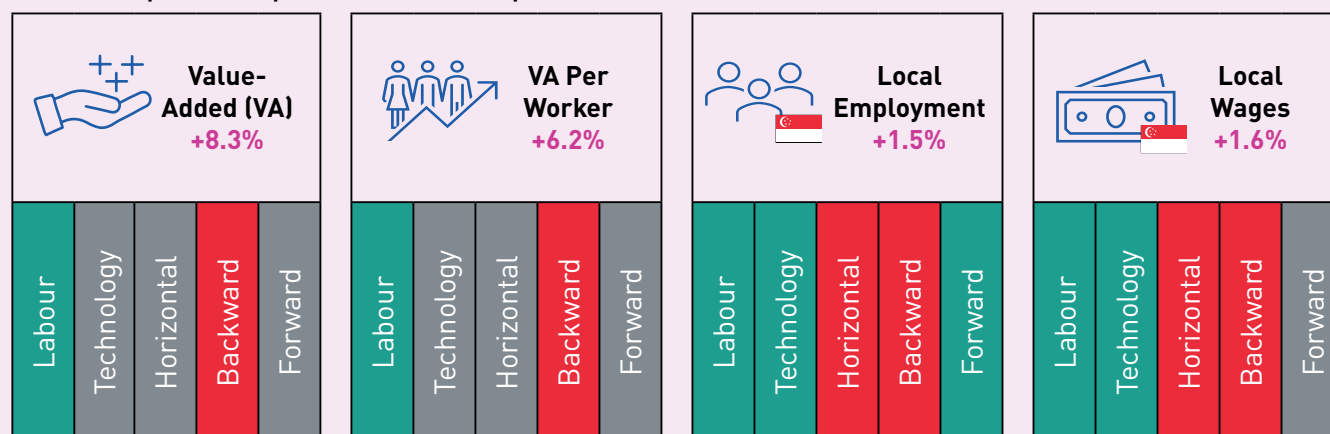
$\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 measure the impact of EDB firms collectively on the average outcomes of non-EDB firms through the five spillover channels.

⁵ Ideally, we should use firm-to-firm transaction data to measure the closeness of firms. However, comprehensive data of such nature does not exist in Singapore. As such, we develop proxies to measure the closeness of firms across the five spillover channels in line with the academic literature.

RESULTS AND DISCUSSION

Our results show that greater exposure to EDB firms improved the performance of non-EDB firms across all four outcomes. In particular, a 10 per cent increase in exposure to EDB firms improved the VA, VA per worker, local employment and local wages of non-EDB firms by 8.3 per cent, 6.2 per cent, 1.5 per cent and 1.6 per cent on average, respectively [Exhibit 3].⁶

Exhibit 3: Impact of a 10 per cent increase in exposure to EDB firms on non-EDB firms' outcomes



Note: Green and Red denote channels that had statistically significant positive and negative spillover effects respectively. Grey denotes spillover channels that had statistically insignificant results.

The effects of the various spillover channels varied depending on the outcome of interest.

For VA and VA per worker, the net positive spillover impact of EDB firms was driven by the labour market channel, suggesting that the positive effect of workforce quality improvements resulting from the EDB firms' presence outweighed the negative effect of increased competition for talent for non-EDB firms. Conversely, the backward spillover effect was negative, indicating that non-EDB firms in upstream industries closer to EDB firms could have experienced reduced margins from their sales of output to EDB firms due to weaker market power, which more than offset the gains from the increase in demand generated by EDB firms. The remaining three channels were not statistically significant.

For local employment, the impact of the labour market and backward spillover channels were in the same direction as that found for the VA and VA per worker outcomes. However, the other three channels became statistically significant, with the technology space and forward spillover channels turning positive, and the horizontal spillover channel turning negative. The positive effect from the technology space channel indicates that exposure to EDB firms allowed non-EDB firms to improve their production and organisational processes to a greater extent than any negative competition effects arising from operating in the same technology space as the EDB firms. Similarly, the positive forward spillover effect suggests that non-EDB firms on net benefitted from the higher-quality inputs supplied by EDB firms. On the other hand, the horizontal spillover channel exerted a negative impact on non-EDB firms, suggesting that market share losses arising from stiffer competition against EDB firms in the same industry was the dominant effect.

For local wages, the impact of the various channels was directionally similar to that for employment. Overall, the net positive impact of EDB firms on non-EDB firms was driven by positive effects through the labour market and technology space channels, even as the backward and horizontal spillover channels exerted a negative impact. However, the forward spillover channel was no longer statistically significant.

⁶ The 10% increase is applied on all five spillover variables. The net impact on each outcome is calculated by summing the statistically-significant coefficients of the spillover variables in the respective regressions.

Across all four outcomes, the labour market channel was consistently positive while the backward spillover channel was consistently negative. For the latter, this may reflect various constraints that limit non-EDB firms' ability to supply inputs to EDB firms, including their inability to meet required specifications, relative lack of competitiveness compared to overseas suppliers, and mismatches in resource profiles for manufacturing activities. At the same time, the effects of the remaining three channels were mixed or limited. In particular, the weak impact of the horizontal and forward spillover channels may reflect EDB firms' outward-orientation towards global markets, which tends to reduce both direct competition with non-EDB firms and the scope for EDB firms to supply inputs to non-EDB firms.

At the aggregate level, the net positive spillover effects translate into substantial economic benefits for Singapore. Between 2012 and 2019, we estimate that EDB firms contributed to an increase in the VA of non-EDB firms as a whole by around \$48.5 million per EDB firm annually. This accounted for 41 per cent of the total (i.e., direct and spillover) economic contributions of EDB firms.

CONCLUSION

Overall, our results suggest that EDB's strategy of attracting foreign MNCs while developing high-potential local companies has led to substantial economy-wide benefits. The positive spillover effects generated by EDB firms were primarily through the labour market channel, which suggests that EDB firms had contributed to raising the quality of workers in the broader ecosystem. Crucially, the positive effects from improved workforce quality significantly outweighed the negative effects from the increased competition for labour, resulting in a net benefit to Singapore's economy.

Nevertheless, significant opportunities remain to enhance these benefits and address the weaker spillover channels. To maximise the labour market channel's positive impact, policymakers should support capability building programmes for non-EDB firms and their employees to enhance their ability to attract skilled labour and benefit from knowledge spillovers through the labour market. This targeted approach would amplify the positive labour market spillover effects and strengthen Singapore's broader business ecosystem.

Equally important is the need to address the weaker spillover channels that currently limit the full potential of EDB firms' contributions. In particular, for the backward spillover channel, where non-EDB firms do not seem to have been able to benefit from increased demand opportunities generated by EDB firms, targeted supplier development initiatives could enhance non-EDB firms' capabilities and competitive position. This would in turn help them to better capitalise on the increased demand from EDB firms.

These complementary approaches would ensure that Singapore captures the maximum economic value from its strategic investments in attracting high-quality firms, and transform the current spillover patterns to benefit the entire economy.

Contributed by:

Ms Tan Yen Ling
Senior Economist
Formerly in Economics Division
Ministry of Trade and Industry

Mr Muhammad Bin Rahmat
Lead Economist
Economics Department
Ministry of Manpower

Dr Gwee Yi Jie
Senior Lead Economist
Formerly in Economics Division
Ministry of Trade and Industry

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100 High Street, #09-01 The Treasury
Singapore 179434

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