Economic Survey of SINGAPORE

SECOND QUARTER 2017

MTI MINISTRY OF TRADE AND INDUSTRY SINGAPORE

August 2017

Ministry of Trade and Industry
Republic of Singapore

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SHOP

MAIN INDICATORS OF THE SINGAPORE ECONOMY

OVERALL ECONOMY

	1Q17	2Q17
Real GDP (Year-on-Year Growth)	+2.5%	+2.9%
GDP at Current Market Prices	$105.9 billion	$105.2 billion

PRICES

(Year-on-Year Growth)	1Q17	2Q17
Consumer Price Index - All Items	+0.6%	+0.8%
Domestic Supply Price Index	+13.5%	+6.7%

LABOUR MARKET

	1Q17	2Q17
Change in Employment (Quarter-on-Quarter)	-6.8 thousand	-7.8 thousand
Overall Unemployment Rate	2.2%	2.2%
Value-added per Worker (Year-on-Year Growth)	2.4%	3.2%

COSTS

(Year-on-Year Growth)	1Q17	2Q17
Unit Labour Cost of Overall Economy	-0.1%	-0.1%
Manufacturing Unit Business Cost	+2.5%	+1.9%
Manufacturing Unit Labour Cost	-9.5%	-6.6%

MERCHANDISE TRADE

(Year-on-Year Growth)	1Q17	2Q17
Merchandise Exports	+17.1%	+8.3%
Merchandise Imports	+15.7%	+11.0%

SERVICES TRADE

(Year-on-Year Growth)	1Q17	2Q17
Services Exports	+3.9%	+4.9%
Services Imports	+4.3%	+4.9%

CHAPTER 1
Economic Performance

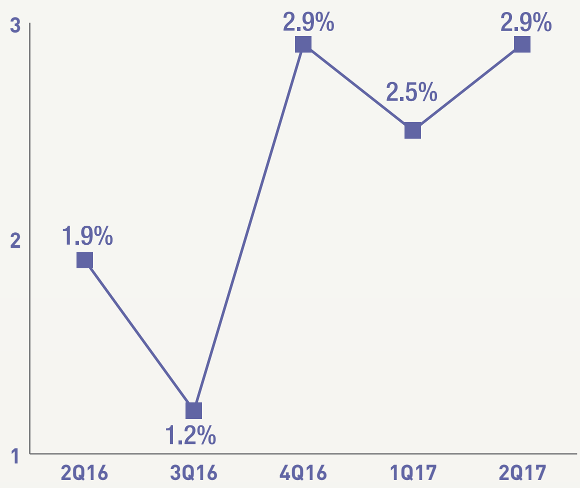
CHAPTER 1
THE SINGAPORE ECONOMY

ECONOMIC PERFORMANCE

Real GDP grew by

2.9% in 2Q17

Quarterly Growth (Year-on-Year)



Main Drivers of Growth in 2Q17

MANUFACTURING

1.5%-point contribution

FINANCE & INSURANCE

0.5%-point contribution

In total, these sectors accounted for

68% of GDP growth

LABOUR MARKET

RESIDENT UNEMPLOYMENT RATE

3.1% in 2Q17

EMPLOYMENT (Q-O-Q CHANGE)

-7,800 employed

Sectors with the Highest Employment Growth in 2Q17

+5,900 employed	+3,000 employed	+1,200 employed
OTHER SERVICES INDUSTRIES	TRANSPORTATION & STORAGE	INFORMATION & COMMUNICATIONS

PRODUCTIVITY

VALUE-ADDED PER WORKER (Y-O-Y GROWTH)

+3.2%

Sectors with the highest Value-added per Worker Growth in 2Q17

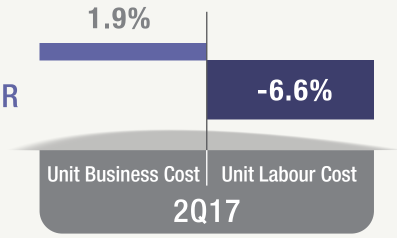
+11.8%	+2.6%
MANUFACTURING	WHOLESALE & RETAIL TRADE

COSTS

Overall Unit Labour Cost declined by

0.1% in 2Q17

WITHIN THE MANUFACTURING SECTOR



PRICES

The Consumer Price Index (CPI) rose by

0.8% in 2Q17

CATEGORIES WITH PRICE INCREASES

Quarterly Growth (Year-on-Year)

- TRANSPORT: 3.4%
- EDUCATION: 3.2%
- HEALTH CARE: 2.7%

CATEGORY WITH PRICE DECLINES

Quarterly Growth (Year-on-Year)

- HOUSING & UTILITIES: -2.2%

INTERNATIONAL TRADE

Total Merchandise Exports rose by

8.3% in 2Q17

- OIL DOMESTIC EXPORTS: +26.9%
- RE-EXPORTS: +7.1%
- NON-OIL DOMESTIC EXPORTS: +2.7%

Main Drivers of Services Export Growth were...

- TRANSPORT SERVICES: +6.6%
- TRAVEL: +11.2%
- OTHER BUSINESS SERVICES: +2.7%

OVERVIEW

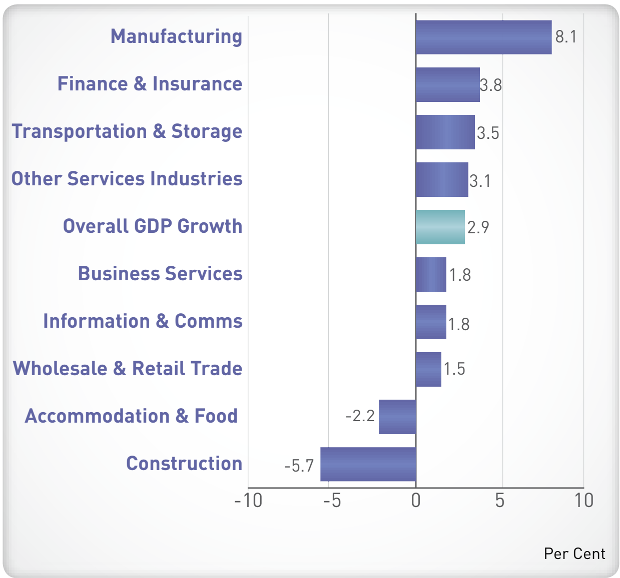
In the second quarter of 2017,

- The economy expanded by 2.9 per cent compared to the same period in 2016. The sectors that contributed the most to GDP growth were the manufacturing and finance & insurance sectors.
- In the labour market, the seasonally-adjusted unemployment rate for residents and citizens declined in June 2017 as compared to March 2017. Total retrenchments in the second quarter were also lower compared to the previous quarter and the same period a year ago.
- However, total employment contracted by 7,800 on a quarter-on-quarter basis, compared to the 4,200 increase in the same period a year ago. The contraction in employment was mainly due to a decrease in Work Permit Holders in the manufacturing and construction sectors.
- The Consumer Price Index rose by 0.8 per cent on a year-on-year basis, slightly faster than the 0.6 per cent increase in the previous quarter.

OVERALL PERFORMANCE

The economy grew by 2.9 per cent on a year-on-year basis in the second quarter, faster than the 2.5 per cent growth in the previous quarter (Exhibit 1.1). On a quarter-on-quarter seasonally-adjusted annualised basis, the economy expanded by 2.2 per cent, a reversal from the 2.1 per cent contraction in the preceding quarter.

Exhibit 1.1: GDP and Sectoral Growth Rates in 2Q 2017



The manufacturing sector continued to grow at a robust pace of 8.1 per cent, extending the 8.5 per cent expansion in the previous quarter. Growth was supported by the electronics, precision engineering and chemicals clusters. On the other hand, declines in the output of the biomedical manufacturing, transport engineering and general manufacturing clusters placed a drag on growth.

The services producing industries grew by 2.4 per cent, faster than the 1.4 per cent growth in the first quarter. Among the services sectors, the finance & insurance sector posted the strongest growth of 3.8 per cent, underpinned by the robust performance of the financial intermediation, fund management and insurance segments. This was followed by the transportation & storage (3.5 per cent) and "other services" (3.1 per cent) sectors. The business services (1.8 per cent), information & communications (1.8 per cent) and wholesale & retail trade (1.5 per cent) sectors similarly recorded expansions in the second quarter. On the other hand, the accommodation & food services sector contracted by 2.2 per cent, weighed down primarily by the food services segment.

Meanwhile, the construction sector shrank by 5.7 per cent, extending the 6.3 per cent contraction in the preceding quarter. The sector's poor performance was due to a weakness in both private sector and public sector construction activities.

The sectors that contributed the most to GDP growth in the second quarter were the manufacturing and finance & insurance sectors (Exhibit 1.2). Collectively, they accounted for 68 per cent of overall GDP growth during the quarter.

Exhibit 1.2: Percentage-Point Contribution to Growth in Real GDP in 2Q 2017 (By Industry)

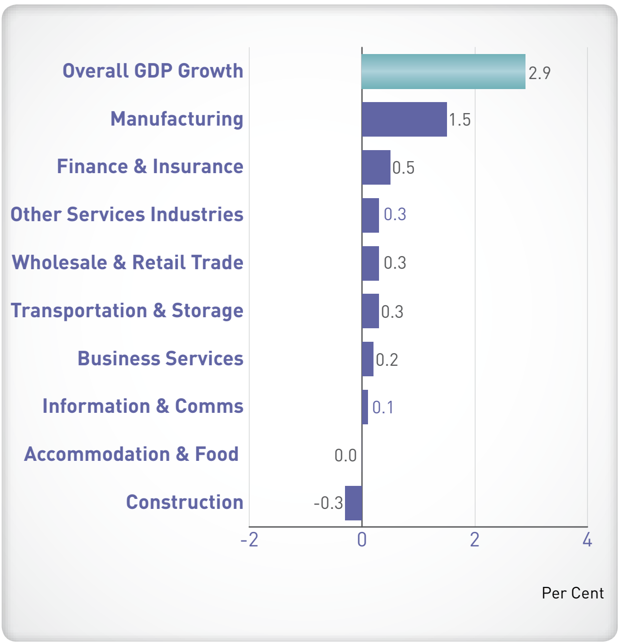


*Exhibit 1.3: Changes in Total Demand**

	2016			2017	
	II	III	IV	I	II
Total Demand	1.4	-0.7	2.8	3.9	**4.2**
External Demand	4.1	2.5	1.6	5.3	**3.1**
Total Domestic Demand	-5.9	-9.3	6.3	0.1	**7.6**
Consumption Expenditure	2.9	-0.1	-0.3	0.7	**1.1**
Public	10.1	-1.3	7.0	4.9	**5.3**
Private	1.2	0.2	-2.3	-0.7	**0.1**
Gross Fixed Capital Formation	1.4	-4.3	-5.0	-3.8	**-7.3**
Changes in Inventories	-5.9	-5.7	5.8	0.7	**6.5**

** For inventories, this refers instead to change as percentage of GDP in the previous year.*

SOURCES OF GROWTH

Total demand rose by 4.2 per cent in the second quarter, higher than the 3.9 per cent growth in the first quarter (Exhibit 1.3). The expansion in total demand was supported by both external and domestic demand. External demand rose by 3.1 per cent, moderating from the 5.3 per cent increase in the previous quarter. On the other hand, domestic demand increased at a faster pace of 7.6 per cent compared to the 0.1 per cent growth in the preceding quarter.

Domestic demand was driven primarily by a larger build-up in inventories. By contrast, gross fixed capital formation (GFCF) declined by 7.3 per cent, weighed down by declines in both private and public investments. In particular, private GFCF fell by 7.6 per cent, extending the 6.6 per cent contraction in the previous quarter. The fall in private GFCF was largely due to a decrease in investment spending on private construction & works and machinery & equipment. Meanwhile, public GFCF declined by 6.4 per cent, a reversal from the 5.2 per cent growth in the preceding quarter, weighed down primarily by a weakness in public construction & works.

In contrast to GFCF, consumption expenditure rose by 1.1 per cent in the second quarter, higher than the 0.7 per cent expansion in the previous quarter. Growth was supported by a 5.3 per cent increase in public consumption.

LABOUR MARKET

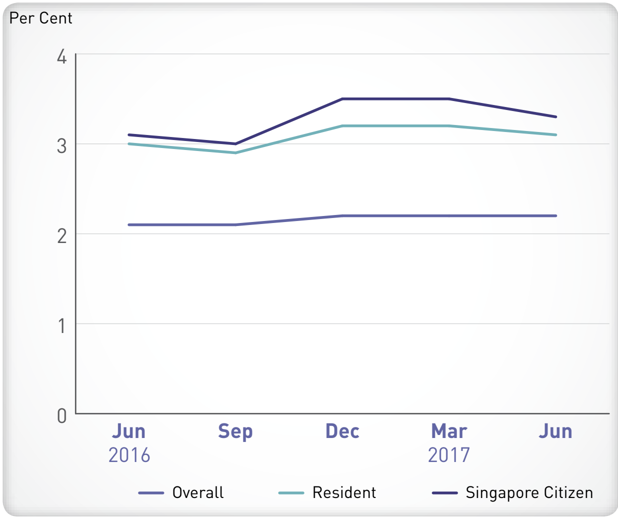
Unemployment and Retrenchment[1]

The seasonally-adjusted unemployment rate for residents fell to 3.1 per cent in June 2017 from 3.2 per cent in March 2017, while that for citizens declined to 3.3 per cent from 3.5 per cent. Over the same period, the overall unemployment rate remained unchanged at 2.2 per cent (Exhibit 1.4).

As at June 2017, an estimated 69,800 residents, including 62,800 Singapore citizens, were unemployed, lower than the number of unemployed residents (74,400) and citizens (67,100) in March 2017.[2]

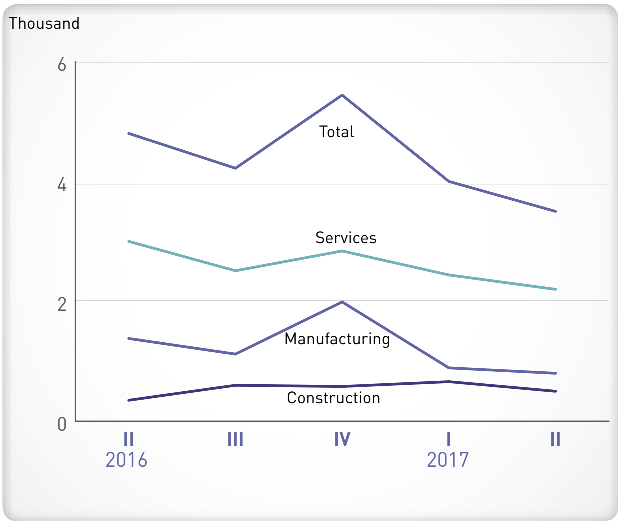
[1] *Figures pertain to private sector establishments with at least 25 employees and the public sector.*
[2] *Based on seasonally-adjusted data on number of unemployed persons.*

Exhibit 1.4: Unemployment Rate (Seasonally Adjusted)



Total retrenchments fell in the second quarter. Around 3,500 workers were retrenched during the quarter, fewer than that in the first quarter (4,000) and the same period a year ago (4,800). The decline seen over the quarter was broad-based, with retrenchments falling in the manufacturing (from 890 in the first quarter to 800 in the second quarter), construction (from 660 to 500) and services (from 2,440 to 2,200) sectors (Exhibit 1.5).

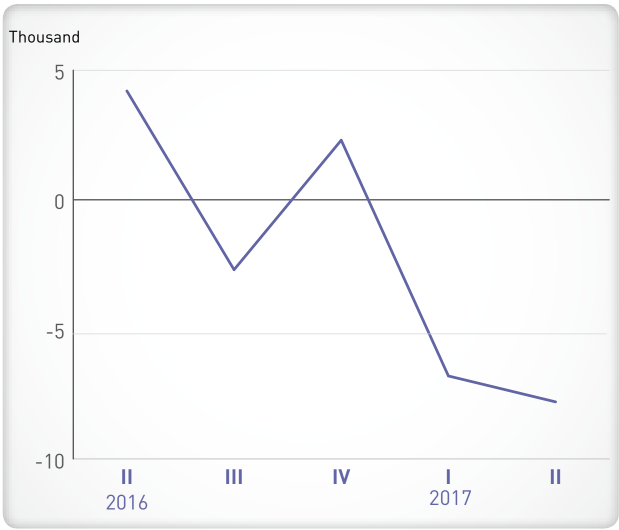
Exhibit 1.5: Retrenchments



Employment[3]

Total employment declined by 7,800 on a quarter-on-quarter basis in the second quarter, compared to the growth of 4,200 in the same period a year ago (Exhibit 1.6). Excluding foreign domestic workers (FDWs), employment declined by 8,400 in the second quarter, a reversal from the growth of 2,100 in the same period in 2016.

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

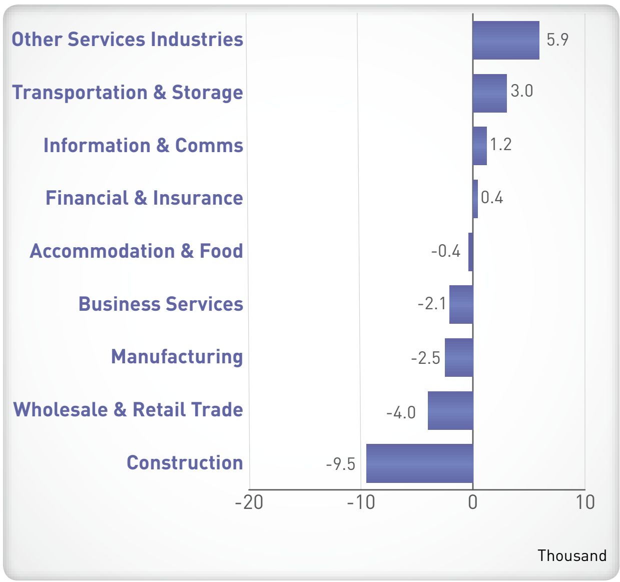


The decline in employment in the second quarter was mainly due to a continued decrease in Work Permit Holders in the manufacturing and construction sectors. Employment in the manufacturing sector fell by 2,500 in the second quarter, the eleventh consecutive quarter of decline, although this was a smaller contraction as compared to the previous quarter (-4,300). The weakness in manufacturing employment can primarily be attributed to the marine & offshore engineering segment, which continued to be weighed down by sluggish demand for oil rigs and oilfield equipment amidst low global oil prices. Employment in the construction sector also declined (-9,500) for the fourth consecutive quarter, due to continued weakness in construction activities (Exhibit 1.7).

The employment declines in the manufacturing and construction sectors were partially offset by employment gains in the services sectors (4,100). Among the services sectors, the other services (5,900), transportation & storage (3,000) and information & communications (1,200) sectors saw the strongest employment gains.

[3] *Based on preliminary estimates.*

Exhibit 1.7: Changes in Employment by Industry in 2Q 2017



Hiring Expectations

The hiring outlook of the manufacturing sector continued to be negatively affected by firms in the oil-related segments. According to EDB's latest Business Expectations Survey for the Manufacturing Sector, a net weighted balance of 5 per cent of manufacturers expected to hire fewer workers in the third quarter of 2017 as compared to the second quarter. The weak hiring sentiment was largely due to the marine & offshore engineering segment, where a net weighted balance of 26 per cent of firms expected lower levels of hiring. By contrast, firms in the machinery & systems and specialty chemicals segments were the most optimistic, with a net weighted balance of 10 per cent and 8 per cent of firms in the respective segments expecting to increase hiring in the third quarter.

Unlike the manufacturing sector, hiring expectations in the services sector were positive. According to DOS' latest Business Expectations Survey for the Services Sector, a net weighted balance of 6 per cent of services firms expected to increase hiring in the third quarter of 2017 as compared to the second quarter. In particular, a net weighted balance of 50 per cent of firms in the fund management segment and 29 per cent of firms in the other financial services as well as the food & beverage services segments expected to hire more workers.

COMPETITIVENESS

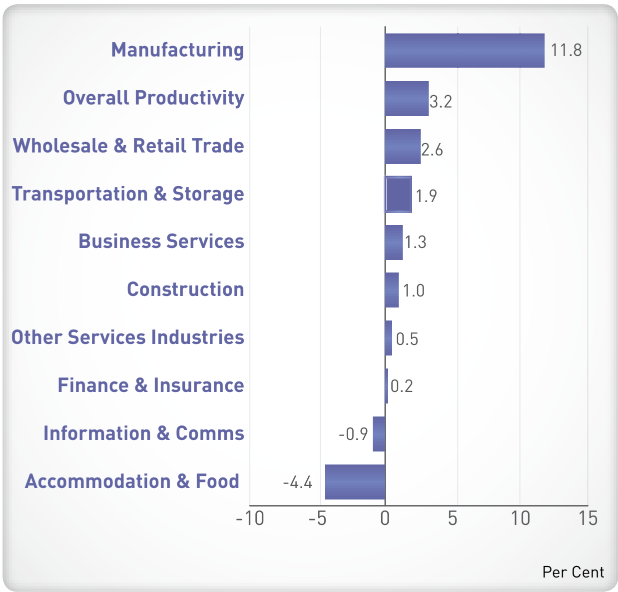
Productivity

Overall labour productivity, as measured by value-added per worker, increased by 3.2 per cent in the second quarter compared to the same period a year ago (Exhibit 1.8).

The manufacturing (12 per cent), wholesale & retail trade (2.6 per cent) and transportation & storage (1.9 per cent) sectors saw the highest productivity growth rates. By contrast, the accommodation & food (-4.4 per cent) and information & communications (-0.9 per cent) sectors experienced declines in productivity.

Outward-oriented sectors as a whole registered higher productivity growth than domestically-oriented sectors. Compared to the same period last year, the productivity of outward-oriented sectors grew by 5.2 per cent in the second quarter, while that of domestically-oriented sectors improved by 0.4 per cent.[4]

Exhibit 1.8: Changes in Value-added per Worker for the Overall Economy and Sectors in 2Q 2017



[4] *Based on MTI estimates. Outward-oriented sectors refer to manufacturing, wholesale trade, transportation & storage, accommodation, information & communications, finance & insurance and professional services. Domestically-oriented sectors refer to construction, retail trade, food & beverage services, other business services and other services industries.*

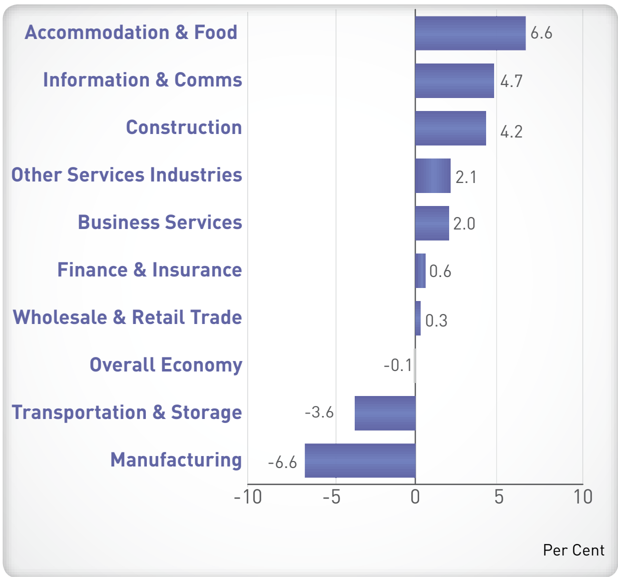
Unit Labour Cost and Unit Business Cost

Overall unit labour cost (ULC) for the economy fell by 0.1 per cent in the second quarter, unchanged from the previous quarter (Exhibit 1.9). The decline in the overall ULC was due to positive labour productivity growth that exceeded the increase in labour cost per worker.

By sectors, the ULC for the manufacturing sector fell by 6.6 per cent, the sixth consecutive quarter of decline, on the back of strong productivity gains.

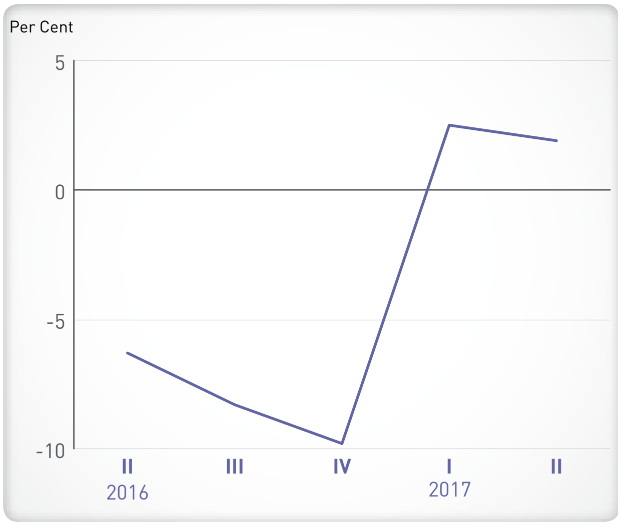
On the other hand, the ULC for services producing industries increased by 1.4 per cent. All the services sectors, with the exception of transportation & storage, saw increases in their respective ULCs. Construction ULC also edged up by 4.2 per cent, as the rise in total labour cost per worker outpaced labour productivity growth for the sector.

Exhibit 1.9: Changes in Unit Labour Cost in 2Q 2017



Unit business cost (UBC) for the manufacturing sector rose by 1.9 per cent in the second quarter, lower than the 2.5 per cent increase in the previous quarter (Exhibit 1.10). The smaller rise in manufacturing UBC was mainly due to a slower 5.1 per cent increase in the unit services cost (which includes utilities and rental costs), as compared to the 8.1 per cent increase in the preceding quarter.

Exhibit 1.10: Changes in Unit Business Cost for Manufacturing

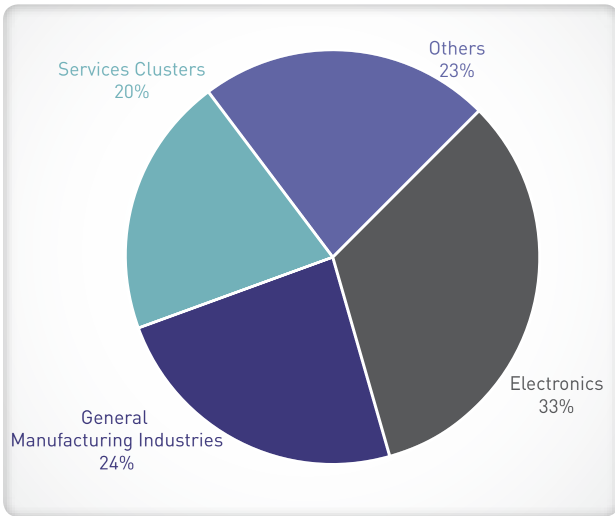


Investment Commitments

Investment commitments in terms of total Fixed Asset Investments (FAI) and Total Business Expenditure (TBE) amounted to $4.0 billion and $2.4 billion respectively in the second quarter (Exhibit 1.11 and Exhibit 1.12).

In terms of FAI, the largest contribution came from the electronics cluster, which garnered $1.3 billion in commitments, mainly from the semiconductors segment. This was followed by the general manufacturing industries cluster, which attracted $0.9 billion in commitments. Investors from Europe contributed the most to FAI commitments, accounting for $1.6 billion (40 per cent) of total FAI commitments.

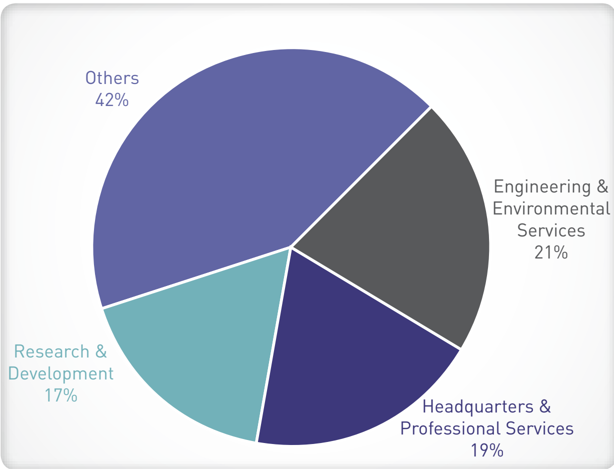
Exhibit 1.11: Fixed Asset Investments by Industry Cluster in 2Q 2017



In terms of TBE, the engineering & environmental services cluster attracted the highest amount of commitments at $507 million, followed by the headquarters & professional services cluster at $452 million. Investors from the United States were the largest source of TBE, accounting for $0.9 billion (40 per cent) of total TBE committed.

When fully realised, these commitments are expected to generate value-added of $5.7 billion and more than 8,100 jobs.

Exhibit 1.12: Total Business Expenditure by Industry Cluster in 2Q 2017

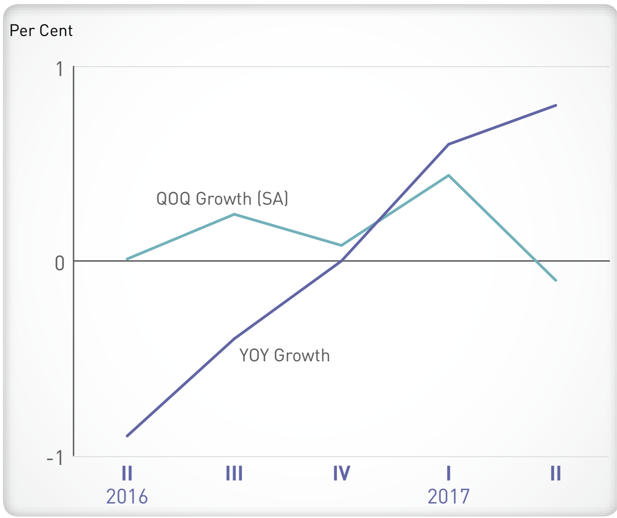


PRICES

Consumer Price Index

The Consumer Price Index (CPI) increased by 0.8 per cent on a year-on-year basis in the second quarter, slightly faster than the 0.6 per cent increase in the first quarter (Exhibit 1.13). On a quarter-on-quarter seasonally-adjusted basis, the CPI edged down by 0.1 per cent, after increasing by 0.4 per cent in the preceding quarter.

Exhibit 1.13: Changes in CPI



Among the CPI categories, the largest positive contributor to headline inflation in the second quarter was transport costs, which rose by 3.4 per cent on a year-on-year basis (Exhibit 1.14). In particular, while bus & train fares fell, private road transport costs picked up on the back of higher petrol prices, car & motorcycle prices and vehicle repair & maintenance fees, as well as the expiry of the road tax rebate and the rise in parking charges. Food prices rose by 1.4 per cent due to price increases for hawker food and restaurant meals, as well as non-cooked food items such as fruits and fish & seafood.

At the same time, education costs increased by 3.2 per cent on account of higher fees at commercial institutions, universities, polytechnics, childcare centres and kindergartens. Healthcare costs went up by 2.7 per cent due to more expensive hospital and outpatient services. Clothing & footwear costs rose by 1.4 per cent because of price increases for ready-made garments and footwear. The prices of household durables & services picked up by 0.6 per cent as a result of higher salaries for foreign domestic workers. Communications costs edged up by 0.4 per cent due to the higher cost of telecommunication services. Lastly, the prices of miscellaneous goods & services increased slightly by 0.1 per cent on account of a rise in the cost of personal effects items.

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

	2016			2017	Per Cent
	II	III	IV	I	II
All items	-0.9	-0.4	0.0	0.6	**0.8**
Food	2.2	2.1	2.0	1.5	**1.4**
Clothing & Footwear	0.6	-1.6	-0.2	-0.9	**1.4**
Housing & Utilities	-4.2	-4.3	-3.8	-3.2	**-2.2**
Household Durables & Services	2.3	3.1	2.6	1.7	**0.6**
Health Care	0.9	0.6	2.1	2.7	**2.7**
Transport	-5.2	-1.6	0.1	3.8	**3.4**
Communication	-0.5	0.8	-0.6	0.3	**0.4**
Recreation & Culture	1.2	1.1	0.9	0.4	**0.0**
Education	3.2	3.4	3.2	3.6	**3.2**
Miscellaneous Goods & Services	0.4	0.0	0.1	-0.1	**0.1**

The price gains in these CPI categories were partially offset by the 2.2 per cent fall in the cost of housing & utilities. The fall in housing & utilities cost in turn came on the back of a decline in accommodation costs which outweighed the rise in the cost of electricity & gas, housing maintenance charges and refuse collection fees.

On the other hand, the cost of recreation & culture was unchanged as the higher cost of holiday travel was fully offset by the fall in the prices of audio-visual & information processing equipment.

INTERNATIONAL TRADE

Merchandise Trade

Singapore's total merchandise trade increased by 9.5 per cent year-on-year in the second quarter, slower than the 16 per cent expansion in the preceding quarter (Exhibit 1.15). The expansion in trade was due to growth in both oil and non-oil trade. Total oil trade increased by 28 per cent in nominal terms on the back of a rise in oil prices from levels a year ago, while non-oil trade rose by 5.9 per cent.

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

	2016				2017	Per Cent
	II	III	IV	Ann	I	II
Merchandise Trade	-6.0	-6.6	4.0	-4.9	16.4	**9.5**
Merchandise Exports	-4.8	-4.5	2.1	-5.1	17.1	**8.3**
Domestic Exports	-5.0	-8.0	7.6	-5.8	29.3	**9.4**
Oil	-18.0	-13.7	20.2	-12.6	72.0	**26.9**
Non-Oil	1.2	-5.4	2.7	-2.8	15.3	**2.7**
Re-Exports	-4.6	-1.0	-2.4	-4.4	6.7	**7.1**
Merchandise Imports	-7.4	-9.1	6.1	-4.7	15.7	**11.0**
Oil	-29.2	-23.9	16.8	-20.6	89.8	**33.0**
Non-Oil	-0.7	-4.9	3.9	-0.6	3.2	**6.2**

Total merchandise exports rose by 8.3 per cent in the second quarter, extending the 17 per cent increase in the preceding quarter. This marked the third consecutive quarter of growth, and was due to an increase in domestic exports and re-exports of 9.4 per cent and 7.1 per cent respectively.

The increase in domestic exports was in turn due to an expansion in both oil and non-oil domestic exports. In particular, oil domestic exports grew by 27 per cent in the second quarter amidst higher oil prices as compared to a year ago. In volume terms, oil domestic exports also rose, but by a smaller 5.1 per cent.

Non-oil domestic exports (NODX) expanded by 2.7 per cent in the second quarter, slowing from the robust 15 per cent growth in the previous quarter. The expansion was due to the growth in electronics NODX which outweighed the decline in non-electronics NODX.

Total merchandise imports rose by 11 per cent in the second quarter, following the 16 per cent increase in the previous quarter. This was due to an increase in both oil and non-oil imports. Specifically, oil imports increased by 33 per cent on the back of higher oil prices and higher import volumes. Meanwhile, non-oil imports rose by 6.2 per cent, driven by an increase in both electronics and non-electronics imports.

Services Trade

Total services trade increased by 4.9 per cent in the second quarter, up from the 4.1 per cent growth in the previous quarter (Exhibit 1.16). Services exports rose by 4.9 per cent, higher than the 3.9 per cent growth in the preceding quarter. The gains in services exports can be attributed to an increase in transport, travel, and other business services exports. Services imports also grew by 4.9 per cent, picking up from the 4.3 per cent growth in the previous quarter. The rise in services imports was mainly due to increases in the imports of transport and other business services, as well as payments for the use of intellectual property.

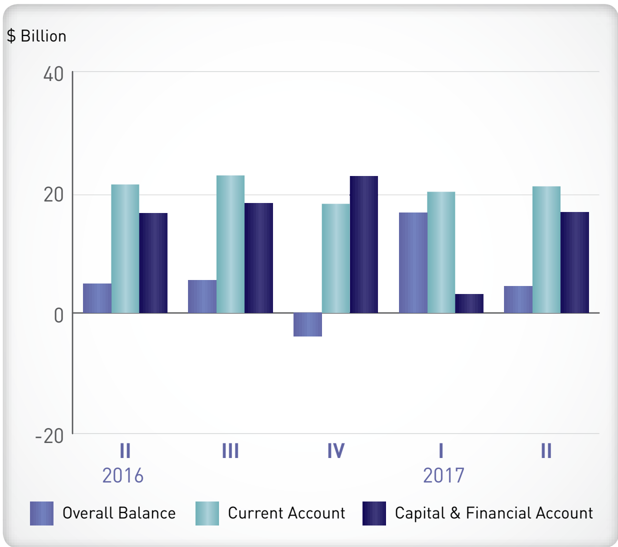
Exhibit 1.16: Growth Rates of Total Services Trade, Services Exports and Services Imports (In Nominal Terms)

						Per Cent
	2016				2017	
	II	III	IV	Ann	I	II
Total Services Trade	1.4	0.4	3.4	1.2	4.1	**4.9**
Services Exports	2.0	0.6	3.1	1.2	3.9	**4.9**
Services Imports	0.9	0.2	3.7	1.2	4.3	**4.9**

BALANCE OF PAYMENTS

The overall balance of payments recorded a smaller surplus of $4.4 billion in the second quarter, compared to $17 billion in the first quarter (Exhibit 1.17). This occurred as the increase in net outflows from the capital and financial account outweighed the increase in the current account surplus.

Exhibit 1.17: Balance of Payments[5]



Current Account

The current account surplus rose to $21 billion in the second quarter, from $20 billion in the previous quarter. This was due to an increase in the goods surplus, which more than offset higher deficits in both the primary and secondary income accounts. Meanwhile, the services balance deficit was relatively stable.

The surplus in the goods balance increased by $1.8 billion to $29 billion in the second quarter, as goods exports rose more than imports.

By contrast, the deficit in the primary income balance widened from $1.5 billion to $2.1 billion in the second quarter, largely reflecting a rise in income payments abroad.

At the same time, the deficit in the services balance was stable at around $2.4 billion. Although net receipts from financial and insurance services rose, these were largely offset by higher net payments for travel, transport, other business services, as well as charges for the use of intellectual property.

[5] Decrease in assets and liabilities, and 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".

Capital and Financial Account

Net outflows from the capital and financial account rose to $17 billion in the second quarter, from $3.1 billion in the preceding quarter. Portfolio investment turned from net inflows to net outflows, while net inflows of direct investment and financial derivatives declined. These outweighed the decrease in the net outflows of "other investment".

The portfolio investment account recorded $18 billion of net outflows in the second quarter, a reversal from the $0.5 billion of net inflows in the preceding quarter. This largely reflected the increase in domestic deposit-taking corporations' net purchases of foreign securities, as well as the switch by the non-bank private sector from net divestments to net acquisitions of foreign securities.

Meanwhile, net inflows of direct investment fell by $7.1 billion to $13 billion in the second quarter, as the decrease in foreign direct investment into Singapore exceeded the decline in residents' investment abroad.

In comparison, net outflows from the "other investment" account fell to $19 billion in the second quarter from $34 billion in the previous quarter. This was mainly driven by the decrease in net outflows from both domestic deposit-taking corporations and the non-bank private sector.


SHOP

BOX ARTICLE 1.1

Box 1.1: Singapore's Corporate Sector: Recent Trends in Firm Formation and Cessation

The corporate landscape in Singapore consists of business entities such as companies, partnerships, sole proprietorships, limited liability partnerships (LLP) and limited partnerships (LP), with each business entity differing in terms of its legal structure.[1] In general, it is cheaper and easier to set up and maintain a business (comprising sole-proprietorships and partnerships) than a company. First, businesses pay a lower registration fee as compared to companies.[2] Second, they have simpler statutory obligations, unlike companies which have to comply with statutory standards such as the filing of annual returns, which may include financial statements, with the Accounting and Corporate Regulatory Authority (ACRA), among others.

Companies and businesses are the two dominant types of business entities in Singapore

In tandem with economic growth, the total stock of business entities in Singapore has risen steadily over the years. Between 2010 and 2016, the total number of business entities increased by a compounded annual growth rate (CAGR) of 4.3 per cent to reach 480,000 in December 2016 (Exhibit 1A).

Exhibit 1A: Stock* of Business Entities, 2010-2016

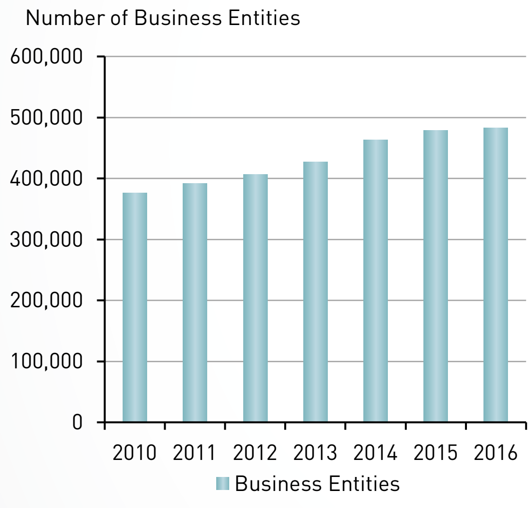
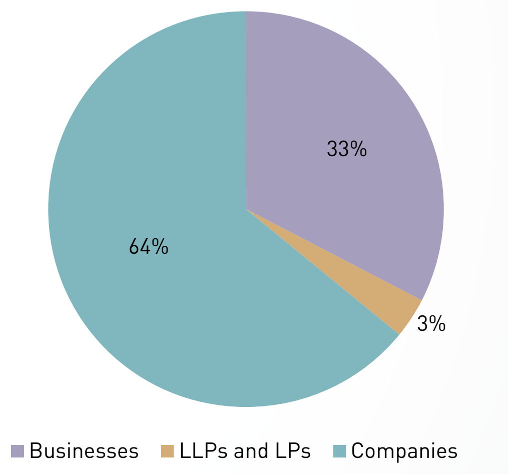


Exhibit 1B: Share of Business Entities by Type, 2016



Source: ACRA
*Stock figures are as at December of each year

[1] Briefly, a company is a business entity incorporated under the Companies Act consisting of at least (i) one director, (ii) one secretary and (iii) one member. On the other hand, a business is an entity formed either as a sole-proprietorship or partnership consisting of two to twenty members. In terms of liability, a company is a separate legal entity, which means that its directors and members are generally not personally liable for the debts and obligations incurred by the company. On the other hand, business owners are generally accountable for any obligations borne by the business. A more detailed comparison of the different types of business entities in Singapore can be found on ACRA's website (www.acra.gov.sg).

[2] The registration fee for setting up a company is $300, while that for businesses is $100.

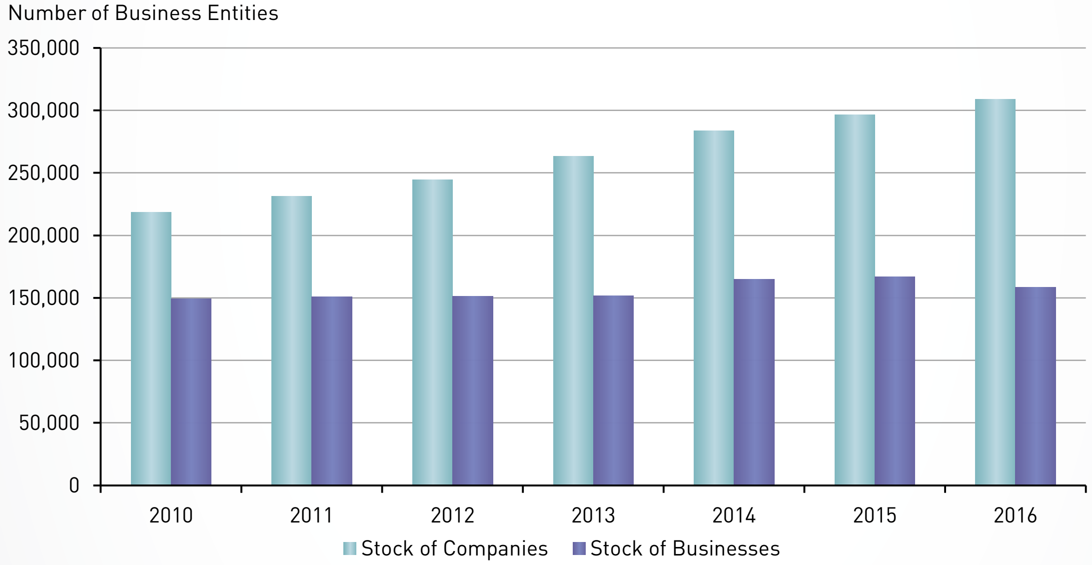
The large majority of business entities in Singapore are companies and businesses. As at 2016, companies and businesses made up around 64 per cent and 33 per cent of total business entities respectively (Exhibit 1B). The remaining 3 per cent of business entities comprise LLPs and LPs. Given the dominant share of companies and businesses in our corporate landscape, the rest of this article focuses on recent trends in the formation and cessation of companies and businesses based on data from ACRA.[3]

The stock of both companies and businesses has generally increased over the years, although there was a slight dip in the stock of businesses in 2016

Over the 2010 to 2016 period, the stock of companies has grown at a healthy rate of 6.0 per cent on a CAGR basis (Exhibit 2). The rising stock of companies is reflective of the positive net flows of companies annually, with the number of new companies formed exceeding the number of companies that ceased operations every year between 2010 and 2016.

As for businesses, the stock of businesses remained stable from 2010 to 2013, before rising in 2014. The increase in the stock of businesses in 2014 was due to robust business formation, even as business cessation remained stable. However, on the back of slower economic growth in 2015 and 2016, business cessation picked up pace while the number of new businesses formed declined. This led to the stock of businesses dipping slightly in 2016.

Exhibit 2: Stock* of Companies and Businesses, 2010-2016



Source: ACRA
*Stock figures are as at December of each year

The following sections describe the formation and cessation trends for companies and businesses in greater detail.

The number of new companies and businesses formed in Singapore has remained healthy in recent years

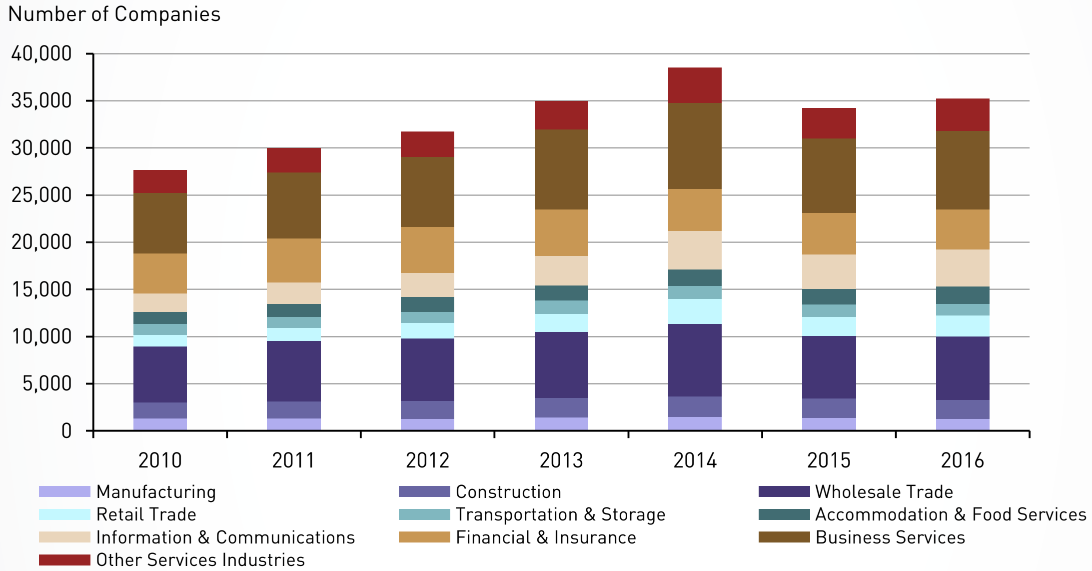
The formation of new companies and businesses is an important indicator of economic health. In particular, the creation of new firms leads to the generation of new jobs and investments. A high level of firm entry may also reflect strong entrepreneurial activities, which could in turn bring about greater experimentation and the introduction of innovative technologies, processes and business models. Collectively, these would contribute to an economy's competitiveness and dynamism.

[3] The analysis is based on the latest data available, which is published on the Department of Statistics' website (www.tablebuilder.singstat.gov.sg). The statistics on the cessation of business entities have been revised to provide a more accurate reflection of the cessation trends. An explanation of the revisions made can be found on the Department of Statistics' website.

Between 2010 and 2016, the number of new companies formed in Singapore grew by 4.1 per cent on a CAGR basis. Notably, the number of new companies formed rose steadily from 2010 to a record high of 38,480 in 2014, before moderating in 2015 and 2016 in tandem with a slowdown in the economy. Notwithstanding the moderation, company formation in 2015 and 2016 remained healthy, with an average of 34,740 new companies formed annually, higher than the historical average of 32,570 per annum over the preceding five years from 2010 to 2014 (Exhibit 3).

In terms of sectors, the business services, wholesale trade and information & communications sectors were the main contributors to overall company formation over the period of 2010 to 2016. In 2016 alone, the number of new companies in the business services and wholesale trade sectors grew by 5.5 and 2.6 per cent respectively. The increase in the number of companies formed in the business services sector was in turn driven by robust company formation in the professional, scientific & technical activities segment. Similarly, the number of companies formed in the information & communications sector rose by 7.9 per cent. Growth was mainly driven by new companies in the IT & information services industry, underscoring the increasing prominence of the digital economy.

Exhibit 3: Number of Companies Formed by Sectors, 2010 – 2016



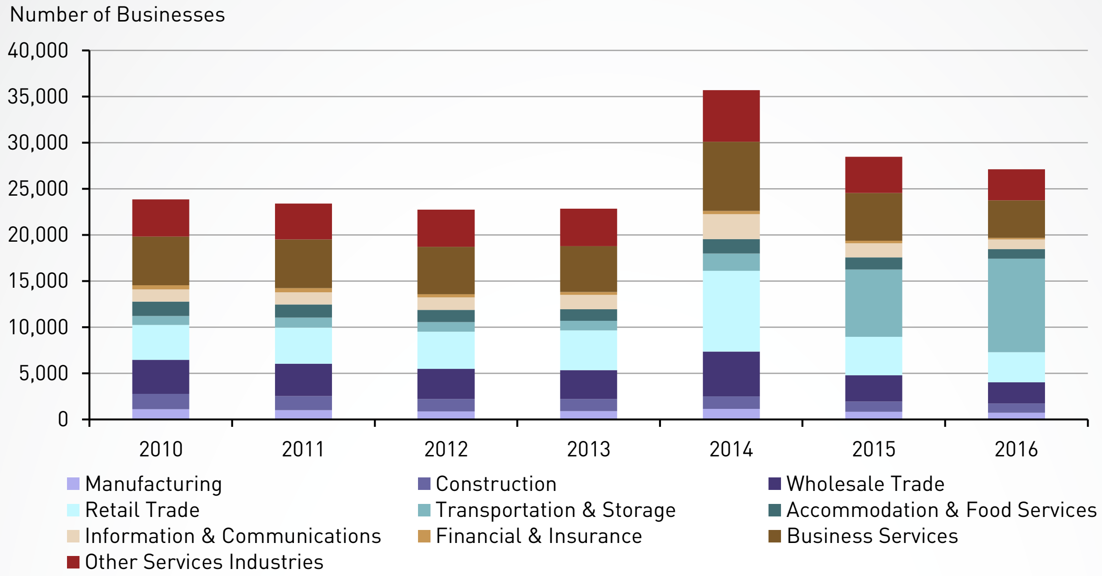
Source: ACRA

Turning to businesses, the number of new businesses formed rose at a CAGR of 2.2 per cent between 2010 and 2016. Following stable business formation trends between 2010 and 2013, business formation spiked in 2014 before moderating in 2015 and 2016. However, notwithstanding the decline in business formation in 2015 and 2016, the average number of new businesses formed annually in the two years, at 27,800, was still higher than the annual average of 25,700 seen over the period of 2010 to 2014 (Exhibit 4).

At a sectoral level, business formation trends for the various sectors were relatively stable between 2010 and 2013, with the retail trade and information & communications sector contributing the most to overall business formation. The sharp increase in overall business formation in 2014 was mainly due to new businesses being formed in the retail trade sector, including a mixture of brick-and-mortar and online shops (104 per cent). By 2015 and 2016, business formation in the retail trade sector has moderated, in part due to headwinds facing the sector given sluggish sales and labour constraints. This contributed to the bulk of the decline in overall business formation during this period. Other key contributors to the decline in overall business formation were the business services and wholesale trade sectors. By contrast, the number of new businesses in the transportation & storage sector surged by close to 300 per cent and 39 per cent in 2015 and 2016 respectively. This was in turn driven by new businesses entering the land transport segment, likely due to new business registrations by drivers providing private car-hire services via platforms such as Uber and Grab.[4]

[4] *All cars used in the provision of a car hire service must be commercially registered under a business entity.*

Exhibit 4: Number of Businesses Formed by Sectors, 2010-2016



Source: ACRA

However, company and business cessations have seen an increase in recent years, in line with the economic slowdown and on-going economic restructuring

Firm cessation is an inherent part of economic restructuring, in which unproductive firms exit the market, thus freeing up capital and labour so that they can be put to better use.[5] At the same time, changes in firm cessation may also be a reflection of the business cycle, with firm exits increasing in tandem with weaker economic conditions.

In Singapore, the absolute number of company and business cessations has seen an increase since 2015, after remaining relatively stable in the preceding years (Exhibits 5A and 5B). As the increase in the cessation numbers could in part be a reflection of the larger stock of companies and businesses in the economy over time, especially in light of the strong formation trends in 2014, it would also be useful to examine how the cessation rate[6] of companies and businesses has changed over time (Exhibit 6).

Exhibit 5A: Number of Companies Ceased, 2010-2016

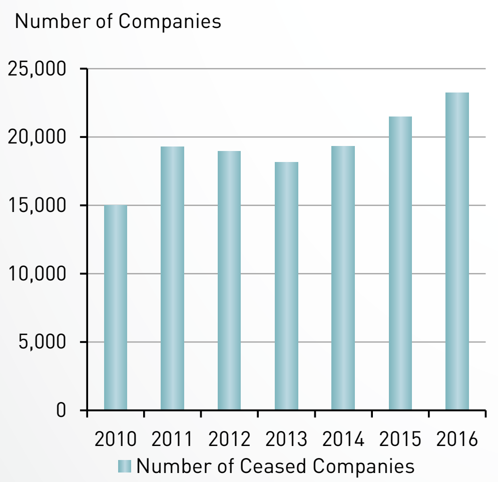
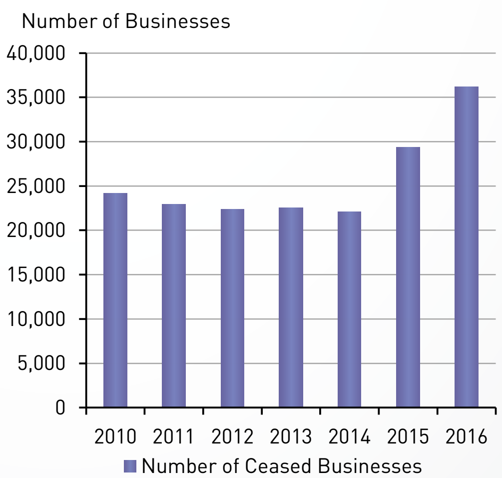


Exhibit 5B: Number of Businesses Ceased, 2010-2016

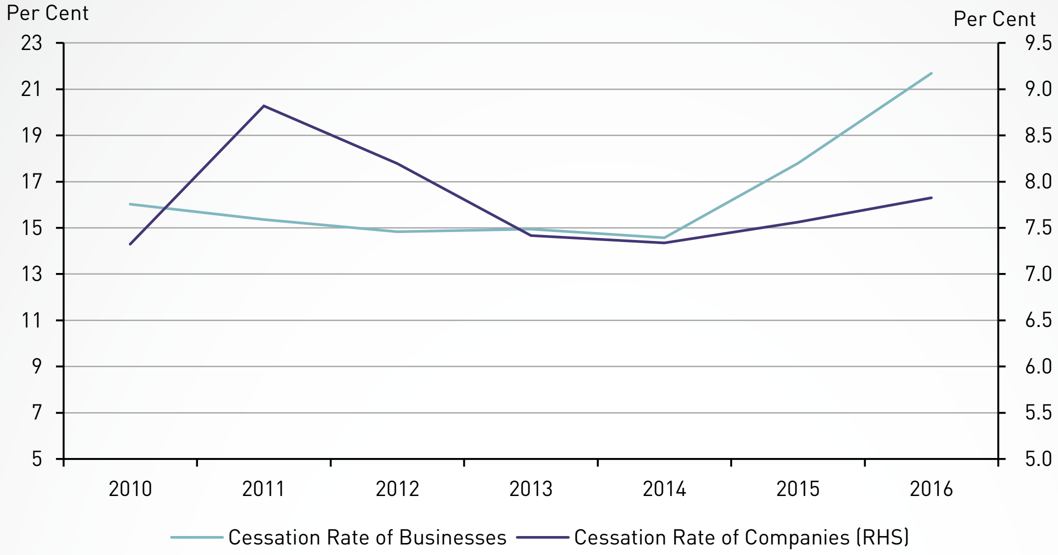


Source: ACRA

[5] *For instance, an earlier MTI study found that between 2009 and 2013, the firms that exited the manufacturing sector were less productive on average than the entering firms. (Source: "Firm Dynamics And Their Impact on Productivity Growth In The Manufacturing Sector", Economic Survey of Singapore, 2016)*

[6] *Cessation rate is calculated as the number of firms that had ceased in a particular year out of the total number of firms at the end of the preceding year.*

Exhibit 6: Cessation Rates of Companies and Businesses, 2010-2016



Source: MTI Estimates based on ACRA data

Based on the cessation rates, a few salient observations can be made.

First, the cessation rate of businesses over the 2010 to 2016 period is roughly double that for companies. The higher cessation rate may in part be explained by the nature and dynamics of businesses. For instance, due to the ease and lower cost of registering a business with ACRA, it is likely that entrepreneurs may register a business to experiment and test out a new concept, with many subsequently ceasing their operations if the concept does not work out.

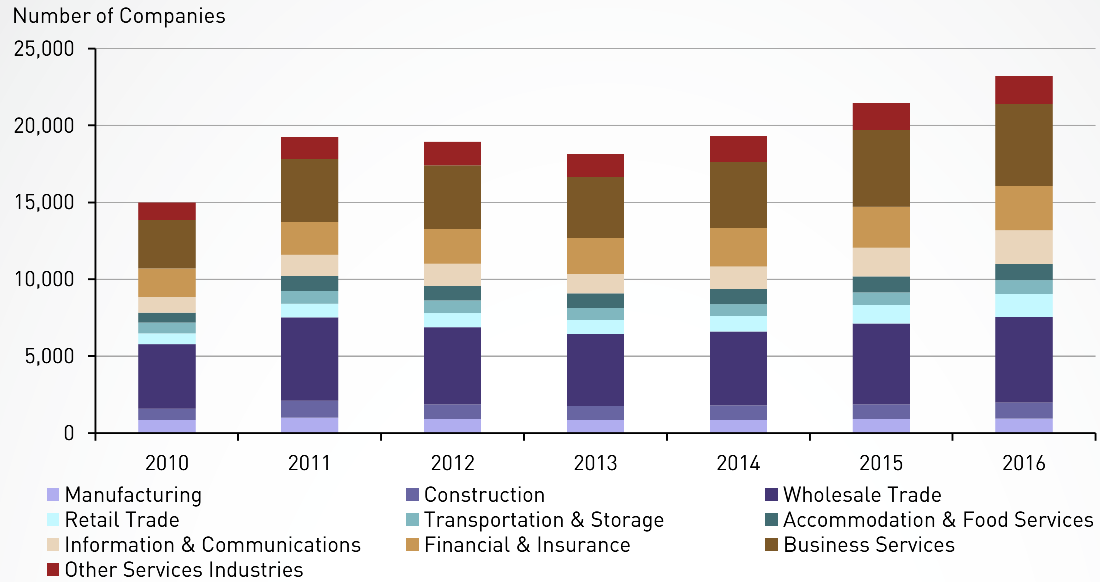
Second, there was a slight pickup in the cessation rate of companies in recent years, from 7.3 per cent in 2014 to 7.6 per cent in 2015 and further to 7.8 per cent in 2016. This could be due to the economic slowdown in 2015 and 2016, as well as on-going economic restructuring. Nonetheless, the cessation rate as at 2016 was still lower than the levels recorded in 2011 and 2012, suggesting that the overall corporate health of companies has not deteriorated significantly.

On the other hand, the cessation rate of businesses rose considerably in the last two years to reach 22 per cent in 2016. This suggests that businesses may be more vulnerable to economic slowdowns than companies, as they likely have weaker balance sheets and may lack access to financing to tide over a period of slower economic growth. This could be especially the case for younger businesses, as a significant proportion of the businesses that ceased operations in 2015 and 2016 were less than two years old.

The pickup in company and business cessation in 2015 and 2016 was seen across all sectors, with the retail trade sector being one of the more significant contributors to the increase

By sectors, the increase in company closures in 2015 and 2016 was broad-based, with all sectors recording a larger number of exits in these two years (Exhibit 7). In particular, the business services and wholesale trade sectors contributed the most to the overall increase in company cessation in the two years, with the number of company closures in these two sectors rising by 11 per cent and 7.9 per cent per annum on average respectively. Notably too, the number of company closures in the retail trade sector rose by 20 per cent per annum on average in 2015 and 2016, significantly higher than the 9.3 per cent seen in 2014.

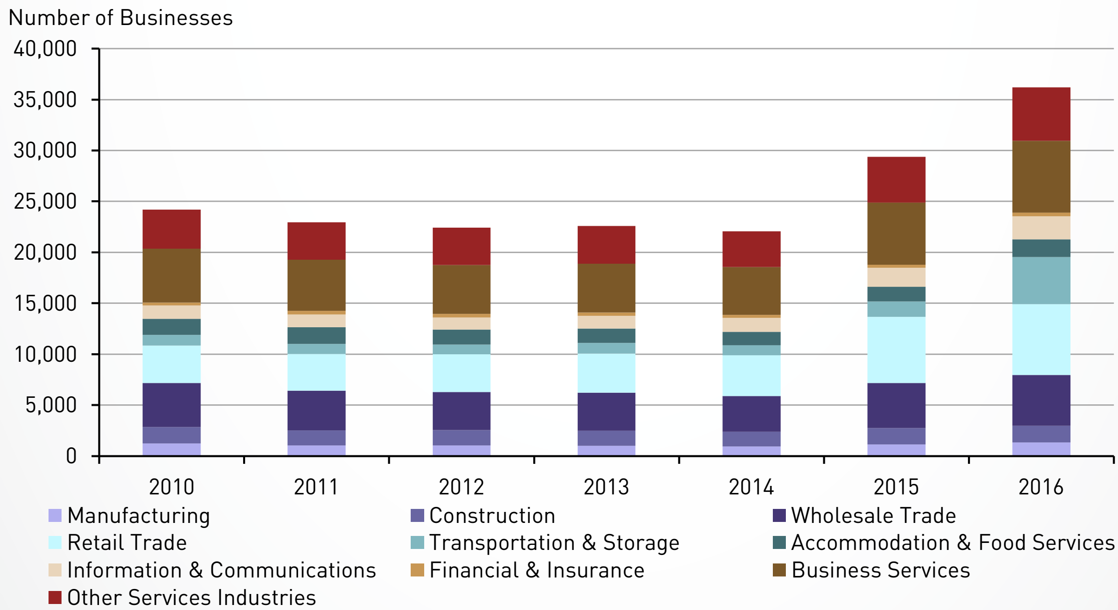
Exhibit 7: Number of Companies that Ceased by Sectors, 2010-2016



Source: ACRA

As for businesses, while all sectors saw a rise in business cessation in 2015 and 2016, most of the increase in overall business cessation in these two years could be attributed to the retail trade and transportation & storage sectors (Exhibit 8). The rise in business cessation in the retail trade sector reflects the sluggish business environment faced by retailers in recent years, and also comes on the back of the spike in the number of new businesses formed in the sector in 2014. On the other hand, the increase in the number of businesses that ceased operations in the transportation & storage sector could be due to the exits of drivers providing private car-hire services after having tried it out for one to two years.

Exhibit 8: Number of Businesses that Ceased by Sectors, 2010 – 2016



Source: ACRA

Conclusion

Notwithstanding the challenging business environment in recent years, the number of new companies and businesses created has remained at healthy levels. While the number of companies that ceased operations has risen since 2015, the cessation rate of companies has remained relatively stable, having seen only a slight pickup. On the other hand, businesses seem to be more vulnerable to the vagaries of the economic cycle, as observed by the larger increase in their cessation rate since 2015. Much of the increase in business cessation in the last two years can be attributed to the retail trade and transportation & storage sectors.

Looking ahead, the outlook for business entities in Singapore is expected to improve this year relative to 2016. Underscoring this, the latest SBF-DP SME Index, which tracks the sentiments of small- to medium-sized firms (SMEs) in Singapore, showed a modest uptick in business sentiments amongst SMEs for the second half of this year. Nevertheless, the Government will continue to closely monitor the health of the firms in our economy.

Contributed by:

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Economics Division
Ministry of Trade and Industry


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CHAPTER 2
Sectoral Performance

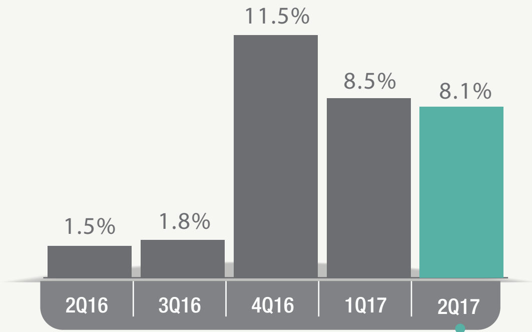
Image courtesy of Singapore Economic Development Board

CHAPTER 2

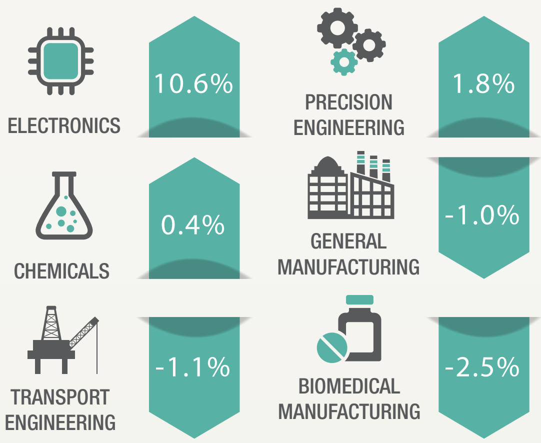
SECTORAL PERFORMANCE

MANUFACTURING

Real Growth

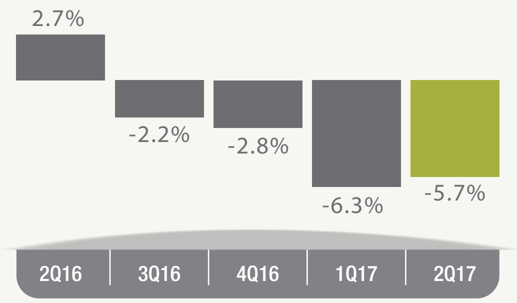


Clusters in Manufacturing Sector %-point contribution in 2Q17

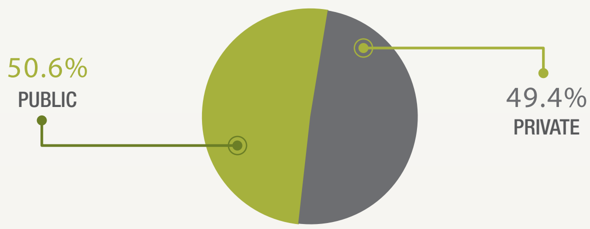


CONSTRUCTION

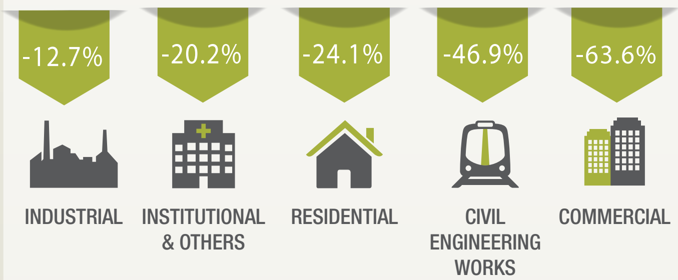
Real Growth



Certified Payments in 2Q17

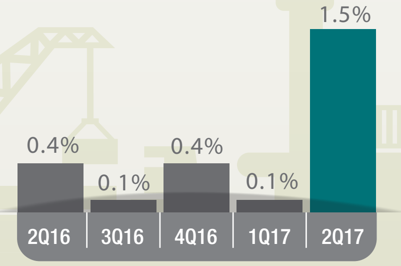


Contracts Awarded in 2Q17

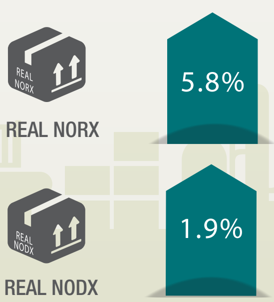


WHOLESALE & RETAIL TRADE

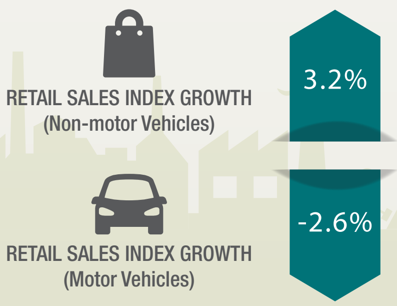
Real Growth



Wholesale Trade

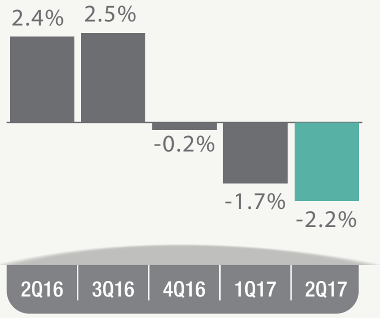


Retail Trade



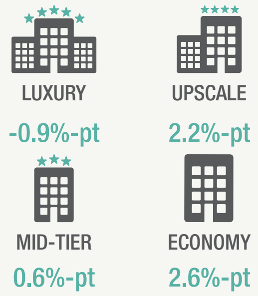
ACCOMMODATION & FOOD SERVICES

Real Growth



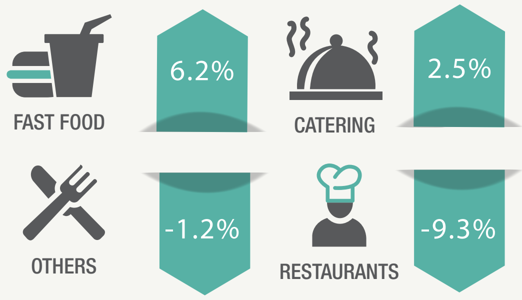
Accommodation

Occupancy rates of hotels
(Y-O-Y CHANGE)



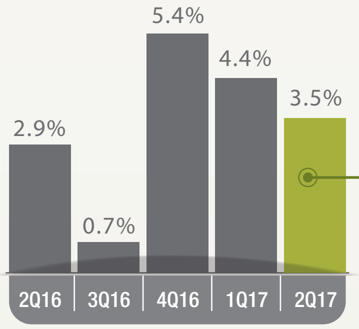
Food Services

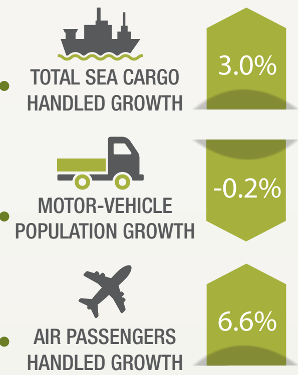
Performance of F&B (Sales growth)



TRANSPORTATION & STORAGE

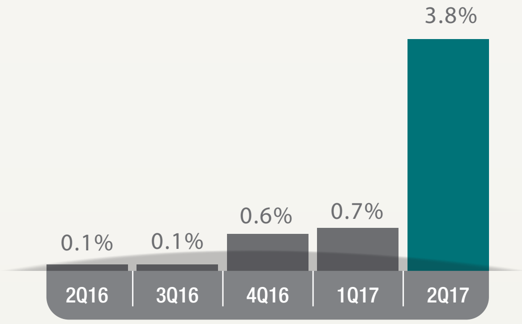
Real Growth



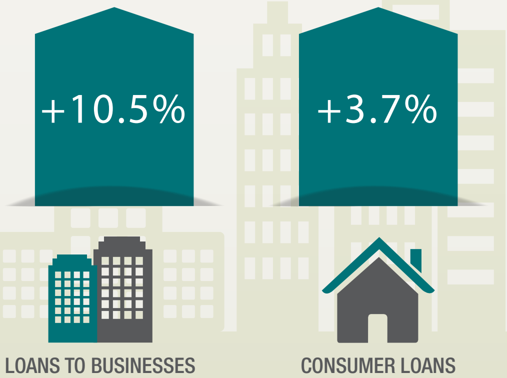


FINANCE & INSURANCE

Real Growth

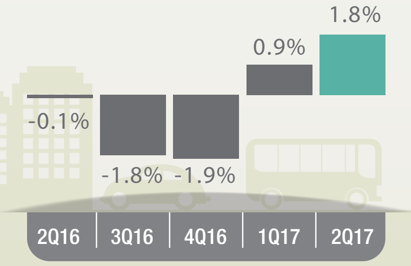


Growth of bank loans & advances to non-bank customers in 2Q17

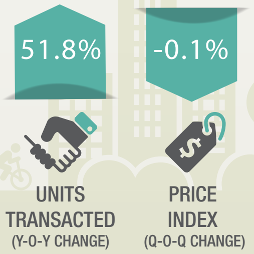


BUSINESS SERVICES

Real Growth



Private Residential Real Estate



OVERVIEW

In the second quarter of 2017,

- The manufacturing sector expanded by 8.1 per cent, extending the 8.5 per cent growth in the previous quarter. Growth was supported by higher output in the electronics, precision engineering and chemicals clusters. On the other hand, lower output levels in the biomedical manufacturing, transport engineering and general manufacturing clusters placed a drag on growth.

- The construction sector contracted by 5.7 per cent, extending the 6.3 per cent decline in the preceding quarter. The decline in construction output was due to weakness in both private sector and public sector construction activities.

- The wholesale & retail trade sector grew by 1.5 per cent, accelerating from the 0.1 per cent growth in the previous quarter. Growth was supported by expansions in both the wholesale trade and retail trade segments.

- The transportation & storage sector expanded by 3.5 per cent, moderating from the 4.4 per cent expansion in the previous quarter. Growth was supported by the water transport and air transport segments, which were in turn bolstered by an increase in the volume of sea cargo handled and air passenger traffic respectively.

- The accommodation & food services sector contracted by 2.2 per cent, extending the 1.7 per cent decline in the preceding quarter, weighed down primarily by the poor performance of the food services segment.

- Growth in the finance & insurance sector accelerated to 3.8 per cent, from 0.7 per cent in the first quarter. Stronger outturns in the financial intermediation, fund management and insurance segments contributed to higher growth in the sector.

- The business services sector grew by 1.8 per cent, faster than the 0.9 per cent expansion in the preceding quarter. Growth in the sector was supported primarily by the others and professional services segments.

MANUFACTURING

Manufacturing output increased by 8.1 per cent in the second quarter (Exhibit 2.1). This was due to output expansions in the electronics, precision engineering and chemicals clusters. On the other hand, declines in the output of the biomedical manufacturing, transport engineering and general manufacturing clusters weighed on the performance of the sector (Exhibit 2.2).

Exhibit 2.1: Manufacturing Sector's Growth Rates

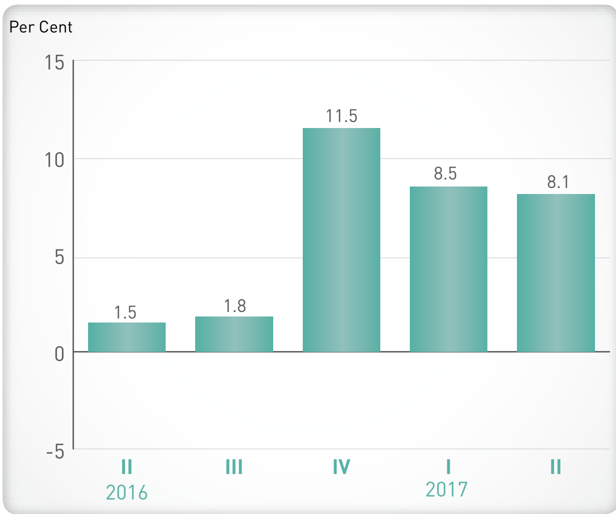
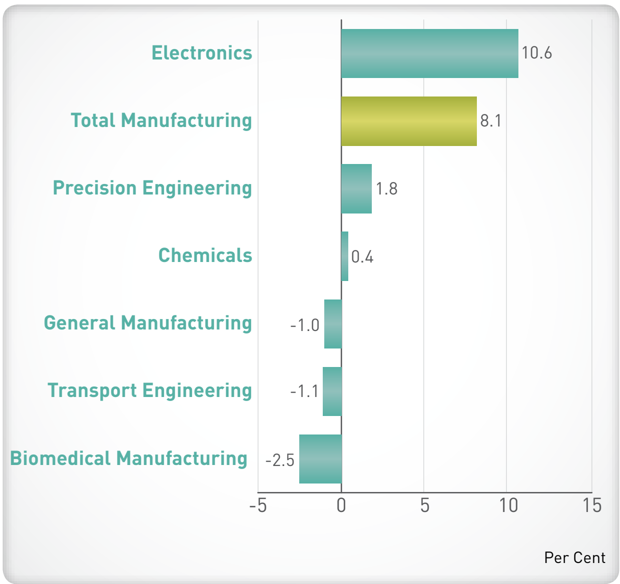


Exhibit 2.2: Percentage-Point Contribution to Manufacturing Sector's Growth in 2Q 2017



The output of the electronics cluster increased by 36 per cent in the second quarter, largely driven by the semiconductors segment, which recorded robust growth of 51 per cent. The strong performance of the semiconductors segment came on the back of a continued pickup in global semiconductor demand, supported in turn by an improved outlook for key end markets such as smartphone and automotive applications. Apart from the semiconductors segment, the computer peripherals (10 per cent), infocomms & consumer electronics (7.1 per cent), and other electronic modules & components (12 per cent) segments also saw output expansions during the quarter. On the other hand, output in the data storage segment declined by 23 per cent.

The precision engineering cluster expanded by 13 per cent in the second quarter, supported by both the machinery & systems (M&S) and precision modules & components (PMC) segments. Output in the M&S segment rose by 16 per cent, driven in part by strong demand for semiconductor-related equipment from U.S. and China. Meanwhile, the PMC segment grew by 7.7 per cent on account of a higher level of production of dies, moulds, tools, jigs & fixture and metal precision parts.

The output of the chemicals cluster increased by 4.3 per cent in the second quarter, supported by growth in all segments. The specialty chemicals (4.9 per cent) segment posted higher output on the back of robust export demand for mineral oil additives. Growth in the petrochemicals (4.7 per cent) segment, on the other hand, was largely on account of a low base in the second quarter of last year caused by plant maintenance shutdowns. At the same time, the other chemicals and petroleum segments grew by 2.7 per cent and 4.5 per cent respectively.

The output of the general manufacturing cluster fell by 8.5 per cent in the second quarter, with all segments recording declines. The miscellaneous industries (-12 per cent) segment recorded lower production of fibreglass products, metal doors, windows, grilles & gratings and other construction-related materials. Output in the food, beverages & tobacco segment declined by 4.0 per cent due to a drop in the production of soft drinks, while output in the printing segment fell by 14 per cent on account of a lower volume of print jobs.

The transport engineering cluster contracted by 7.4 per cent in the second quarter, as continued weakness in the marine & offshore engineering (M&OE) segment placed a drag on the cluster's performance. Output in the M&OE segment fell by 23 per cent as rig-building activities and demand for oilfield & gasfield equipment remained weak. In addition, the segment also recorded lower levels of shipbuilding and repair activities. The decline in output in the M&OE segment more than offset robust output expansions in the aerospace and land segments, at 11 per cent and 17 per cent respectively. The aerospace segment was in turn supported by a higher level of repair and maintenance activity for commercial airlines.

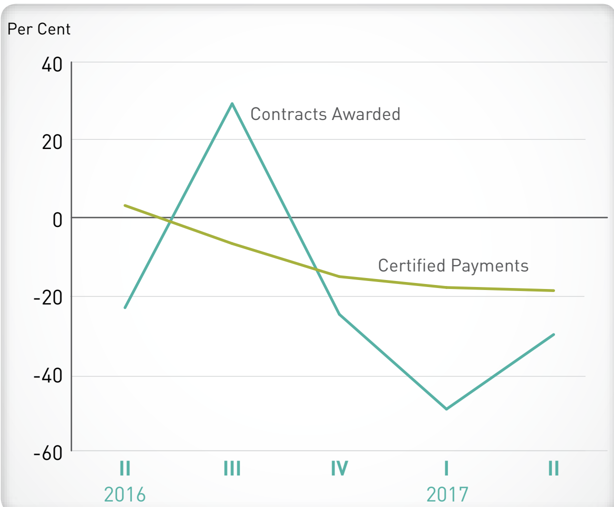
The biomedical manufacturing cluster shrank by 12 per cent in the second quarter. Within the cluster, the medical technology segment grew by 13 per cent on the back of higher export demand for medical devices. By contrast, the pharmaceuticals segment contracted by 18 per cent as the production of active pharmaceutical ingredients fell.

CONSTRUCTION

The construction sector contracted by 5.7 per cent in the second quarter, extending the 6.3 per cent decline recorded in the previous quarter. This was due to weakness in both private sector and public sector construction output.

Nominal certified progress payments (a proxy for construction output) fell for the fourth consecutive quarter in the second quarter, at a pace of 19 per cent, similar to the 18 per cent drop recorded in the preceding quarter (Exhibit 2.3). The decline was due to a contraction in both private and public certified progress payments. Private certified progress payments fell by 22 per cent, led by a slowdown in private industrial building works (-27 per cent) and private residential building works (-21 per cent). Public certified progress payments declined by 15 per cent on the back of weakness in public civil engineering works (-25 per cent) and public residential building works (-26 per cent), even as public institutional & other building works (8.8 per cent) and public industrial building works (28 per cent) provided some support.

Exhibit 2.3: Changes in Contracts Awarded and Certified Payments



Construction demand in terms of contracts awarded continued to weaken in the second quarter, decreasing by 30 per cent, extending the 49 per cent decline in the previous quarter (Exhibit 2.3). The fall was largely due to private sector construction demand, which slumped by 39 per cent as a result of lower demand for private industrial building works (-44 per cent) and private commercial building works (-72 per cent). Construction demand was also weighed down by public sector construction demand, which declined by 23 per cent on the back of lower demand for public civil engineering works (-56 per cent) and public institutional & other building works (-27 per cent). However, an increase in public industrial building contracts awarded helped to cushion the fall in public sector construction demand.

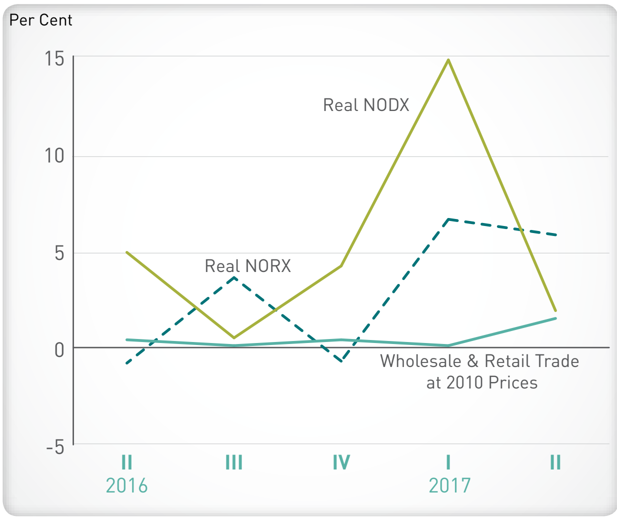
Notwithstanding the decline in total contracts awarded to-date, BCA expects construction demand to come in at $28 billion to $35 billion for the full year. At the lower bound of the range, a 7.4 per cent increase in construction demand from 2016's level is expected. The public sector is expected to account for approximately 70 per cent of total construction demand.

WHOLESALE & RETAIL TRADE

The wholesale & retail trade sector grew by 1.5 per cent in the second quarter, accelerating from the 0.1 per cent growth in the previous quarter (Exhibit 2.4). Growth was supported by both the wholesale trade and retail trade segments.

The wholesale trade segment grew on the back of an expansion in trade volumes in Singapore. Singapore's non-oil domestic exports (NODX) expanded by 1.9 per cent in volume terms in the second quarter, although this was slower than the 15 per cent growth in the preceding quarter. The increase in NODX was primarily driven by healthy growth in the domestic exports of machinery & equipment. Similarly, the volume of non-oil re-exports (NORX) rose by 5.8 per cent in the second quarter, following the 6.6 per cent expansion in the first quarter. The increase in NORX was supported by robust growth in the re-exports of machinery & equipment as well as chemicals & chemical products.

Exhibit 2.4: Changes in Wholesale & Retail Trade VA at 2010 Prices, Real NODX and Real NORX



For the retail trade segment, overall retail sales volume rose by 2.0 per cent in the second quarter, improving from the 1.2 per cent growth in the previous quarter, on the back of a recovery in non-motor vehicle sales (Exhibit 2.5). Notably, retail (excluding motor vehicles) sales volume expanded by 3.2 per cent in the second quarter, a reversal from the 0.4 per cent decline in the previous quarter, buoyed in part by higher tourist spending on discretionary items. In particular, the sales volume of watches & jewellery, department stores, and computer & telecommunications equipment improved by 14 per cent, 4.9 per cent and 3.5 per cent respectively in the second quarter.

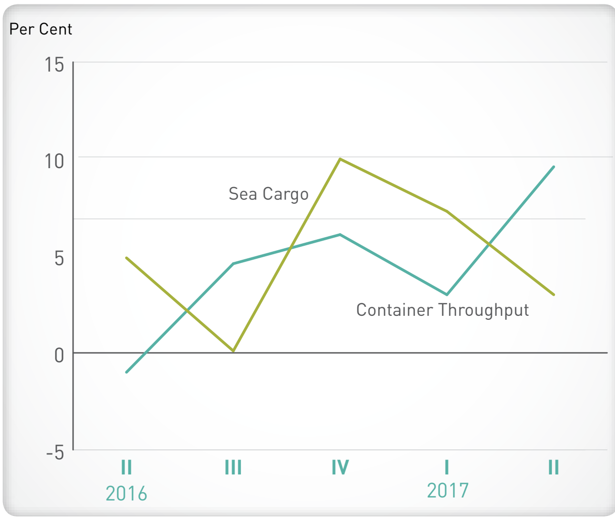
Exhibit 2.5: Changes in Retail Sales Index at Constant Prices

TRANSPORTATION & STORAGE

Growth in the transportation & storage sector came in at 3.5 per cent in the second quarter, easing from the 4.4 per cent expansion in the previous quarter.

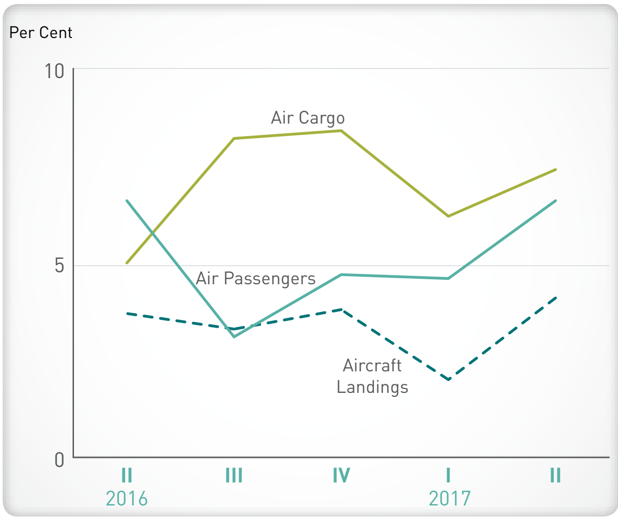
Within the sector, the water transport segment remained healthy in the second quarter, as the volume of sea cargo handled grew by 3.0 per cent, extending the 7.3 per cent growth in the previous quarter (Exhibit 2.6). The higher volume of sea cargo handled in the second quarter came on the back of an uptick in container throughput handled (9.6 per cent) at Singapore's ports.

Exhibit 2.6: Changes in Container Throughput and Sea Cargo Handled



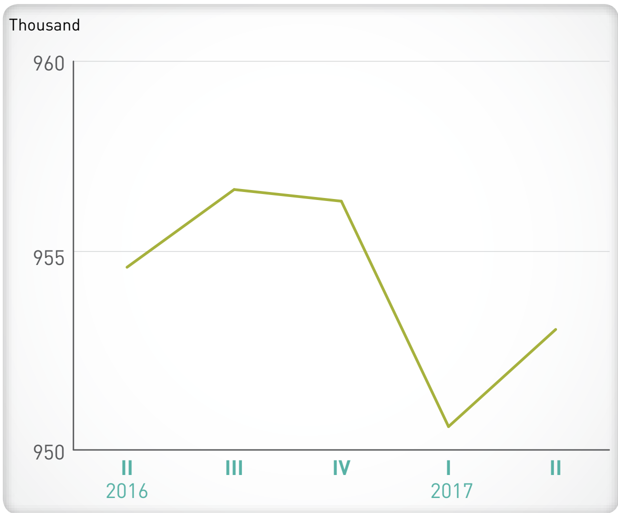
Similarly, the air transport segment posted robust growth, supported by an increase in air passenger and air cargo volume handled at Changi Airport. Specifically, the volume of air passenger traffic passing through Changi Airport rose by 6.6 per cent in the second quarter, up from the 4.6 per cent increase in the previous quarter (Exhibit 2.7). The higher volume of air passenger traffic was underpinned by robust growth on the Singapore-China and Singapore-Indonesia routes. Likewise, total air cargo shipments handled at Changi Airport expanded by 7.4 per cent in the second quarter, following the 6.2 per cent growth in the preceding quarter. In addition, the number of aircraft landings rose by 4.1 per cent in the second quarter to reach 46,330, higher than the 2.0 per cent expansion in the previous quarter.

Exhibit 2.7: Changes in Air Transport



As of June 2017, the total number of motor vehicles registered with the Land Transport Authority was 953,097, representing a 0.2 per cent decline from a year ago (Exhibit 2.8). These comprised 545,024 private and company cars, 63,259 rental cars, 25,699 taxis, 18,632 buses, 142,118 motorcycles and scooters, and 158,365 goods vehicles & other vehicle types.

Exhibit 2.8: Motor Vehicles Registered

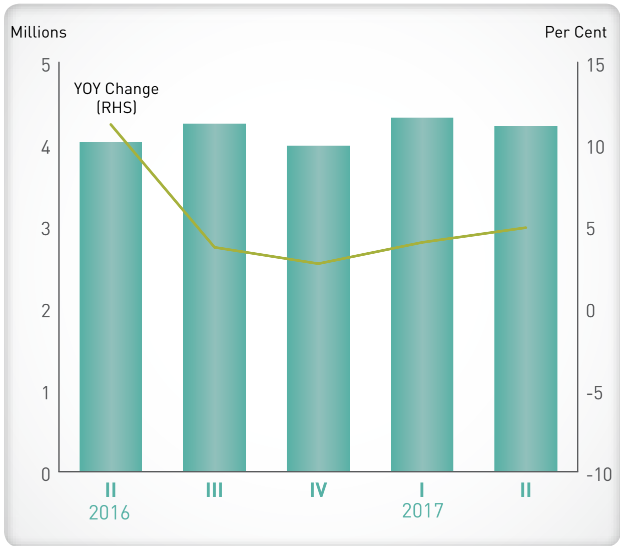


ACCOMMODATION & FOOD SERVICES

The accommodation & food services sector contracted by 2.2 per cent in the second quarter, extending the 1.7 per cent decline recorded in the previous quarter. The lacklustre performance of the sector was primarily due to continued weakness in the food services segment.

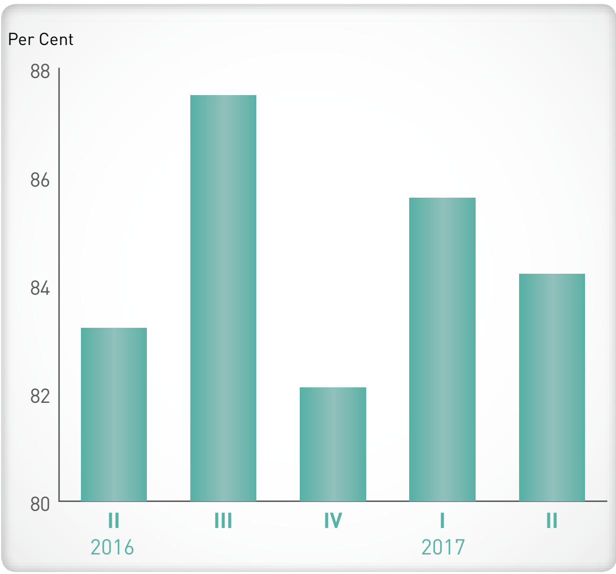
The accommodation segment was supported by healthy visitor arrivals in the second quarter. Specifically, total visitor arrivals rose by 4.9 per cent during the quarter, improving from the 4.0 per cent increase in the preceding quarter (Exhibit 2.9). The pickup in visitor arrivals came on the back of a surge in Indian arrivals, which expanded by 20 per cent in the second quarter, faster than the 7.3 per cent growth in the previous quarter. The strong performance of the Indian inbound market could in turn be due to the addition of flights connecting Changi Airport to the various Indian cities.

Exhibit 2.9: Visitor Arrivals



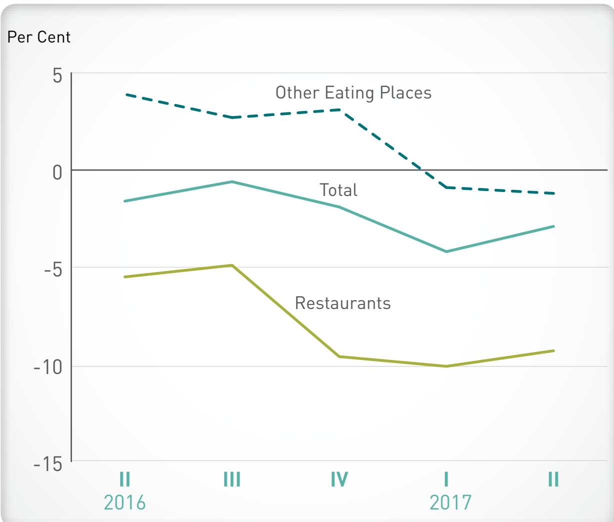
In tandem with the growth in visitor arrivals, the overall average occupancy rate of gazetted hotels rose by 1.0 percentage-points from a year ago to reach 84 per cent in the second quarter (Exhibit 2.10). The improvement was broad-based, with most hotel tiers recording higher occupancy rates over the period. In particular, the average occupancy rate of the economy, mid-tier and upscale hotels rose by 2.6 percentage-points, 0.6 percentage-points and 2.2 percentage-points respectively as compared to the same period a year ago.

Exhibit 2.10: Overall Average Occupancy Rate



By contrast, the food services segment remained weak with the volume of food & beverage sales declining by 2.9 per cent in the second quarter, extending the 4.2 per cent contraction in the first quarter (Exhibit 2.11). The fall in food & beverage sales volume could largely be attributed to the lacklustre performance of restaurants, which recorded a 9.3 per cent slump in sales volume over the period. The sales volume at other eating places also dipped by 1.2 per cent in the second quarter, extending the 0.9 per cent decline in the previous quarter.

Exhibit 2.11: Changes in Food & Beverage Services Index at Constant Prices

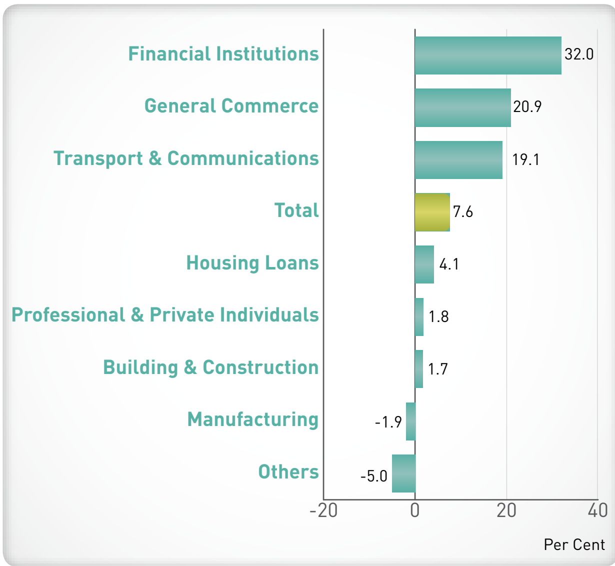


FINANCE & INSURANCE

The finance & insurance sector expanded by 3.8 per cent in the second quarter, after growing by 0.7 per cent in the preceding quarter.

The improvement resulted in part from the robust performance of the financial intermediation segments. Domestic Banking Unit (DBU) non-bank lending grew by 7.6 per cent in the second quarter, with increases in loans to various sectors such as general commerce, transport & communication, and non-bank financial institutions (Exhibit 2.12). Asian Currency Unit (ACU) non-bank lending also expanded by 2.6 per cent in the second quarter, extending the 1.1 per cent growth in the previous quarter. In particular, non-bank lending to Europe and the Americas registered strong gains, while lending to East Asia saw a turnaround. Furthermore, banks posted robust growth in net fees and commissions earned from the provision of credit-related and portfolio management services in the second quarter.

Exhibit 2.12: Growth of DBU Loans & Advances to Non-Bank Customers by Industry in 2Q 2017



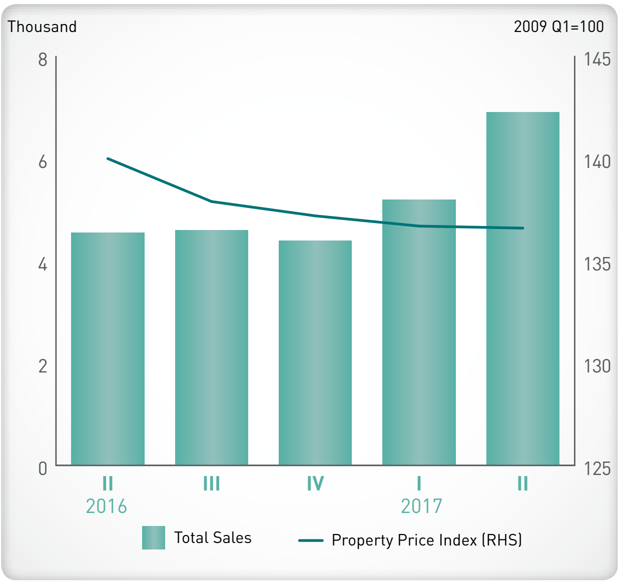
The insurance industry grew strongly in the quarter, across both the life and general insurance segments. Meanwhile, the sentiment-sensitive cluster saw mixed performances. Net fees and commissions received by fund managers recorded stellar growth, supported by sustained investor interest in regional assets. However, average daily forex turnover contracted by 2.1 per cent, in part due to lower demand for safe-haven currencies amidst a low-volatility environment.

BUSINESS SERVICES

The business services sector grew by 1.8 per cent in the second quarter, an improvement from the 0.9 per cent growth recorded in the previous quarter.

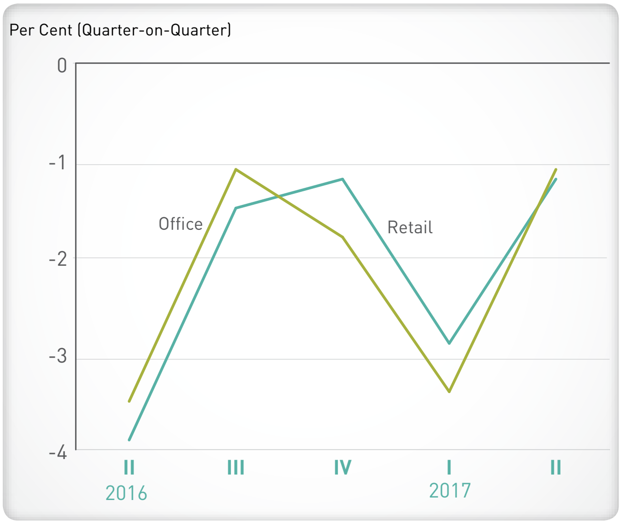
Growth in the business services sector was supported primarily by the others[1] and professional services segments. Meanwhile, the real estate segment's performance improved on the back of a moderation in the decline of private residential property prices as well as healthy sales transactions. Private residential property prices dipped by 0.1 per cent on a quarter-on-quarter basis in the second quarter, the smallest contraction in fifteen consecutive quarters of decline. At the same time, the sales transactions of private residential units saw an uptick, supported by the launch of new condominiums such as Seaside Residences. Specifically, private home sales rose by 52 per cent year-on-year in the second quarter, extending the 83 per cent growth registered in the preceding quarter (Exhibit 2.13).

Exhibit 2.13: Total Sales Transactions for Private Residential Units and Private Residential Property Price Index



For the private retail space segment, rentals fell by 1.2 per cent on a quarter-on-quarter basis in the second quarter, extending the 2.9 per cent decline registered in the previous quarter (Exhibit 2.14). This came about as retailers continued to face challenging operating conditions, even as the supply of retail space continued to increase. Reflecting the sluggish retail space market, the average occupancy rate of private retail space remained at 91 per cent in the second quarter, lower than the average occupancy rate of 93 per cent achieved in the past five years.

Exhibit 2.14: Changes in Rentals of Private Sector Office and Retail Spaces

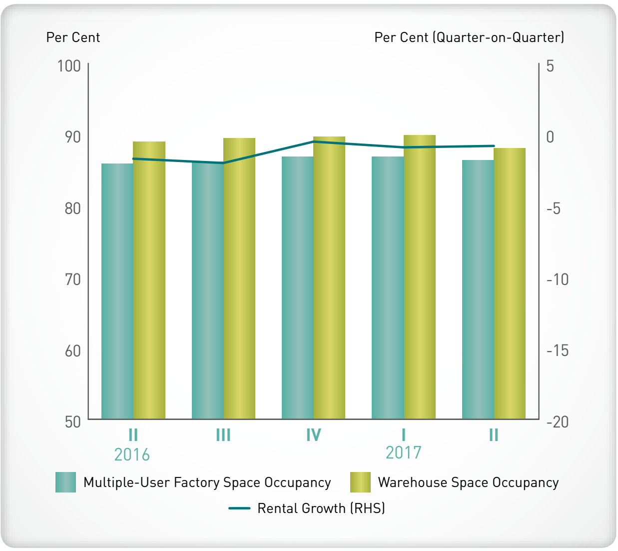


Similarly, the private office space segment remained soft on the back of lacklustre demand and rising supply. In particular, rentals declined by 1.1 per cent on a quarter-on-quarter basis, extending the 3.4 per cent drop in the previous quarter. The average occupancy rate also deteriorated slightly from 87 per cent in the first quarter to 86 per cent in the second quarter.

In the private industrial space market, overall rentals shrank by 0.8 per cent on a quarter-on-quarter basis, similar to the 0.9 per cent decline in the previous quarter (Exhibit 2.15). The occupancy rate in the private sector multiple-user factory space segment stood at 86 per cent, lower than the 87 per cent registered in the previous quarter. Likewise, the occupancy rate for private sector warehouse space declined from 90 per cent in the first quarter to 88 per cent in the second quarter.

[1] *The others segment consists of (i) rental & leasing, (ii) other professional, scientific & technical services and (iii) other administrative & support services. Rental & leasing activities include rental & leasing of motor vehicles, rental & leasing of other machinery, equipment and tangible goods and the leasing of non-financial intangible assets.*

Exhibit 2.15: Occupancy Rate and Rental Growth of Private Sector Industrial Space



CHAPTER 3
Economic Outlook

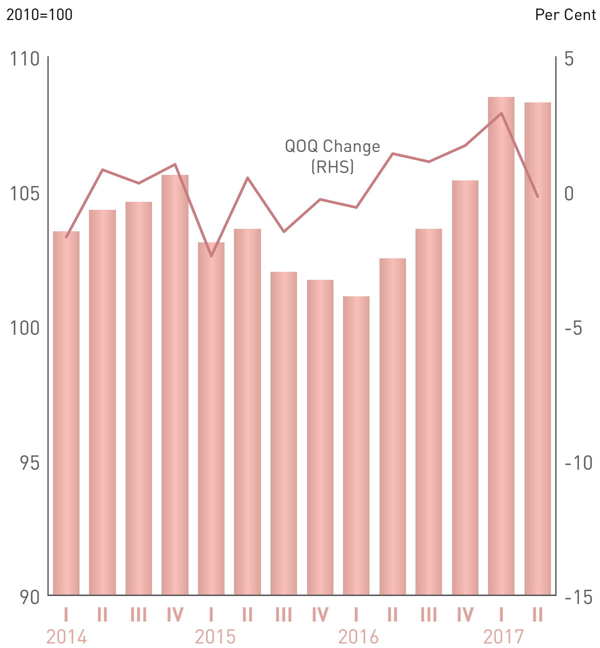
CHAPTER 3

ECONOMIC OUTLOOK

LEADING INDICATORS

The composite leading index (CLI) dipped slightly by 0.2 per cent on a quarter-on-quarter basis in the second quarter of 2017, after posting strong growth of 2.9 per cent in the previous quarter (Exhibit 3.1).

Exhibit 3.1: Composite Leading Index Levels and Growth Rate



Of the nine components within the CLI, three of them increased compared to the preceding quarter, namely non-oil sea cargo handled, money supply and stock price. Meanwhile, the other six components – new companies formed, non-oil retailed imports, the US Purchasing Managers' Index, stock of finished goods, wholesale trade and domestic liquidity – declined compared to a quarter ago.

OUTLOOK FOR 2017

The outlook for the global economy has remained stable in recent months, with global growth on track to come in higher in 2017 as compared to 2016.

In the US, the economy rebounded to grow at a faster pace in the second quarter of the year as compared to the first quarter. The growth momentum is expected to be sustained in the second half of 2017, supported primarily by domestic demand. In particular, resilient labour market conditions will continue to boost private consumption. Private investment is also expected to pick up on the back of a recovery in mining and equipment investments. For 2017 as a whole, the US economy is expected to grow at a faster pace as compared to 2016.

Meanwhile, the Eurozone economy is expected to remain stable, and to continue to grow at a modest pace for the rest of 2017. Within the Eurozone, labour market conditions have improved, with unemployment rates on a downward trend even though they remain elevated. At the same time, improving business and consumer sentiments, coupled with accommodative monetary policies, are also likely to support domestic demand. On balance, growth in the Eurozone is expected to pick up slightly in 2017 as compared to 2016.

In Asia, China's growth is projected to ease slightly in the second half of 2017, following stronger-than-expected growth in the first half of the year. In particular, real investments are likely to see a modest slowdown over the course of the year. However, exports are expected to remain robust, with the recent pickup in external demand likely to be sustained into the second half of the year, thereby supporting GDP growth. In ASEAN, growth in the Indonesian and Malaysian economies is projected to remain resilient for the remaining quarters of the year on the back of healthy domestic demand and a sustained improvement in merchandise exports.

While the global economic recovery is expected to continue on a firm footing for the rest of the year, downside risks remain. First, anti-globalisation sentiments could adversely affect global trade if they lead to increased protectionism, with knock-on effects on economic growth worldwide. Global political risks and policy uncertainty also remain elevated, reflecting in part uncertainties over the policies of the US administration and on-going Brexit negotiations. Second, at this advanced stage of the US' economic expansion, monetary policy could normalise faster than expected, thus causing global financial conditions to tighten more than anticipated. There also remains the risk of a steeper-than-intended pullback of credit in China as efforts to contain leverage and risks in the financial system continue. Nonetheless, the potential for these downside risks to have a significant impact on global growth in 2017 has eased compared to three months ago.

Against this external backdrop, the manufacturing sector is likely to continue to provide support to the Singapore economy in the second half of the year. In particular, the strong performance of the electronics and precision engineering clusters is expected to be sustained into the second half of the year on the back of robust global demand for semiconductors and semiconductor-related equipment, although the pace of expansion may moderate given less favourable base effects. Likewise, externally-oriented services sectors such as the transportation & storage, wholesale trade and finance & insurance sectors are expected to benefit from the pickup in global trade. Meanwhile, the information & communications and education, health & social services sectors are likely to remain resilient. On the other hand, the performance of the construction sector is expected to remain lacklustre, weighed down by the continued weakness in private and public sector construction activities.

Taking into account the global and domestic economic environment, as well as the GDP growth of 2.7 per cent achieved in the first half of the year, the full-year growth forecast for the Singapore economy is narrowed upwards to **"2.0 to 3.0 per cent"**, from "1.0 to 3.0 per cent". Barring unexpected outcomes in the global economy and key sectors in the domestic economy for the rest of the year, MTI's central view is that GDP growth for the full year is likely to come in at around 2.5 per cent.

FEATURE ARTICLE

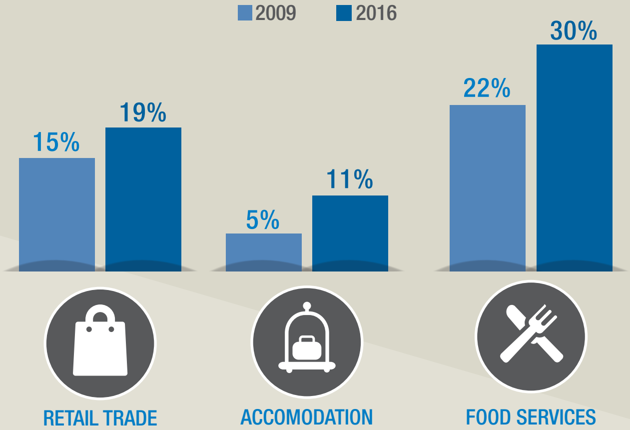
FEATURE ARTICLE

PART-TIME EMPLOYMENT AND THE PRODUCTIVITY OF FIRMS

INTRODUCTION

Part-time employment has steadily increased across the years and a significant proportion of these workers are employed in the Retail Trade, Accommodation, and Food Services sectors.

INCIDENCE OF PART-TIME EMPLOYMENT AMONG EMPLOYED RESIDENTS

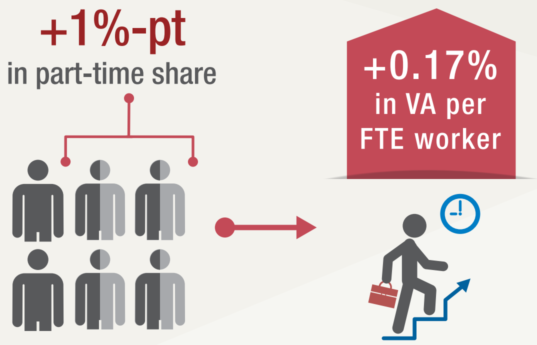


This study examines the relationship between part-time employment share and firm-level productivity in the three sectors.

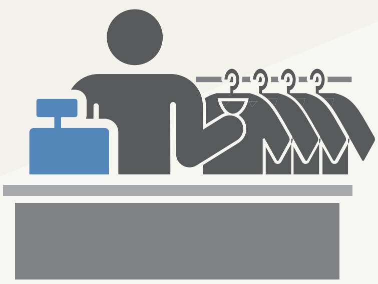
FINDINGS

Overall, this study finds that the hiring of part-time workers has not been detrimental to the productivity of the firms in the three sectors.

Specifically, when we consider the firms in the three sectors as a group, a 1 percentage point increase in a firm's part-time employment share is associated with a 0.17% increase in its value-added per full-time equivalent (FTE) worker on average.



POLICY TAKEAWAY



The results from the study are encouraging as they suggest that efforts to promote part-time work as a channel for workers who are unable to engage in full-time work to be active in the labour market would not have unintended consequences on the productivity of firms.

EXECUTIVE SUMMARY

- Part-time employment has been on the rise in Singapore, with a significant proportion of the part-time workers employed in the Retail Trade, Accommodation and Food Services sectors. However, the impact of having a part-time workforce on a firm's productivity is uncertain. On the one hand, part-time workers could be less likely to go for training and may also lead to coordination problems within the firm, thus dampening productivity. On the other hand, the hiring of part-time workers may allow the firm to optimise processes and resources to meet variations in demand, thereby raising productivity. The objective of this study is thus to determine whether there is a positive or negative relationship between part-time employment and firm-level productivity in the Retail Trade, Accommodation and Food Services sectors.

- Our results show that there is a positive and statistically significant relationship between firms' productivity and their part-time employment share in the three sectors. Specifically, when we consider the firms in the three sectors as a group, we find that a one percentage-point increase in a firm's part-time employment share is associated with a 0.17% increase in its value-added per full-time equivalent[1] worker (our proxy for productivity) on average. However, when the firms in each sector are examined separately, a positive and statistically significant relationship between firms' productivity and part-time employment share was found only for the Retail Trade sector, suggesting that the hiring of part-time workers has been beneficial for the firms in this sector. On the other hand, statistically insignificant results were found for the Accommodation and Food Services sectors, suggesting that the hiring of part-time workers has not had an impact on the productivity of the firms in these two sectors.

- On balance, this study finds that the hiring of part-time workers has not been detrimental to the productivity of the firms in the three sectors. In fact, it may have a positive impact for firms in the Retail Trade sector.

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 Singapore.[2]

INTRODUCTION

An increasing proportion of the resident workforce in Singapore comprises part-time workers.[3] Between 2009 and 2016, the proportion of part-time workers out of all employed residents rose from 8.4% to 10.5%. In absolute terms, the number of part-time employed residents increased by 71,800 over the same period, from 156,200 residents to 228,000 residents (Exhibit 1).

The rise of the part-time workforce could be due to both supply and demand factors. On the supply side, there could be more Singaporeans preferring to work on a part-time basis due to lifestyle considerations, or because of care-giving responsibilities. On the demand side, companies facing labour shortage may find it useful to tap into the pool of part-time workers to overcome their labour constraints. Government initiatives, such as the Work-Life Grant[4] which provides funding and incentives for companies to offer flexible work arrangements (FWAs) comprising flexi-time, flexi-place and part-time work, may have also played a part in encouraging more companies to take on part-time workers. Common occupations that part-timers take up include food preparation & kitchen assistants, shop sales assistants, clerks, office cleaners and waiters.[5]

[1] *A part-time worker is considered as 0.5 of a full-time worker in the computation of full-time equivalent workers.*

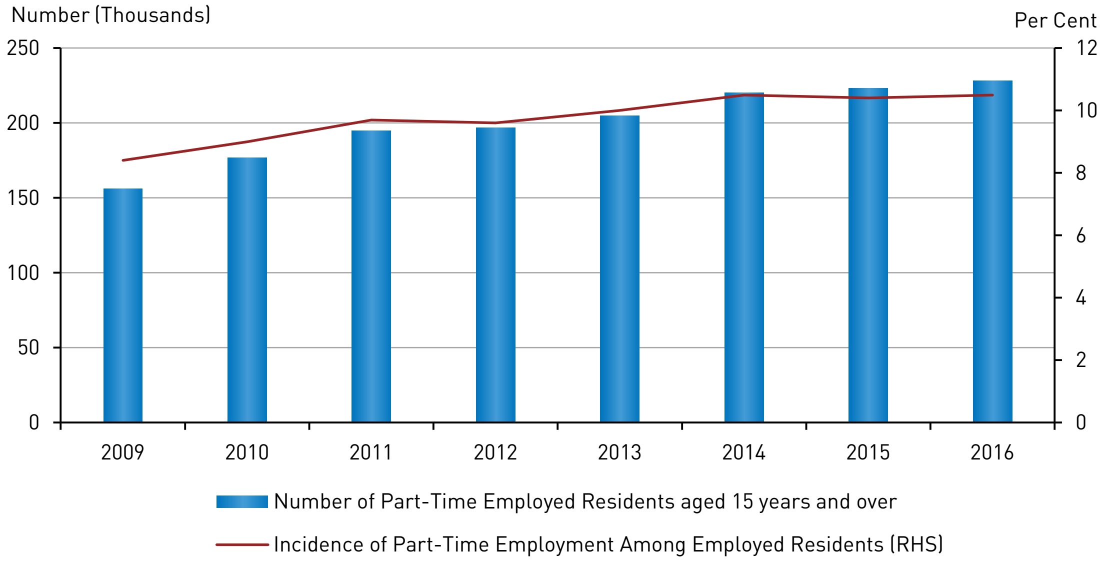
[2] *We would like to thank Yong Yik Wei, Kenneth Yeow, Kenny Goh and Andy Feng for their suggestions and comments. We are also grateful to Tiffany Foo, Timothy Lin and Roy Hung for their contributions to the initial phase of this study. All errors belong to the authors.*

[3] *Part-time employment refers to employed persons where the normal hours of work is less than 35 hours per week.*

[4] *The Work-Life Grant was introduced to help employees better manage work and family responsibilities, and enhance the pro-family environment in Singapore. The Work-Life Grant consists of two components. The Developmental Grant helps companies take steps towards implementing FWAs and other work-life programmes, and to defray part of the costs incurred. The FWA Incentive encourages companies to support more employees on FWAs and to provide and sustain work-life friendly workplaces. (Source: Ministry of Manpower website)*

[5] *Source: MOM Labour Force Survey, 2016*

Exhibit 1: Incidence of Part-Time Employment Among Employed Residents, June 2009-2016

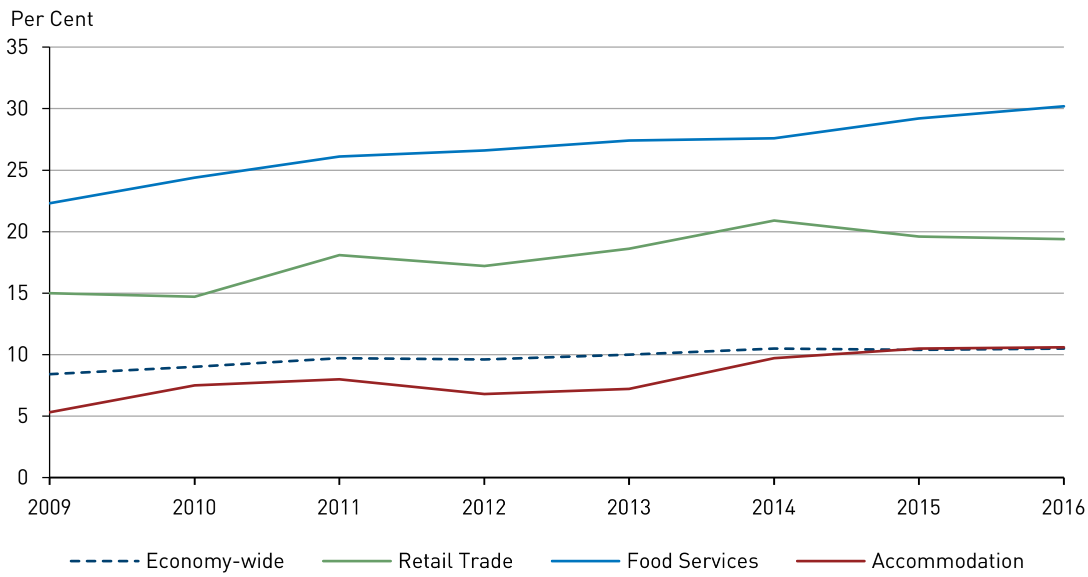


Source: Comprehensive Labour Force Survey, Manpower Research and Statistics Department, MOM

Of the 228,000 part-time employed residents in 2016, 61,600 (or 27%) were employed in the Retail Trade, Accommodation and Food Services sectors. These three relatively labour-intensive services sectors also tend to have rising part-time employment shares that have exceeded the economy average by 2016 (Exhibit 2), and productivity levels that tend to be below the economy average (Exhibit 3).

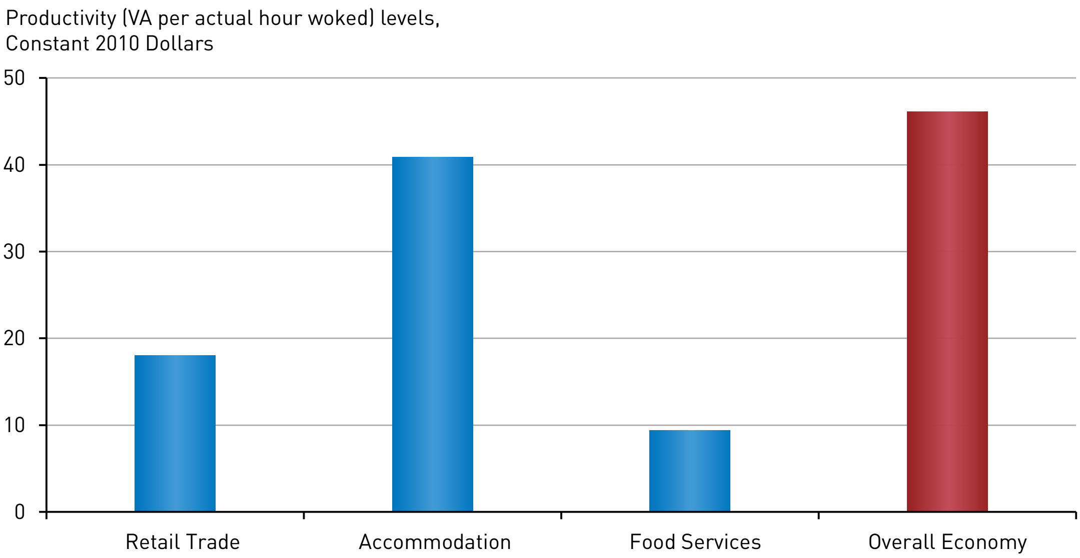
In view of the upward trend in part-time employment in the overall economy and in some of the more labour-intensive services sectors, it is pertinent to examine the impact of the part-time workforce on the productivity of firms. In this study, we aim to evaluate the relationship between the part-time employment share and productivity of firms in three labour-intensive services sectors with above-average and rising part-time employment shares – the Retail Trade, Accommodation and Food Services sectors.

Exhibit 2: Incidence of Part-Time Employment Among Employed Residents in the Retail Trade, Accommodation and Food Services Sectors, June 2009-2016



Source: Comprehensive Labour Force Survey, Manpower Research and Statistics Department, MOM

Exhibit 3: Average Productivity (Value-added per Actual Hour Worked) of the Retail, Accommodation and Food Services Sectors between 2009 and 2016[6]



Source: MTI Staff Estimates

LITERATURE REVIEW

There are several channels through which part-time work may affect the productivity of a firm. On the one hand, human capital theory predicts a negative relationship as part-time workers tend to participate less in training. This could be because part-time employees work fewer hours, and may thus benefit less from training than full-time employees. At the same time, firms may also be less willing to train their part-time workers. Empirically, it has been observed that part-time employed workers in Singapore have a lower propensity to participate in training than their full-time employed counterparts.[7]

At the firm level, the hiring of part-time workers may also cause coordination and supervision problems (Lewis, 2003). For instance, when part-time workers rather than full-time workers are utilised, supervisors have to oversee more workers, which could lead to greater difficulties in communication and performance monitoring. Furthermore, compared to a full-time worker, it may be more challenging for part-time workers doing the same task to acquire mastery of the task or to establish long-term relationships with their clients (Edwards and Robinson, 2004).

On the other hand, the hiring of part-time workers may raise a firm's productivity if doing so allows the firm to optimise processes by deploying more workers during peak hours relative to non-peak hours. By having shift-based part-time work, the firm will also be able to extend its operating hours, leading to a more intensive use of capital.

Overseas empirical studies have found mixed results in terms of the impact of part-time employment on firms' productivity. Devicienti et al (2015) found part-time work to be detrimental to firms' productivity in Italy. This negative result was attributed to the communication and coordination inefficiencies created by part-time work. By contrast, Nelen et al (2013) found that Dutch pharmacies with a large part-time employment share were more productive than those with a large full-time employment share. This was because the firms had deployed the part-time workers in a way that allowed them to bridge the lunch breaks of their full-time colleagues, thus enabling the firms to increase their operating hours.

[6] The trends in Exhibit 3 hold even if we use real VA per worker as the measure of productivity.

[7] In 2016, full-timers (45%) had a higher training participation rate than part-timers (21%). Training participation rate is defined as the proportion of residents aged 15 to 64 in the labour force who had engaged in some form of work-related structured training or education activities over the 12-month period ending June. (Source: Labour Force in Singapore, 2016)

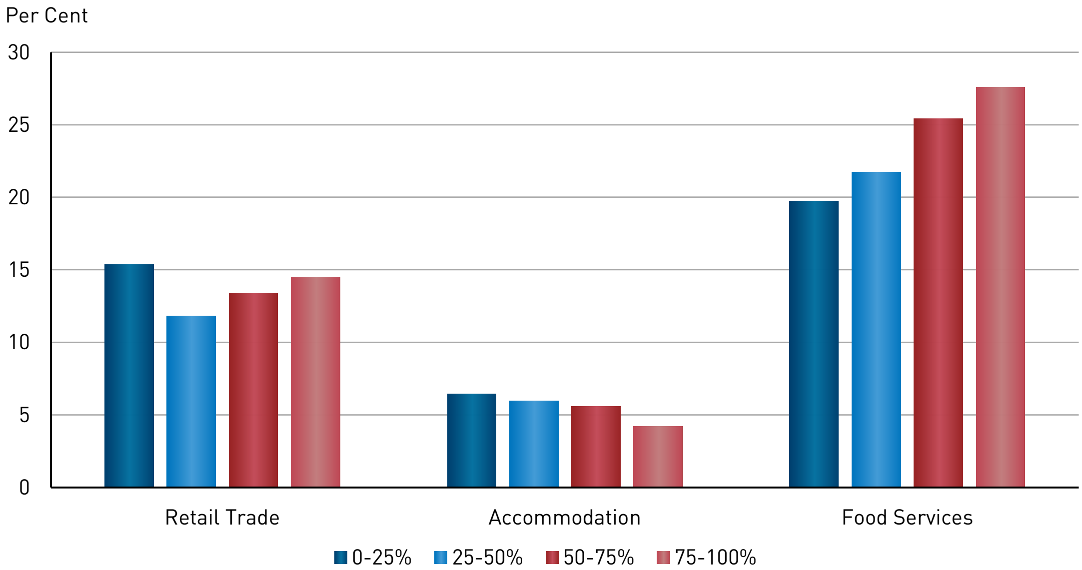
DATA AND EMPIRICAL METHODOLOGY

To study the relationship between part-time employment and productivity at the firm level, this study uses data from the Department of Statistics' Annual Survey of Services, spanning the period of 2002 to 2015.[8] The dataset contains firm-level characteristics such as the revenue and number of full-time/part-time workers employed by the firm, as well as the industry the firm operates in, among others.

In this analysis, our measure of productivity at the firm level is the value-added (VA) per full-time equivalent (FTE) worker employed by the firm, where a part-time worker is considered to be half of a full-time worker. Our key explanatory variable is the share of part-time workers[9] out of the total FTE employment of the firm.

An examination of the data for the three sectors of interest shows that more productive firms employed a higher share of part-time workers in the Food Services sector, whereas the converse is true in the Accommodation sector (Exhibit 4). For the Retail Trade sector, the trend is mixed – while firms in the lowest productivity quartile had the highest share of part-time workers, those in the higher quartiles saw a positive relationship between productivity and their share of part-time workers.

Exhibit 4: Average Part-Time Share of Total Full-Time Equivalent Employment by Productivity[10] Quartiles (2002-2015)



Source: MTI Staff Estimates from DOS' Annual Survey of Services

Nonetheless, as there could be other factors such as ownership status and the extent of utilisation of machinery affecting the productivity of firms in these sectors, there is a need to account for their impact on productivity in order to isolate the impact of the part-time workforce.

To do so, we conduct a regression analysis that controls for the key characteristics of the firms. However, apart from observable characteristics like the utilisation of machinery, there is also a need to control for unobserved firm characteristics as not doing so could bias our results. For example, poor management practices resulting in low retention of workers – a factor which is not observed in the data – could lead to a higher share of part-time workers. At the same time, poor management quality may also lead to poorer worker engagement and development, in turn lowering firm productivity. Hence, if management quality is not controlled for in the regression analysis, the impact of part-time employment on productivity would be biased downwards as it would be picking up the negative relationship between productivity and the hiring of part-time workers caused by poor management quality.

[8] *The survey covers larger firms (in terms of revenue) with certainty, while the remaining firms are selected on a sampling basis.*

[9] *In our study, a part-time worker is defined as an employee who works less than 35 hours in a normal week.*

[10] *Defined as nominal VA per full-time equivalent worker*

To overcome this bias, we utilise the fixed effects regression specification below, which would control for the unobservable, time-invariant firm characteristics in addition to the observable characteristics:

$$\log(\frac{VA_{it}}{FTE_{it}}) = \beta_0 + \beta_1(\frac{PT_{it}}{FTE_{it}}) + \gamma X_{it} + \alpha_1 year_t + \delta_i + \epsilon_{it}$$

Where:

$\frac{VA_{it}}{FTE_{it}}$ is the VA per FTE worker of firm i in year t;

$\frac{PT_{it}}{FTE_{it}}$ is the part-time share of total FTE employment of firm i in year t;

X_{it} are the firm-level controls, including net machinery[11], SME indicator[12], local/foreign ownership, industry, machinery intensity[13], and the foreign employment share;

$year_t$ is a vector of year dummies that captures effects that are common to all firms in the specific year;

δ_i denotes the firm fixed effects.

RESULTS

Our findings from the regression analysis suggest that there is a positive and statistically significant relationship between productivity and part-time employment share at the firm level for firms in the Retail Trade, Accommodation and Food Services sectors (Exhibit 5). Specifically, we find that in these three sectors, a one percentage-point increase in part-time employment share is associated with a 0.17% increase in firms' productivity on average.

We next run separate regressions for firms in each of the three sectors to find out the impact of the part-time workforce on firms in each sector. We find that the positive result above is largely driven by firms in the Retail Trade sector (Exhibit 6).

The statistically significant positive impact that part-time employment has on the productivity of firms in the Retail Trade sector could possibly be due to the fact that having a part-time workforce allows the firms to optimise their processes to cater to peak-hour demand and/or to extend their operating hours, similar to what was found by Nelen et al (2013) for the Dutch pharmacy sector. On the other hand, statistically insignificant results were found for the Accommodation and Food Services sectors, suggesting that part-time employment has not had an impact on firms' productivity in these sectors.

Exhibit 5: Regression Results

Dependent variable: $\text{Log}(VA/FTE)$	
$\frac{PT_{it}}{FTE_{it}}$ (β_1)	0.167*
Year effects	Yes
Firm fixed effects	Yes

*, ** and *** indicate significance at the 90%, 95%, and 99% level, respectively

[11] *Net machinery refers to the net book value of fixed assets on computers & peripheral equipment, telecommunications equipment and other machinery & equipment.*

[12] *SME refers to firms with annual sales turnover of not more than S$100 million or employment size of not more than 200 workers.*

[13] *Machinery intensity is defined as the ratio of net machinery to total fixed assets.*

Exhibit 6: Regression Results

Dependent variable: $\text{Log}(VA/FTE)$			
	Retail Trade	Accommodation	Food Services
$\frac{PT_{it}}{FTE_{it}}(\beta_1)$	0.199*	-0.0583	0.256
Year effects	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes

*, ** and *** indicate significance at the 90%, 95%, and 99% level, respectively

CONCLUSION

In Singapore, part-time employment has been on the rise, and a significant proportion of the part-time workers are employed in the Retail Trade, Accommodation and Food Services sectors.

While the literature suggests an ambiguous relationship between part-time employment and productivity, this study finds that the hiring of part-time workers has not been detrimental to the productivity of firms in the Retail Trade, Accommodation and Food Services sectors. In fact, for the Retail Trade sector, employing part-time workers may be beneficial for firms in the sector as it potentially allows them to optimise their processes to cater to peak-hour demand and/or to extend their operating hours.

Overall, the results from the study are encouraging as they suggest that efforts to promote part-time work as a channel for workers who are unable to engage in full-time work (e.g., individuals with care-giving responsibilities) to be active in the labour market[14] would not have unintended consequences on the productivity of firms.

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[14] *Minister of State for Manpower highlighted during his Committee of Supply 2017 speech that "there is still room to improve employment of our female residents, especially in the area of part-time employment".*

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