

SINGAPORE YEARBOOK OF **Manpower Statistics**

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MINISTRY OF
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MISSION

*To provide timely and reliable
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PREFACE

The “Singapore Yearbook of Manpower Statistics” contains a wide range of statistics on the labour market. These include key data on the labour force, job vacancy, wages, retrenchment, labour turnover, hours worked, conditions of employment, labour relations, workplace safety and health, higher education and skills training. Wherever possible, time-series data from 2009 to 2019 are included. This Yearbook is the 44th edition published by the Manpower Research and Statistics Department of the Ministry of Manpower.

We hope this Yearbook will meet the needs of users for up-to-date and comprehensive manpower statistics. The contents and presentation of the Yearbook are reviewed regularly.

We wish to thank the various government agencies, statutory boards and private organisations for their contributions to this publication. We are also grateful to those who have offered valuable comments and suggestions to improve the Yearbook.

ANG BOON HENG

Director

Manpower Research and Statistics Department

Ministry of Manpower

June 2020



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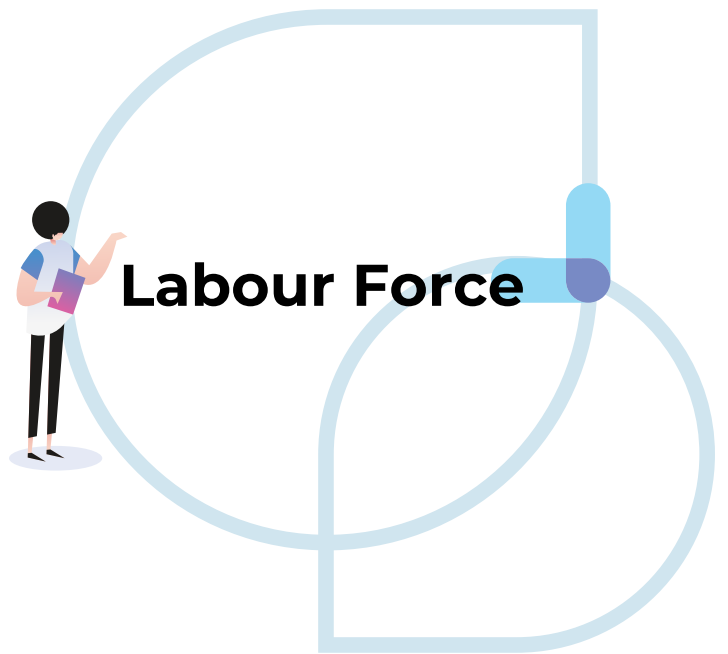
- : nil or negligible
n.a. : not available / not applicable

Abbreviations

AME	: Average (Mean) Monthly Earnings
CET	: Continuing Education and Training
CHC	: Chinese Heritage Centre
CMS	: Career Matching Service
CPF	: Central Provident Fund
CTC	: Company Training Committee
e2i	: Employment and Employability Institute
EOS	: Earth Observatory of Singapore
FWS	: Flexible Work Schedules
IAC	: Industrial Arbitration Court
ISC	: ITE Skills Certificate
ITE	: Institute of Technical Education
MOE	: Ministry of Education
MOM	: Ministry of Manpower
MTI	: Ministry of Trade and Industry
MVC	: Monthly Variable Component
NACE	: National Centre of Excellence for Workplace Learning
NIE	: National Institute of Education
Nitec	: National ITE Certificate
NP	: Ngee Ann Polytechnic
NTI	: Nanyang Technological Institute
NTU	: Nanyang Technological University
NTUC	: National Trades Union Congress
NUS	: National University of Singapore
NWC	: National Wages Council
NYP	: Nanyang Polytechnic
Off-JT	: Off-the-Job Training
OJT	: On-the-Job Training
PCP	: Professional Conversion Programme
PET	: Pre-employment Training
PMETs	: Professionals, Managers, Executives and Technicians

Abbreviations *(continued)*

RP	: Republic Polytechnic
RSIS	: S Rajaratnam School of International Studies
SBF	: Singapore Business Federation
SCElse	: Singapore Centre for Environmental Life Sciences Engineering
SHARP	: SUTD Honours and Research Programme
SIM	: Singapore Institute of Management
SIT	: Singapore Institute of Technology
SMU	: Singapore Management University
SNEF	: Singapore National Employers Federation
SP	: Singapore Polytechnic
SSG	: SkillsFuture Singapore
SSIC	: Singapore Standard Industrial Classification
SSIP	: Stabilisation and Support Package
SSOC	: Singapore Standard Occupational Classification
STEP	: SUTD Technology Entrepreneurship Programme
SUSS	: Singapore University of Social Sciences
SUTD	: Singapore University of Technology and Design
TADM	: Tripartite Alliance for Dispute Management
TP	: Temasek Polytechnic
WMI	: Wealth Management Institute
WSDip	: Work-Study Diploma
WSG	: Workforce Singapore
WSQ	: Workforce Skills Qualification



LABOUR FORCE

Source of Data

Statistics on the Labour Force, Employed and Unemployed Persons are compiled from the Labour Force Survey conducted by the Manpower Research and Statistics Department of the Ministry of Manpower.

The objective of the survey is to collect data on the economic activities of the population, including detailed information on employment and unemployment as well as characteristics of persons in and outside the labour force.

The survey covers a sample of private households in Singapore. It excludes workers living in construction worksites, dormitories and workers' quarters at the workplace and persons commuting from abroad to work in Singapore. Estimates of the total labour force are derived by combining data on residents obtained from the survey with foreign employment data compiled from administrative records.

Concepts and Definitions

The **reference period** refers to the week preceding the date of the survey interview.

Employed Persons refer to persons aged fifteen years and over who during the reference period:

- i) work for one hour or more either for pay or profit; or
- ii) have a job or business to return to but are temporarily absent because of illness, injury, breakdown of machinery at workplace, labour management dispute or other reasons.

Members of the Singapore Armed Forces including full-time National Servicemen are included in the persons employed, unless otherwise specified.

Unemployed Persons refer to persons aged fifteen years and over who are not working but are actively looking for a job and available for work during the reference period. They include persons who are not working but are taking steps to start their own business or taking up a new job after the reference period.

Labour Force refers to persons aged fifteen years and over who are either employed (i.e. working) or unemployed (i.e. actively looking for job and available for work) during the reference period.

The **Labour Force Participation Rate** is defined as the percentage of the labour force to the population.

The **Unemployment Rate** is defined as the percentage of unemployed persons to the labour force.

A.1 LABOUR FORCE, EMPLOYED, UNEMPLOYED AND UNEMPLOYMENT RATE, 2009 – 2019 (JUNE)

June	Labour Force ('000)		Employed ('000)		Unemployed ('000)		Unemployment Rate (%) (Non-Seasonally Adjusted)		Unemployment Rate (%) (Seasonally Adjusted)	
	Total	Residents	Total	Residents	Total	Residents	Total	Residents	Total	Residents
2009	3,030.0	1,985.7	2,905.9	1,869.4	124.1	116.3	4.1	5.9	3.2	4.5
2010	3,135.9	2,047.3	3,047.2	1,962.9	88.8	84.4	2.8	4.1	2.2	3.1
2011	3,237.1	2,080.1	3,149.7	1,998.9	87.4	81.2	2.7	3.9	2.0	2.9
2012	3,361.8	2,119.6	3,274.7	2,040.6	87.1	79.0	2.6	3.7	1.9	2.8
2013	3,443.7	2,138.8	3,352.9	2,056.1	90.7	82.6	2.6	3.9	2.0	2.9
2014	3,530.8	2,185.2	3,440.2	2,103.5	90.7	81.8	2.6	3.7	1.9	2.8
2015	3,610.6	2,232.3	3,516.0	2,147.8	94.6	84.5	2.6	3.8	2.0	2.8
2016	3,672.8	2,257.6	3,570.0	2,165.3	102.8	92.3	2.8	4.1	2.1	3.0
2017	3,657.0	2,269.7	3,550.1	2,175.3	106.9	94.4	2.9	4.2	2.2	3.1
2018	3,675.6	2,292.7	3,575.3	2,203.7	100.2	89.0	2.7	3.9	2.1	2.9
2019	3,740.8	2,328.5	3,630.0	2,230.4	110.8	98.1	3.0	4.2	2.2	3.1

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

Note :

The seasonally adjusted unemployment figures are subject to annual revisions when the latest set of seasonal factors is updated, taking into account observations for the latest available year. Users are advised to check our website, <http://stats.mom.gov.sg>, for the most up-to-date data.

A.2 KEY CHARACTERISTICS OF RESIDENT LABOUR FORCE, 2009 – 2019 (JUNE)

June	Labour Force Participation Rate (%) (Aged 15 & Over)			Employment Rate (%) (Aged 15 & Over)			Employment Rate (%) (Aged 25 – 64)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
2009	65.4	76.3	55.2	61.6	72.2	51.6	75.8	88.3	63.9
2010	66.2	76.5	56.5	63.5	73.5	54.0	77.1	88.8	66.1
2011	66.1	75.6	57.0	63.5	72.9	54.5	78.0	89.1	67.4
2012	66.6	76.0	57.7	64.1	73.4	55.3	78.8	89.7	68.5
2013	66.7	75.8	58.1	64.1	73.2	55.6	79.0	89.3	69.2
2014	67.0	75.9	58.6	64.5	73.3	56.2	79.7	89.3	70.5
2015	68.3	76.7	60.4	65.7	73.9	58.0	80.5	89.8	71.8
2016	68.0	76.2	60.4	65.3	73.3	57.7	80.3	89.0	72.1
2017	67.7	76.0	59.8	64.9	73.0	57.2	80.7	89.4	72.4
2018	67.7	75.6	60.2	65.1	72.8	57.8	80.3	88.9	72.3
2019	68.0	75.4	61.1	65.2	72.4	58.3	80.8	88.8	73.3

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

A.3 RESIDENT LABOUR FORCE AGED FIFTEEN YEARS AND OVER BY AGE, LABOUR FORCE STATUS AND SEX, JUNE 2019

Thousands

Age (Years)	Total			Employed			Unemployed		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
TOTAL	2,328.5	1,251.1	1,077.4	2,230.4	1,202.5	1,027.9	98.1	48.6	49.5
15 – 19	36.3	22.1	14.1	32.6	20.8	11.8	3.6	1.3	2.3
20 – 24	148.9	75.8	73.1	131.3	68.8	62.5	17.6	7.0	10.6
25 – 29	239.0	122.5	116.4	224.7	113.5	111.1	14.3	9.0	5.3
30 – 34	253.7	126.3	127.4	246.0	122.9	123.0	7.8	3.4	4.4
35 – 39	266.7	134.1	132.6	259.8	131.3	128.5	6.9	2.8	4.1
40 – 44	270.1	137.5	132.6	262.0	134.5	127.4	8.1	2.9	5.2
45 – 49	284.1	150.2	133.9	273.8	145.3	128.6	10.3	4.9	5.4
50 – 54	256.8	142.3	114.5	247.0	137.4	109.6	9.8	4.9	4.9
55 – 59	237.1	134.7	102.4	227.8	128.9	98.9	9.2	5.7	3.5
60 – 64	170.2	103.7	66.5	165.8	101.1	64.8	4.3	2.6	1.7
65 – 69	103.7	63.0	40.8	100.4	60.8	39.5	3.4	2.1	1.2
70 & Over	62.1	39.0	23.1	59.3	37.1	22.2	2.8	1.9	0.9

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

Note :
Data may not add up to the total due to rounding.

A.4 RESIDENT LABOUR FORCE AGED FIFTEEN YEARS AND OVER BY HIGHEST QUALIFICATION ATTAINED AND SEX, 2009 AND 2019 (JUNE)

Thousands

Highest Qualification Attained	2009			2019		
	Total	Males	Females	Total	Males	Females
TOTAL	1,985.7	1,126.8	859.0	2,328.5	1,251.1	1,077.4
Below Secondary	481.9	293.4	188.4	352.0	200.6	151.4
Secondary	482.2	260.0	222.2	373.3	187.7	185.6
Post-Secondary (Non-Tertiary)	154.7	92.1	62.5	261.8	160.2	101.6
Diploma & Professional Qualification	336.2	187.0	149.2	468.7	253.8	214.9
Degree	530.9	294.3	236.6	872.7	448.8	423.9

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

Note :
Data may not add up to the total due to rounding.

A.5 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY INDUSTRY, AGE AND SEX, JUNE 2019

Thousands

SSIC 2015	Industry	Total			15 – 19			20 – 29		
		Total	Males	Females	Total	Males	Females	Total	Males	Females
	TOTAL	2,230.4	1,202.5	1,027.9	32.6	20.8	11.8	356.0	182.3	173.6
C10-32	Manufacturing	214.4	136.9	77.6	0.8	0.2	0.6	18.6	10.3	8.3
F41-43	Construction	98.0	71.0	27.0	0.4	0.3	0.1	6.5	4.1	2.5
G-U	Services	1,894.5	979.1	915.5	31.2	20.2	11.0	327.7	166.4	161.3
G46-47	Wholesale & Retail Trade	356.0	181.7	174.3	3.7	1.2	2.5	40.3	18.9	21.4
H49-53	Transportation & Storage	205.5	156.0	49.5	1.3	0.8	0.5	26.8	17.8	9.0
I55-56	Accommodation & Food Services	131.8	58.2	73.6	4.9	2.0	2.9	18.1	9.2	9.0
J58-63	Information & Communications	100.0	59.2	40.8	0.5	0.3	0.3	21.3	10.9	10.4
K64-66	Financial & Insurance Services	209.4	103.9	105.5	0.8	0.3	0.5	37.7	17.6	20.1
L68	Real Estate Services	48.7	23.9	24.8	0.1	-	0.1	4.1	1.7	2.3
M69-75	Professional Services	181.5	93.6	87.9	1.1	0.5	0.6	35.9	14.4	21.5
N77-82	Administrative & Support Services	122.6	67.7	54.9	0.7	0.3	0.4	16.1	8.8	7.3
O84,P85	Public Administration & Education	304.3	160.4	143.9	15.4	14.4	1.0	80.9	54.5	26.4
Q86-88	Health & Social Services	136.2	31.1	105.2	1.2	0.1	1.1	33.2	6.9	26.3
R90-93	Arts, Entertainment & Recreation	34.3	15.7	18.5	1.0	0.2	0.8	6.6	3.2	3.3
S94-U99	Other Community, Social & Personal Services	64.1	27.6	36.5	0.3	0.1	0.2	6.7	2.4	4.3
A,B,D,E,V	Others¹	23.5	15.6	7.9	0.2	0.1	0.1	3.1	1.6	1.5

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

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Note :

Data may not add up to the total due to rounding.

A.5 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY INDUSTRY, AGE AND SEX, JUNE 2019 (continued)

Thousands

SSIC 2015	Industry	30 – 39			40 – 49			50 – 59			60 & Over		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
	TOTAL	505.7	254.2	251.5	535.8	279.8	256.0	474.8	266.4	208.5	325.5	199.0	126.5
C10-32	Manufacturing	43.8	26.9	16.9	62.9	39.3	23.6	57.6	38.3	19.3	30.8	21.9	8.8
F41-43	Construction	16.7	10.6	6.1	23.6	16.2	7.4	32.2	24.7	7.6	18.5	15.2	3.3
G-U	Services	439.7	213.7	226.0	443.9	220.4	223.5	379.8	199.4	180.4	272.2	158.9	113.3
G46-47	Wholesale & Retail Trade	76.7	37.1	39.5	92.2	47.5	44.7	83.9	43.6	40.3	59.1	33.3	25.9
H49-53	Transportation & Storage	36.2	25.2	11.0	45.4	32.4	13.0	53.5	43.1	10.4	42.4	36.7	5.6
I55-56	Accommodation & Food Services	17.7	7.7	10.0	24.5	9.6	14.9	33.0	14.2	18.8	33.5	15.5	18.0
J58-63	Information & Communications	33.2	20.6	12.7	27.4	17.2	10.2	13.4	7.5	5.9	4.2	2.7	1.4
K64-66	Financial & Insurance Services	64.6	32.1	32.5	58.2	28.9	29.3	32.8	16.3	16.5	15.3	8.8	6.5
L68	Real Estate Services	11.5	5.3	6.1	11.2	4.9	6.2	13.1	7.1	6.1	8.8	4.9	3.9
M69-75	Professional Services	51.6	24.7	26.8	46.3	25.3	21.0	31.2	18.4	12.8	15.4	10.3	5.1
N77-82	Administrative & Support Services	20.0	10.1	9.9	23.3	12.2	11.2	27.3	15.2	12.1	35.2	21.3	14.0
O84,P85	Public Administration & Education	71.8	32.8	39.1	66.6	28.3	38.4	45.7	18.5	27.2	23.8	11.9	11.9
Q86-88	Health & Social Services	34.1	7.7	26.4	26.4	5.8	20.6	24.2	5.6	18.6	17.2	5.0	12.2
R90-93	Arts, Entertainment & Recreation	8.8	4.4	4.4	8.2	3.7	4.5	5.5	2.2	3.3	4.1	1.9	2.2
S94-U99	Other Community, Social & Personal Services	13.7	6.1	7.6	14.2	4.7	9.5	16.1	7.7	8.4	13.1	6.6	6.5
A,B,D,E,V	Others¹	5.5	3.0	2.5	5.4	3.9	1.5	5.2	4.0	1.2	4.0	3.0	1.0

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

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Note :

Data may not add up to the total due to rounding.

A.6 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY OCCUPATION, AGE AND SEX, JUNE 2019

Thousands

Occupation (SSOC 2015)	Total			15 – 19			20 – 29		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
TOTAL	2,230.4	1,202.5	1,027.9	32.6	20.8	11.8	356.0	182.3	173.6
Managers & Administrators	281.4	172.0	109.4	-	-	-	6.4	3.1	3.3
Working Proprietors	62.2	43.6	18.6	-	-	-	2.4	1.4	1.0
Professionals	467.1	248.6	218.4	0.3	0.1	0.2	87.8	36.7	51.2
Associate Professionals & Technicians	489.1	246.5	242.6	1.6	0.4	1.1	110.4	48.3	62.0
Clerical Support Workers	233.6	53.8	179.8	5.3	2.0	3.3	43.0	14.2	28.8
Service & Sales Workers	261.6	115.9	145.7	8.7	2.9	5.8	42.3	21.2	21.1
Craftsmen & Related Trades Workers	67.8	58.8	8.9	0.1	0.1	0.1	6.2	4.9	1.3
Plant & Machine Operators & Assemblers	153.5	136.5	16.9	0.7	0.6	0.1	10.0	9.3	0.7
Cleaners, Labourers & Related Workers	149.4	64.4	85.1	1.9	0.7	1.3	8.2	4.9	3.3
Others ¹	64.8	62.4	2.4	14.1	13.9	0.1	39.4	38.4	1.0

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

¹ 'Others' includes Agricultural & Fishery Workers and Workers Not Elsewhere Classified.

Note :

Data may not add up to the total due to rounding.

A.6 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY OCCUPATION, AGE AND SEX, JUNE 2019 (continued)

Thousands

Occupation (SSOC 2015)	30 – 39			40 – 49			50 – 59			60 & Over		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
TOTAL	505.7	254.2	251.5	535.8	279.8	256.0	474.8	266.4	208.5	325.5	199.0	126.5
Managers & Administrators	71.9	37.9	34.0	109.1	65.8	43.3	68.4	46.4	22.0	25.6	18.8	6.8
Working Proprietors	9.8	6.1	3.7	17.1	12.2	4.9	17.5	12.6	5.0	15.4	11.3	4.1
Professionals	159.6	81.5	78.2	128.2	73.7	54.6	67.1	41.1	26.0	24.0	15.7	8.4
Associate Professionals & Technicians	143.5	71.5	72.0	117.3	57.5	59.8	79.7	44.5	35.2	36.7	24.2	12.4
Clerical Support Workers	42.5	8.9	33.6	51.2	7.6	43.5	55.7	9.8	45.9	35.9	11.3	24.6
Service & Sales Workers	41.8	19.1	22.8	52.4	20.6	31.7	64.0	25.2	38.8	52.4	26.8	25.6
Craftsmen & Related Trades Workers	7.8	6.7	1.1	11.7	10.0	1.8	23.8	21.3	2.4	18.2	15.9	2.3
Plant & Machine Operators & Assemblers	14.9	13.1	1.8	29.0	24.1	4.9	52.2	45.9	6.2	46.8	43.5	3.3
Cleaners, Labourers & Related Workers	9.0	4.9	4.1	16.7	5.7	11.0	44.3	17.7	26.6	69.3	30.5	38.8
Others ¹	4.8	4.5	0.3	3.1	2.8	0.4	2.2	1.8	0.4	1.3	1.0	0.3

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

¹ 'Others' includes Agricultural & Fishery Workers and Workers Not Elsewhere Classified.

Note :

Data may not add up to the total due to rounding.

A.7 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY INDUSTRY AND OCCUPATION, JUNE 2019

Thousands

SSIC 2015	Industry	Total	Managers & Administrators	Working Proprietors	Professionals	Associate Professionals & Technicians	Clerical Support Workers	Service & Sales Workers	Craftsmen & Related Trades Workers	Plant & Machine Operators & Assemblers	Cleaners, Labourers & Related Workers	Others ²
	TOTAL	2,230.4	281.4	62.2	467.1	489.1	233.6	261.6	67.8	153.5	149.4	64.8
C10-32	Manufacturing	214.4	32.8	5.7	44.8	55.8	21.4	6.7	19.4	19.7	8.1	-
F41-43	Construction	98.0	16.1	8.5	11.3	19.6	11.8	1.1	16.7	7.0	5.9	0.1
G-U	Services	1,894.5	229.4	47.7	405.8	407.4	197.7	253.1	31.0	125.3	133.4	63.7
G46-47	Wholesale & Retail Trade	356.0	55.8	23.6	41.5	72.4	41.8	78.0	10.8	17.8	13.8	0.4
H49-53	Transportation & Storage	205.5	15.5	2.4	14.4	30.2	23.5	15.4	2.3	90.5	11.3	-
I55-56	Accommodation & Food Services	131.8	7.4	4.1	1.1	11.1	7.4	55.5	1.6	2.0	41.5	0.1
J58-63	Information & Communications	100.0	18.9	2.7	43.7	21.7	8.3	2.0	1.0	0.6	1.1	-
K64-66	Financial & Insurance Services	209.4	44.9	1.0	73.0	48.6	28.6	5.5	1.7	3.6	2.4	0.1
L68	Real Estate Services	48.7	5.9	0.2	4.1	26.6	4.5	2.3	1.2	0.4	3.5	-
M69-75	Professional Services	181.5	29.4	6.5	64.4	48.4	20.4	3.7	4.0	2.2	2.5	0.1
N77-82	Administrative & Support Services	122.6	8.6	2.5	7.4	19.1	13.9	30.6	2.5	2.5	34.6	1.1
O84,P85	Public Administration & Education	304.3	25.9	1.4	93.0	76.1	19.6	17.9	1.2	0.5	6.9	61.7
Q86-88	Health & Social Services	136.2	7.6	0.4	53.3	31.7	16.2	15.7	0.2	1.4	9.4	0.1
R90-93	Arts, Entertainment & Recreation	34.3	4.0	0.8	3.1	9.4	5.1	9.5	0.3	0.3	1.4	0.3
S94-U99	Other Community, Social & Personal Services	64.1	5.4	2.0	6.8	12.0	8.4	17.1	4.1	3.4	5.0	-
A,B,D,E,V	Others¹	23.5	3.2	0.3	5.2	6.2	2.7	0.6	0.7	1.6	2.0	0.9

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

¹ 'Others' industry includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.² 'Others' occupation includes Agricultural & Fishery Workers and Workers Not Elsewhere Classified.

Note :

Data may not add up to the total due to rounding.

A.8 RESIDENT LABOUR FORCE PARTICIPATION RATE BY AGE AND SEX, 2009 AND 2019 (JUNE)

Per Cent

Age (Years)	2009			2019		
	Total	Males	Females	Total	Males	Females
TOTAL	65.4	76.3	55.2	68.0	75.4	61.1
15 – 19	11.8	13.0	10.4	15.1	17.5	12.4
20 – 24	63.5	65.2	61.8	61.0	59.3	62.9
25 – 29	89.3	93.3	85.5	90.1	90.0	90.1
30 – 34	88.3	97.7	79.9	92.3	96.8	88.3
35 – 39	85.8	97.8	75.5	89.6	97.8	82.7
40 – 44	84.4	97.8	71.3	88.7	97.3	81.2
45 – 49	82.1	96.4	67.9	87.9	96.0	80.3
50 – 54	78.1	93.5	63.0	82.3	93.9	71.3
55 – 59	68.4	86.8	49.5	75.0	87.3	63.3
60 – 64	50.6	69.5	33.0	63.9	76.7	50.8
65 – 69	29.9	43.6	17.7	46.1	57.6	35.3
70 & Over	10.5	17.6	5.2	17.6	25.4	11.5

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

A.9 UNEMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY SEX, AGE AND HIGHEST QUALIFICATION ATTAINED, 2009 – 2019
(Annual Average)

Characteristics	Thousands										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	86.9	64.8	60.6	60.0	59.8	61.2	62.5	67.4	70.9	66.9	72.9
Sex											
Males	46.2	34.0	30.6	31.2	32.1	31.8	33.2	36.2	38.4	35.4	37.0
Females	40.7	30.8	30.0	28.8	27.7	29.4	29.2	31.2	32.6	31.5	35.8
Age (Years)											
15 – 29	27.5	23.7	21.0	21.1	21.3	22.1	22.2	21.8	22.6	21.6	23.1
30 – 39	18.6	12.1	12.6	11.9	11.2	11.5	9.9	11.9	12.6	11.5	11.5
40 – 49	19.6	13.7	11.3	11.4	11.7	11.4	12.6	12.8	13.7	12.6	14.1
50 & Over	21.2	15.3	15.6	15.7	15.6	16.3	17.8	20.9	22.0	21.1	24.1
Highest Qualification Attained											
Below Secondary	23.6	16.0	12.8	11.9	10.7	11.1	10.6	10.1	10.9	9.7	10.9
Secondary	22.3	14.8	14.9	12.4	11.9	11.6	11.3	12.3	11.1	11.0	13.3
Post-Secondary (Non-Tertiary)	8.2	7.8	7.4	7.7	7.9	6.4	7.4	7.5	8.9	8.0	8.0
Diploma & Professional Qualification	13.3	10.4	10.1	11.1	10.7	12.1	12.5	13.2	14.1	13.8	15.2
Degree	19.5	15.8	15.4	17.0	18.6	20.1	20.6	24.2	25.9	24.4	25.4

Source : Labour Force Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Annual figures are the simple averages of the non-seasonally adjusted unemployment figures obtained at quarterly intervals.
- 2) Data may not add up to the total due to rounding.

A.10 RESIDENT UNEMPLOYMENT RATE BY SEX, AGE AND HIGHEST QUALIFICATION ATTAINED, 2009 – 2019
(Annual Average)

Characteristics	Per Cent										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	4.3	3.1	2.9	2.8	2.8	2.7	2.8	3.0	3.1	2.9	3.1
Sex											
Males	4.1	3.0	2.6	2.7	2.7	2.7	2.7	3.0	3.1	2.9	3.0
Females	4.7	3.4	3.2	3.1	2.9	2.9	2.9	3.0	3.1	3.0	3.4
Age (Years)											
15 – 29	6.7	5.5	5.0	5.1	5.2	5.2	5.1	5.0	5.4	5.2	5.9
30 – 39	3.6	2.3	2.4	2.2	2.2	2.2	1.9	2.3	2.4	2.2	2.2
40 – 49	3.8	2.6	2.1	2.1	2.2	2.1	2.4	2.4	2.5	2.3	2.5
50 & Over	3.9	2.7	2.5	2.4	2.3	2.3	2.4	2.7	2.8	2.6	2.9
Highest Qualification Attained											
Below Secondary	4.9	3.4	2.8	2.6	2.4	2.5	2.5	2.4	2.6	2.5	2.9
Secondary	4.7	3.3	3.5	2.9	2.9	2.8	2.7	3.1	2.8	2.8	3.5
Post-Secondary (Non-Tertiary)	4.8	3.8	3.2	3.5	3.5	2.7	3.0	3.2	3.8	3.4	3.6
Diploma & Professional Qualification	3.9	2.9	2.7	2.8	2.7	2.9	2.9	3.1	3.3	3.1	3.3
Degree	3.6	2.8	2.6	2.7	2.8	2.9	2.8	3.1	3.2	2.9	2.9

Source : Labour Force Survey, Manpower Research & Statistics Department, MOM

Note :

Annual figures are the simple averages of the non-seasonally adjusted unemployment figures obtained at quarterly intervals.



Income, Wages And Earnings

INCOME, WAGES AND EARNINGS

Source of Data

Statistics on Gross Monthly Income From Work are compiled from the Comprehensive Labour Force Survey conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. The survey covers a sample of private households in Singapore. It excludes workers living in construction worksites, dormitories and workers' quarters at the workplace and persons commuting from abroad to work in Singapore.

Statistics on Annual Wage Changes are compiled from the Survey on Annual Wage Changes conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. The survey covers private sector establishments with at least 10 employees. The data collected pertain to full-time resident employees in continuous employment of at least one year.

Wage and wage-related guidelines are provided by the National Wages Council (NWC). The NWC, established in February 1972, is a tripartite body comprising representatives from government, employers and employees. Although its recommendations are not mandatory, they are widely accepted and followed.

Statistics on Average (Mean) Monthly Earnings are compiled based on the payroll of contributors to the Central Provident Fund (CPF). The data cover full-time and part-time employees who have CPF contributions. They exclude identifiable self-employed persons who have made CPF contributions.

Statistical Note

Gross Monthly Income From Work (Table B.1 – B.4)

Gross Monthly Income From Work is the widest measure of income from employment, covering both employees and the self-employed. For an indication of workers' economic well-being or how much a typical worker in Singapore is earning, users may look at the median income. This is the income of the worker in the middle of the income distribution, i.e. half of the workers earned more than this income and half, less.

While the growth in median income from work is a measurement of the progress in income of the employed pool as a whole, year-on-year income changes which are derived from a sample survey are prone to fluctuations and hence should

always be interpreted with caution. Income growth studied over longer periods (e.g. 5 or 10 years) smooths out these fluctuations and hence provides a more direct indication of income growth.

When determining how workers' income has changed over time, it is also more meaningful to focus on the income growth among those in full-time employment. This will avoid clouding the income trends with the changing mix of full-timers and part-timers among employed persons, as part-time work involves shorter working hours and correspondingly lower income. Moreover, full-timers form the bulk of workers in Singapore.

Annual Wage Changes (Table B.5 – B.7)

If interest is in wage increases over the year that employers give, then look at the annual wage changes. This indicator provides a breakdown of changes in total wages (Table B.5) into basic wages (Table B.6) and bonuses (Table B.7) by industry.

The data refer to wage changes that employers give their full-time resident employees in continuous employment of at least one year.

Average (Mean) Monthly Earnings (Table B.9)

Available quarterly, Average (Mean) Monthly Earnings (AME) provides a timely rough gauge of average wage movement. However, the AME can be influenced by the changing mix of full-time and part-time workers and variations in overtime as the data are compiled based on the payroll of contributors to the Central Provident Fund (CPF) which do not allow for breakdown separately to full-timers and part-timers.

Also, as AME pertains to mean earnings, it can be skewed upwards by a small number of very high income earners. For income of a typical worker, users should refer to the median Gross Monthly Income From Work and for wage growth of employees over a year users can refer to the Annual Wage Changes.

Concepts and Definitions

Gross Monthly Income From Work refers to income earned from employment. For employees, it refers to the gross monthly wages or salaries before deduction of employee CPF contributions and personal income tax. It comprises basic wages, overtime pay, commissions, tips, other allowances and one-twelfth of annual bonuses. For self-employed persons, gross monthly income refers to the average

monthly profits from their business, trade or profession (i.e. total receipts less business expenses incurred) before deduction of income tax.

Median (50th Percentile) Income

refers to the income level at the middle of the income distribution which divides the bottom half of income earners from the upper half.

20th Percentile Income refers to the income level which divides the bottom 20% of income earners from the rest. In Singapore, this measure is commonly used to proxy income of low-wage workers.

Total Wages refers to the sum of basic wages and bonuses.

Basic Wages refers to the basic pay before deduction of employee CPF contributions and personal income tax. It excludes employer CPF contributions, bonuses, overtime payments, commissions, allowances.

Annual Variable Component usually consists of two components i.e. Annual Wage Supplement (also known as 13th month) and variable bonus.

Average (Mean) Monthly Earnings refers to all remuneration received before deduction of the employee Central Provident Fund (CPF) contributions and

personal income tax. It comprises basic wages, overtime pay, commissions, allowances and bonuses but exclude employer CPF contributions.

B.1 GROSS MONTHLY INCOME FROM WORK OF FULL-TIME EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER, 2009 – 2019 (JUNE)

Dollars

June	Including Employer CPF		Excluding Employer CPF	
	Median (50th Percentile)	20th Percentile	Median (50th Percentile)	20th Percentile
2009	2,927	1,500	2,600	1,400
2010	3,000	1,600	2,708	1,500
2011	3,249	1,733	2,925	1,500
2012	3,480	1,740	3,000	1,563
2013	3,705	1,885	3,250	1,700
2014	3,770	1,972	3,276	1,750
2015	3,949	2,012	3,467	1,800
2016	4,056	2,106	3,500	1,950
2017	4,232	2,200	3,749	2,000
2018	4,437	2,340	3,800	2,000
2019	4,563	2,457	4,000	2,167

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

Notes :

- 1) Data exclude Full-Time National Servicemen.
- 2) Full-time employment (excluding full-time National Servicemen) refers to employment where the normal hours of work is at least 35 hours per week.
- 3) Gross Monthly Income From Work refers to income earned from employment. For employees, it refers to the gross monthly wages or salaries before deduction of employee CPF contributions and personal income tax. It comprises basic wages, overtime pay, commissions, tips, other allowances and one-twelfth of annual bonuses. For self-employed persons, gross monthly income refers to the average monthly profits from their business, trade or profession (i.e. total receipts less business expenses incurred) before deduction of income tax.
- 4) As data are captured from a sample survey, year-on-year income changes are prone to fluctuations and hence should always be interpreted with caution. Income growth studied over longer periods (e.g. 5 or 10 years) smooths out these fluctuations and hence provides a more direct indication of income growth.

**B.2 MEDIAN GROSS MONTHLY INCOME FROM WORK OF EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER
BY NATURE OF EMPLOYMENT AND SEX, 2009 – 2019 (JUNE)**
(Exclude Full-Time National Servicemen)
(TOTAL)

Dollars

June	Including Employer CPF			Excluding Employer CPF		
	Total	Full-Time	Part-Time	Total	Full-Time	Part-Time
2009	2,671	2,927	683	2,420	2,600	619
2010	2,817	3,000	745	2,500	2,708	700
2011	3,000	3,249	800	2,633	2,925	750
2012	3,133	3,480	812	2,800	3,000	800
2013	3,364	3,705	885	3,000	3,250	800
2014	3,444	3,770	928	3,000	3,276	827
2015	3,549	3,949	943	3,125	3,467	850
2016	3,680	4,056	1,000	3,250	3,500	938
2017	3,803	4,232	1,000	3,300	3,749	1,000
2018	3,949	4,437	1,053	3,467	3,800	1,000
2019	4,095	4,563	1,090	3,561	4,000	1,000

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

Notes :

- 1) Full-time employment (excluding full-time National Servicemen) refers to employment where the normal hours of work is at least 35 hours per week.
- 2) Gross Monthly Income From Work refers to income earned from employment. For employees, it refers to the gross monthly wages or salaries before deduction of employee CPF contributions and personal income tax. It comprises basic wages, overtime pay, commissions, tips, other allowances and one-twelfth of annual bonuses. For self-employed persons, gross monthly income refers to the average monthly profits from their business, trade or profession (i.e. total receipts less business expenses incurred) before deduction of income tax.
- 3) As data are captured from a sample survey, year-on-year income changes are prone to fluctuations and hence should always be interpreted with caution. Income growth studied over longer periods (e.g. 5 or 10 years) smooths out these fluctuations and hence provides a more direct indication of income growth.

**B.2 MEDIAN GROSS MONTHLY INCOME FROM WORK OF EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER
BY NATURE OF EMPLOYMENT AND SEX, 2009 – 2019 (JUNE)** (continued)
(Exclude Full-Time National Servicemen)
(MALES)

Dollars

June	Including Employer CPF			Excluding Employer CPF		
	Total	Full-Time	Part-Time	Total	Full-Time	Part-Time
2009	2,887	3,000	773	2,600	2,708	700
2010	3,000	3,159	825	2,708	2,917	800
2011	3,174	3,441	830	2,917	3,000	800
2012	3,451	3,640	885	3,000	3,250	800
2013	3,654	3,915	966	3,250	3,467	900
2014	3,770	4,000	1,000	3,263	3,502	1,000
2015	3,890	4,118	1,000	3,467	3,683	1,000
2016	3,991	4,241	1,075	3,500	3,792	1,000
2017	4,095	4,437	1,075	3,675	3,988	1,000
2018	4,331	4,680	1,090	3,792	4,033	1,000
2019	4,437	4,810	1,170	3,967	4,229	1,017

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

Notes :

- 1) Full-time employment (excluding full-time National Servicemen) refers to employment where the normal hours of work is at least 35 hours per week.
- 2) Gross Monthly Income From Work refers to income earned from employment. For employees, it refers to the gross monthly wages or salaries before deduction of employee CPF contributions and personal income tax. It comprises basic wages, overtime pay, commissions, tips, other allowances and one-twelfth of annual bonuses. For self-employed persons, gross monthly income refers to the average monthly profits from their business, trade or profession (i.e. total receipts less business expenses incurred) before deduction of income tax.
- 3) As data are captured from a sample survey, year-on-year income changes are prone to fluctuations and hence should always be interpreted with caution. Income growth studied over longer periods (e.g. 5 or 10 years) smooths out these fluctuations and hence provides a more direct indication of income growth.

**B.2 MEDIAN GROSS MONTHLY INCOME FROM WORK OF EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER
BY NATURE OF EMPLOYMENT AND SEX, 2009 – 2019 (JUNE)** (continued)
(Exclude Full-Time National Servicemen)
(FEMALES)

Dollars

June	Including Employer CPF			Excluding Employer CPF		
	Total	Full-Time	Part-Time	Total	Full-Time	Part-Time
2009	2,481	2,754	653	2,167	2,492	600
2010	2,481	2,863	692	2,188	2,500	650
2011	2,672	3,099	750	2,383	2,708	700
2012	2,839	3,230	779	2,500	2,828	700
2013	3,016	3,480	836	2,700	3,000	800
2014	3,087	3,518	884	2,708	3,125	800
2015	3,248	3,744	928	2,817	3,250	800
2016	3,382	3,803	936	2,979	3,298	813
2017	3,543	4,027	1,000	3,033	3,500	900
2018	3,627	4,095	1,023	3,150	3,558	1,000
2019	3,803	4,329	1,075	3,250	3,772	1,000

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

Notes :

- 1) Full-time employment (excluding full-time National Servicemen) refers to employment where the normal hours of work is at least 35 hours per week.
- 2) Gross Monthly Income From Work refers to income earned from employment. For employees, it refers to the gross monthly wages or salaries before deduction of employee CPF contributions and personal income tax. It comprises basic wages, overtime pay, commissions, tips, other allowances and one-twelfth of annual bonuses. For self-employed persons, gross monthly income refers to the average monthly profits from their business, trade or profession (i.e. total receipts less business expenses incurred) before deduction of income tax.
- 3) As data are captured from a sample survey, year-on-year income changes are prone to fluctuations and hence should always be interpreted with caution. Income growth studied over longer periods (e.g. 5 or 10 years) smooths out these fluctuations and hence provides a more direct indication of income growth.

**B.3 MEDIAN GROSS MONTHLY INCOME FROM WORK OF FULL-TIME EMPLOYED RESIDENTS
AGED FIFTEEN YEARS AND OVER BY INDUSTRY AND SEX, JUNE 2019**
(Exclude Full-Time National Servicemen)

Industry (SSIC 2015)		Including Employer CPF			Excluding Employer CPF		
		Total	Males	Females	Total	Males	Females
Total		4,563	4,810	4,329	4,000	4,229	3,772
C	Manufacturing	5,000	5,460	4,129	4,333	4,805	3,575
F	Construction	4,095	4,278	3,549	3,589	3,800	3,229
G-U	Services	4,516	4,709	4,368	4,000	4,117	3,792
	G Wholesale & Retail Trade	4,118	4,563	3,686	3,639	4,000	3,245
	H Transportation & Storage	3,225	3,000	3,949	3,000	2,800	3,383
	I Accommodation & Food Services	2,300	2,571	2,106	2,000	2,300	1,875
	J Information & Communications	6,084	6,786	5,489	5,383	5,833	4,767
	K Financial & Insurance Services	6,913	8,009	6,338	6,000	7,000	5,417
	L Real Estate Services	4,520	4,500	4,586	4,072	4,004	4,072
	M Professional Services	5,704	6,338	5,070	5,000	5,471	4,375
	N Administrative & Support Services	2,853	2,727	3,042	2,500	2,400	2,600
	O,P Public Administration & Education	6,338	6,954	5,704	5,417	5,958	4,918
	Q Health & Social Services	4,199	5,265	3,949	3,625	4,586	3,435
	R Arts, Entertainment & Recreation	4,056	4,056	4,058	3,500	3,575	3,500
	S-U Other Community, Social & Personal Services	3,250	3,494	3,168	2,909	3,033	2,750
A,B,D,E,V	Others¹	5,070	5,290	4,388	4,333	4,608	3,750

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

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

**B.4 EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER BY GROSS MONTHLY INCOME FROM WORK
(EXCLUDING EMPLOYER CPF), NATURE OF EMPLOYMENT AND SEX, JUNE 2019**
(Exclude Full-Time National Servicemen)

Thousands

Gross Monthly Income (Excluding Employer CPF)	Total			Full - Time			Part - Time		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
TOTAL	2,184.2	1,156.2	1,027.9	1,933.8	1,062.2	871.6	250.4	94.1	156.3
Under \$500	39.5	13.6	26.0	4.0	1.8	2.2	35.5	11.8	23.8
\$ 500 - \$ 999	101.9	37.8	64.1	24.2	11.8	12.4	77.7	26.0	51.7
\$ 1,000 - \$ 1,499	198.6	88.2	110.4	130.4	61.8	68.6	68.2	26.4	41.8
\$ 1,500 - \$ 1,999	172.0	88.3	83.7	150.4	77.3	73.1	21.6	11.0	10.6
\$ 2,000 - \$ 2,499	191.8	102.0	89.8	177.5	96.6	80.9	14.3	5.4	8.8
\$ 2,500 - \$ 2,999	169.8	84.4	85.4	164.0	82.7	81.3	5.9	1.7	4.1
\$ 3,000 - \$ 3,999	317.1	165.8	151.3	306.5	161.2	145.4	10.6	4.7	5.9
\$ 4,000 - \$ 4,999	231.6	123.8	107.8	226.1	121.3	104.8	5.4	2.4	3.0
\$ 5,000 - \$ 5,999	175.7	94.4	81.3	171.8	92.8	79.0	3.9	1.6	2.3
\$ 6,000 - \$ 6,999	108.9	58.7	50.2	107.2	58.0	49.2	1.7	0.7	1.0
\$ 7,000 - \$ 7,999	92.5	51.9	40.6	91.3	51.4	39.9	1.3	0.5	0.8
\$ 8,000 - \$ 8,999	71.2	41.9	29.4	70.6	41.6	28.9	0.7	0.2	0.4
\$ 9,000 - \$ 9,999	53.5	31.5	22.1	52.9	31.4	21.5	0.6	0.1	0.5
\$10,000 - \$10,999	59.3	37.9	21.4	58.6	37.4	21.2	0.7	0.5	0.2
\$11,000 - \$11,999	29.5	17.4	12.1	29.3	17.3	12.0	0.2	0.1	0.1
\$12,000 & Over	171.1	118.7	52.3	169.0	117.8	51.2	2.1	0.9	1.1

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

B.5 TOTAL WAGE CHANGE BY INDUSTRY, 2009 – 2019

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	-0.4	5.5	5.3	3.8	5.3	4.9	4.0	3.1	3.8	4.6	3.9
C10-32	Manufacturing	-0.3	4.9	4.1	3.7	4.4	4.9	3.1	1.7	4.2	4.2	3.1
F41-43	Construction	1.6	4.4	4.2	3.7	5.2	3.8	3.1	2.1	2.0	2.8	2.6
G-U	Services	-0.6	5.8	5.6	3.9	5.5	5.0	4.3	3.5	3.9	4.8	4.2
G46-47	Wholesale & Retail Trade	0.4	5.4	4.6	4.5	5.3	4.4	3.3	2.7	3.3	4.1	3.5
H49-53	Transportation & Storage	-5.1	2.5	7.4	1.7	6.0	3.8	4.3	5.1	3.3	4.4	3.3
I55-56	Accommodation & Food Services	0.1	3.3	4.5	3.4	5.3	3.7	3.2	2.3	3.8	3.9	4.2
J58-63	Information & Communications	-1.0	4.7	4.6	4.7	5.5	4.7	2.5	2.7	3.9	5.0	4.9
K64-66	Financial & Insurance Services	-1.7	10.0	9.1	4.4	5.3	5.9	5.4	3.9	4.2	6.3	5.6
L68	Real Estate Services	-0.5	4.8	5.5	4.4	6.4	6.8	4.1	3.4	3.1	5.0	3.9
M69-75	Professional Services	-0.5	8.1	5.6	3.8	4.9	4.0	3.7	3.3	4.3	5.4	4.6
N77-82	Administrative & Support Services	0.9	4.3	3.7	4.7	6.6	8.6	6.5	5.0	4.3	4.5	3.9
O-U	Community, Social & Personal Services	1.3	7.0	5.0	3.9	5.3	5.4	5.1	3.7	4.3	4.9	4.0

Source : Survey on Annual Wage Changes, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to full-time resident employees in continuous employment of at least one year.
- 2) The survey covers private sector establishments each with at least 10 employees.

B.6 BASIC WAGE CHANGE BY INDUSTRY, 2009 – 2019

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	1.3	3.9	4.4	4.5	5.1	4.9	4.2	3.5	3.6	4.0	3.8
C10-32	Manufacturing	0.7	3.6	4.0	4.3	4.6	4.3	3.8	3.1	3.2	4.1	3.6
F41-43	Construction	1.5	3.5	3.9	3.6	5.2	3.8	3.3	2.3	2.6	2.8	2.6
G-U	Services	1.5	4.0	4.5	4.6	5.2	5.1	4.4	3.8	3.7	4.1	4.0
G46-47	Wholesale & Retail Trade	1.4	3.6	4.1	4.2	5.5	4.5	3.7	3.2	3.4	3.8	3.6
H49-53	Transportation & Storage	0.4	2.9	3.8	4.7	5.2	4.3	3.6	3.9	3.3	3.4	3.5
I55-56	Accommodation & Food Services	1.7	2.9	3.8	3.4	5.1	3.9	3.2	2.5	3.9	3.8	4.1
J58-63	Information & Communications	1.1	4.0	4.5	4.6	4.7	4.6	4.0	3.8	3.7	4.1	4.4
K64-66	Financial & Insurance Services	1.9	6.0	7.4	5.1	4.7	5.6	5.3	4.4	4.0	5.3	4.9
L68	Real Estate Services	1.3	3.3	4.1	4.6	6.0	6.7	4.4	3.4	3.6	3.4	3.4
M69-75	Professional Services	1.7	5.7	5.0	4.7	4.8	4.4	4.2	3.8	3.8	4.4	4.3
N77-82	Administrative & Support Services	1.3	2.8	3.5	4.8	6.4	8.5	6.3	4.9	3.9	4.1	3.7
O-U	Community, Social & Personal Services	2.4	4.3	4.2	5.0	4.8	5.4	5.1	4.0	3.9	4.2	3.9

Source : Survey on Annual Wage Changes, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to full-time resident employees in continuous employment of at least one year.
- 2) The survey covers private sector establishments each with at least 10 employees.

B.7 QUANTUM OF VARIABLE COMPONENT PAID BY INDUSTRY, 2009 – 2019

SSIC 2015	Industry	Months of Basic Wage										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	1.99	2.17	2.32	2.19	2.21	2.21	2.17	2.16	2.14	2.06	1.94
C10-32	Manufacturing	2.33	2.60	2.62	2.54	2.37	2.54	2.42	2.25	2.28	2.16	1.96
F41-43	Construction	1.28	1.50	1.59	1.42	1.49	1.46	1.40	1.45	1.27	1.11	1.12
G-U	Services	1.95	2.11	2.31	2.17	2.21	2.19	2.18	2.19	2.17	2.12	2.00
G46-47	Wholesale & Retail Trade	1.71	1.89	2.19	2.15	2.09	1.99	1.96	1.98	1.83	1.86	1.76
H49-53	Transportation & Storage	2.51	2.39	2.88	2.35	2.40	2.39	2.49	2.68	2.65	2.66	2.42
I55-56	Accommodation & Food Services	1.11	1.11	1.20	1.31	1.29	1.10	1.11	1.13	1.08	1.01	0.83
J58-63	Information & Communications	2.26	2.31	2.39	2.32	2.38	2.45	2.27	2.05	2.01	1.89	1.48
K64-66	Financial & Insurance Services	2.98	3.30	3.35	3.12	3.26	3.37	3.38	3.28	3.34	3.13	3.23
L68	Real Estate Services	1.62	1.66	2.08	1.90	1.91	2.08	1.92	1.82	2.28	2.45	2.36
M69-75	Professional Services	1.79	2.17	2.29	2.09	2.14	2.02	2.05	2.03	1.94	1.96	1.85
N77-82	Administrative & Support Services	1.02	1.09	1.05	0.97	1.07	1.14	1.14	1.25	1.38	1.08	0.95
O-U	Community, Social & Personal Services	2.03	2.37	2.46	2.36	2.40	2.46	2.37	2.39	2.44	2.36	2.34

Source : Survey on Annual Wage Changes, Manpower Research & Statistics Department, MOM

Notes :

1) Data pertain to full-time resident employees in continuous employment of at least one year.

2) The survey covers private sector establishments each with at least 10 employees.

3) Data on bonus quantum for a reference year is collected twice. Once during the reference year and once more a year later to facilitate calculation of total wage changes in the same company received by a fixed cohort of employees. This table is based on bonus quantum collected in the reference year.

B.8 NATIONAL WAGES COUNCIL (NWC) 2020/2021 GUIDELINES

WAGE AND TRAINING RECOMMENDATIONS

1 The National Wages Council (“NWC”) convened in March 2020 to formulate wage guidelines for the period from 1 April 2020 to 30 June 2021. These 2020/2021 Guidelines will supersede the 2019/2020 Guidelines with effect from 1 April 2020.

An Unprecedented Crisis

2 The ongoing COVID-19 pandemic presents significant challenges to the global economy. The outbreak has now spread beyond China to other major economies such as the US and Europe, and the public health measures taken to contain the outbreak are causing widespread economic disruptions. In Singapore, the outbreak has severely affected our economy. The sharp fall in international travel and tourist arrivals has badly hit our air transport and tourism sectors. Other consumer-facing sectors such as food services and retail trade have also been adversely affected by the decline in tourist arrivals as well as the cutback in domestic consumption. At the same time, outward-oriented sectors such as manufacturing and wholesale trade face a sharp fall in external demand as the outbreak takes a toll on the global economy.

3 Based on the Ministry of Trade and Industry’s (“MTI”) advance estimates for the first quarter of 2020, the Singapore economy contracted by 2.2% on a year-on-year basis and 10.6% on a quarter-on-quarter seasonally-adjusted annualised basis. Taking into account the challenging external and domestic situation, MTI has further downgraded Singapore’s GDP growth forecast for 2020 from “-0.5% to 1.5%” to “-4.0% to -1.0%”.

4 The Government has dedicated close to \$55 billion to respond to COVID-19, amounting to 11% of our GDP. This includes the \$48 billion Resilience Budget and the \$6.4 billion in the Unity Budget committed towards the Stabilisation and Support Package (“SSP”), the Care and Support Package, and to support our frontline agencies.

Staying United to Respond to COVID-19

5 The NWC calls on employers, unions & workers, and the Government to stay united and work together, to mitigate the impact of COVID-19 and position Singapore for eventual recovery. To sustain businesses and save jobs, employers should consider the following (in order of priority):

- a) First, reduce non-wage costs, and consider various measures to utilise and manage excess manpower.
- b) Second, tap on Government support to offset business and wage costs, and press on with business and workforce transformation.
- c) Third, trim wage costs.
- d) Fourth, if it is necessary to retrench workers as a last resort, ensure it is done in a responsible manner.

Reducing Non-Wage Costs and Managing Excess Manpower

6 The NWC notes that the Tripartite Advisory on Managing Excess Manpower and Responsible Retrenchments (“the Tripartite Advisory”) was updated in March 2020. The NWC reaffirms the approach of having employers recognise the need to take a long-term view of their manpower needs, including the need to maintain a strong Singaporean core, notwithstanding the economic uncertainty brought on by COVID-19.

7 The NWC recommends the following to reduce non-wage costs and manage excess manpower:

- a) Focus on training and upskilling. See the next section for the NWC’s training recommendations.
- b) Adopt Flexible Work Schedules (FWS). Flexible Work Schedules allow employers to optimise the use of manpower when they go through cyclical troughs and peaks. Under an FWS, employers can reduce weekly working hours without adjusting wages, by creating a “timebank” of unused working hours. These banked hours can then be used to offset the increase in working hours in subsequent periods.
- c) Support affected local employees who wish to seek a second job to supplement their income. Employers that implement job-sharing arrangements, shorter work-week, or temporary layoffs should support employees who are interested to take on part-time or temporary work for another employer.

8 To help companies save jobs, employees are also urged to support employers’ cost-cutting measures and reasonable efforts to manage excess manpower. Unemployed workers should also take advantage of training support schemes to upgrade themselves and be flexible in accepting new job opportunities.

Pressing on with Business and Workforce Transformation

9 The Government has provided significant wage offsets to ease business costs. For example, under the enhanced and extended Jobs Support Scheme, the Government will co-fund 25% of the gross monthly wages of each local employee, up to a monthly wage cap of \$4,600. Firms in the food services sector will receive higher support, at 50% of wages, and firms in the aviation and tourism sectors, which are the most badly affected sectors, will be supported at 75% of wages.

10 The NWC strongly encourages all employers to make full use of Government support measures to press on with business and workforce transformation. Singapore should remain focused on longer-term industry transformation throughout this period. For employers that are seeing declines in business volume, the NWC urges them to use this period to accelerate the implementation of business and workforce transformation initiatives. Employers that do this will gain a competitive advantage and be better prepared to grow when the economy recovers.

11 The NWC makes the following recommendations:

- a) Bring forward planned training for employees. In last year's guidelines, the NWC recommended that all employers develop a training plan that meets their current and future requirements, drawing reference from the relevant Skills Frameworks. Employers that have done so should now bring forward planned training, putting employees' downtime to productive use.

Employers that have yet to develop training plans should seek help from the National Centre of Excellence for Workplace Learning ("NACE"), Singapore National Employers Federation ("SNEF"), Singapore Business Federation ("SBF"), other trade associations & chambers, the unions and NTUC LearningHub.

SkillsFuture Singapore ("SSG") offers extensive course fee subsidies and absentee payroll support. Sectors that have been particularly impacted by COVID-19 will receive further support under the SSP, in the form of enhanced course fee subsidies.

- b) Bring forward implementation of productivity initiatives. Employers should:
- i. Redesign jobs and train their employees for these new jobs. Under the SSP, WSG has made the Job Redesign and Redeployment programmes more attractive for sectors most affected by COVID-19. Under the Next Bound of SkillsFuture, the Productivity Solutions Grant has also been expanded to include job redesign consultancy services.
 - ii. Invest in training all employees in emerging skills, so that they continue to be employable and are not at risk of redundancy. Eligible employers can also tap on the new SkillsFuture Enterprise Credit to defray 90% of out-of-pocket expenses for business transformation, job redesign and skills training.
- c) Set up a Company Training Committee ("CTC") with the labour movement. More than 350 CTCs have already been established, and they are helping employers to build up their in-house workplace learning capabilities, conduct Ops-Tech Roadmapping, and re-strategise their business.
- d) Share productivity gains with their employees. Employers that do this will benefit from the enhanced Wage Credit Scheme, which subsidises qualifying wage increases for Singaporeans.

Wage Recommendations for All Workers

12 The NWC recognises that notwithstanding efforts to reduce non-wage costs, manage excess manpower, and use the lull to invest in business transformation and workforce training, employers may still find it necessary to trim wage bills in order to save jobs. The NWC therefore makes the following general wage recommendations:

- a) Employers that are adversely impacted by COVID-19 and face uncertain prospects may exercise wage reduction, with management leading by example. Depending on their financial position and prospects, these employers may consider reducing variable payments, in accordance with the Tripartite Advisory. As wage reduction measures affect the livelihood of employees, especially over an extended period of time, employers should seek the consent of unions and engage employees before implementing such measures.
- b) The NWC notes that given the adverse impact from COVID-19, fewer employees are working overtime and receiving overtime pay. Employees with commission-based variable payments or who have been asked to go on no-pay leave would also already have had their overall wages impacted. For these employees, employers should take such factors into account if they are considering a reduction in other wage components.
- c) If monthly wage levels are unsustainable given the fall in demand, employers can consider adjusting monthly variable wage components.
 - i. Under the flexible wage system¹, the Monthly Variable Component (“MVC”), which is part of the basic wage, allows employers to adjust wages quickly in response to changes in the business environment without having to wait until the end of the year to adjust variable bonus payments and other annual variable components. Employers can consider adjusting the MVC downwards. The extent of the adjustment would depend on the employer’s situation and any key performance indicators or guidelines for triggering an MVC cut as agreed with the union (if company is unionised) or employees.
 - ii. For the rest of employers that have not implemented the MVC but need to adjust monthly wages downwards, they could consider treating any cut in basic wages of up to 10% as an MVC cut. In the case of management, depending on the circumstances and requirements of the company, the MVC set aside could be more than 10% of basic wages, in line with the principle of leadership by example.
 - iii. Employers should set clear guidelines to restore MVC or basic wage cuts through future wage increases or adjustments when business recovers.

¹ The flexible wage system is a key recommendation of the NWC since 1986. In the most recent survey, 88% of private sector employees already work in establishments with some form of flexible wage system.

- d) As far as possible, employers should endeavour to pay their employees the Annual Wage Supplement. Recognising employees fairly will enable these employers to retain and inspire loyalty in their workforce and be well positioned for the recovery.
- e) Any reduction of wages should be applied to local and foreign employees fairly.

13 Companies that have done or are still doing well. At the same time, the NWC recognises that some employers will have done well despite the general economic situation. These employers should continue to reward employees with variable payments commensurate with the company's performance and the employees' contributions. If their business prospects are uncertain, they may exercise moderation in built-in wage increases.

14 Softening impact on Low-Wage Workers. The NWC recognises that any wage adjustment would have a disproportionately larger impact on low-wage workers. Hence, it strongly recommends that employers give special consideration to such workers, particularly those serving in the frontline of the COVID-19 response. Where wage reductions are necessary, employers should adopt a graduated approach, with deeper reductions at the management level and for higher-wage employees to effect the desired extent of reduction in total wage cost.

- a) For low-wage workers earning a basic monthly wage of up to \$1,400, the NWC recommends differentiated treatment:
 - i. If employers are implementing a policy of wage reduction, then, with respect to such workers, to implement a wage freeze instead.
 - ii. If employers are implementing a policy of wage freeze or wage increase, then, with respect to such workers, to consider a built-in wage increase of up to \$50 instead.
- b) Where employers can afford to, they should provide special consideration to workers who have stepped up to assist the business during this challenging period. This could be in the form of an *ex gratia* payment, depending on business performance.

Responsible Retrenchment

15 If retrenchment is necessary despite all of the above measures and wage adjustments, the NWC calls on employers to conduct retrenchment exercises in a responsible manner, as set out in the Tripartite Advisory.

- a) When carrying out a retrenchment exercise, the selection of employees for retrenchment should be conducted fairly, based on objective criteria such as the ability of the employee to contribute to the company's future business needs. Discrimination against local employees, for example, will not be tolerated by the Government.

- b) Employers should submit Mandatory Retrenchment Notifications to the Ministry of Manpower, and consult their relevant unions if they are unionized, as early as possible.
- c) Employers should provide longer notice periods to the extent practicable for employees who will be retrenched, beyond the minimum requirements covered under the Employment Act.
- d) Employers should provide retrenchment benefits in line with the Tripartite Advisory.
- e) Employers should help affected employees look for alternative jobs in associate companies, in other companies or through outplacement assistance programmes. Employers can work with the unions, SNEF, SBF, WSG, NTUC's e2i, Job Security Council, U PME Centre, or any other relevant agencies, to provide employment facilitation services to help the affected employees.

Implementation of Recommendations

16 These guidelines apply to all employees – professionals, managers, executives, technicians and rank-and-file employees, in unionised and non-unionised firms, in both the public and private sectors. They also apply to re-employed employees.

17 To facilitate wage negotiation, employers should share relevant information, such as company wage information, business performance and prospects, with unions.

18 The NWC encourages employers that encounter difficulties in implementing the guidelines to work with the employers' associations and unions to address the issues.

19 In view of the rapid changes in the economic situation, the NWC will reconvene to review the wage guidelines as and when the situation warrants it.

B.9 AVERAGE (MEAN) MONTHLY EARNINGS PER EMPLOYEE BY SEX, 2009 – 2019
(TOTAL)

	Level (\$)					Change (%) Over Corresponding Period Of Previous Year				
	Annual	1Q	2Q	3Q	4Q	Annual	1Q	2Q	3Q	4Q
2009	3,872	4,155	3,609	3,562	4,160	-2.6	-3.7	-2.2	-3.0	-1.6
2010	4,089	4,310	3,819	3,754	4,474	5.6	3.7	5.8	5.4	7.5
2011	4,334	4,677	4,048	3,956	4,655	6.0	8.5	6.0	5.4	4.0
2012	4,433	4,717	4,162	4,078	4,773	2.3	0.9	2.8	3.1	2.5
2013	4,622	4,948	4,329	4,212	4,998	4.3	4.9	4.0	3.3	4.7
2014	4,727	5,108	4,445	4,314	5,040	2.3	3.2	2.7	2.4	0.8
2015	4,892	5,259	4,611	4,493	5,205	3.5	3.0	3.7	4.1	3.3
2016	5,074	5,483	4,789	4,646	5,379	3.7	4.3	3.9	3.4	3.3
2017	5,229	5,586	4,939	4,795	5,596	3.1	1.9	3.1	3.2	4.0
2018	5,410	5,808	5,119	4,962	5,752	3.5	4.0	3.6	3.5	2.8
2019	5,549	6,005	5,225	5,183	5,783	2.6	3.4	2.1	4.5	0.5

Source : Derived based on data from Central Provident Fund Board

Notes :

- 1) Average (Mean) Monthly Earnings (AME) refers to all remuneration received before deduction of the employee Central Provident Fund (CPF) contributions and personal income tax. It comprises basic wages, overtime pay, commissions, allowances and bonuses but exclude employer CPF contributions.
- 2) Data cover full-time and part-time employees who have CPF contributions. They exclude identifiable self-employed persons who have made CPF contribution.
- 3) Average (Mean) Monthly Earnings covers employees who contribute to the Central Provident Fund. Available quarterly, AME provides a timely rough gauge of average wage movement. However, the AME can be influenced by the changing mix of full-time and part-time workers and variations in overtime as the data are compiled based on the payroll of contributors to the CPF which do not allow for breakdown separately to full-timers and part-timers. Also, as AME pertains to mean earnings, it can be skewed upwards by a small number of very high income earners. For income of a typical worker, users should refer to the median Gross Monthly Income From Work and for wage growth of employees over a year they can refer to the Annual Wage Changes, both of which are available on MOM's website.

B.9 AVERAGE (MEAN) MONTHLY EARNINGS PER EMPLOYEE BY SEX, 2009 – 2019 (continued)
(MALES)

	Level (\$)					Change (%) Over Corresponding Period Of Previous Year				
	Annual	1Q	2Q	3Q	4Q	Annual	1Q	2Q	3Q	4Q
2009	4,436	4,787	4,137	4,092	4,730	-2.7	-3.1	-2.5	-3.4	-1.9
2010	4,686	4,955	4,380	4,310	5,098	5.6	3.5	5.9	5.3	7.8
2011	4,964	5,351	4,653	4,546	5,304	5.9	8.0	6.2	5.5	4.0
2012	5,080	5,418	4,778	4,688	5,436	2.3	1.3	2.7	3.1	2.5
2013	5,291	5,661	4,978	4,844	5,682	4.2	4.5	4.2	3.3	4.5
2014	5,412	5,845	5,100	4,957	5,745	2.3	3.3	2.5	2.3	1.1
2015	5,584	6,019	5,280	5,136	5,900	3.2	3.0	3.5	3.6	2.7
2016	5,774	6,239	5,472	5,301	6,084	3.4	3.7	3.6	3.2	3.1
2017	5,935	6,339	5,637	5,458	6,306	2.8	1.6	3.0	3.0	3.6
2018	6,118	6,564	5,818	5,627	6,461	3.1	3.5	3.2	3.1	2.5
2019	6,159	6,772	5,938	5,423	6,503	0.7	3.2	2.1	-3.6	0.7

Source : Derived based on data from Central Provident Fund Board

Notes :

- 1) Average (Mean) Monthly Earnings (AME) refers to all remuneration received before deduction of the employee Central Provident Fund (CPF) contributions and personal income tax. It comprises basic wages, overtime pay, commissions, allowances and bonuses but exclude employer CPF contributions.
- 2) Data cover full-time and part-time employees who have CPF contributions. They exclude identifiable self-employed persons who have made CPF contribution.
- 3) Average (Mean) Monthly Earnings covers employees who contribute to the Central Provident Fund. Available quarterly, AME provides a timely rough gauge of average wage movement. However, the AME can be influenced by the changing mix of full-time and part-time workers and variations in overtime as the data are compiled based on the payroll of contributors to the CPF which do not allow for breakdown separately to full-timers and part-timers. Also, as AME pertains to mean earnings, it can be skewed upwards by a small number of very high income earners. For income of a typical worker, users should refer to the median Gross Monthly Income From Work and for wage growth of employees over a year they can refer to the Annual Wage Changes, both of which are available on MOM's website.

B.9 AVERAGE (MEAN) MONTHLY EARNINGS PER EMPLOYEE BY SEX, 2009 – 2019 (continued)
(FEMALES)

	Level (\$)					Change (%) Over Corresponding Period Of Previous Year				
	Annual	1Q	2Q	3Q	4Q	Annual	1Q	2Q	3Q	4Q
2009	3,247	3,457	3,025	2,976	3,530	-2.6	-4.6	-1.8	-2.5	-1.3
2010	3,434	3,598	3,203	3,145	3,791	5.8	4.1	5.9	5.7	7.4
2011	3,650	3,943	3,390	3,316	3,951	6.3	9.6	5.8	5.4	4.2
2012	3,735	3,960	3,498	3,422	4,061	2.3	0.4	3.2	3.2	2.8
2013	3,909	4,186	3,637	3,540	4,271	4.7	5.7	4.0	3.4	5.2
2014	4,006	4,329	3,755	3,639	4,302	2.5	3.4	3.2	2.8	0.7
2015	4,172	4,467	3,914	3,825	4,484	4.1	3.2	4.2	5.1	4.2
2016	4,353	4,701	4,084	3,971	4,655	4.3	5.2	4.3	3.8	3.8
2017	4,509	4,816	4,228	4,119	4,873	3.6	2.4	3.5	3.7	4.7
2018	4,693	5,040	4,411	4,289	5,033	4.1	4.7	4.3	4.1	3.3
2019	4,827	5,232	4,506	4,512	5,060	2.9	3.8	2.2	5.2	0.5

Source : Derived based on data from Central Provident Fund Board

Notes :

- 1) Average (Mean) Monthly Earnings (AME) refers to all remuneration received before deduction of the employee Central Provident Fund (CPF) contributions and personal income tax. It comprises basic wages, overtime pay, commissions, allowances and bonuses but exclude employer CPF contributions.
- 2) Data cover full-time and part-time employees who have CPF contributions. They exclude identifiable self-employed persons who have made CPF contribution.
- 3) Average (Mean) Monthly Earnings covers employees who contribute to the Central Provident Fund. Available quarterly, AME provides a timely rough gauge of average wage movement. However, the AME can be influenced by the changing mix of full-time and part-time workers and variations in overtime as the data are compiled based on the payroll of contributors to the CPF which do not allow for breakdown separately to full-timers and part-timers. Also, as AME pertains to mean earnings, it can be skewed upwards by a small number of very high income earners. For income of a typical worker, users should refer to the median Gross Monthly Income From Work and for wage growth of employees over a year they can refer to the Annual Wage Changes, both of which are available on MOM's website.



Employment, Hours Worked And Conditions Of Employment



EMPLOYMENT, HOURS WORKED AND CONDITIONS OF EMPLOYMENT

Source of Data

Employment data are compiled primarily from administrative records of the Central Provident Fund Board and the Ministry of Manpower. The self-employed component is estimated from the Labour Force Survey.

Statistics on Paid Hours Worked are compiled from the Labour Market Survey conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. Before 2006, the survey covered private sector establishments with at least 25 employees. From 2006 onwards, the survey also includes the public sector.

Statistics on Actual Hours Worked and Usual Hours Worked (including paid and unpaid hours worked by employed persons) are compiled from the Labour Force Survey conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. The survey covers private households in Singapore. It excludes workers living in construction worksites, dormitories and workers' quarters at the workplace and persons commuting from abroad to work in Singapore.

Statistics on Employment Conditions and Practices are compiled from a supplementary survey on Quality Workplaces conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. The survey covers establishments in the private sector with at least 25 employees and the public sector.

Concepts and Definitions

Employment data from administrative records comprise all persons in employment. However, it excludes men who are serving their 2-year full-time national service in the Singapore Armed Forces, Police and Civil Defence Forces.

Data on the number of local (also known as resident) employees are compiled from the Central Provident Fund (CPF) Board's administrative records of active contributors, defined as local employees who have at least one CPF contribution paid for him/her. A local employee is a Singapore citizen or Permanent Resident who is employed by an employer under a contract of service or other agreement entered into in Singapore. Every local employee and his/her employer are

required to make monthly contributions to the CPF. The CPF is a compulsory savings scheme that provides workers financial security in old age and helps meet the needs of healthcare, home-ownership, family protection and asset enhancement.

Data on foreigners working in Singapore are compiled from administrative records of foreigners on valid work passes issued by the Ministry of Manpower. Foreigners can work in Singapore only if they have valid work passes issued by the Ministry of Manpower.

The number of self-employed persons is estimated from the Labour Force Survey. The self-employed comprises persons aged fifteen years and over who are own account workers, employers or contributing family workers.

Standard Hours Worked Per Week refers to the number of hours, excluding meal breaks worked by an employee during a normal working week.

Paid Overtime Hours Worked Per Week refers to the number of hours worked by an employee in excess of the standard hours for which the employees were paid. It excludes overtime hours worked for which 'time-off' was granted instead of wage payment.

Paid Hours Worked Per Week refers to the total number of paid hours worked during a week by an employee. It is the sum of standard hours and paid overtime hours worked.

Actual Hours Worked Per Week refers to the actual time spent by employed persons on work activities, regardless of whether the hours are regular in nature or whether he is paid or not.

Usual Hours Worked Per Week refers to the number of hours that a person usually works in a typical week, regardless of whether he is paid or not.

An **establishment** refers to an economic unit that produces goods or services at a single physical location and engages in one, or predominantly one type of economic activity. Thus, each branch of a multi-branch organisation at a different location is conceptually a different establishment. However, if in practice the required statistics are centrally kept such that it is not possible to obtain separate data for each individual unit or branch, the organisation or enterprise is treated as a single reporting unit and allowed to submit a consolidated return covering all the units or branches.

Part-Time Work refers to total working hours of less than 35 hours in a week. This work arrangement includes those who work half-day or only some days per week but excludes workers who work “on and off” and temporary employees who work the normal hours.

Flexi-time is an arrangement where employees can vary their daily working hours to suit their work and personal commitments so long as they work the total hours agreed for an accounting period, usually a week or month in the office.

Tele-working is an arrangement for extended period of time where employees perform work in places other than the office and the job is performed using information and communication technologies. Employees under this work arrangement may be required to spend certain “core” times or days in the office. This differs from an **ad-hoc tele-working** arrangement where employees tele-work on a case-by-case basis for personal reasons (e.g. to cope with family emergencies).

Homeworking is an arrangement where employees undertake work mainly in their homes without using information and communication technologies. Such jobs usually involve production of goods or services (e.g. sewing parts of a product, hand-packing of products from home). It excludes those who are tele-working.

Job Sharing is an arrangement where the workload of a full-time job is split between two or more people in the office. The jobsharers work at different times, although there may be a time overlap to maintain continuity. They may each work part of the day or week, or alternate weeks (depending on individual and their employers’ circumstances) on an ongoing, regular basis.

Compressed Work Week is an arrangement where a standard work week is condensed into fewer than five days (i.e. employees complete their expected workload over a shorter time period). It is an option taken up by employees, rather than a mandatory requirement made by the employer.

Staggered Hours is an arrangement characterised by different starting and finishing hours (e.g. start time can vary from 7am to 10am with finish time adjusted accordingly) around compulsory core hours (e.g. 10am to 4pm).

C.1 EMPLOYMENT BY INDUSTRY, 2009 – 2019 (DECEMBER)

												Thousands
SSIC 2015	Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	2,990.0	3,105.9	3,228.5	3,357.6	3,493.8	3,623.9	3,656.2	3,673.1	3,669.4	3,714.8	3,784.5
C10-32	MANUFACTURING	516.3	520.9	526.7	535.1	539.9	536.0	514.8	500.5	490.0	488.2	486.1
C10-12	Food, Beverages & Tobacco	34.4	36.3	36.8	38.1	41.7	43.7	45.8	47.2	49.7	51.4	53.2
C17-18,22	Paper / Rubber / Plastic Products & Printing	37.5	40.9	40.5	38.5	37.9	36.9	34.3	32.4	30.8	29.7	28.6
C19-21	Petroleum, Chemical & Pharmaceutical Products	57.1	53.3	52.3	64.3	65.0	61.5	58.1	63.4	59.4	62.9	63.5
C25,28	Fabricated Metal Products, Machinery & Equipment	102.9	107.6	112.6	113.0	113.3	114.8	109.8	101.4	99.3	95.3	93.9
C26	Electronic, Computer & Optical Products	94.9	100.4	95.1	91.3	88.3	87.4	85.8	83.9	91.6	92.0	88.4
C29-30	Transport Equipment	132.0	122.6	128.8	128.4	131.7	128.1	117.7	109.0	95.5	94.1	96.6
C13-16,23-24,27,31-32	Other Manufacturing Industries	57.5	59.7	60.6	61.4	62.0	63.5	63.4	63.2	63.7	62.9	61.8
F41-43	CONSTRUCTION	378.0	378.5	400.3	440.7	479.3	494.0	501.2	489.9	451.8	444.2	456.8
G-U	SERVICES	2,073.9	2,184.2	2,278.3	2,356.9	2,448.1	2,566.6	2,612.3	2,655.1	2,700.4	2,755.3	2,814.7
G46-47	WHOLESALE AND RETAIL TRADE	427.6	440.7	455.1	466.7	482.1	499.6	491.2	492.6	490.1	491.2	487.2
G46	Wholesale Trade	281.1	291.2	298.6	304.8	314.5	322.5	322.4	322.9	321.7	325.5	323.5
G47	Retail Trade	146.5	149.5	156.5	161.9	167.7	177.1	168.9	169.6	168.4	165.7	163.7
H49-53	TRANSPORTATION AND STORAGE	199.9	206.6	213.4	222.8	231.1	239.0	241.6	245.0	252.2	259.8	263.0
H49,5221	Land Transport & Supporting Services	79.8	81.6	82.7	85.1	87.9	91.1	94.4	99.3	103.8	108.6	109.5
H50,5222, 5225	Water Transport & Supporting Services	39.4	40.5	43.0	44.0	46.1	48.1	47.0	46.3	46.0	45.3	44.9
H51,5223	Air Transport & Supporting Services	25.6	27.3	29.1	31.2	32.4	32.1	32.4	31.1	32.9	34.3	35.5
H521,5224,5229,53	Other Transportation & Storage Services	55.1	57.2	58.6	62.5	64.7	67.7	67.7	68.2	69.6	71.7	73.0
I55-56	ACCOMMODATION AND FOOD SERVICES	190.2	205.7	215.9	223.0	230.5	240.7	245.9	251.2	254.8	259.7	265.9
I55	Accommodation	28.0	33.4	35.4	35.9	35.7	36.3	35.8	35.0	35.0	36.4	36.5
I56	Food & Beverage Services	162.2	172.4	180.5	187.1	194.8	204.4	210.1	216.2	219.7	223.3	229.4

Source : Administrative Records and Labour Force Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data are primarily from administrative records, with the self-employed component estimated from the Labour Force Survey.
- 2) Data may not add up to the total due to rounding.

C.1 EMPLOYMENT BY INDUSTRY, 2009 – 2019 (DECEMBER) (continued)

												Thousands
SSIC 2015	Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	89.7	98.2	107.2	110.3	116.6	123.5	127.7	129.9	134.1	142.4	149.6
J58-61	Telecommunications, Broadcasting & Publishing	35.6	37.5	38.7	38.9	40.2	40.9	41.3	40.4	40.2	41.0	41.1
J62-63	IT & Other Information Services	54.1	60.7	68.5	71.4	76.4	82.6	86.4	89.6	93.9	101.4	108.5
K64-66	FINANCIAL AND INSURANCE SERVICES	142.3	149.0	156.1	162.0	167.8	176.5	179.8	185.5	188.6	194.5	200.8
K64 & 66 (excl. 662)	Financial Services	115.2	120.8	127.4	132.6	137.6	142.8	145.6	149.9	150.3	155.1	160.3
K65 & 662	Insurance Services	27.1	28.2	28.6	29.4	30.3	33.7	34.2	35.6	38.2	39.4	40.5
L68	REAL ESTATE SERVICES	78.9	81.3	85.0	89.1	87.7	95.0	89.6	84.4	86.3	82.6	83.8
M69-75	PROFESSIONAL SERVICES	172.6	184.2	193.7	203.9	218.6	231.7	234.4	233.9	237.9	243.8	254.0
M69-70	Legal, Accounting & Management Services	81.5	87.4	91.2	95.3	103.7	110.5	115.1	117.0	120.8	125.7	133.2
M71	Architectural & Engineering Services	51.4	54.5	57.6	60.6	63.9	64.5	63.2	60.7	59.2	60.6	61.2
M72-75	Other Professional Services	39.7	42.2	44.9	48.0	51.0	56.7	56.1	56.2	57.8	57.6	59.6
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	157.2	169.0	178.8	185.9	196.5	210.5	224.8	234.2	240.7	247.6	254.8
N80	Security & Investigation	32.5	33.5	35.9	36.8	38.1	40.5	42.8	44.4	47.1	48.4	49.4
N81	Cleaning & Landscaping	43.7	45.5	46.5	48.6	54.7	59.2	65.3	72.8	75.5	77.5	79.5
N77-79,82	Other Administrative & Support Services	81.1	90.0	96.5	100.5	103.7	110.7	116.7	117.0	118.2	121.6	125.9
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	615.4	649.5	673.1	693.2	717.3	750.2	777.2	798.3	815.8	833.6	855.4
O84,P85	Public Administration & Education	195.3	203.1	210.8	218.9	225.4	234.3	239.3	244.2	245.7	250.7	255.9
Q86-88	Health & Social Services	90.8	98.8	106.4	115.0	124.0	133.3	145.1	152.5	158.4	163.5	169.4
R90-93	Arts, Entertainment & Recreation	42.0	52.7	55.8	55.3	54.7	56.0	56.2	55.6	56.1	56.7	57.3
S,T,U	Other Community, Social & Personal Services	287.3	294.8	300.1	304.1	313.2	326.5	336.6	346.1	355.6	362.7	372.7
A,B,D,E,V	Others¹	21.9	22.4	23.2	24.9	26.6	27.3	27.9	27.7	27.2	27.1	27.0

Source : Administrative Records and Labour Force Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data are primarily from administrative records, with the self-employed component estimated from the Labour Force Survey.

2) Data may not add up to the total due to rounding.

**C.2 AVERAGE WEEKLY TOTAL PAID HOURS WORKED PER EMPLOYEE BY INDUSTRY, 2009 – 2019
(ALL EMPLOYEES)**

SSIC 2015	Industry	Hours										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	46.0	46.2	46.2	46.2	46.2	46.0	45.6	45.5	45.1	44.8	44.7
C10-32	MANUFACTURING	49.3	50.5	50.2	50.2	50.1	49.7	49.3	48.9	48.5	48.3	47.8
C10-12	Food, Beverages & Tobacco	46.8	47.5	48.5	47.8	46.9	46.9	46.6	46.6	46.4	45.6	45.1
C17-18,22	Paper / Rubber / Plastic Products & Printing	48.8	50.0	49.2	48.6	49.1	49.3	48.6	48.5	48.6	48.3	47.6
C19-21	Petroleum, Chemical & Pharmaceutical Products	45.3	46.1	45.9	45.1	44.7	44.5	44.4	44.9	44.4	44.1	43.9
C25,28	Fabricated Metal Products, Machinery & Equipment	51.1	52.7	52.2	52.6	52.6	52.1	51.1	50.4	50.1	49.8	49.5
C26	Electronic, Computer & Optical Products	46.1	47.3	47.0	46.8	46.9	46.8	46.4	47.0	46.9	47.1	46.3
C29-30	Transport Equipment	52.1	53.4	53.1	53.5	53.0	52.4	52.8	51.3	50.6	50.7	50.7
C13-16,23-24,27,31-32	Other Manufacturing Industries	49.4	49.9	49.7	49.7	50.2	49.2	48.5	48.6	48.5	48.0	47.4
F41-43	CONSTRUCTION	52.2	52.4	52.8	53.0	53.2	52.9	52.1	52.0	50.8	50.4	50.0
G-U	SERVICES	43.3	43.4	43.4	43.5	43.4	43.2	43.1	43.2	43.1	42.9	42.9
G46-47	WHOLESALE AND RETAIL TRADE	43.7	43.8	43.7	43.6	43.2	43.1	43.0	42.7	42.8	42.9	42.9
G46	Wholesale Trade	43.6	43.8	43.6	43.7	43.6	43.6	43.4	43.0	43.2	43.3	43.2
G47	Retail Trade	43.8	43.8	43.8	43.3	42.3	42.0	42.1	42.1	42.1	42.0	42.1
H49-53	TRANSPORTATION AND STORAGE	45.3	45.7	46.2	46.1	45.7	45.8	45.7	45.9	45.5	45.6	45.5
H49,5221	Land Transport & Supporting Services	47.0	47.6	48.4	48.4	46.8	46.9	46.0	45.9	45.3	45.2	46.1
H50,5222,5225	Water Transport & Supporting Services	44.9	44.7	44.9	44.6	44.3	44.5	44.3	44.7	44.3	44.5	44.7
H51,5223	Air Transport & Supporting Services	43.4	43.7	44.6	44.8	45.1	45.0	45.2	45.7	45.1	45.0	44.5
H521,5224,5229,53	Other Transportation & Storage Services	46.0	46.7	46.9	46.7	46.6	46.6	47.0	46.8	46.9	46.9	46.2

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

C.2 AVERAGE WEEKLY TOTAL PAID HOURS WORKED PER EMPLOYEE BY INDUSTRY, 2009 – 2019 (continued)
(ALL EMPLOYEES)

SSIC 2015	Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
												Hours
I55-56	ACCOMMODATION AND FOOD SERVICES	41.2	41.2	41.6	42.1	43.0	42.0	41.5	42.0	42.2	41.5	41.8
I55	Accommodation	44.9	45.4	45.8	45.9	46.6	46.5	46.4	46.2	46.1	45.7	45.7
I56	Food & Beverage Services	40.0	39.9	40.4	41.1	42.0	40.9	40.4	41.1	41.3	40.6	41.0
J58-63	INFORMATION AND COMMUNICATIONS	41.6	41.7	41.5	41.5	41.7	41.5	41.5	41.4	41.5	41.7	41.6
J58-61	Telecommunications, Broadcasting & Publishing	41.6	41.7	41.4	41.6	42.3	41.9	41.9	41.7	41.6	41.6	41.7
J62-63	IT & Other Information Services	41.5	41.6	41.6	41.4	41.2	41.2	41.2	41.2	41.5	41.7	41.6
K64-66	FINANCIAL AND INSURANCE SERVICES	41.9	41.4	41.2	41.2	41.2	41.1	41.1	41.1	41.1	41.1	41.6
K64 & 66 (excl. 662)	Financial Services	42.2	41.6	41.4	41.3	41.3	41.3	41.2	41.2	41.3	41.3	41.8
K65 & 662	Insurance Services	40.4	40.4	39.8	40.0	40.0	40.2	40.1	40.1	40.1	40.1	40.2
L68	REAL ESTATE SERVICES	44.2	44.7	44.6	44.5	44.6	44.5	44.8	45.0	44.6	44.0	44.2
M69-75	PROFESSIONAL SERVICES	43.3	43.0	43.1	43.6	43.6	43.1	42.9	43.3	43.1	43.0	42.9
M69-70	Legal, Accounting & Management Services	41.2	41.0	41.1	41.5	41.3	41.2	41.2	41.3	41.2	41.1	40.9
M71	Architectural & Engineering Services	45.9	45.6	45.7	46.6	47.0	46.2	45.6	46.5	46.1	46.1	46.0
M72-75	Other Professional Services	42.2	42.5	42.9	42.2	41.8	41.7	42.0	42.0	42.4	41.8	41.9
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	47.9	48.7	48.5	48.5	47.5	47.3	46.4	46.6	46.7	46.0	46.0
N80	Security & Investigation	55.0	55.2	54.6	55.5	52.8	52.1	50.5	51.2	52.3	51.4	51.3
N81	Cleaning & Landscaping	44.0	44.8	45.7	45.3	44.9	44.6	43.8	44.0	44.4	44.7	44.4
N77-79,82	Other Administrative & Support Services	44.9	46.0	45.7	45.0	44.8	45.2	45.3	44.9	44.5	44.1	44.4
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	41.8	42.0	42.1	42.1	42.1	42.0	42.1	42.1	41.9	41.8	41.9
O84,P85	Public Administration & Education	41.5	41.5	41.4	41.3	41.3	41.3	41.5	41.6	41.4	41.2	41.3
Q86-88	Health & Social Services	41.9	42.0	42.1	42.1	42.0	41.9	41.9	42.0	41.9	42.0	41.9
R90-93	Arts, Entertainment & Recreation	41.9	42.6	43.4	43.8	43.9	43.8	44.2	44.0	43.7	43.8	43.8
S,T,U	Other Community, Social & Personal Services	43.5	44.0	44.3	44.2	43.8	43.5	42.9	42.9	42.8	42.3	42.4
A,B,D,E,V	Others¹	46.4	46.3	45.8	45.7	45.7	45.6	45.6	45.7	45.4	45.4	45.1

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

**C.3 AVERAGE WEEKLY PAID OVERTIME HOURS WORKED PER EMPLOYEE BY INDUSTRY, 2009 – 2019
(ALL EMPLOYEES)**

SSIC 2015	Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	3.4	3.7	3.7	3.8	3.8	3.7	3.4	3.3	3.0	2.8	2.7
C10-32	MANUFACTURING	6.1	7.2	7.0	7.2	7.1	6.7	6.3	5.9	5.6	5.5	5.1
C10-12	Food, Beverages & Tobacco	3.7	4.3	5.0	4.3	4.1	3.9	4.0	4.0	3.9	3.6	3.3
C17-18,22	Paper / Rubber / Plastic Products & Printing	5.4	6.4	5.8	5.1	5.7	5.8	5.4	5.2	5.3	5.2	4.3
C19-21	Petroleum, Chemical & Pharmaceutical Products	2.8	3.3	3.2	3.2	2.9	2.8	2.6	2.8	2.5	2.4	2.3
C25,28	Fabricated Metal Products, Machinery & Equipment	7.6	8.9	8.6	9.1	9.0	8.6	7.6	6.9	6.8	6.5	6.3
C26	Electronic, Computer & Optical Products	3.6	5.0	4.6	4.8	4.8	4.7	4.3	4.6	4.5	4.9	4.0
C29-30	Transport Equipment	8.4	9.6	9.4	9.9	9.4	8.8	9.1	7.7	7.1	7.3	7.3
C13-16,23-24,27,31-32	Other Manufacturing Industries	6.3	6.9	6.8	6.7	7.2	6.3	5.9	6.0	6.0	5.5	5.0
F41-43	CONSTRUCTION	7.4	7.5	7.9	8.2	8.5	8.2	7.6	7.7	6.6	6.4	6.1
G-U	SERVICES	1.5	1.7	1.7	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5
G46-47	WHOLESALE AND RETAIL TRADE	1.8	1.9	1.7	1.7	1.7	1.8	1.8	1.5	1.5	1.6	1.5
G46	Wholesale Trade	1.7	1.7	1.6	1.6	1.5	1.7	1.8	1.4	1.5	1.4	1.3
G47	Retail Trade	2.0	2.2	2.1	2.0	2.0	2.0	1.8	1.7	1.7	1.8	1.7
H49-53	TRANSPORTATION AND STORAGE	2.4	2.9	3.3	3.3	3.0	3.0	2.9	2.9	2.6	2.6	2.7
H49,5221	Land Transport & Supporting Services	3.8	4.3	4.9	5.2	3.8	4.0	3.3	3.2	2.8	2.8	3.7
H50,5222,5225	Water Transport & Supporting Services	1.9	1.9	2.0	1.8	1.8	2.0	1.8	2.0	1.6	1.9	2.2
H51,5223	Air Transport & Supporting Services	1.2	1.6	2.3	2.4	2.2	1.8	2.1	2.6	2.0	1.8	1.4
H521,5224,5229,53	Other Transportation & Storage Services	3.0	3.9	4.1	3.9	3.9	4.1	4.0	3.7	3.7	3.5	3.0

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

C.3 AVERAGE WEEKLY PAID OVERTIME HOURS WORKED PER EMPLOYEE BY INDUSTRY, 2009 – 2019 (continued)
(ALL EMPLOYEES)

SSIC 2015	Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
I55-56	ACCOMMODATION AND FOOD SERVICES	1.2	1.3	1.5	1.7	2.3	1.9	1.8	1.8	2.0	1.9	1.9
I55	Accommodation	1.2	1.8	1.9	2.1	2.6	2.7	2.6	2.4	2.4	2.3	2.3
I56	Food & Beverage Services	1.2	1.2	1.4	1.7	2.2	1.7	1.6	1.7	1.9	1.8	1.9
J58-63	INFORMATION AND COMMUNICATIONS	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.3
J58-61	Telecommunications, Broadcasting & Publishing	0.7	0.9	0.8	0.7	0.8	0.6	0.7	0.5	0.4	0.4	0.3
J62-63	IT & Other Information Services	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.3
K64-66	FINANCIAL AND INSURANCE SERVICES	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.4
K64 & 66 (excl. 662)	Financial Services	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5
K65 & 662	Insurance Services	0.5	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1
L68	REAL ESTATE SERVICES	1.7	2.1	2.0	1.9	2.2	2.0	2.3	2.4	2.0	1.6	1.7
M69-75	PROFESSIONAL SERVICES	1.8	1.7	1.7	2.0	2.1	1.8	1.4	1.6	1.5	1.4	1.4
M69-70	Legal, Accounting & Management Services	0.8	0.7	0.6	0.8	0.8	0.8	0.5	0.5	0.4	0.3	0.3
M71	Architectural & Engineering Services	3.2	3.0	3.1	3.9	4.3	3.7	2.9	3.6	3.3	3.3	3.4
M72-75	Other Professional Services	0.7	1.1	1.5	0.9	0.7	0.6	0.7	0.6	0.8	0.7	0.6
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	4.7	5.3	5.3	5.6	4.8	5.3	4.4	4.6	4.7	4.1	4.1
N80	Security & Investigation	10.6	10.5	10.5	12.1	9.6	10.3	9.1	9.3	9.8	9.9	10.1
N81	Cleaning & Landscaping	1.4	1.9	2.6	2.3	2.3	2.6	1.8	2.0	2.5	2.7	2.6
N77-79,82	Other Administrative & Support Services	2.3	3.3	3.2	2.7	2.6	2.9	2.8	2.9	2.6	2.0	2.0
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
O84,P85	Public Administration & Education	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Q86-88	Health & Social Services	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.5
R90-93	Arts, Entertainment & Recreation	0.8	0.9	1.3	1.4	1.2	1.2	1.5	1.4	1.2	1.3	1.1
S,T,U	Other Community, Social & Personal Services	1.1	1.8	1.9	2.0	1.7	1.7	1.5	1.0	1.1	1.2	1.2
A,B,D,E,V	Others¹	3.4	3.3	3.1	3.1	3.1	2.9	3.0	3.1	2.9	2.8	2.6

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

**C.4 AVERAGE WEEKLY TOTAL PAID HOURS / STANDARD HOURS WORKED PER EMPLOYEE
BY INDUSTRY AND NATURE OF EMPLOYMENT, 2019**

Hours

SSIC 2015	Industry	Average Weekly Total Paid Hours Worked			Average Weekly Standard Hours Worked		
		All Employees	Full-time Employees	Part-time Employees	All Employees	Full-time Employees	Part-time Employees
	TOTAL	44.7	45.6	25.2	42.0	42.8	24.6
C10-32	MANUFACTURING	47.8	48.1	25.5	42.7	43.0	25.1
C10-12	Food, Beverages & Tobacco	45.1	47.1	26.7	41.9	43.5	26.6
C17-18,22	Paper / Rubber / Plastic Products & Printing	47.6	47.8	23.3	43.3	43.4	22.8
C19-21	Petroleum, Chemical & Pharmaceutical Products	43.9	44.0	17.8	41.6	41.7	17.7
C25,28	Fabricated Metal Products, Machinery & Equipment	49.5	49.6	23.7	43.2	43.3	23.0
C26	Electronic, Computer & Optical Products	46.3	46.3	27.0	42.3	42.3	25.9
C29-30	Transport Equipment	50.7	50.9	22.4	43.4	43.6	22.3
C13-16,23-24,27,31-32	Other Manufacturing Industries	47.4	47.6	20.9	42.4	42.6	20.5
F41-43	CONSTRUCTION	50.0	50.2	20.6	43.9	44.1	20.6
G-U	SERVICES	42.9	44.1	25.2	41.5	42.5	24.7
G46-47	WHOLESALE AND RETAIL TRADE	42.9	44.1	25.2	41.4	42.6	24.8
G46	Wholesale Trade	43.2	43.6	26.3	41.9	42.3	25.8
G47	Retail Trade	42.1	45.4	24.9	40.4	43.4	24.5
H49-53	TRANSPORTATION AND STORAGE	45.5	45.9	24.0	42.8	43.2	23.3
H49,5221	Land Transport & Supporting Services	46.1	47.1	24.2	42.4	43.3	23.4
H50,5222,5225	Water Transport & Supporting Services	44.7	44.8	24.6	42.5	42.6	24.6
H51,5223	Air Transport & Supporting Services	44.5	44.6	25.3	43.1	43.2	25.2
H521,5224,5229,53	Other Transportation & Storage Services	46.2	46.6	23.7	43.2	43.5	23.2
I55-56	ACCOMMODATION AND FOOD SERVICES	41.8	46.2	25.4	39.8	43.9	24.9
I55	Accommodation	45.7	46.3	20.8	43.4	43.9	20.6
I56	Food & Beverage Services	41.0	46.2	25.5	39.1	43.9	24.9

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.
- 3) Part-time employees are employees who normally work less than 35 hours in a week, including those who work half-days or only some days per week. They exclude workers who work 'on and off' and temporary employees who work the normal hours.

**C.4 AVERAGE WEEKLY TOTAL PAID HOURS / STANDARD HOURS WORKED PER EMPLOYEE
BY INDUSTRY AND NATURE OF EMPLOYMENT, 2019 (continued)**

SSIC 2015	Industry	Average Weekly Total Paid Hours Worked			Average Weekly Standard Hours Worked		
		All Employees	Full-time Employees	Part-time Employees	All Employees	Full-time Employees	Part-time Employees
J58-63	INFORMATION AND COMMUNICATIONS	41.6	41.9	25.1	41.4	41.6	25.0
J58-61	Telecommunications, Broadcasting & Publishing	41.7	42.3	24.1	41.4	42.0	24.0
J62-63	IT & Other Information Services	41.6	41.7	27.8	41.3	41.4	27.5
K64-66	FINANCIAL AND INSURANCE SERVICES	41.6	41.6	24.5	41.2	41.2	24.3
K64 & 66 (excl. 662)	Financial Services	41.8	41.9	24.4	41.3	41.4	24.2
K65 & 662	Insurance Services	40.2	40.3	25.2	40.1	40.2	24.9
L68	REAL ESTATE SERVICES	44.2	44.8	26.5	42.5	43.1	26.2
M69-75	PROFESSIONAL SERVICES	42.9	43.1	22.3	41.5	41.7	22.2
M69-70	Legal, Accounting & Management Services	40.9	41.2	21.4	40.7	40.9	21.4
M71	Architectural & Engineering Services	46.0	46.2	22.7	42.7	42.8	22.4
M72-75	Other Professional Services	41.9	42.2	24.9	41.3	41.5	24.8
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	46.0	47.9	27.9	41.9	43.5	26.4
N80	Security & Investigation	51.3	55.3	32.3	41.2	43.9	28.8
N81	Cleaning & Landscaping	44.4	46.7	25.0	41.8	43.8	24.7
N77-79,82	Other Administrative & Support Services	44.4	44.9	23.8	42.4	42.8	23.7
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	41.9	42.8	23.3	41.4	42.4	23.1
O84,P85	Public Administration & Education	41.3	42.2	20.3	41.2	42.1	20.3
Q86-88	Health & Social Services	41.9	42.7	25.8	41.5	42.2	25.6
R90-93	Arts, Entertainment & Recreation	43.8	44.9	24.4	42.7	43.7	23.8
S,T,U	Other Community, Social & Personal Services	42.4	44.3	25.3	41.2	43.0	25.1
A,B,D,E,V	Others¹	45.1	45.5	24.7	42.5	42.9	24.7

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

3) Part-time employees are employees who normally work less than 35 hours in a week, including those who work half-days or only some days per week. They exclude workers who work 'on and off' and temporary employees who work the normal hours.

C.5 AVERAGE WEEKLY PAID OVERTIME HOURS WORKED PER EMPLOYEE BY INDUSTRY AND NATURE OF EMPLOYMENT, 2019

Hours

SSIC 2015	Industry	Average Weekly Paid Overtime Hours Worked (of All Employees)			Average Weekly Paid Overtime Hours Worked (of Employees who Worked Overtime)		
		All Employees	Full-time Employees	Part-time Employees	All Employees	Full-time Employees	Part-time Employees
	TOTAL	2.7	2.8	0.6	9.6	9.7	4.1
C10-32	MANUFACTURING	5.1	5.2	0.3	11.0	11.0	4.7
C10-12	Food, Beverages & Tobacco	3.3	3.6	0.2	9.5	9.6	2.5
C17-18,22	Paper / Rubber / Plastic Products & Printing	4.3	4.4	0.5	10.0	10.0	8.1
C19-21	Petroleum, Chemical & Pharmaceutical Products	2.3	2.3	0.1	7.9	7.9	4.2
C25,28	Fabricated Metal Products, Machinery & Equipment	6.3	6.3	0.7	12.7	12.7	6.4
C26	Electronic, Computer & Optical Products	4.0	4.0	1.1	8.9	8.9	11.8
C29-30	Transport Equipment	7.3	7.3	0.1	12.3	12.3	3.7
C13-16,23-24,27,31-32	Other Manufacturing Industries	5.0	5.0	0.4	11.2	11.2	5.4
F41-43	CONSTRUCTION	6.1	6.1	0.1	11.6	11.6	2.0
G-U	SERVICES	1.5	1.5	0.6	7.8	7.9	4.1
G46-47	WHOLESALE AND RETAIL TRADE	1.5	1.5	0.4	6.3	6.5	2.3
G46	Wholesale Trade	1.3	1.4	0.5	7.2	7.3	4.5
G47	Retail Trade	1.7	2.0	0.4	5.2	5.5	1.9
H49-53	TRANSPORTATION AND STORAGE	2.7	2.8	0.8	7.9	7.9	5.1
H49,5221	Land Transport & Supporting Services	3.7	3.8	0.8	8.6	8.6	4.8
H50,5222,5225	Water Transport & Supporting Services	2.2	2.2	-	6.1	6.1	0.8
H51,5223	Air Transport & Supporting Services	1.4	1.4	-	7.5	7.5	1.3
H521,5224,5229,53	Other Transportation & Storage Services	3.0	3.1	0.5	8.4	8.4	4.2
I55-56	ACCOMMODATION AND FOOD SERVICES	1.9	2.3	0.5	6.7	7.2	3.3
I55	Accommodation	2.3	2.4	0.2	6.8	6.8	4.8
I56	Food & Beverage Services	1.9	2.3	0.5	6.7	7.3	3.2

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.
- 3) Part-time employees are employees who normally work less than 35 hours in a week, including those who work half-days or only some days per week. They exclude workers who work 'on and off' and temporary employees who work the normal hours.

C.5 AVERAGE WEEKLY PAID OVERTIME HOURS WORKED PER EMPLOYEE BY INDUSTRY AND NATURE OF EMPLOYMENT, 2019 (continued)

Hours

SSIC 2015	Industry	Average Weekly Paid Overtime Hours Worked (of All Employees)			Average Weekly Paid Overtime Hours Worked (of Employees who Worked Overtime)		
		All Employees	Full-time Employees	Part-time Employees	All Employees	Full-time Employees	Part-time Employees
J58-63	INFORMATION AND COMMUNICATIONS	0.3	0.3	0.1	6.3	6.3	3.6
J58-61	Telecommunications, Broadcasting & Publishing	0.3	0.3	-	5.2	5.3	2.7
J62-63	IT & Other Information Services	0.3	0.3	0.3	7.1	7.1	2.8
K64-66	FINANCIAL AND INSURANCE SERVICES	0.4	0.4	0.2	5.5	5.5	3.3
K64 & 66 (excl. 662)	Financial Services	0.5	0.5	0.2	5.6	5.6	3.1
K65 & 662	Insurance Services	0.1	0.1	0.3	3.6	3.6	5.6
L68	REAL ESTATE SERVICES	1.7	1.7	0.3	8.7	8.8	3.4
M69-75	PROFESSIONAL SERVICES	1.4	1.4	0.1	9.0	9.1	4.3
M69-70	Legal, Accounting & Management Services	0.3	0.3	0.1	5.0	5.1	2.9
M71	Architectural & Engineering Services	3.4	3.4	0.3	10.0	10.0	7.9
M72-75	Other Professional Services	0.6	0.6	-	9.5	9.6	1.0
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	4.1	4.4	1.6	10.7	10.9	6.9
N80	Security & Investigation	10.1	11.5	3.4	13.3	14.0	7.5
N81	Cleaning & Landscaping	2.6	2.9	0.2	8.2	8.3	4.1
N77-79,82	Other Administrative & Support Services	2.0	2.1	0.1	9.7	9.8	1.9
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	0.4	0.4	0.2	5.3	5.4	3.4
O84,P85	Public Administration & Education	0.1	0.1	0.1	7.2	7.6	2.9
Q86-88	Health & Social Services	0.5	0.5	0.2	4.1	4.2	2.2
R90-93	Arts, Entertainment & Recreation	1.1	1.2	0.6	5.4	5.4	4.7
S,T,U	Other Community, Social & Personal Services	1.2	1.3	0.2	7.2	7.3	5.6
A,B,D,E,V	Others¹	2.6	2.6	-	9.0	9.0	2.4

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

3) Part-time employees are employees who normally work less than 35 hours in a week, including those who work half-days or only some days per week. They exclude workers who work 'on and off' and temporary employees who work the normal hours.

C.6 ANNUAL AVERAGE ACTUAL HOURS WORKED PER WEEK OF EMPLOYED PERSONS AGED FIFTEEN YEARS AND OVER BY INDUSTRY, 2019
(Exclude Full-Time National Servicemen)

Industry (SSIC 2015)		Hours Average Actual Hours Worked Per Week
TOTAL		44.7
C	Manufacturing	43.0
F	Construction	44.8
G	Wholesale & Retail Trade	41.2
H	Transportation & Storage	44.1
I	Accommodation & Food Services	42.4
J	Information & Communications	41.2
K	Financial & Insurance Services	42.0
L - N	Business Services	41.4
O - U	Other Services Industries	52.0
A,B,D,E,V	Others ¹	40.4

Source : Labour Force Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' industry includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes:

1) Annual figures are the simple averages of the non-seasonally adjusted figures obtained at quarterly intervals.

2) As data are obtained from a sample survey, estimates for smaller sub-industries are subject to larger sampling variability.

**C.7 AVERAGE USUAL HOURS WORKED PER WEEK OF EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER
BY NATURE OF EMPLOYMENT AND SELECTED CHARACTERISTICS, JUNE 2019**
(Exclude Full-Time National Servicemen)

Characteristics	Average Usual Hours Worked Per Week (Hours)			Proportion of Employed Residents Who Worked More Than 48 Hours Per Week (%)	
	Total	Full - Time	Part - Time	Total	Full - Time
TOTAL	42.9	45.8	21.1	21.1	23.8
Sex					
Males	44.8	46.8	21.3	26.3	28.6
Females	40.9	44.5	21.0	15.2	17.9
Age (Years)					
15 - 24	37.6	44.2	19.0	12.0	16.3
25 - 29	44.2	45.2	21.9	20.2	21.1
30 - 39	44.3	45.5	21.6	22.5	23.6
40 - 49	44.2	46.0	21.3	23.9	25.8
50 - 59	43.3	46.4	21.8	22.6	25.9
60 & Over	39.3	45.7	21.1	15.7	21.2
Highest Qualification Attained					
Below Secondary	41.3	47.2	22.1	20.3	26.4
Secondary	42.2	46.1	21.2	18.9	22.3
Post-Secondary (Non-Tertiary)	43.0	46.3	20.9	20.7	23.7
Diploma & Professional Qualification	42.6	44.8	20.7	17.2	19.0
Degree	44.0	45.5	20.0	24.3	25.8

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

**C.7 AVERAGE USUAL HOURS WORKED PER WEEK OF EMPLOYED RESIDENTS AGED FIFTEEN YEARS AND OVER
BY NATURE OF EMPLOYMENT AND SELECTED CHARACTERISTICS, JUNE 2019 (continued)**
(Exclude Full-Time National Servicemen)

Characteristics	Average Usual Hours Worked Per Week (Hours)			Proportion of Employed Residents Who Worked More Than 48 Hours Per Week (%)		Characteristics	Average Usual Hours Worked Per Week (Hours)			Proportion of Employed Residents Who Worked More Than 48 Hours Per Week (%)	
	Total	Full-Time	Part-Time	Total	Full-Time		Total	Full-Time	Part-Time	Total	Full-Time
Total	42.9	45.8	21.1	21.1	23.8						
Occupation (SSOC 2015)						Industry (SSIC 2015)					
Managers & Administrators	45.5	46.0	21.3	28.1	28.8	C Manufacturing	43.9	45.2	23.1	18.9	20.0
Working Proprietors	45.0	48.3	19.6	31.3	35.4	F Construction	43.6	46.3	20.9	22.7	25.4
Professionals	44.2	45.4	21.2	24.0	25.3	G-U Services	42.8	45.8	21.0	21.3	24.2
						G Wholesale & Retail Trade	42.4	44.9	22.4	16.9	19.0
Associate Professionals & Technicians	42.2	44.5	18.5	15.8	17.3	H Transportation & Storage	45.4	48.4	22.3	29.7	33.5
						I Accommodation & Food Services	40.5	48.3	21.8	23.6	33.4
Clerical Support Workers	40.4	43.1	21.5	8.1	9.3	J Information & Communications	43.1	44.5	21.3	19.5	20.7
						K Financial & Insurance Services	44.2	45.1	21.9	23.8	24.8
Service & Sales Workers	42.0	48.1	22.2	23.8	31.1	L Real Estate Services	42.0	45.2	19.2	19.4	22.2
						M Professional Services	43.4	45.3	20.3	23.2	25.0
Craftsmen & Related Trades Workers	43.8	46.1	22.3	20.0	22.1	N Administrative & Support Services	42.6	47.1	21.4	21.8	26.3
						O,P Public Administration & Education	42.3	45.7	18.0	22.2	25.3
Plant & Machine Operators & Assemblers	46.7	50.6	22.7	35.8	41.6	Q Health & Social Services	42.1	44.8	22.5	14.5	16.5
						R Arts, Entertainment & Recreation	40.5	45.6	17.5	16.1	19.7
Cleaners, Labourers & Related Workers	36.7	44.9	21.1	11.2	17.0	S-U Other Community, Social & Personal Services	40.2	45.6	20.1	17.2	21.7
Others ¹	46.1	46.8	s	29.2	30.2	A,B,D,E,V Others²	43.0	45.1	20.4	16.5	18.0

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

¹ 'Others' occupation includes Agricultural and Fishery Workers and Workers Not Elsewhere Classified.

² 'Others' industry includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Note :

s : Data suppressed due to small number covered.

C.8 PROPORTION OF ESTABLISHMENTS OFFERING FORMAL FLEXIBLE WORK ARRANGEMENTS, JUNE 2019

								Per Cent
SSIC 2015	Industry	Total ¹	Part-time working	Flexi-hours/ Staggered Hours	Formal Tele-working	Compressed Work Week	Job Sharing	Homeworking
	TOTAL (Public & Private Sectors)	52.7	36.7	29.8	6.9	1.6	1.3	0.9
	TOTAL (Private Sector)	52.4	36.3	29.3	6.5	1.6	1.2	0.9
	< By Industry (Private Sector) >							
C10-32	MANUFACTURING	47.0	28.3	26.8	6.5	1.4	0.8	1.0
C10-12	Food, Beverages & Tobacco	62.3	47.4	24.8	8.1	2.3	2.3	3.9
C17-18,22	Paper / Rubber / Plastic Products & Printing	43.4	29.3	27.8	5.6	1.0	-	-
C19-21	Petroleum, Chemical & Pharmaceutical Products	60.4	29.6	39.1	10.1	6.5	4.1	3.0
C25,28	Fabricated Metal Products, Machinery & Equipment	39.2	22.3	21.3	5.2	-	-	-
C26	Electronic, Computer & Optical Products	56.7	30.5	41.1	5.0	2.1	-	-
C29-30	Transport Equipment	41.8	28.5	24.8	3.9	1.1	1.1	1.3
C13-16,23-24,27,31-32	Other Manufacturing Industries	47.7	19.9	30.5	11.3	1.3	-	-
F41-43	CONSTRUCTION	28.8	17.1	16.5	1.0	1.4	0.8	-
G-U	SERVICES	61.3	44.5	33.9	8.1	1.8	1.4	1.2
G46-47	WHOLESALE AND RETAIL TRADE	53.7	34.6	28.7	5.8	1.1	0.9	0.8
G46	Wholesale Trade	51.0	30.3	28.5	5.0	0.7	0.8	0.7
G47	Retail Trade	64.3	51.6	29.7	8.6	3.0	1.2	1.2
H49-53	TRANSPORTATION AND STORAGE	44.6	29.1	29.1	7.9	1.8	0.3	0.9
H49,5221	Land Transport & Supporting Services	41.0	30.7	20.5	11.2	2.4	1.0	2.4
H50,5222,5225	Water Transport & Supporting Services	46.5	28.1	31.9	6.5	0.5	-	-
H51,5223	Air Transport & Supporting Services	s	s	s	s	s	s	s
H521,5224,5229,53	Other Transportation & Storage Services	44.7	27.8	30.7	5.8	2.3	-	0.6

Source : Supplementary Survey on Quality Workplaces, Manpower Research & Statistics Department, MOM

¹ 'Total' refers to establishments offering at least one type of formal flexible work arrangement (excluding unplanned time-off and informal/ad-hoc tele-working).

Notes :

- 1) Data pertain to private sector establishments each with at least 25 employees and the public sector.
- 2) Data pertain to permanent employees and employees on term contract of at least one year.
- 3) Figures refer to establishments that offered the respective formal flexible work arrangements as a proportion of all establishments.
- 4) Data do not add up to 'total' as establishments can offer more than one formal flexible work arrangement.
- 5) s : Data have been suppressed due to small number of observations.

C.8 PROPORTION OF ESTABLISHMENTS OFFERING FORMAL FLEXIBLE WORK ARRANGEMENTS, JUNE 2019 (continued)

								Per Cent
SSIC 2015	Industry	Total ¹	Part-time working	Flexi-hours/ Staggered Hours	Formal Tele-working	Compressed Work Week	Job Sharing	Homeworking
I55-56	ACCOMMODATION AND FOOD SERVICES	73.4	58.4	34.7	5.5	2.3	1.3	2.9
I55	Accommodation	73.3	44.0	46.6	0.9	7.8	0.9	1.7
I56	Food & Beverage Services	73.5	59.9	33.5	5.9	1.7	1.4	3.0
J58-63	INFORMATION AND COMMUNICATIONS	57.7	27.4	43.5	19.5	0.5	2.6	1.7
J58-61	Telecommunications, Broadcasting & Publishing	56.9	39.2	37.7	12.3	0.8	3.1	-
J62-63	IT & Other Information Services	58.0	22.0	46.2	22.7	0.3	2.4	2.4
K64-66	FINANCIAL AND INSURANCE SERVICES	62.2	41.0	42.4	15.8	4.2	2.4	1.2
K64 & 66 (excl. 662)	Financial Services	61.2	41.1	40.6	16.0	4.3	3.0	1.5
K65 & 662	Insurance Services	66.7	40.6	50.0	14.6	4.2	-	-
L68	REAL ESTATE SERVICES	51.1	38.0	31.4	4.4	-	1.3	-
M69-75	PROFESSIONAL SERVICES	60.6	39.9	42.1	13.9	1.1	1.4	0.5
M69-70	Legal, Accounting & Management Services	70.2	48.8	49.5	18.5	1.0	2.2	0.5
M71	Architectural & Engineering Services	52.0	32.9	36.1	7.0	1.3	0.5	0.3
M72-75	Other Professional Services	56.1	33.5	37.0	17.3	1.2	1.2	1.2
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	59.0	44.7	27.7	6.0	1.1	0.5	1.0
N80	Security & Investigation	78.8	63.5	32.7	-	-	-	-
N81	Cleaning & Landscaping	59.0	50.9	18.3	2.0	0.2	1.2	-
N77-79,82	Other Administrative & Support Services	50.9	30.6	35.6	12.7	2.3	-	2.3
P-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	76.7	67.2	37.1	6.1	3.2	3.1	1.1
P85	Education	79.2	76.1	34.7	9.7	3.5	3.5	1.9
Q86-88	Health & Social Services	85.9	80.6	42.3	1.9	4.7	0.9	0.6
R-U	Other Community, Social & Personal Services	71.4	57.6	35.6	6.7	2.3	4.0	1.0
A,B,D,E,V	Others²	48.1	33.3	29.6	12.3	-	6.2	-

Source : Supplementary Survey on Quality Workplaces, Manpower Research & Statistics Department, MOM

¹ 'Total' refers to establishments offering at least one type of formal flexible work arrangement (excluding unplanned time-off and informal/ad-hoc tele-working).² 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

- 1) Data pertain to private sector establishments each with at least 25 employees and the public sector.
- 2) Data pertain to permanent employees and employees on term contract of at least one year.
- 3) Figures refer to establishments that offered the respective formal flexible work arrangements as a proportion of all establishments.
- 4) Data do not add up to 'total' as establishments can offer more than one formal flexible work arrangement.
- 5) s : Data have been suppressed due to small number of observations.



Labour Turnover, Retrenchment, Job Vacancy And Employment Service



LABOUR TURNOVER, RETRENCHMENT, JOB VACANCY AND EMPLOYMENT SERVICE

Source of Data

Statistics on Labour Turnover, Retrenchment and Job Vacancy are compiled from the Labour Market Survey conducted by the Manpower Research and Statistics Department of the Ministry of Manpower. Before 2006, the survey covered private sector establishments with at least 25 employees. From 2006 onwards, the survey also includes the public sector.

Statistics on New Registrants seeking employment and/or training assistance at the Workforce Singapore (WSG)'s career matching service (CMS) physical touch points such as Careers Connect and National Trades Union Congress (NTUC)'s Employment and Employability Institute (e2i) centres, as well as job seekers placed into employment by these touch points, are compiled by WSG. WSG is a statutory board under the Ministry of Manpower. It works with individuals, businesses and partners to minimise mismatches and maximise matching between jobs and skills, workers and businesses.

Concepts and Definitions

Average Monthly Resignation/ Recruitment Rate for a year is the simple average of the quarterly figures. The monthly rate during a quarter is defined as the average number of persons resigned/ recruited in a month during the quarter divided by the average number of employees in the establishment. Resignation refers to the termination of employment initiated by the employee.

The use of average monthly rate is preferred to the cumulative annual rate as the latter is liable to misinterpretation. For example, the annual resignation rate obtained by dividing the **total** number of resignations during the year by the **average** employment during the year could amount to 40 per 100 employees. This might imply that 40% of all employees voluntarily left their jobs during the year. This is probably not the case as many jobs in a given establishment are vacated and refilled more than once during the year. Over shorter periods of time, the resignation rates have less repetitive counting of employees holding the same jobs.

Retrenchment refers to

- i) termination of permanent employees due to redundancy; and
- ii) early termination of term contract employees due to redundancy.

In the public sector, it includes those who left service under the Special Resignation Scheme that allows redundant non-deployable Civil Service or Statutory Board employees to leave their organisations with compensation.

Job Vacancy Rate for a year is the simple average of the quarterly figures. The job vacancy rate refers to the total number of job vacancies divided by the demand for manpower at the end of the quarter. The demand for manpower is defined as the sum of the number of employees and job vacancies at the end of the quarter.

Job Vacancy To Unemployed Person Ratio is a ratio of the estimates of the total number of job vacancies for the whole economy to the total number of unemployed persons. The job vacancies for the whole economy is estimated based on the assumption that private sector establishments with less than 25 employees have the same vacancy rate as private establishments with 25-49 employees. Estimates on the total number of unemployed persons are obtained from the Labour Force Survey.

D.1 AVERAGE MONTHLY RECRUITMENT RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	2.2	2.8	2.7	2.8	2.7	2.6	2.4	2.2	2.1	2.3	2.2
C10-32	MANUFACTURING	1.5	2.0	2.0	1.9	1.9	1.8	1.6	1.6	1.8	1.9	1.7
C10-12	Food, Beverages & Tobacco	3.0	3.2	3.1	3.1	3.2	3.1	3.2	2.9	3.0	3.2	2.9
C17-18,22	Paper / Rubber / Plastic Products & Printing	1.3	2.3	2.0	2.1	1.8	1.9	1.7	1.6	1.9	1.8	1.6
C19-21	Petroleum, Chemical & Pharmaceutical Products	1.2	1.5	1.4	1.6	1.8	1.8	1.4	1.4	1.4	1.3	1.3
C25,28	Fabricated Metal Products, Machinery & Equipment	1.5	1.9	2.1	2.1	1.9	1.8	1.4	1.4	1.6	1.9	1.8
C26	Electronic, Computer & Optical Products	1.4	2.2	1.8	1.6	1.5	1.7	1.6	1.6	2.5	1.8	1.6
C29-30	Transport Equipment	1.1	1.5	1.8	1.5	1.8	1.3	1.1	1.2	1.2	1.7	1.4
C13-16,23-24,27,31-32	Other Manufacturing Industries	2.1	2.3	2.2	2.2	2.0	2.0	1.8	1.8	1.6	1.6	1.5
F41-43	CONSTRUCTION	2.5	2.5	2.8	3.4	3.3	2.6	2.5	2.1	1.7	2.0	2.2
G-U	SERVICES	2.5	3.2	3.0	2.9	2.8	2.8	2.6	2.4	2.3	2.4	2.4
G46-47	WHOLESALE AND RETAIL TRADE	2.7	3.6	3.2	3.4	3.5	3.1	2.7	2.5	2.4	2.4	2.2
G46	Wholesale Trade	2.1	2.8	2.6	2.8	2.8	2.4	2.0	1.9	1.8	2.0	1.9
G47	Retail Trade	3.9	5.2	4.7	4.9	5.1	4.8	4.1	3.8	3.5	3.4	2.9
H49-53	TRANSPORTATION AND STORAGE	1.4	2.3	2.4	2.3	2.3	2.1	2.0	1.8	1.7	1.8	1.7
H49,5221	Land Transport & Supporting Services	2.0	2.2	2.5	2.5	2.2	2.1	2.2	1.9	1.7	1.8	1.8
H50,5222,5225	Water Transport & Supporting Services	1.5	1.9	2.0	2.1	2.2	1.8	1.7	1.4	1.5	1.1	1.2
H51,5223	Air Transport & Supporting Services	0.4	1.5	1.7	1.7	1.5	1.1	1.5	1.3	1.1	1.6	1.5
H521,5224,5229,53	Other Transportation & Storage Services	1.8	3.4	3.1	2.9	3.0	3.1	2.4	2.4	2.3	2.5	2.3
I55-56	ACCOMMODATION AND FOOD SERVICES	3.8	4.7	4.9	4.6	4.6	4.7	4.5	3.9	3.7	3.7	4.0
I55	Accommodation	2.4	4.0	3.7	3.5	3.4	3.4	3.5	2.9	2.8	2.8	3.1
I56	Food & Beverage Services	4.2	5.0	5.2	4.8	4.9	5.0	4.7	4.2	4.0	3.9	4.1

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.1 AVERAGE MONTHLY RECRUITMENT RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019 (continued)

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	2.0	3.2	3.0	2.8	2.7	3.0	2.6	2.2	2.0	2.3	2.4
J58-61	Telecommunications, Broadcasting & Publishing	1.4	2.3	2.5	2.6	2.3	2.5	2.2	1.8	1.6	1.7	1.7
J62-63	IT & Other Information Services	2.5	3.9	3.3	2.9	3.0	3.3	3.0	2.4	2.2	2.6	2.7
K64-66	FINANCIAL AND INSURANCE SERVICES	1.6	2.7	2.4	1.9	2.1	2.2	2.0	1.9	1.8	2.1	1.8
K64 & 66 (excl. 662)	Financial Services	1.6	2.8	2.4	1.8	2.0	2.1	1.9	1.8	1.8	2.1	1.8
K65 & 662	Insurance Services	1.8	2.5	3.0	2.5	2.4	2.5	2.5	2.5	2.3	2.2	2.3
L68	REAL ESTATE SERVICES	3.6	3.9	4.1	4.1	3.6	3.8	3.5	3.5	3.4	3.3	3.2
M69-75	PROFESSIONAL SERVICES	2.3	2.7	2.8	2.9	2.5	2.3	2.2	2.3	2.0	2.5	2.2
M69-70	Legal, Accounting & Management Services	2.2	3.2	2.9	2.6	2.5	2.4	2.5	2.3	2.1	2.3	2.4
M71	Architectural & Engineering Services	2.5	2.1	2.6	3.5	2.4	2.2	1.8	2.3	1.9	2.8	2.1
M72-75	Other Professional Services	2.1	2.9	2.8	2.5	2.4	2.2	2.3	2.0	1.8	2.3	2.1
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	4.3	4.8	4.9	4.6	4.8	5.2	4.7	4.4	4.6	4.5	4.3
N80	Security & Investigation	4.9	5.3	5.6	5.1	5.0	4.6	4.2	3.5	3.7	3.9	4.5
N81	Cleaning & Landscaping	4.8	5.1	5.0	5.0	4.9	5.6	5.1	4.8	4.6	4.7	4.5
N77-79,82	Other Administrative & Support Services	3.4	4.2	4.0	3.7	4.3	5.3	4.8	4.9	5.5	4.5	4.0
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	2.0	2.3	1.9	1.8	1.6	1.6	1.6	1.4	1.3	1.5	1.5
O84,P85	Public Administration & Education	1.4	1.3	1.3	1.3	1.1	1.1	1.1	1.1	1.0	1.1	1.1
Q86-88	Health & Social Services	2.2	2.4	2.3	2.3	2.0	2.1	2.0	1.6	1.6	1.7	1.7
R90-93	Arts, Entertainment & Recreation	4.0	5.9	2.9	2.4	2.2	2.4	2.6	1.7	1.8	1.9	2.0
S,T,U	Other Community, Social & Personal Services	2.6	3.0	2.9	2.9	2.6	2.4	2.2	2.2	2.0	2.6	2.1
A,B,D,E,V	Others¹	2.3	2.0	2.1	2.4	2.2	2.1	1.6	1.3	1.4	1.8	1.6
	OCCUPATIONAL GROUP											
	Professionals, Managers, Executives & Technicians	1.6	2.2	2.1	1.9	1.9	1.9	1.8	1.6	1.5	1.7	1.7
	Clerical, Sales & Service Workers	3.1	4.0	3.8	3.7	3.8	3.8	3.5	3.1	3.1	3.2	3.2
	Production & Transport Operators, Cleaners & Labourers	2.3	2.7	2.8	3.1	3.1	2.9	2.6	2.5	2.4	2.5	2.5

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.2 AVERAGE MONTHLY RESIGNATION RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	1.8	2.0	2.0	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.8
C10-32	MANUFACTURING	1.5	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.5
C10-12	Food, Beverages & Tobacco	2.7	2.8	2.7	2.5	2.5	2.8	2.6	2.6	2.5	2.8	2.6
C17-18,22	Paper / Rubber / Plastic Products & Printing	1.5	2.1	2.0	2.0	1.8	1.9	1.6	1.7	1.7	1.7	1.6
C19-21	Petroleum, Chemical & Pharmaceutical Products	0.7	0.9	0.9	1.0	1.0	1.2	1.0	0.9	0.9	0.9	0.8
C25,28	Fabricated Metal Products, Machinery & Equipment	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.5	1.4
C26	Electronic, Computer & Optical Products	1.4	1.6	1.6	1.5	1.4	1.5	1.3	1.4	1.5	1.6	1.5
C29-30	Transport Equipment	1.5	1.2	1.3	1.2	1.1	1.2	1.3	1.3	1.4	1.3	1.2
C13-16,23-24,27,31-32	Other Manufacturing Industries	1.5	1.6	1.8	1.8	1.7	1.7	1.6	1.4	1.3	1.5	1.4
F41-43	CONSTRUCTION	1.6	1.8	1.7	1.8	2.0	1.9	1.8	1.7	1.8	1.8	1.8
G-U	SERVICES	1.9	2.3	2.2	2.3	2.2	2.2	2.0	1.9	1.9	1.9	1.8
G46-47	WHOLESALE AND RETAIL TRADE	2.4	2.9	2.6	2.9	2.9	2.6	2.2	2.2	2.0	2.0	1.8
G46	Wholesale Trade	1.7	2.1	1.9	2.2	2.2	2.0	1.7	1.7	1.6	1.6	1.4
G47	Retail Trade	3.8	4.7	4.2	4.4	4.3	4.0	3.4	3.2	3.0	3.0	2.4
H49-53	TRANSPORTATION AND STORAGE	1.3	1.6	1.6	1.6	1.7	1.7	1.5	1.4	1.3	1.3	1.4
H49,5221	Land Transport & Supporting Services	1.6	1.7	1.7	1.5	1.4	1.5	1.4	1.3	1.3	1.3	1.1
H50,5222,5225	Water Transport & Supporting Services	1.0	1.2	1.2	1.4	1.6	1.2	1.1	1.0	0.9	0.9	0.9
H51,5223	Air Transport & Supporting Services	0.5	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.8	1.0	0.9
H521,5224,5229,53	Other Transportation & Storage Services	1.8	2.3	2.3	2.4	2.4	2.6	2.1	2.0	1.9	1.9	2.1
I55-56	ACCOMMODATION AND FOOD SERVICES	3.8	4.1	4.2	4.3	4.1	4.3	4.0	3.6	3.6	3.3	3.4
I55	Accommodation	2.4	3.0	2.8	3.2	3.1	3.0	3.0	2.6	2.6	2.4	2.5
I56	Food & Beverage Services	4.3	4.4	4.6	4.6	4.3	4.6	4.3	3.8	3.8	3.4	3.6

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.2 AVERAGE MONTHLY RESIGNATION RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019 (continued)

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	1.6	2.1	1.9	2.0	2.0	1.8	1.8	1.7	1.6	1.6	1.6
J58-61	Telecommunications, Broadcasting & Publishing	1.2	1.6	1.7	1.7	1.6	1.5	1.5	1.4	1.2	1.2	1.2
J62-63	IT & Other Information Services	2.0	2.5	2.0	2.2	2.2	2.0	2.0	1.9	1.8	1.8	1.8
K64-66	FINANCIAL AND INSURANCE SERVICES	1.1	1.6	1.5	1.2	1.4	1.4	1.3	1.2	1.3	1.4	1.2
K64 & 66 (excl. 662)	Financial Services	1.1	1.6	1.4	1.2	1.3	1.3	1.2	1.2	1.2	1.3	1.2
K65 & 662	Insurance Services	1.4	1.7	1.7	1.6	1.6	1.9	1.7	1.6	1.6	1.6	1.6
L68	REAL ESTATE SERVICES	2.9	3.3	3.2	3.3	3.0	3.4	3.1	2.9	2.7	2.5	2.5
M69-75	PROFESSIONAL SERVICES	1.6	1.9	1.8	1.8	1.8	1.8	1.8	1.6	1.5	1.6	1.7
M69-70	Legal, Accounting & Management Services	1.9	2.2	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.6	1.6
M71	Architectural & Engineering Services	1.2	1.5	1.6	1.7	1.7	1.8	1.6	1.5	1.5	1.7	1.7
M72-75	Other Professional Services	1.8	2.2	2.1	2.0	1.7	1.7	2.1	1.6	1.5	1.8	1.8
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	3.3	4.1	3.9	4.1	3.8	4.0	3.4	3.5	3.6	3.4	3.5
N80	Security & Investigation	3.2	4.4	4.5	4.6	4.0	3.7	3.1	2.8	3.0	3.0	3.8
N81	Cleaning & Landscaping	4.1	5.1	4.5	4.7	4.3	4.7	4.2	4.1	4.3	4.2	3.9
N77-79,82	Other Administrative & Support Services	2.7	3.0	2.8	3.1	3.1	3.4	2.9	3.3	3.3	2.5	2.7
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	1.0	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.1	1.0
O84,P85	Public Administration & Education	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.7	0.7
Q86-88	Health & Social Services	1.1	1.3	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.2	1.2
R90-93	Arts, Entertainment & Recreation	1.8	2.0	1.9	1.9	2.0	2.1	2.2	1.6	1.6	1.5	1.6
S,T,U	Other Community, Social & Personal Services	2.3	2.6	2.5	2.5	2.4	2.2	1.9	1.9	1.8	2.3	1.8
A,B,D,E,V	Others¹	2.0	1.6	1.7	1.7	1.5	1.5	1.4	1.2	1.4	1.4	1.2
	OCCUPATIONAL GROUP											
	Professionals, Managers, Executives & Technicians	1.1	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.2
	Clerical, Sales & Service Workers	2.7	3.1	3.0	3.1	3.1	3.1	2.8	2.7	2.6	2.5	2.6
	Production & Transport Operators, Cleaners & Labourers	1.9	2.1	2.1	2.2	2.2	2.3	2.1	2.1	2.2	2.2	2.1

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.3 AVERAGE MONTHLY RECRUITMENT AND RESIGNATION RATES BY INDUSTRY AND OCCUPATIONAL GROUP, 2019

Per Cent

SSIC 2015	Industry	Total		Occupational Group					
				Professionals, Managers, Executives & Technicians		Clerical, Sales & Service Workers		Production & Transport Operators, Cleaners & Labourers	
		Recruitment	Resignation	Recruitment	Resignation	Recruitment	Resignation	Recruitment	Resignation
	TOTAL	2.2	1.8	1.7	1.2	3.2	2.6	2.5	2.1
C10-32	MANUFACTURING	1.7	1.5	1.3	1.0	2.8	2.1	1.8	1.7
C10-12	Food, Beverages & Tobacco	2.9	2.6	1.8	1.4	4.3	3.3	2.6	2.7
C17-18,22	Paper / Rubber / Plastic Products & Printing	1.6	1.6	1.3	1.0	1.8	1.8	1.8	2.0
C19-21	Petroleum, Chemical & Pharmaceutical Products	1.3	0.8	1.2	0.7	1.6	1.1	1.4	1.1
C25,28	Fabricated Metal Products, Machinery & Equipment	1.8	1.4	1.5	1.2	2.5	1.7	2.0	1.5
C26	Electronic, Computer & Optical Products	1.6	1.5	1.3	1.0	1.4	1.3	2.2	2.2
C29-30	Transport Equipment	1.4	1.2	1.1	0.8	1.7	1.2	1.5	1.5
C13-16,23-24,27,31-32	Other Manufacturing Industries	1.5	1.4	1.6	1.2	2.5	2.2	1.4	1.4
F41-43	CONSTRUCTION	2.2	1.8	2.1	1.8	2.0	2.0	2.3	1.8
G-U	SERVICES	2.4	1.8	1.8	1.2	3.3	2.7	3.1	2.6
G46-47	WHOLESALE AND RETAIL TRADE	2.2	1.8	1.6	1.2	3.0	2.4	2.4	1.9
G46	Wholesale Trade	1.9	1.4	1.5	1.1	2.4	1.9	2.3	1.8
G47	Retail Trade	2.9	2.4	1.8	1.5	3.4	2.8	2.5	2.1
H49-53	TRANSPORTATION AND STORAGE	1.7	1.4	1.5	1.2	1.8	1.4	1.9	1.5
H49,5221	Land Transport & Supporting Services	1.8	1.1	1.2	1.0	2.1	1.7	1.8	1.0
H50,5222,5225	Water Transport & Supporting Services	1.2	0.9	1.5	1.0	1.3	1.1	0.8	0.8
H51,5223	Air Transport & Supporting Services	1.5	0.9	1.2	0.6	1.4	0.9	2.4	2.3
H521,5224,5229,53	Other Transportation & Storage Services	2.3	2.1	1.8	1.8	2.6	2.3	2.5	2.3
I55-56	ACCOMMODATION AND FOOD SERVICES	4.0	3.4	2.4	2.1	4.7	4.0	3.7	3.2
I55	Accommodation	3.1	2.5	2.4	2.0	3.8	2.9	3.1	2.7
I56	Food & Beverage Services	4.1	3.6	2.4	2.1	4.8	4.2	3.9	3.4

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.3 AVERAGE MONTHLY RECRUITMENT AND RESIGNATION RATES BY INDUSTRY AND OCCUPATIONAL GROUP, 2019 (continued)

Per Cent

SSIC 2015	Industry	Total		Occupational Group					
				Professionals, Managers, Executives & Technicians		Clerical, Sales & Service Workers		Production & Transport Operators, Cleaners & Labourers	
		Recruitment	Resignation	Recruitment	Resignation	Recruitment	Resignation	Recruitment	Resignation
J58-63	INFORMATION AND COMMUNICATIONS	2.4	1.6	2.3	1.6	2.9	1.9	3.9	3.3
J58-61	Telecommunications, Broadcasting & Publishing	1.7	1.2	1.6	1.1	2.1	1.4	2.1	3.1
J62-63	IT & Other Information Services	2.7	1.8	2.6	1.8	4.0	2.7	4.5	3.4
K64-66	FINANCIAL AND INSURANCE SERVICES	1.8	1.2	1.8	1.2	2.2	1.6	2.1	1.9
K64 & 66 (excl. 662)	Financial Services	1.8	1.2	1.8	1.1	1.9	1.5	2.1	1.9
K65 & 662	Insurance Services	2.3	1.6	2.1	1.5	3.1	1.9	1.0	0.7
L68	REAL ESTATE SERVICES	3.2	2.5	1.9	1.4	3.9	2.9	4.9	4.1
M69-75	PROFESSIONAL SERVICES	2.2	1.7	2.2	1.5	2.8	2.5	2.0	1.8
M69-70	Legal, Accounting & Management Services	2.4	1.6	2.4	1.6	2.5	2.2	1.4	0.6
M71	Architectural & Engineering Services	2.1	1.7	1.9	1.4	2.8	2.4	2.2	2.1
M72-75	Other Professional Services	2.1	1.8	2.0	1.6	4.0	4.3	1.5	1.1
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	4.3	3.5	3.3	2.1	4.7	3.7	4.5	4.0
N80	Security & Investigation	4.5	3.8	2.2	2.0	4.9	4.2	2.5	2.1
N81	Cleaning & Landscaping	4.5	3.9	1.9	1.5	3.4	2.1	4.8	4.2
N77-79,82	Other Administrative & Support Services	4.0	2.7	3.8	2.2	4.8	3.2	3.5	3.3
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	1.5	1.0	1.3	0.8	2.2	1.7	2.0	1.4
O84,P85	Public Administration & Education	1.1	0.7	1.1	0.7	1.5	1.0	1.8	0.8
Q86-88	Health & Social Services	1.7	1.2	1.6	1.0	2.1	1.6	1.9	1.2
R90-93	Arts, Entertainment & Recreation	2.0	1.6	1.9	1.4	2.2	2.0	2.1	1.0
S,T,U	Other Community, Social & Personal Services	2.1	1.8	1.5	1.2	2.7	2.2	2.1	2.1
A,B,D,E,V	Others¹	1.6	1.2	1.1	0.6	2.0	2.1	2.5	2.0

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.4 RETRENCHMENT BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019

SSIC 2015	Industry	Number										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	23,430	9,800	9,990	11,010	11,560	12,930	15,580	19,170	14,720	10,730	10,690
C10-32	MANUFACTURING	13,640	4,490	4,460	4,050	5,000	3,970	5,210	6,280	3,790	2,570	2,790
C10-12	Food, Beverages & Tobacco	10	20	10	30	40	120	80	330	190	200	100
C17-18,22	Paper / Rubber / Plastic Products & Printing	780	470	660	590	380	150	570	410	480	160	170
C19-21	Petroleum, Chemical & Pharmaceutical Products	230	160	330	240	220	170	320	360	300	180	200
C25,28	Fabricated Metal Products, Machinery & Equipment	3,170	1,570	630	750	690	1,350	1,780	2,400	930	870	690
C26	Electronic, Computer & Optical Products	6,460	1,720	2,020	1,790	2,280	1,290	1,630	1,670	920	670	1,160
C29-30	Transport Equipment	1,460	280	180	130	200	440	570	720	820	310	120
C13-16,23-24,27,31-32	Other Manufacturing Industries	1,520	270	640	540	1,200	460	260	390	150	190	360
F41-43	CONSTRUCTION	980	1,350	1,050	650	1,120	1,690	1,780	1,920	2,020	1,200	860
G-U	SERVICES	8,720	3,960	4,430	6,300	5,430	7,260	8,510	10,880	8,900	6,960	7,000
G46-47	WHOLESALE AND RETAIL TRADE	2,670	1,170	1,050	1,830	1,280	2,190	2,180	2,380	2,180	1,780	2,090
G46	Wholesale Trade	2,480	940	750	1,270	1,180	1,490	2,150	2,200	1,920	1,580	1,850
G47	Retail Trade	190	220	300	560	100	700	30	180	260	210	240
H49-53	TRANSPORTATION AND STORAGE	1,050	320	230	280	450	470	690	870	900	710	770
H49,5221	Land Transport & Supporting Services	60	60	70	10	10	-	60	10	160	200	60
H50,5222,5225	Water Transport & Supporting Services	220	80	70	150	130	210	280	490	300	180	80
H51,5223	Air Transport & Supporting Services	420	110	30	10	100	20	110	160	20	20	50
H521,5224,5229,53	Other Transportation & Storage Services	360	80	70	110	210	240	250	220	430	310	580
I55-56	ACCOMMODATION AND FOOD SERVICES	200	130	350	270	220	380	200	350	470	350	170
I55	Accommodation	60	-	210	100	10	240	10	70	120	10	20
I56	Food & Beverage Services	140	130	140	170	210	140	190	280	350	340	150

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Retrenchment refers to the termination of permanent employees due to redundancy and early termination of term contract employees due to redundancy.
- 3) Data are rounded to the nearest 10. Hence, they may not add up to the total.

D.4 RETRENCHMENT BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019 (continued)

SSIC 2015	Industry	Number										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	590	340	480	710	800	790	710	970	910	1,070	650
J58-61	Telecommunications, Broadcasting & Publishing	260	220	250	340	480	350	280	570	500	650	300
J62-63	IT & Other Information Services	330	120	220	370	330	440	430	400	420	420	350
K64-66	FINANCIAL AND INSURANCE SERVICES	1,840	610	860	1,380	1,270	1,350	1,760	2,310	1,780	1,330	1,300
K64 & 66 (excl. 662)	Financial Services	1,780	570	790	1,310	1,230	1,280	1,710	2,210	1,720	1,240	1,190
K65 & 662	Insurance Services	70	40	70	80	40	60	50	90	60	80	110
L68	REAL ESTATE SERVICES	140	130	130	60	30	90	50	90	70	100	190
M69-75	PROFESSIONAL SERVICES	1,210	720	940	1,230	960	1,520	2,290	2,740	1,700	1,100	1,210
M69-70	Legal, Accounting & Management Services	610	370	450	560	590	1,030	1,180	1,410	860	600	640
M71	Architectural & Engineering Services	370	330	200	470	240	350	940	1,050	560	310	360
M72-75	Other Professional Services	230	20	290	200	120	140	170	280	280	190	220
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	780	280	130	300	240	360	400	340	430	240	320
N80	Security & Investigation	70	-	-	20	-	110	70	20	120	10	10
N81	Cleaning & Landscaping	90	50	20	20	10	10	50	60	70	40	60
N77-79,82	Other Administrative & Support Services	630	230	110	260	230	230	280	260	250	190	250
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	240	260	260	240	190	130	230	850	460	290	300
O84,P85	Public Administration & Education	100	50	10	50	30	40	40	50	40	90	90
Q86-88	Health & Social Services	20	30	-	40	10	20	90	40	50	20	100
R90-93	Arts, Entertainment & Recreation	10	50	50	100	40	20	10	500	240	130	20
S,T,U	Other Community, Social & Personal Services	120	130	190	60	120	50	80	260	130	50	90
A,B,D,E,V	Others¹	90	-	50	10	10	10	80	100	20	-	30
	OCCUPATIONAL GROUP											
	Professionals, Managers, Executives & Technicians	9,570	3,450	4,170	5,960	6,430	6,530	8,550	10,890	8,700	6,980	6,500
	Clerical, Sales & Service Workers	2,530	1,450	1,080	1,480	1,140	1,860	1,550	2,100	1,550	1,230	1,420
	Production & Transport Operators, Cleaners & Labourers	11,330	4,900	4,750	3,570	4,000	4,540	5,480	6,190	4,480	2,510	2,770

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Retrenchment refers to the termination of permanent employees due to redundancy and early termination of term contract employees due to redundancy.
- 3) Data are rounded to the nearest 10. Hence, they may not add up to the total.

D.5 INCIDENCE OF RETRENCHMENT BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019

SSIC 2015	Industry	Number Of Retrenched Employees Per 1,000 Employees										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	14.2	5.7	5.5	5.8	5.8	6.3	7.4	8.9	7.0	5.1	5.1
C10-32	MANUFACTURING	35.1	11.5	11.4	10.2	12.5	10.0	13.2	16.7	10.6	7.3	8.1
C10-12	Food, Beverages & Tobacco	0.6	0.8	0.4	1.0	1.3	4.1	2.7	10.6	6.1	5.9	3.0
C17-18,22	Paper / Rubber / Plastic Products & Printing	28.1	16.5	23.3	21.2	15.1	7.3	25.6	19.7	24.3	8.7	9.3
C19-21	Petroleum, Chemical & Pharmaceutical Products	9.9	6.7	13.4	9.5	8.4	5.8	11.8	12.8	10.4	6.1	6.6
C25,28	Fabricated Metal Products, Machinery & Equipment	31.3	15.7	6.2	7.0	6.5	12.5	17.3	25.3	10.9	10.6	8.8
C26	Electronic, Computer & Optical Products	76.3	19.2	22.6	20.4	26.7	15.9	19.4	21.9	12.4	8.6	15.3
C29-30	Transport Equipment	15.3	3.1	2.0	1.4	2.1	4.7	6.4	8.2	10.4	4.2	1.7
C13-16,23-24,27,31-32	Other Manufacturing Industries	43.8	7.3	16.7	14.3	30.4	11.8	6.3	10.3	3.9	5.1	10.0
F41-43	CONSTRUCTION	4.1	5.6	4.2	2.4	3.8	5.3	5.4	5.7	6.7	4.1	3.1
G-U	SERVICES	8.7	3.7	3.8	5.1	4.3	5.5	6.2	7.7	6.3	4.8	4.8
G46-47	WHOLESALE AND RETAIL TRADE	14.3	6.2	5.1	8.5	5.8	9.5	9.3	10.0	9.1	7.4	8.7
G46	Wholesale Trade	19.5	7.4	5.2	8.3	7.7	9.3	13.3	13.6	11.7	9.6	11.3
G47	Retail Trade	3.1	3.7	4.9	9.0	1.5	9.9	0.4	2.4	3.4	2.7	3.2
H49-53	TRANSPORTATION AND STORAGE	9.2	2.6	1.8	2.0	3.1	3.2	4.6	5.7	5.8	4.5	5.2
H49,5221	Land Transport & Supporting Services	2.7	2.1	2.6	0.2	0.3	0.1	1.7	0.1	3.8	4.8	1.4
H50,5222,5225	Water Transport & Supporting Services	6.8	2.5	1.9	4.1	3.8	5.9	7.6	13.5	8.9	5.2	2.7
H51,5223	Air Transport & Supporting Services	15.7	4.0	1.1	0.4	3.0	0.6	3.2	4.6	0.5	0.7	1.7
H521,5224,5229,53	Other Transportation & Storage Services	10.4	2.1	1.6	2.6	4.7	5.1	5.2	4.7	8.9	6.2	12.0
I55-56	ACCOMMODATION AND FOOD SERVICES	2.2	1.4	3.4	2.5	1.9	3.1	1.6	2.5	3.4	2.5	1.2
I55	Accommodation	2.6	-	9.5	4.3	0.4	11.0	0.4	3.0	5.1	0.6	0.8
I56	Food & Beverage Services	2.0	1.8	1.7	2.0	2.3	1.4	1.8	2.4	3.0	2.9	1.3

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Retrenchment refers to the termination of permanent employees due to redundancy and early termination of term contract employees due to redundancy.

D.5 INCIDENCE OF RETRENCHMENT BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019 (continued)

SSIC 2015	Industry	Number Of Retrenched Employees Per 1,000 Employees										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	12.1	6.7	8.1	11.7	13.0	12.1	10.2	13.4	12.0	12.9	7.6
J58-61	Telecommunications, Broadcasting & Publishing	11.4	9.4	10.5	13.2	19.4	13.3	9.7	19.7	17.5	23.1	11.0
J62-63	IT & Other Information Services	12.7	4.5	6.4	10.6	8.8	11.3	10.5	9.2	8.7	7.6	6.0
K64-66	FINANCIAL AND INSURANCE SERVICES	18.3	6.0	7.5	11.6	10.4	10.6	13.5	17.1	14.1	9.6	8.6
K64 & 66 (excl. 662)	Financial Services	20.1	6.4	7.8	12.4	11.5	11.6	15.0	18.9	15.9	10.5	9.2
K65 & 662	Insurance Services	5.3	3.4	4.9	5.4	2.5	4.0	2.8	5.3	3.3	4.2	5.2
L68	REAL ESTATE SERVICES	3.0	2.6	2.5	1.1	0.5	1.6	0.9	1.6	1.4	1.9	4.7
M69-75	PROFESSIONAL SERVICES	12.5	7.0	8.2	9.7	7.5	11.6	17.2	20.5	13.4	8.4	9.1
M69-70	Legal, Accounting & Management Services	14.8	8.4	8.4	9.7	10.2	16.8	18.6	21.3	14.5	9.4	9.7
M71	Architectural & Engineering Services	9.3	8.2	4.8	9.9	5.0	7.3	19.6	22.9	12.3	6.9	7.6
M72-75	Other Professional Services	14.5	0.9	14.4	9.3	5.9	6.1	7.7	13.0	12.7	8.8	11.1
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	9.0	3.0	1.3	2.8	2.1	3.0	3.0	2.3	2.8	1.6	2.1
N80	Security & Investigation	2.3	-	-	0.4	0.1	2.9	1.6	0.4	2.6	0.4	0.2
N81	Cleaning & Landscaping	2.9	1.6	0.5	0.6	0.2	0.3	1.1	1.1	1.1	0.5	0.8
N77-79,82	Other Administrative & Support Services	21.6	7.3	3.3	7.3	5.9	5.8	6.4	5.8	5.3	4.1	5.3
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	1.0	1.0	0.9	0.8	0.6	0.4	0.7	2.4	1.3	0.8	0.8
O84,P85	Public Administration & Education	0.7	0.4	0.1	0.3	0.2	0.3	0.3	0.3	0.2	0.5	0.5
Q86-88	Health & Social Services	0.3	0.5	-	0.5	0.1	0.2	1.0	0.4	0.5	0.2	0.9
R90-93	Arts, Entertainment & Recreation	0.5	1.4	1.4	2.5	0.9	0.4	0.3	12.2	6.0	3.2	0.5
S,T,U	Other Community, Social & Personal Services	4.9	4.9	6.9	2.0	4.0	1.7	2.6	7.7	3.7	1.3	2.6
A,B,D,E,V	Others¹	4.6	-	2.5	0.5	0.6	0.4	3.8	4.5	0.7	-	1.4
	OCCUPATIONAL GROUP											
	Professionals, Managers, Executives & Technicians	14.7	5.0	5.5	7.4	7.3	7.1	8.9	11.0	8.7	6.7	6.1
	Clerical, Sales & Service Workers	6.9	3.6	2.6	3.5	2.8	4.4	3.6	4.8	3.6	2.9	3.4
	Production & Transport Operators, Cleaners & Labourers	17.9	7.7	7.3	5.2	5.7	6.3	7.6	8.6	6.6	3.9	4.4

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Retrenchment refers to the termination of permanent employees due to redundancy and early termination of term contract employees due to redundancy.

D.6 JOB VACANCY RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	TOTAL	1.8	2.5	2.8	2.5	2.7	3.0	2.8	2.3	2.4	2.7	2.5
C10-32	MANUFACTURING	1.2	2.1	2.3	1.8	1.9	2.1	1.8	1.6	1.8	2.3	1.9
C10-12	Food, Beverages & Tobacco	1.4	2.3	3.0	2.2	2.7	2.9	2.6	2.1	2.0	2.1	2.0
C17-18,22	Paper / Rubber / Plastic Products & Printing	1.1	1.9	1.9	1.6	1.8	2.2	1.6	1.3	1.6	2.0	1.5
C19-21	Petroleum, Chemical & Pharmaceutical Products	1.3	1.6	1.6	1.6	2.0	1.8	1.8	1.6	1.5	2.4	2.2
C25,28	Fabricated Metal Products, Machinery & Equipment	1.0	1.8	2.1	2.0	2.0	2.0	1.4	1.1	1.5	1.9	1.6
C26	Electronic, Computer & Optical Products	1.1	2.8	2.6	1.9	1.9	2.5	2.3	2.4	3.2	2.9	2.2
C29-30	Transport Equipment	1.4	1.6	2.2	1.4	1.5	1.7	1.4	0.9	1.2	2.2	1.7
C13-16,23-24,27,31-32	Other Manufacturing Industries	1.5	2.4	2.1	1.7	2.4	2.0	2.0	1.9	1.5	2.3	1.9
F41-43	CONSTRUCTION	0.8	1.2	1.5	1.2	1.3	1.2	0.9	0.6	0.6	1.1	0.8
G-U	SERVICES	2.3	3.0	3.3	3.0	3.3	3.7	3.5	2.9	2.9	3.1	2.9
G46-47	WHOLESALE AND RETAIL TRADE	1.6	2.4	2.6	2.7	3.0	3.3	2.9	2.6	2.5	2.7	2.2
G46	Wholesale Trade	1.3	2.0	2.1	2.0	2.2	2.5	2.3	1.8	2.0	2.2	2.0
G47	Retail Trade	2.1	3.3	3.7	4.4	4.9	5.1	4.3	4.4	3.6	3.6	2.8
H49-53	TRANSPORTATION AND STORAGE	1.3	2.5	2.6	2.4	2.6	2.8	2.4	1.9	2.2	2.4	1.9
H49,5221	Land Transport & Supporting Services	1.6	3.3	4.0	3.0	2.9	3.3	2.4	1.9	1.7	2.0	1.3
H50,5222,5225	Water Transport & Supporting Services	0.6	1.6	1.3	1.3	2.3	2.2	1.3	0.7	1.4	1.2	1.7
H51,5223	Air Transport & Supporting Services	2.4	3.3	4.1	3.4	3.1	2.7	3.0	2.1	1.9	2.9	2.7
H521,5224,5229,53	Other Transportation & Storage Services	1.0	2.0	1.7	2.2	2.4	3.1	2.9	2.7	3.2	3.3	2.0
I55-56	ACCOMMODATION AND FOOD SERVICES	2.4	4.1	4.1	4.4	5.3	5.9	5.4	4.3	4.2	4.2	3.8
I55	Accommodation	2.4	4.3	4.7	4.8	6.3	7.5	7.3	6.7	6.5	8.0	7.1
I56	Food & Beverage Services	2.4	4.0	4.0	4.2	5.1	5.5	5.0	3.7	3.6	3.4	3.1

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.6 JOB VACANCY RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2009 – 2019 (continued)

SSIC 2015	Industry	Per Cent										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
J58-63	INFORMATION AND COMMUNICATIONS	1.6	2.7	2.9	2.4	2.8	3.5	3.8	3.9	4.0	4.8	4.6
J58-61	Telecommunications, Broadcasting & Publishing	1.5	2.5	3.0	2.4	2.3	2.3	2.5	3.1	2.7	2.7	2.4
J62-63	IT & Other Information Services	1.7	2.9	2.8	2.5	3.1	4.3	4.8	4.5	4.8	5.8	5.6
K64-66	FINANCIAL AND INSURANCE SERVICES	1.3	2.4	2.5	2.0	2.2	2.9	2.8	2.4	3.1	3.5	3.5
K64 & 66 (excl. 662)	Financial Services	1.1	2.3	2.4	1.9	2.1	2.9	2.8	2.4	3.1	3.5	3.5
K65 & 662	Insurance Services	2.4	3.1	3.2	2.8	2.9	2.8	2.5	2.6	2.9	3.5	3.3
L68	REAL ESTATE SERVICES	1.9	2.8	3.5	3.1	3.5	3.9	3.8	2.9	2.2	2.3	2.7
M69-75	PROFESSIONAL SERVICES	1.5	1.9	2.2	2.0	2.2	2.7	3.0	2.5	2.3	3.0	2.9
M69-70	Legal, Accounting & Management Services	1.3	2.2	2.1	1.9	1.9	3.0	3.8	3.0	2.7	3.4	3.5
M71	Architectural & Engineering Services	1.4	1.3	1.7	1.7	2.0	1.9	1.7	1.6	1.5	2.3	2.0
M72-75	Other Professional Services	2.0	2.6	3.3	3.0	3.5	3.3	3.5	3.1	2.5	3.3	2.7
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	2.6	3.4	4.4	3.5	3.8	4.5	3.9	3.3	3.2	3.4	2.6
N80	Security & Investigation	4.5	5.4	6.9	4.3	4.2	5.0	5.6	4.9	4.6	5.6	4.2
N81	Cleaning & Landscaping	1.4	2.4	3.3	3.1	3.7	4.3	3.3	2.5	2.6	2.7	1.7
N77-79,82	Other Administrative & Support Services	1.8	2.5	3.1	2.9	3.5	4.1	2.9	2.7	2.8	2.9	2.8
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	4.2	3.9	4.3	3.6	3.9	4.1	3.7	3.1	2.8	2.9	2.9
O84,P85	Public Administration & Education	5.1	4.5	4.6	3.9	3.9	3.9	3.4	3.0	2.7	2.9	2.9
Q86-88	Health & Social Services	2.7	2.9	3.6	3.2	3.6	4.8	3.8	3.1	2.7	3.0	3.2
R90-93	Arts, Entertainment & Recreation	3.7	3.5	4.7	3.4	3.8	3.8	4.8	3.5	3.7	2.8	2.7
S,T,U	Other Community, Social & Personal Services	2.4	3.5	3.6	3.3	4.5	4.1	3.5	2.7	2.6	3.0	1.9
A,B,D,E,V	Others¹	1.9	2.2	3.1	4.1	3.2	2.5	2.3	1.8	1.8	2.0	1.7
	OCCUPATIONAL GROUP											
	Professionals, Managers, Executives & Technicians	2.3	2.9	3.0	2.5	2.7	3.0	2.9	2.5	2.6	3.0	2.8
	Clerical, Sales & Service Workers	2.1	3.0	3.6	3.4	3.8	4.3	3.9	3.2	3.0	3.2	2.8
	Production & Transport Operators, Cleaners & Labourers	1.2	1.9	2.3	1.9	2.2	2.3	1.9	1.6	1.7	2.0	1.6

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

D.7 JOB VACANCY AND JOB VACANCY RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2019

SSIC 2015	Industry	Total		Occupational Group					
				Professionals, Managers, Executives & Technicians		Clerical, Sales & Service Workers		Production & Transport Operators, Cleaners & Labourers	
		Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)
TOTAL		52.9	2.5	30.7	2.8	12.1	2.8	10.1	1.6
C10-32	MANUFACTURING	6.6	1.9	3.4	2.2	0.5	1.7	2.6	1.6
C10-12	Food, Beverages & Tobacco	0.7	2.0	0.2	1.9	0.2	2.4	0.3	1.8
C17-18,22	Paper / Rubber / Plastic Products & Printing	0.3	1.5	0.1	1.7	-	-	0.1	1.4
C19-21	Petroleum, Chemical & Pharmaceutical Products	0.7	2.2	0.5	2.3	-	-	0.1	2.2
C25,28	Fabricated Metal Products, Machinery & Equipment	1.3	1.6	0.6	1.9	0.1	1.5	0.6	1.4
C26	Electronic, Computer & Optical Products	1.7	2.2	1.1	2.5	-	-	0.6	2.0
C29-30	Transport Equipment	1.3	1.7	0.6	2.5	0.1	1.4	0.5	1.3
C13-16,23-24,27,31-32	Other Manufacturing Industries	0.7	1.9	0.3	2.2	-	-	0.3	1.7
F41-43	CONSTRUCTION	2.3	0.8	0.8	1.3	0.2	1.0	1.3	0.7
G-U	SERVICES	43.6	2.9	26.2	3.1	11.3	3.0	6.1	2.2
G46-47	WHOLESALE AND RETAIL TRADE	5.4	2.2	2.5	2.2	2.2	2.5	0.8	1.8
G46	Wholesale Trade	3.2	2.0	2.1	2.2	0.6	1.7	0.5	1.4
G47	Retail Trade	2.2	2.8	0.4	2.1	1.6	3.1	0.3	2.8
H49-53	TRANSPORTATION AND STORAGE	3.0	1.9	1.0	2.1	0.7	1.7	1.2	1.8
H49,5221	Land Transport & Supporting Services	0.5	1.3	0.1	0.8	0.1	1.6	0.4	1.3
H50,5222,5225	Water Transport & Supporting Services	0.5	1.7	0.3	2.2	0.1	1.2	0.2	1.3
H51,5223	Air Transport & Supporting Services	0.9	2.7	0.4	4.0	0.4	1.9	0.1	4.5
H521,5224,5229,53	Other Transportation & Storage Services	1.0	2.0	0.3	1.6	0.2	1.7	0.6	2.5
I55-56	ACCOMMODATION AND FOOD SERVICES	5.9	3.8	1.1	3.1	3.4	3.7	1.5	4.8
I55	Accommodation	1.8	7.1	0.4	4.4	0.9	8.0	0.6	9.8
I56	Food & Beverage Services	4.0	3.1	0.6	2.6	2.5	3.1	0.9	3.5

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

Notes :

- 1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.
- 2) Annual figures are the simple averages of the figures obtained at quarterly intervals.
- 3) Number of job vacancies may not add up to the total due to rounding.

D.7 JOB VACANCY AND JOB VACANCY RATE BY INDUSTRY AND OCCUPATIONAL GROUP, 2019 (continued)

SSIC 2015	Industry	Total		Occupational Group					
				Professionals, Managers, Executives & Technicians		Clerical, Sales & Service Workers		Production & Transport Operators, Cleaners & Labourers	
		Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)	Vacancies ('000)	Vacancy Rate (%)
J58-63	INFORMATION AND COMMUNICATIONS	4.1	4.6	3.9	4.8	0.2	2.9	-	-
J58-61	Telecommunications, Broadcasting & Publishing	0.7	2.4	0.6	2.5	0.1	2.1	-	-
J62-63	IT & Other Information Services	3.5	5.6	3.3	5.8	0.1	4.0	-	-
K64-66	FINANCIAL AND INSURANCE SERVICES	5.3	3.5	4.8	3.6	0.4	2.9	-	-
K64 & 66 (excl. 662)	Financial Services	4.6	3.5	4.3	3.6	0.3	2.5	-	-
K65 & 662	Insurance Services	0.7	3.3	0.5	3.2	0.1	3.8	-	-
L68	REAL ESTATE SERVICES	1.3	2.7	0.7	3.0	0.2	2.3	0.3	2.5
M69-75	PROFESSIONAL SERVICES	3.9	2.9	3.3	3.2	0.3	2.5	0.2	1.3
M69-70	Legal, Accounting & Management Services	2.4	3.5	2.1	3.6	0.2	2.5	0.1	4.7
M71	Architectural & Engineering Services	1.0	2.0	0.8	2.7	0.1	1.9	0.1	0.7
M72-75	Other Professional Services	0.5	2.7	0.5	2.7	0.1	3.7	-	-
N77-82	ADMINISTRATIVE AND SUPPORT SERVICES	3.9	2.6	0.8	2.6	1.6	3.6	1.5	2.0
N80	Security & Investigation	1.5	4.2	-	-	1.3	4.4	0.2	4.6
N81	Cleaning & Landscaping	1.2	1.7	-	-	0.1	1.6	1.1	1.8
N77-79,82	Other Administrative & Support Services	1.3	2.8	0.7	3.1	0.3	2.4	0.3	2.5
O-U	COMMUNITY, SOCIAL AND PERSONAL SERVICES	10.8	2.9	8.0	2.9	2.3	3.1	0.5	2.0
O84,P85	Public Administration & Education	5.4	2.9	4.9	2.9	0.4	3.1	0.1	1.4
Q86-88	Health & Social Services	3.7	3.2	2.4	3.1	1.0	3.7	0.2	3.3
R90-93	Arts, Entertainment & Recreation	1.1	2.7	0.4	2.5	0.6	3.0	0.1	2.3
S,T,U	Other Community, Social & Personal Services	0.7	1.9	0.3	2.0	0.3	2.2	0.1	1.1
A,B,D,E,V	Others¹	0.4	1.7	0.3	2.0	-	-	0.1	1.2

Source : Labour Market Survey, Manpower Research & Statistics Department, MOM

¹ 'Others' includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

Notes :

1) Data pertain to private sector establishments (each with at least 25 employees) and the public sector.

2) Annual figures are the simple averages of the figures obtained at quarterly intervals.

3) Number of job vacancies may not add up to the total due to rounding.

**D.8 JOB VACANCY TO UNEMPLOYED PERSON RATIO, 2009 – 2019
(SEASONALLY ADJUSTED)**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Annual Average	0.52	0.98	1.21	1.07	1.28	1.38	1.24	0.91	0.87	1.07	0.91
March	0.37	0.87	1.30	1.03	1.15	1.32	1.41	1.05	0.80	1.04	1.05
June	0.40	0.98	1.24	0.98	1.19	1.41	1.24	0.90	0.84	1.09	0.91
September	0.54	1.06	1.15	1.23	1.40	1.41	1.18	0.93	0.91	1.07	0.84
December	0.78	1.03	1.16	1.04	1.40	1.39	1.12	0.78	0.94	1.09	0.84

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

Note :

The seasonally adjusted figures are subject to annual revisions when the latest set of seasonal factors is updated, taking into account observations for the latest available year. Users are advised to check our website, <http://stats.mom.gov.sg>, for the most up-to-date data.

D.9 NEW REGISTRANTS AT CAREER CENTRES BY AGE AND HIGHEST QUALIFICATION ATTAINED, 2014 – 2019

	Number					
	2014	2015	2016	2017	2018	2019
TOTAL	34,709	30,223	23,770	25,322	28,804	32,357
Age (Years)						
Under 20	372	313	207	233	491	1,256
20 – 29	5,113	4,678	3,537	4,161	4,730	4,800
30 – 39	5,488	5,366	4,276	4,727	5,712	6,234
40 – 49	8,153	7,410	6,329	6,742	7,377	7,955
50 – 59	9,424	7,767	6,052	6,209	6,635	7,465
60 & Over	6,159	4,689	3,369	3,250	3,859	4,647
Highest Qualification Attained						
Primary & Below	6,833	4,540	2,972	2,492	2,427	2,848
Secondary	16,820	12,945	8,892	7,840	8,123	9,260
Post Secondary	3,358	3,450	2,941	3,235	4,314	4,203
Diploma	3,811	4,260	3,687	4,510	5,401	6,456
Degree	3,887	5,028	5,278	7,245	8,539	9,590

Source : Workforce Singapore

Note :

'New Registrants' refers to the number of unique individuals who registered for employment and/or training assistance at Workforce Singapore (WSG)'s career matching service (CMS) physical touch points such as Careers Connect and National Trades Union Congress (NTUC)'s Employment and Employability Institute (e2i) centres.

D.10 JOB SEEKERS PLACED IN EMPLOYMENT BY CAREER CENTRES BY AGE AND HIGHEST QUALIFICATION ATTAINED, 2014 – 2019

	Number					
	2014	2015	2016	2017	2018	2019
TOTAL	14,814	13,278	14,428	15,380	19,214	20,083
Age (Years)						
Under 20	385	153	112	110	393	334
20 – 29	3,057	2,390	2,367	2,724	3,262	2,953
30 – 39	2,894	2,358	2,619	2,889	3,797	4,090
40 – 49	3,518	3,269	3,780	4,092	4,873	5,209
50 – 59	3,254	3,357	3,665	3,625	4,405	4,735
60 & Over	1,706	1,751	1,885	1,940	2,484	2,762
Highest Qualification Attained						
Primary & Below	2,381	2,013	1,906	1,540	1,662	1,530
Secondary	7,036	5,806	5,468	4,909	5,425	5,407
Post Secondary	1,698	1,492	1,840	1,988	3,189	2,501
Diploma	1,925	1,967	2,325	2,785	3,533	4,500
Degree	1,774	2,000	2,889	4,158	5,405	6,145

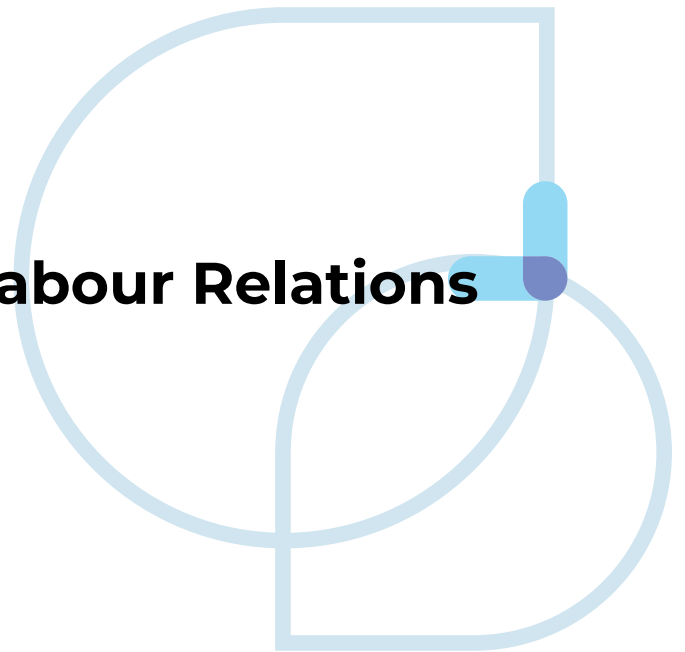
Source : Workforce Singapore

Note :

'Job Seekers Placed in Employment' refers to the number of unique individuals who were placed into employment by Workforce Singapore (WSG)'s career matching service (CMS) physical touch points such as Careers Connect and National Trades Union Congress (NTUC)'s Employment and Employability Institute (e2i) centres. This includes those who found their own jobs after receiving services from WSG's CMS physical touch points and NTUC's e2i centres.



Labour Relations



LABOUR RELATIONS

Source of Data

Statistics on Employers' and Employees' Trade Unions and Trade Disputes are compiled by the Labour Relations and Workplaces Division of the Ministry of Manpower.

The Labour Relations and Workplaces Division monitors the industrial relations situation and provides mediation and conciliation services for the settlement of trade disputes. The Division also investigates complaints on infringements of the Employment Act which governs the terms and conditions of employment.

Statistics on Claims Registered by Issues are compiled by the Tripartite Alliance for Dispute Management (TADM).

TADM was established since 1 Apr 2017 to provide advisory and mediation services to resolve salary-related claims and employment disputes.

Statistics on Collective Agreements and Industrial Arbitration Court Awards are obtained from the Industrial Arbitration Court (IAC).

IAC was set up in 1960 under the Industrial Relations Act. Its functions include the registration and certification of

collective agreements, hearing and determination of trade disputes and handing down of awards and interpretation and enforcement of terms of awards and collective agreements.

Concepts and Definitions

Trade Union refers to any association or combination of employees or employers, whether temporary or permanent, whose principal objective is to regulate relations between workers and employers for all or any of the following purposes:

- Promote good industrial relations between employers and employees;
- Improve the working conditions of employees or enhance their economic and social status; and
- Raise productivity for the benefit of employees, employers and the economy of Singapore.

Trade Dispute refers to a dispute (including a threatened, impending or probable dispute) as to industrial matters.

Collective Agreement refers to an agreement between employers

and employees on employment, non-employment, terms of employment or conditions of work. The duration of a collective agreement is specified and by law shall not be less than two years or more than three years.

An **Industrial Arbitration Court Award** refers to an award made by the IAC, and includes a collective agreement and a memorandum of the terms which have been certified by the President of the IAC in accordance with the provisions of the Industrial Relations Act.

E.1 NUMBER OF EMPLOYERS' TRADE UNIONS BY MEMBERSHIP SIZE, 2009 – 2019
(At Year-End)

Size of Trade Union (Number of Members)	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	3	3	3	3	3	3	3	3	3	3	3
Under 50	1	1	1	1	1	1	1	1	1	1	1
50 – 249	1	1	1	1	1	1	1	1	1	1	1
250 & Over	1	1	1	1	1	1	1	1	1	1	1

Source : Labour Relations and Workplaces Division, MOM

E.2 MEMBERSHIP OF EMPLOYERS' TRADE UNIONS BY MEMBERSHIP SIZE, 2009 – 2019
(At Year-End)

Size of Trade Union (Number of Members)	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	2,571	2,529	2,306	2,288	3,074	3,300	3,365	3,489	3,570	3,490	3,631
Under 50	23	22	21	19	18	21	21	20	20	17	16
50 – 249	130	140	129	113	130	130	136	151	158	163	158
250 & Over	2,418	2,367	2,156	2,156	2,926	3,149	3,208	3,318	3,392	3,310	3,457

Source : Labour Relations and Workplaces Division, MOM

E.3 NUMBER OF EMPLOYEES' TRADE UNIONS BY MEMBERSHIP SIZE, 2009 – 2019
(At Year-End)

Size of Trade Union (Number of Members)												Number	
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL			65	65	65	66	64	65	64	63	61	63	63
Under	50		-	1	1	1	1	2	1	1	1	2	1
50	-	249	6	5	5	7	3	3	3	3	2	3	4
250	-	999	18	17	15	14	16	15	15	13	13	12	11
1,000	-	4,999	19	17	19	18	17	18	18	19	18	19	20
5,000	-	9,999	5	8	8	9	10	9	9	9	9	9	7
10,000	&	Over	17	17	17	17	17	18	18	18	18	18	20

Source : Labour Relations and Workplaces Division, MOM

E.4 NUMBER OF EMPLOYEES' TRADE UNIONS BY INDUSTRY, 2009 – 2019

(At Year-End)

Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Number 2019 ²
TOTAL	65	65	65	66	64	65	64	63	61	63	63
Manufacturing	15	15	15	15	15	15	15	15	15	15	14
Construction	1	1	1	1	1	1	1	1	1	1	1
Wholesale & Retail Trade	1	1	1	1	1	1	1	1	1	1	1
Accommodation & Food Services	2	2	2	2	2	2	2	2	2	2	2
Transport & Storage and Information & Communications	15	15	15	16	15	16	15	14	12	13	16
Financial & Insurance Services	4	4	4	4	4	4	4	4	4	4	4
Real Estate, Professional and Administrative & Support Services	2	2	2	2	2	2	2	2	2	3	2
Community, Social & Personal Services	22	22	22	22	21	21	21	21	21	21	20
Others ¹	3	3	3	3	3	3	3	3	3	3	3

Source : Labour Relations and Workplaces Division, MOM

¹ Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

² Industry classification of some unions were reviewed for better representation.

E.5 MEMBERSHIP OF EMPLOYEES' TRADE UNIONS BY MEMBERSHIP SIZE, 2009 – 2019
(At Year-End)

Size of Trade Union (Number of Members)		Number										
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL		526,089	549,878	588,014	613,418	655,126	686,676	718,723	740,750	755,217	762,807	785,643
Under	50	-	44	44	44	43	46	43	42	40	40	25
50	– 249	861	779	788	1,233	547	556	545	479	596	575	652
250	– 999	10,757	10,026	8,322	8,088	8,853	8,246	8,794	6,447	6,807	6,621	5,889
1,000	– 4,999	47,789	35,569	43,420	39,360	36,994	39,360	39,902	38,551	37,790	40,680	44,453
5,000	– 9,999	30,571	47,558	52,995	61,007	71,276	63,329	66,836	68,503	70,269	70,871	53,232
10,000	& Over	436,111	455,902	482,445	503,686	537,413	575,139	602,603	626,728	639,715	644,020	681,392

Source : Labour Relations and Workplaces Division, MOM

E.6 MEMBERSHIP OF EMPLOYEES' TRADE UNIONS BY INDUSTRY, 2009 – 2019

(At Year-End)

Industry	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 ²
TOTAL	526,089	549,878	588,014	613,418	655,126	686,676	718,723	740,750	755,217	762,807	785,643
Manufacturing	116,517	119,899	128,193	130,385	137,146	141,668	145,159	146,815	149,524	146,447	149,317
Construction	25,317	27,484	29,906	32,027	38,619	41,761	42,630	42,953	43,246	43,638	44,650
Wholesale & Retail Trade	78,819	80,507	84,195	87,358	89,173	93,140	96,068	99,407	99,740	98,641	100,809
Accommodation & Food Services	37,276	38,902	41,437	43,093	45,504	47,863	50,643	51,955	52,135	52,861	54,970
Transport & Storage and Information & Communications	92,430	97,212	101,120	103,605	112,420	116,223	121,910	126,423	129,987	139,872	143,394
Financial & Insurance Services	22,068	23,441	25,607	26,458	28,261	29,103	30,320	31,534	32,597	33,331	35,072
Real Estate, Professional and Administrative & Support Services	11,739	12,582	11,388	12,008	12,178	12,104	13,311	13,771	14,054	13,239	14,172
Community, Social & Personal Services	80,840	86,532	99,976	107,817	116,514	124,272	132,770	137,321	141,141	141,570	148,082
Others ¹	61,083	63,319	66,192	70,667	75,311	80,542	85,912	90,571	92,793	93,208	95,177

Source : Labour Relations and Workplaces Division, MOM

¹ Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

² Industry classification of some unions were reviewed for better representation.

E.7 INDUSTRIAL STOPPAGES, 2009 – 2019

	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of Industrial Stoppages	0	0	0	1	0	0	0	0	0	0	0

Source : Labour Relations and Workplaces Division, MOM

E.8 TRADE DISPUTES REFERRED TO THE CONCILIATION SECTION BY NATURE OF TRADE DISPUTES, 2009 – 2019

Nature of Trade Disputes	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 ¹	2019
TOTAL	166	121	159	164	136	106	119	112	101	92	86
Wage Increase and Conditions of Service	72	57	76	92	83	66	72	62	44	64	67
Retrenchment Benefits	34	12	15	11	18	15	18	27	28	16	6
Bonus or Gratuity	13	13	17	19	10	5	11	6	5	11	9
Other Industrial Matters (e.g. Sales Commission and Shift Allowances)	47	39	51	42	25	20	18	17	24	1	4

Source : Labour Relations and Workplaces Division, MOM

¹ Disputes involving individual union members are excluded from 2018 onwards and the figures have been updated accordingly.

E.9 TRADE DISPUTES REFERRED TO THE CONCILIATION SECTION BY INDUSTRY, 2009 – 2019

														Number
SSIC 2005	Industry	2009	2010		Industry	2011	2012	2013	2014	2015	2016	2017	2018 ²	2019
	TOTAL	166	121		TOTAL	159	164	136	106	119	112	101	92	86
C15-36	Manufacturing	78	40	C10-32	Manufacturing	41	44	41	40	30	46	32	34	30
F45	Construction	9	5	F41-43	Construction	8	7	5	4	9	5	4	-	4
G50-51, J58	Wholesale & Retail Trade and Hotels & Restaurants	25	18	G46-47, I55-56	Wholesale & Retail Trade and Accommodation & Food Services	32	23	26	15	31	24	17	22	20
H52-56, K60-63	Transportation & Storage and Information & Communications	28	28	H49-53, J58-63	Transportation & Storage and Information & Communications	43	47	27	28	29	15	30	19	17
L-V	Financial & Insurance, Real Estate, Professional, Administrative and Community, Social & Personal Services	26	28	K-U	Financial & Insurance, Real Estate, Professional, Administrative and Community, Social & Personal Services	32	41	36	18	18	19	18	14	12
A,B,D,E	Others ¹	-	2	A,B,D,E,V	Others ¹	3	2	1	1	2	3	-	3	3

Source : Labour Relations and Workplaces Division, MOM

¹ Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

² Disputes involving individual union members are excluded from 2018 onwards and the figures have been updated accordingly.

Note :

Data are classified according to the SSIC 2010 from 2011-2017. From 2018 onwards, data are classified according to the SSIC 2015.

E.10 CLAIMS REGISTERED WITH THE INDIVIDUAL DISPUTES SECTION BY ISSUES, 2009 – 2019

Issues	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Arrears of Wages	11,793	6,961	5,777	6,434	7,129	8,013	7,892	6,932	7,489	7,199	7,989
Wages in Lieu of Notice	938	788	938	1,079	1,205	1,250	1,621	1,704	1,638	1,645	1,885
Wages in Lieu of Annual Leave	547	532	496	669	689	690	975	1,038	813	690	846
Wages for Work on Rest Days	380	422	577	563	670	639	651	734	843	2,047	2,622
Wages for Work on Holidays	512	668	456	627	730	656	681	833	619	842	933
Overtime Wages	1,297	1,134	1,205	1,399	1,798	1,913	2,391	2,395	2,767	3,788	4,324
Sick Leave Wages	300	598	229	128	180	127	145	146	117	128	152
Maternity Allowance	70	28	61	39	45	35	34	24	19	14	75
Other Issues	3,618	2,608	2,234	990	1,194	1,275	1,555	1,160	1,538	1,677	2,116

Source : Labour Relations and Workplaces Division, MOM and Tripartite Alliance for Dispute Management

Note :

Figures in table do not indicate the total number of claims registered as one claim may have multiple issues.

E.11 COLLECTIVE AGREEMENTS CERTIFIED BY TYPE OF WORKERS COVERED, 2009 – 2019

Type of Workers Covered	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	384	363	342	322	474	420	479	411	390	398	405
Professionals, Managers, Executives & Technicians	81	75	44	33	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Professionals, Managers & Executives	n.a.	n.a.	n.a.	n.a.	26	15	14	13	14	18	9
Associate Professionals & Technicians	n.a.	n.a.	n.a.	n.a.	3	-	-	-	-	-	8
Clerical, Sales & Service Workers	51	60	28	33	48	42	65	70	71	51	70
Production & Transport Operators, Cleaners & Labourers	29	29	19	20	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Production, Transport & Manual Workers	n.a.	n.a.	n.a.	n.a.	21	35	41	25	30	31	28
Others (combination of earlier categories)	223	199	251	236	224	229	219	218	172	189	210
Maritime Officers & Seamen	n.a.	n.a.	n.a.	n.a.	152	99	140	85	103	109	80

Source: Industrial Arbitration Court

E.12 COLLECTIVE AGREEMENTS CERTIFIED BY TYPE OF ORGANISATIONS, 2009 – 2019

Type of Organisations	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	384	363	342	322	474	420	479	411	390	398	405
Private Enterprise	371	351	335	311	457	414	465	396	385	385	390
Statutory Board	12	12	7	10	17	6	14	15	5	13	4
Government	1	-	-	1	-	-	-	-	-	-	11

Source: Industrial Arbitration Court

E.13 TRADE DISPUTES REFERRED TO THE INDUSTRIAL ARBITRATION COURT BY NATURE OF TRADE DISPUTES, 2009 – 2019

Nature of Trade Disputes	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	16	15	19	16	6	12	9	7	9	6	16
Variations of Awards / Collective Agreements	10	11	7	9	2	4	7	5	7	5	5
Continuation of Awards / Collective Agreements	2	1	4	2	2	3	1	1	1	-	-
Non-compliance of Awards / Collective Agreements	1	-	-	-	-	-	-	-	1	-	-
Interpretation of Awards / Collective Agreements	-	-	-	-	-	-	-	-	-	-	1
Proposals for Salary, Terms and Conditions of Service, including Fringe Benefits	2	1	6	3	1	4	1	1	-	1	10
Retrenchment	-	2	2	2	-	-	-	-	-	-	-
Recognition	-	-	-	-	-	-	-	-	-	-	-
Dismissal / Victimisation	-	-	-	-	-	-	-	-	-	-	-
Compliance with Court Order (section 56)	-	-	-	-	1	1	-	-	-	-	-
Contempt of Court (section 57)	-	-	-	-	-	-	-	-	-	-	-
Directed by Minister	1	-	-	-	-	-	-	-	-	-	-
Collective Agreement be varied to conform with an Award	-	-	-	-	-	-	-	-	-	-	-
Representation of certain classes of PMEs	-	-	-	-	-	-	-	-	-	-	-

Source: Industrial Arbitration Court

E.14 INDUSTRIAL ARBITRATION COURT AWARDS BY NATURE OF TRADE DISPUTES, 2009 – 2019

Nature of Trade Disputes	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	12	11	11	13	4	5	7	5	8	5	15
Variations of Awards / Collective Agreements	10	11	7	9	2	4	7	5	7	5	4
Continuation of Awards / Collective Agreements	1	-	1	-	-	-	-	-	-	-	-
Non-compliance of Awards / Collective Agreements	-	-	-	-	-	-	-	-	1	-	-
Interpretation of Awards / Collective Agreements	-	-	1	-	-	-	-	-	-	-	1
Proposals for Salary, Terms and Conditions of Service, including Fringe Benefits	-	-	1	1	1	1	-	-	-	-	10
Retrenchment	-	-	1	3	-	-	-	-	-	-	-
Recognition	-	-	-	-	-	-	-	-	-	-	-
Dismissal	-	-	-	-	-	-	-	-	-	-	-
Contempt of Court Awards	-	-	-	-	-	-	-	-	-	-	-
Referee Appeal	-	-	-	-	1	-	-	-	-	-	-
Directed by Minister	1	-	-	-	-	-	-	-	-	-	-

Source : Industrial Arbitration Court

E.15 INDUSTRIAL ARBITRATION COURT AWARDS BY TYPE OF WORKERS COVERED, 2009 – 2019

Type of Workers Covered	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	12	11	11	13	4	5	7	5	8	5	15
Professionals, Managers, Executives & Technicians	5	5	2	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Professionals, Managers & Executives	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Associate Professionals & Technicians	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-
Clerical, Sales & Service Workers	1	2	-	-	-	-	-	-	1	-	-
Production & Transport Operators, Cleaners & Labourers	-	-	-	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Production, Transport & Manual Workers	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	1	-
Others (combination of earlier categories)	6	4	9	12	4	5	7	5	6	4	15
Maritime Officers & Seamen	n.a.	n.a.	n.a.	n.a.	-	-	-	-	1	-	-

Source : Industrial Arbitration Court

E.16 INDUSTRIAL ARBITRATION COURT AWARDS BY TYPE OF ORGANISATIONS, 2009 – 2019

Type of Organisations	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	12	11	11	13	4	5	7	5	8	5	15
Private Enterprise	12	11	11	12	4	5	7	4	8	5	14
Statutory Board	-	-	-	1	-	-	-	1	-	-	1
Government	-	-	-	-	-	-	-	-	-	-	-

Source : Industrial Arbitration Court



Workplace Safety And Health



WORKPLACE SAFETY AND HEALTH

Source of Data

Data on workplace safety and health are compiled by the Occupational Safety and Health Division of the Ministry of Manpower in the administration of legal requirements under the Workplace Safety and Health Act.

Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations which was enacted on 1 March 2006. With effect from 4 January 2014, reporting was also required for work-related traffic injuries.

The Occupational Safety and Health Division monitors and enforces safety and health standards in workplaces. It also promotes self-regulation in workplaces and the management of safety and health through industry ownership and good risk management.

Coverage

The types of workplace injuries, which include work-related traffic injuries, and occupational diseases covered in the reported statistics include the following:

- Workplace injuries sustained by employees and resulting in more than three days of medical leave (consecutive or otherwise); or
- Workplace injuries sustained by employees and resulting in at least 24 hours of hospitalisation;
- Workplace incidents resulting in the death of employees, self-employed persons and persons not at work (includes members of the public);
- Occupational diseases listed in the Second Schedule of the Workplace Safety and Health Act.

Concepts and Definitions

Workplace Incident refers to an unexpected and unplanned occurrence, arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death.

Workplace Injury refers to any personal injury, disease or death resulting from a workplace incident.

Occupational Disease refers to a disease contracted as a result of an exposure over a period of time to risk factors arising from work activity.

Workplace Injury Rate refers to the number of fatal and non-fatal workplace injuries per 100,000 workers.

Workplace Fatal Injury Rate refers to the number of workplace fatal injuries per 100,000 workers.

Occupational Disease Incidence refers to the number of new cases of occupational diseases confirmed by the Ministry of Manpower per 100,000 workers.

The degree of injury of a workplace injury is defined as:

- **Fatal** if it results in death;
- **Major** if it is an injury, other than fatal injuries, which are more severe in nature based on the nature of injury, part of the body injured, incident type and duration of medical leave. These injuries include: amputation, blindness, deafness, paralysis, crushing, fractures and dislocations, exposure to electric current, asphyxia/ drowning, hypothermia, burns, concussion, mosquito borne diseases and virus outbreak with more than 20 days of medical leave; and
- **Minor** if it is an injury, other than fatal injuries and major injuries, which results

in more than three days of medical leave, or at least 24 hours of hospitalisation.

Confirmed Case Of Occupational Disease refers to one where there is definite evidence that the worker suffers from a disease which is related to his occupation.

F.1 WORKPLACE SAFETY AND HEALTH INDICATORS BY INDUSTRY, 2019

SSIC 2010	Industry	Workplace Fatal Injury Rate	Workplace Injury Rate	Occupational Disease Incidence
		per 100,000 workers		per 100,000 workers
	TOTAL	1.1	396	14.9
C10-32 (excluding C301)	Manufacturing (excluding shipbuilding and ship repairing)	1.0	667	36.8
C10-12	Food, Beverages & Tobacco	-	1,067	43.9
C17,18,22	Paper / Rubber / Plastic Products & Printing	-	690	24.4
C19-20	Petrochemical	1.9	202	100.0
C23	Non-metallic Mineral Products	-	3,553	52.6
C24-25,27-28	Metalworking ¹	2.8	1,066	33.8
C26	Electronic, Computer & Optical Products	-	189	6.7
C29-30 (excluding C301)	Transport Equipment (excluding shipbuilding and ship repairing)	-	341	41.8
C31	Furniture	-	1,223	-
C301,H52225,52252	Marine ²	6.0	529	19.5
F41-43	Construction	2.9	465	11.7
E36-38	Water Supply, Sewerage and Waste Management	6.0	789	24.1
G46-47	Wholesale and Retail Trade	0.4	157	4.8
G46	Wholesale Trade	0.6	114	4.6
G47	Retail Trade	-	244	5.0
H49-53	Transportation and Storage	3.1	432	23.7
H49	Land Transport	0.9	133	13.2
H50	Water Transport	17.8	89	5.9
H52	Warehousing & Support Activities for Transport	1.9	832	35.3

Source : Occupational Safety and Health Division, MOM

¹ Includes Manufacture of Basic Metals, Fabricated Metal Products, Machinery & Equipment and Electrical Machinery & Apparatus.² Includes Shipbuilding and Ship Repairing, Marine Surveying Services (other than classification societies), Salvaging of Distressed Vessels and Cargo and Works carried out at the anchorage.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.1 WORKPLACE SAFETY AND HEALTH INDICATORS BY INDUSTRY, 2019 (continued)

SSIC 2010	Industry	Workplace Fatal Injury Rate	Workplace Injury Rate	Occupational Disease Incidence
		per 100,000 workers		per 100,000 workers
I55-56	Accommodation and Food Services	0.8	503	12.6
I55	Accommodation	-	777	30.0
I56	Food & Beverage Services	0.9	459	9.7
J58-63	Information and Communications	-	36	2.0
J58-61	Telecommunications, Broadcasting & Publishing	-	75	2.4
J62-63	IT & Other Information Services	-	21	1.9
K64-66	Financial and Insurance Services	-	103	5.0
L68	Real Estate Services	1.2	562	15.5
M69-75	Professional Services	-	180	11.5
M69-70	Legal, Accounting & Management Services	-	142	6.0
M71	Architectural & Engineering Services	-	316	26.2
N77-82	Administrative and Support Services	0.8	295	6.3
N80	Security & Investigation	-	385	2.0
N81	Cleaning & Landscaping	-	366	6.3
O84-U99	Community, Social and Personal Services	0.1	188	8.0
Q86,8701	Health Activities	-	507	38.4
R90-93	Arts, Entertainment & Recreation	-	264	3.5

Source : Occupational Safety and Health Division, MOM

Notes :

- 1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.
- 2) Figures are victim-based.

F.2 TOP INCIDENT TYPES LEADING TO WORKPLACE INJURIES BY INDUSTRY, 2019

Number

SSIC 2010	Industry	Top Incident Types							
		Slips, Trips & Falls	Struck by Moving Objects	Cut / Stabbed by Objects	Struck by Falling Objects	Caught in or Between Objects	Over-exertion / Strenuous Movement	Strike Against Objects	Falls from Heights
	TOTAL	3,913	2,270	1,482	1,117	986	923	802	688
C10-32 (excluding C301)	Manufacturing (excluding shipbuilding and ship repairing)	541	578	389	259	373	120	209	85
C10-12	Food, Beverages & Tobacco	123	72	115	41	52	29	42	17
C17,18,22	Paper / Rubber / Plastic Products & Printing	51	26	32	12	39	s	21	s
C19-20	Petrochemical	22	16	s	s	s	s	s	s
C23	Non-metallic Mineral Products	22	30	18	16	21	s	11	4
C24-25,27-28	Metalworking ¹	182	307	88	127	206	37	82	29
C26	Electronic, Computer & Optical Products	54	20	16	s	14	12	12	s
C29-30 (excluding C301)	Transport Equipment (excluding shipbuilding and ship repairing)	27	23	s	10	12	s	11	s
C31	Furniture	10	16	63	12	s	s	s	s
C301,H52225,52252	Marine ²	74	87	11	36	51	s	18	36
F41-43	Construction	482	491	186	249	191	59	96	222
E36-38	Water Supply, Sewerage and Waste Management	34	27	s	s	12	10	5	s
G46-47	Wholesale and Retail Trade	241	82	86	66	30	70	47	49
G46	Wholesale Trade	121	46	34	26	16	37	26	21
G47	Retail Trade	120	36	52	40	14	33	21	28
H49-53	Transportation and Storage	358	226	35	79	89	95	65	26
H49	Land Transport	55	18	s	s	s	12	s	s
H50	Water Transport	s	s	-	-	s	-	-	-
H52	Warehousing & Support Activities for Transport	262	195	31	67	76	76	57	24

Source : Occupational Safety and Health Division, MOM

¹ Includes Manufacture of Basic Metals, Fabricated Metal Products, Machinery & Equipment and Electrical Machinery & Apparatus.

² Includes Shipbuilding and Ship Repairing, Marine Surveying Services (other than classification societies), Salvaging of Distressed Vessels and Cargo and Works carried out at the anchorage.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

3) Figures include both fatal and non-fatal injuries.

4) Slips, Trips and Falls incidents are identified through Slips and Trips on same level/ Fall from Vehicle/ Stairs/ Steps/ Machines/ Other Locations incidents.

5) Falls from Heights (FFH) incidents are identified through fall from Roof/ Mobile Work Platform/ Scaffold/ Ladder/ Structure/ Into Depth incidents.

6) s : Suppressed because the injury numbers are too small (i.e. less than 10) for meaningful analysis.

F.2 TOP INCIDENT TYPES LEADING TO WORKPLACE INJURIES BY INDUSTRY, 2019 (continued)

SSIC 2010	Industry	Top Incident Types								Number
		Slips, Trips & Falls	Struck by Moving Objects	Cut / Stabbed by Objects	Struck by Falling Objects	Caught in or Between Objects	Over-exertion / Strenuous Movement	Strike Against Objects	Falls from Heights	
I55-56	Accommodation and Food Services	320	80	370	82	22	77	81	17	
I55	Accommodation	73	24	76	29	s	20	27	s	
I56	Food & Beverage Services	247	56	294	53	13	57	54	13	
J58-63	Information and Communications	27	s	s	s	s	s	s	s	
J58-61	Telecommunications, Broadcasting & Publishing	13	s	s	s	s	-	-	s	
J62-63	IT & Other Information Services	14	s	s	-	-	s	s	-	
K64-66	Financial and Insurance Services	80	19	22	17	s	29	s	13	
L68	Real Estate Services	168	52	45	27	16	56	28	17	
M69-75	Professional Services	139	70	38	39	25	43	26	24	
M69-70	Legal, Accounting & Management Services	60	21	20	12	s	26	11	s	
M71	Architectural & Engineering Services	56	41	11	20	15	14	10	14	
N77-82	Administrative and Support Services	299	101	60	54	32	55	34	26	
N80	Security & Investigation	95	21	-	s	s	18	s	s	
N81	Cleaning & Landscaping	124	42	29	25	12	14	13	11	
O84-U99	Community, Social and Personal Services	616	204	85	74	70	195	80	45	
Q86,8701	Health Activities	190	74	21	31	25	123	21	s	
R90-93	Arts, Entertainment & Recreation	63	11	12	s	s	11	s	s	

Source : Occupational Safety and Health Division, MOM

- Notes :
- 1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.
 - 2) Figures are victim-based.
 - 3) Figures include both fatal and non-fatal injuries.
 - 4) Slips, Trips and Falls incidents are identified through Slips and Trips on same level/ Fall from Vehicle/ Stairs/ Steps/ Machines/ Other Locations incidents.
 - 5) Falls from Heights (FFH) incidents are identified through fall from Roof/ Mobile Work Platform/ Scaffold/ Ladder/ Structure/ Into Depth incidents.
 - 6) s : Suppressed because the injury numbers are too small (i.e. less than 10) for meaningful analysis.

F.3 WORKPLACE INJURIES BY INDUSTRY AND DEGREE OF INJURY, 2019

SSIC 2010	Industry	Total	Fatal	Number	
				Non-fatal	
				Major Injury	Minor Injury
TOTAL		13,779	39	629	13,111
C10-32 (excluding C301)	Manufacturing (excluding shipbuilding and ship repairing)	2,794	4	137	2,653
C10-12	Food, Beverages & Tobacco	559	-	24	535
C17,18,22	Paper / Rubber / Plastic Products & Printing	198	-	12	186
C19-20	Petrochemical	107	1	10	96
C23	Non-metallic Mineral Products	135	-	6	129
C24-25,27-28	Metalworking ¹	1,134	3	42	1,089
C26	Electronic, Computer & Optical Products	168	-	11	157
C29-30 (excluding C301)	Transport Equipment (excluding shipbuilding and ship repairing)	98	-	9	89
C31	Furniture	126	-	5	121
C301,H52225,52252	Marine ²	353	4	19	330
F41-43	Construction	2,115	13	121	1,981
E36-38	Water Supply, Sewerage and Waste Management	131	1	5	125
G46-47	Wholesale and Retail Trade	760	2	35	723
G46	Wholesale Trade	369	2	15	352
G47	Retail Trade	391	-	20	371

Source : Occupational Safety and Health Division, MOM

¹ Includes Manufacture of Basic Metals, Fabricated Metal Products, Machinery & Equipment and Electrical Machinery & Apparatus.² Includes Shipbuilding and Ship Repairing, Marine Surveying Services (other than classification societies), Salvaging of Distressed Vessels and Cargo and Works carried out at the anchorage.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.3 WORKPLACE INJURIES BY INDUSTRY AND DEGREE OF INJURY, 2019 (continued)

SSIC 2010	Industry	Total	Fatal	Number	
				Non-fatal	
				Major Injury	Minor Injury
H49-53	Transportation and Storage	1,129	8	57	1,064
H49	Land Transport	141	1	12	128
H50	Water Transport	15	3	1	11
H52	Warehousing & Support Activities for Transport	871	2	42	827
I55-56	Accommodation and Food Services	1,321	2	54	1,265
I55	Accommodation	285	-	12	273
I56	Food & Beverage Services	1,036	2	42	992
J58-63	Information and Communications	54	-	2	52
J58-61	Telecommunications, Broadcasting & Publishing	31	-	1	30
J62-63	IT & Other Information Services	23	-	1	22
K64-66	Financial and Insurance Services	205	-	5	200
L68	Real Estate Services	471	1	15	455
M69-75	Professional Services	454	-	12	442
M69-70	Legal, Accounting & Management Services	188	-	2	186
M71	Architectural & Engineering Services	193	-	8	185
N77-82	Administrative and Support Services	747	2	30	715
N80	Security & Investigation	191	-	9	182
N81	Cleaning & Landscaping	291	-	10	281
O84-U99	Community, Social and Personal Services	1,601	1	61	1,539
Q86,8701	Health Activities	582	-	15	567
R90-93	Arts, Entertainment & Recreation	152	-	9	143

Source : Occupational Safety and Health Division, MOM

Notes :

- 1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.
- 2) Figures are victim-based.

F.4 WORKPLACE INJURIES BY INCIDENT TYPES AND DEGREE OF INJURY, 2019

Incident Types	Total	Fatal	Number	
			Non-fatal	
			Major Injury	Minor Injury
TOTAL	13,779	39	629	13,111
Slips, Trips & Falls	3,913	3	216	3,694
Struck by Moving Objects	2,270	5	85	2,180
Cut / Stabbed by Objects	1,482	-	30	1,452
Struck by Falling Objects	1,117	2	34	1,081
Caught in or Between Objects	986	4	59	923
Over-exertion / Strenuous Movement	923	-	21	902
Strike Against Objects	802	-	18	784
Falls from Heights	688	7	62	619
Exposure to/ Contact with Extreme Temperatures	433	1	34	398
Work-related Traffic	269	4	17	248
Exposed to/ Contact with Biological Materials	193	-	4	189
Exposed to/ Contact with Hazardous Substances	173	-	6	167
Physical Assault	133	-	1	132
Fires and Explosion	69	1	8	60
Stepping on Objects	32	-	-	32
Others	296	12	34	250

Source : Occupational Safety and Health Division, MOM

Notes :

- 1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.
- 2) Figures are victim-based.
- 3) Slips, Trips and Falls incidents are identified through Slips and Trips on same level/ Fall from Vehicle/ Stairs/ Steps/ Machines/ Other Locations incidents.
- 4) Falls from Heights (FFH) incidents are identified through fall from Roof/ Mobile Work Platform/ Scaffold/ Ladder/ Structure/ Into Depth incidents.

F.5 WORKPLACE INJURIES BY TOP INCIDENT AGENTS AND DEGREE OF INJURY, 2019

Top Incident Agents	Total	Fatal	Number	
			Non-fatal	
			Major Injury	Minor Injury
TOTAL	13,779	39	629	13,111
Physical Workplace	2,364	5	143	2,216
Floor/Level Surfaces	2,171	2	113	2,056
Means of Access	1,269	3	72	1,194
Stairs or Steps	641	-	30	611
Ladders	480	1	30	449
Metal Items	1,436	2	41	1,393
Industrial Machines	1,044	2	73	969
Moving Vehicles	1,175	7	70	1,098
Furniture & Fittings	926	-	43	883
Industrial Hand Tools (Electrical & Non-electrical)	881	-	21	860
Human Factor	925	-	20	905
Knives and Needles	649	-	3	646
Goods/Cargo	535	2	18	515

Source : Occupational Safety and Health Division, MOM

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.6 CONFIRMED CASES OF OCCUPATIONAL DISEASES BY TYPE OF DISEASE, 2009 – 2019

Type of Disease	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	468	432	839	987	887	992	935	732	799	563	517
Noise Induced Deafness	380	364	741	869	564	594	498	322	329	163	169
Early	375	358	730	855	544	580	476	301	303	148	163
Advanced	5	6	11	14	20	14	22	21	26	15	6
Occupational Skin Disease	56	43	52	57	56	54	89	47	78	48	39
Excessive Absorption of Chemicals	16	15	10	4	4	2	1	2	1	-	-
Chemical Poisoning	-	-	1	-	3	-	1	-	18	-	-
Compressed Air Illness	-	2	6	12	5	7	18	14	15	2	2
Barotrauma	1	1	2	10	7	8	7	12	10	5	2
Work-related Musculoskeletal Disorder ¹	3	4	6	18	237	315	304	316	337	326	293
Occupational Lung Disease ²	3	1	10	5	9	5	5	7	1	6	4
Others	9	2	11	12	2	7	12	12	10	13	8

Source : Occupational Safety and Health Division, MOM

¹ Back injuries due to ergonomic risks were considered as a WRMSD case and included as occupational disease since 2013.

² Includes occupational asthma, silicosis and asbestosis.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.7 CONFIRMED CASES OF OCCUPATIONAL DISEASES BY TYPE OF DISEASE AND INDUSTRY, 2019

SSIC 2010	Industry	Total	Noise Induced Deafness	Occupational Skin Disease	Excessive Absorption of Chemicals	Chemical Poisoning	Barotrauma	Compressed Air Illness	Occupational Lung Disease ¹	Work-related Musculo-skeletal Disorder ²	Number
											Others
TOTAL		517	169	39	-	-	2	2	4	293	8
C10-32 (excluding C301)	Manufacturing (excluding shipbuilding and ship repairing)	154	101	11	-	-	-	-	1	41	-
C10-12	Food, Beverages & Tobacco	23	14	2	-	-	-	-	-	7	-
C17,18,22	Paper / Rubber / Plastic Products & Printing	7	4	-	-	-	-	-	-	3	-
C19-20	Petrochemical	53	50	-	-	-	-	-	-	3	-
C23	Non-metallic Mineral Products	2	1	-	-	-	-	-	-	1	-
C24-25,27-28	Metalworking ³	36	23	4	-	-	-	-	1	8	-
C26	Electronic, Computer & Optical Products	6	2	-	-	-	-	-	-	4	-
C29-30 (excluding C301)	Transport Equipment (excluding shipbuilding and ship repairing)	12	6	3	-	-	-	-	-	3	-
C31	Furniture	-	-	-	-	-	-	-	-	-	-
C301,H52225, 52252	Marine ⁴	13	8	2	-	-	-	-	-	2	1
F41-43	Construction	53	18	3	-	-	-	1	1	29	1
E36-38	Water Supply, Sewerage and Waste Management	4	-	-	-	-	1	-	-	3	-
G46-47	Wholesale and Retail Trade	23	2	1	-	-	-	-	-	19	1
G46	Wholesale Trade	15	2	1	-	-	-	-	-	12	-
G47	Retail Trade	8	-	-	-	-	-	-	-	7	1

Source : Occupational Safety and Health Division, MOM

¹ Includes occupational asthma, silicosis and asbestosis.

² Back injuries due to ergonomic risks were considered as a WRMSD case and included as occupational disease since 2013.

³ Includes Manufacture of Basic Metals, Fabricated Metal Products, Machinery & Equipment and Electrical Machinery & Apparatus.

⁴ Includes Shipbuilding and Ship Repairing, Marine Surveying Services (other than classification societies), Salvaging of Distressed Vessels and Cargo and Works carried out at the anchorage.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.7 CONFIRMED CASES OF OCCUPATIONAL DISEASES BY TYPE OF DISEASE AND INDUSTRY, 2019 (continued)

SSIC 2010	Industry	Total	Noise Induced Deafness	Occupational Skin Disease	Excessive Absorption of Chemicals	Chemical Poisoning	Barotrauma	Compressed Air Illness	Occupational Lung Disease ¹	Number	
										Work-related Musculo-skeletal Disorder ²	Others
H49-53	Transportation and Storage	62	17	2	-	-	-	-	-	41	2
H49	Land Transport	14	11	1	-	-	-	-	-	2	-
H50	Water Transport	1	1	-	-	-	-	-	-	-	-
H52	Warehousing & Support Activities for Transport	37	5	1	-	-	-	-	-	29	2
I55-56	Accommodation and Food Services	33	-	5	-	-	-	-	-	28	-
I55	Accommodation	11	-	2	-	-	-	-	-	9	-
I56	Food & Beverage Services	22	-	3	-	-	-	-	-	19	-
J58-63	Information and Communications	3	1	-	-	-	-	-	-	2	-
J58-61	Telecommunications, Broadcasting & Publishing	1	-	-	-	-	-	-	-	1	-
J62-63	IT & Other Information Services	2	1	-	-	-	-	-	-	1	-
K64-66	Financial and Insurance Services	10	-	-	-	-	-	-	-	9	1
L68	Real Estate Services	13	-	-	-	-	-	-	-	13	-
M69-75	Professional Services	29	14	1	-	-	1	-	2	11	-
M69-70	Legal, Accounting & Management Services	8	2	-	-	-	1	-	1	4	-
M71	Architectural & Engineering Services	16	10	-	-	-	-	-	1	5	-
N77-82	Administrative and Support Services	16	-	2	-	-	-	1	-	12	1
N80	Security & Investigation	1	-	1	-	-	-	-	-	-	-
N81	Cleaning & Landscaping	5	-	-	-	-	-	-	-	5	-
O84-U99	Community, Social and Personal Services	68	2	9	-	-	-	-	-	56	1
Q86,8701	Health Activities	44	-	8	-	-	-	-	-	35	1
R90-93	Arts, Entertainment & Recreation	2	-	-	-	-	-	-	-	2	-

Source : Occupational Safety and Health Division, MOM

¹ Includes occupational asthma, silicosis and asbestosis.² Back injuries due to ergonomic risks were considered as a WRMSD case and included as occupational disease since 2013.

Notes :

1) Data on workplace safety and health are compiled based on incident reports made by employers, occupiers and medical practitioners in the fulfilment of their obligations under the Workplace Safety and Health (Incident Reporting) Regulations.

2) Figures are victim-based.

F.8 AMOUNT OF WORK INJURY COMPENSATION AWARDED (\$M), 2017 – 2019

Work Injury Compensation		2017	2018	2019
Temporary Incapacity*	No. of Cases	10,354	10,170	11,496
	MC Wages (\$million)	8.80	9.48	11.22
Permanent Incapacity*	No. of Cases	4,513	4,304	4,370
	MC Wages (\$million)	14.15	12.41	14.92
	PI Compensation (\$million)	74.35	73.88	76.26
Fatal*	No. of Cases	149	111	126
	Death Compensation (\$million)	20.58	15.96	17.62
Total	No. of Cases	15,016	14,585	15,992
	MC Wages (\$million)	22.95	21.89	26.14
	PI/ Death Compensation (\$million)	94.93	89.84	93.88

Source : Occupational Safety and Health Division, MOM

* includes Occupational Diseases

Notes :

- 1) MC wages indicated in the table above are computed based on the number of days of medical/hospitalisation leave captured by MOM.
- 2) Excludes cases that were withdrawn, cases with No-Further-Action required and cases that were not admitted under the Work Injury Compensation Act.
- 3) 0% permanent incapacity cases are accounted under Temporary Incapacity.



SOCIAL SECURITY

Source of Data

Statistics on Central Provident Fund (CPF) members are compiled by the Central Provident Fund Board.

Definitions and Notes

An **active CPF member** refers to a person who has at least one contribution paid for him for the current or any of the preceding three months.

All CPF members have three accounts with the CPF Board – the Ordinary, MediSave and Special Accounts. Savings in the Ordinary Account can be used to buy a home, pay for insurance premiums (namely the Dependants' Protection Scheme and Home Protection Scheme), or withdrawn for investment and education. MediSave savings can be used for hospitalisation expenses, approved medical insurance and certain outpatient treatments while savings in the Special Account are reserved for retirement needs. From age 55, a Retirement Account is created for the CPF member. This account, comprising monies transferred from his Special and/or Ordinary Accounts, is used to provide monthly payments for the member during retirement.

Both the employer and the employee make monthly contributions to the CPF. The employer is liable to pay the total CPF contributions, and is entitled to recover the employee's contribution from the employee's wages.

G.1 CENTRAL PROVIDENT FUND CONTRIBUTION RATES, 1997 – 2020

Per Cent

Period	Contribution Rate			Credited Into		
	Total	By Employer	By Employee	Ordinary Account	Special Account	MediSave Account
From Jan 1997 to Dec 1998						
Up to 35 years	40.0	20.0	20.0	30.0	4.0	6.0
Above 35 – 45 years	40.0	20.0	20.0	29.0	4.0	7.0
Above 45 – 55 years	40.0	20.0	20.0	28.0	4.0	8.0
Above 55 – 60 years	20.0	7.5	12.5	12.0	-	8.0
Above 60 – 65 years	15.0	7.5	7.5	7.0	-	8.0
Above 65 years	10.0	5.0	5.0	2.0	-	8.0
From Jan 1999 to Mar 2000						
Up to 35 years	30.0	10.0	20.0	24.0	-	6.0
Above 35 – 45 years	30.0	10.0	20.0	23.0	-	7.0
Above 45 – 55 years	30.0	10.0	20.0	22.0	-	8.0
Above 55 – 60 years	16.5	4.0	12.5	8.5	-	8.0
Above 60 – 65 years	9.5	2.0	7.5	1.5	-	8.0
Above 65 years	7.0	2.0	5.0	-	-	7.0
From Apr 2000 to Dec 2000						
Up to 35 years	32.0	12.0	20.0	24.0	2.0	6.0
Above 35 – 45 years	32.0	12.0	20.0	23.0	2.0	7.0
Above 45 – 55 years	32.0	12.0	20.0	22.0	2.0	8.0
Above 55 – 60 years	17.0	4.5	12.5	9.0	-	8.0
Above 60 – 65 years	10.0	2.5	7.5	2.0	-	8.0
Above 65 years	7.5	2.5	5.0	-	-	7.5
From Jan 2001 to Sep 2003						
Up to 35 years	36.0	16.0	20.0	26.0	4.0	6.0
Above 35 – 45 years	36.0	16.0	20.0	23.0	6.0	7.0
Above 45 – 55 years	36.0	16.0	20.0	22.0	6.0	8.0
Above 55 – 60 years	18.5	6.0	12.5	10.5	-	8.0
Above 60 – 65 years	11.0	3.5	7.5	2.5	-	8.5
Above 65 years	8.5	3.5	5.0	-	-	8.5

Source : Central Provident Fund Board

G.1 CENTRAL PROVIDENT FUND CONTRIBUTION RATES, 1997 – 2020 (continued)

Per Cent

Period	Contribution Rate			Credited Into		
	Total	By Employer	By Employee	Ordinary Account	Special Account	MediSave Account
From Oct 2003 to Dec 2004						
Up to 35 years	33.0	13.0	20.0	22.0	5.0	6.0
Above 35 – 45 years	33.0	13.0	20.0	20.0	6.0	7.0
Above 45 – 55 years	33.0	13.0	20.0	18.0	7.0	8.0
Above 55 – 60 years	18.5	6.0	12.5	10.5	-	8.0
Above 60 – 65 years	11.0	3.5	7.5	2.5	-	8.5
Above 65 years	8.5	3.5	5.0	-	-	8.5
From Jan 2005 to Dec 2005						
Up to 35 years	33.0	13.0	20.0	22.0	5.0	6.0
Above 35 – 45 years	33.0	13.0	20.0	20.0	6.0	7.0
Above 45 – 50 years	33.0	13.0	20.0	18.0	7.0	8.0
Above 50 – 55 years	30.0	11.0	19.0	15.0	7.0	8.0
Above 55 – 60 years	18.5	6.0	12.5	10.5	-	8.0
Above 60 – 65 years	11.0	3.5	7.5	2.5	-	8.5
Above 65 years	8.5	3.5	5.0	-	-	8.5
From Jan 2006 to Jun 2007						
Up to 35 years	33.0	13.0	20.0	22.0	5.0	6.0
Above 35 – 45 years	33.0	13.0	20.0	20.0	6.0	7.0
Above 45 – 50 years	33.0	13.0	20.0	18.0	7.0	8.0
Above 50 – 55 years	27.0	9.0	18.0	12.0	7.0	8.0
Above 55 – 60 years	18.5	6.0	12.5	10.5	-	8.0
Above 60 – 65 years	11.0	3.5	7.5	2.5	-	8.5
Above 65 years	8.5	3.5	5.0	-	-	8.5

Source : Central Provident Fund Board

G.1 CENTRAL PROVIDENT FUND CONTRIBUTION RATES, 1997 – 2020 (continued)

Period	Contribution Rate			Credited Into			Per Cent
	Total	By Employer	By Employee	Ordinary Account	Special Account	MediSave Account	
From Jul 2007 to Aug 2010 ¹							
Up to 35 years	34.5	14.5	20.0	23.0	5.0	6.5	
Above 35 – 45 years	34.5	14.5	20.0	21.0	6.0	7.5	
Above 45 – 50 years	34.5	14.5	20.0	19.0	7.0	8.5	
Above 50 – 55 years	28.5	10.5	18.0	13.0	7.0	8.5	
Above 55 – 60 years	20.0	7.5	12.5	11.5	-	8.5	
Above 60 – 65 years	12.5	5.0	7.5	3.5	-	9.0	
Above 65 years	10.0	5.0	5.0	1.0	-	9.0	
From Sep 2010 to Feb 2011 ¹							
Up to 35 years	35.0	15.0	20.0	23.0	5.0	7.0	
Above 35 – 45 years	35.0	15.0	20.0	21.0	6.0	8.0	
Above 45 – 50 years	35.0	15.0	20.0	19.0	7.0	9.0	
Above 50 – 55 years	29.0	11.0	18.0	13.0	7.0	9.0	
Above 55 – 60 years	20.5	8.0	12.5	11.5	-	9.0	
Above 60 – 65 years	13.0	5.5	7.5	3.5	-	9.5	
Above 65 years	10.5	5.5	5.0	1.0	-	9.5	
From Mar 2011 to Aug 2011 ¹							
Up to 35 years	35.5	15.5	20.0	23.0	5.5	7.0	
Above 35 – 45 years	35.5	15.5	20.0	21.0	6.5	8.0	
Above 45 – 50 years	35.5	15.5	20.0	19.0	7.5	9.0	
Above 50 – 55 years	29.5	11.5	18.0	13.0	7.5	9.0	
Above 55 – 60 years	21.0	8.5	12.5	11.5	0.5	9.0	
Above 60 – 65 years	13.5	6.0	7.5	3.5	0.5	9.5	
Above 65 years	11.0	6.0	5.0	1.0	0.5	9.5	

Source : Central Provident Fund Board

¹ For total wages exceeding \$1,500 per month. The Ordinary Wage Ceiling is \$4,500.

G.1 CENTRAL PROVIDENT FUND CONTRIBUTION RATES, 1997 – 2020 (continued)

Period	Contribution Rate			Credited Into			Per Cent
	Total	By Employer	By Employee	Ordinary Account	Special Account	MediSave Account	
From Sep 2011 to Aug 2012 ²							
Up to 35 years	36.0	16.0	20.0	23.0	6.0	7.0	
Above 35 – 45 years	36.0	16.0	20.0	21.0	7.0	8.0	
Above 45 – 50 years	36.0	16.0	20.0	19.0	8.0	9.0	
Above 50 – 55 years	30.0	12.0	18.0	13.0	8.0	9.0	
Above 55 – 60 years	21.5	9.0	12.5	11.5	1.0	9.0	
Above 60 – 65 years	14.0	6.5	7.5	3.5	1.0	9.5	
Above 65 years	11.5	6.5	5.0	1.0	1.0	9.5	
From Sep 2012 to Dec 2013 ²							
Up to 35 years	36.0	16.0	20.0	23.0	6.0	7.0	
Above 35 – 45 years	36.0	16.0	20.0	21.0	7.0	8.0	
Above 45 – 50 years	36.0	16.0	20.0	19.0	8.0	9.0	
Above 50 – 55 years	32.5	14.0	18.5	13.5	9.5	9.5	
Above 55 – 60 years	23.5	10.5	13.0	12.0	2.0	9.5	
Above 60 – 65 years	14.5	7.0	7.5	3.5	1.5	9.5	
Above 65 years	11.5	6.5	5.0	1.0	1.0	9.5	

Source : Central Provident Fund Board

² For total wages exceeding \$1,500 per month. The Ordinary Wage Ceiling is \$5,000.

G.1 CENTRAL PROVIDENT FUND CONTRIBUTION RATES, 1997 – 2020 (continued)

Period	Contribution Rate			Credited Into			Per Cent
	Total	By Employer	By Employee	Ordinary Account	Special Account	MediSave Account	
From Jan 2014 to Dec 2014 ³							
Up to 35 years	36.0	16.0	20.0	23.0	6.0	7.0	
Above 35 – 45 years	36.0	16.0	20.0	21.0	7.0	8.0	
Above 45 – 50 years	36.0	16.0	20.0	19.0	8.0	9.0	
Above 50 – 55 years	32.5	14.0	18.5	13.5	9.5	9.5	
Above 55 – 60 years	23.5	10.5	13.0	12.0	2.0	9.5	
Above 60 – 65 years	14.5	7.0	7.5	3.5	1.5	9.5	
Above 65 years	11.5	6.5	5.0	1.0	1.0	9.5	
From Jan 2015 to Dec 2015 ³							
Up to 35 years	37.0	17.0	20.0	23.0	6.0	8.0	
Above 35 – 45 years	37.0	17.0	20.0	21.0	7.0	9.0	
Above 45 – 50 years	37.0	17.0	20.0	19.0	8.0	10.0	
Above 50 – 55 years	35.0	16.0	19.0	14.0	10.5	10.5	
Above 55 – 60 years	25.0	12.0	13.0	12.0	2.5	10.5	
Above 60 – 65 years	16.0	8.5	7.5	3.5	2.0	10.5	
Above 65 years	12.5	7.5	5.0	1.0	1.0	10.5	
From Jan 2016 onwards ⁴							
Up to 35 years	37.0	17.0	20.0	23.0	6.0	8.0	
Above 35 – 45 years	37.0	17.0	20.0	21.0	7.0	9.0	
Above 45 – 50 years	37.0	17.0	20.0	19.0	8.0	10.0	
Above 50 – 55 years	37.0	17.0	20.0	15.0	11.5	10.5	
Above 55 – 60 years	26.0	13.0	13.0	12.0	3.5	10.5	
Above 60 – 65 years	16.5	9.0	7.5	3.5	2.5	10.5	
Above 65 years	12.5	7.5	5.0	1.0	1.0	10.5	

Source : Central Provident Fund Board

³ For total wages of \$750 or more per month. The Ordinary Wage Ceiling is \$5,000.⁴ For total wages of \$750 or more per month. The Ordinary Wage Ceiling is \$6,000.

G.2 ACTIVE CENTRAL PROVIDENT FUND MEMBERS BY AGE, 2009 – 2019
(At Year-End)

Age (Year)	Thousands										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	1,644.6	1,700.4	1,735.4	1,788.8	1,854.3	1,951.0	1,959.3	1,974.3	1,990.4	2,014.4	2,037.8
Up to 20	38.9	43.9	42.5	45.7	49.3	56.8	49.7	45.0	43.2	43.5	42.6
> 20 – 25	109.7	115.5	118.6	122.4	122.1	129.4	120.1	115.7	112.2	107.4	102.9
> 25 – 30	211.7	209.3	202.2	199.8	208.2	217.6	221.0	228.4	232.0	228.1	228.4
> 30 – 35	227.5	231.1	229.4	232.2	233.9	235.7	233.5	226.9	223.9	233.4	239.5
> 35 – 40	229.3	232.0	234.3	233.2	232.4	236.6	237.5	235.8	237.9	238.6	237.8
> 40 – 45	208.0	210.6	214.0	220.9	228.7	237.4	236.7	237.2	233.4	231.0	231.6
> 45 – 50	201.8	206.9	210.4	212.6	214.6	217.2	215.4	216.4	220.1	225.4	228.8
> 50 – 55	174.2	182.7	188.1	194.4	201.1	209.9	210.6	211.2	208.8	207.4	204.3
> 55 – 60	122.3	132.0	142.6	153.9	165.3	178.3	182.9	185.4	187.1	189.3	191.3
Above 60	121.3	136.2	153.3	173.5	198.6	232.1	251.8	272.2	291.8	310.4	330.6

Source : Central Provident Fund Board

Notes :

- 1) Data exclude self-employed persons.
- 2) Data may not add up to the total due to rounding.
- 3) 'Total' includes active CPF members with unspecified age.

G.3 ACTIVE CENTRAL PROVIDENT FUND MEMBERS BY INDUSTRY AND SEX, 2016 – 2019
(At Year-End)

SSIC 2015	Industry	Thousands					
		2016			2017		
		Total	Males	Females	Total	Males	Females
	TOTAL	1,974.3	1,000.8	973.5	1,990.4	1,005.0	985.4
C10-32	Manufacturing	244.5	150.5	94.0	239.8	146.9	92.9
F41-43	Construction	111.8	74.7	37.1	105.6	70.5	35.1
G-U	Services						
G46-47	Wholesale & Retail Trade	293.0	139.2	153.8	295.8	139.6	156.2
H49-53	Transport & Storage	126.1	82.7	43.4	129.0	84.4	44.7
I55-56	Accommodation & Food Service Activities	133.0	59.0	73.9	134.5	59.5	75.0
J58-63	Information & Communications	78.5	44.6	34.0	82.1	46.6	35.5
K64-66	Financial & Insurance Activities	160.3	70.1	90.2	162.7	71.1	91.7
L68	Real Estate Activities	48.8	23.9	24.8	48.3	23.5	24.8
M69-75	Professional, Scientific & Technical Activities	163.7	80.1	83.6	164.9	80.4	84.5
N77-82	Administrative & Support Service Activities	179.7	100.1	79.6	185.3	104.2	81.1
O-U	Other Service Activities	417.6	164.4	253.2	424.9	166.7	258.2
A,B,D,E,V	Others ¹	17.3	11.5	5.8	17.5	11.6	5.9

Source : Central Provident Fund Board

¹ Includes Agriculture, Fishing, Quarrying, Utilities, Sewerage & Waste Management and Activities Not Adequately Defined.

Notes :

- 1) Data for males and females do not add up to the total due to unspecified sex.
- 2) Data exclude self-employed persons.
- 3) Data may not add up to the total due to rounding.

G.3 ACTIVE CENTRAL PROVIDENT FUND MEMBERS BY INDUSTRY AND SEX, 2016 – 2019 (continued)

(At Year-End)

Thousands

SSIC 2015	Industry	2018			2019		
		Total	Males	Females	Total	Males	Females
	TOTAL	2,014.4	1,013.9	1,000.5	2,037.8	1,021.5	1,016.3
C10-32	Manufacturing	238.5	145.7	92.8	239.0	145.4	93.5
F41-43	Construction	103.8	69.3	34.5	102.7	68.0	34.7
G-U	Services						
G46-47	Wholesale & Retail Trade	295.8	139.3	156.4	293.5	137.1	156.4
H49-53	Transport & Storage	131.6	86.1	45.5	133.2	86.8	46.5
I55-56	Accommodation & Food Service Activities	137.2	60.7	76.4	141.8	62.9	78.9
J58-63	Information & Communications	85.2	48.6	36.6	89.5	51.0	38.5
K64-66	Financial & Insurance Activities	167.5	73.5	93.9	169.5	74.5	95.0
L68	Real Estate Activities	48.2	23.5	24.7	48.1	23.3	24.8
M69-75	Professional, Scientific & Technical Activities	169.1	82.0	87.0	178.2	86.9	91.3
N77-82	Administrative & Support Service Activities	188.3	105.2	83.1	188.8	105.8	83.0
O-U	Other Service Activities	431.8	168.3	263.6	436.8	168.8	268.1
A,B,D,E,V	Others ¹	17.5	11.5	6.0	16.6	11.0	5.6

Source : Central Provident Fund Board

¹ Includes Agriculture, Fishing, Quarrying, Utilities, Sewerage & Waste Management and Activities Not Adequately Defined.

Notes :

- 1) Data for males and females do not add up to the total due to unspecified sex.
- 2) Data exclude self-employed persons.
- 3) Data may not add up to the total due to rounding.



Higher Education And Skills Training



HIGHER EDUCATION AND SKILLS TRAINING

Source of Data

Statistics on starting salaries of graduates are collected through the Graduate Employment Survey conducted by publicly-funded local universities, polytechnics and Institute of Technical Education (ITE). The monthly gross starting salary comprises the basic salary, fixed allowances, overtime pay and commissions, but does not include bonuses, as the graduates generally would not have worked long enough to get bonus payouts. The data pertain to graduates in full-time permanent employment, including those on contracts of one year or more.

Statistics on the number of graduates from the institutions of higher learning in Singapore are provided by the National University of Singapore, Nanyang Technological University (including National Institute of Education), Singapore Management University, Singapore University of Technology and Design, Singapore Institute of Technology, Singapore University of Social Sciences, Singapore Institute of Management, Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic.

Statistics on the number of persons who completed or participated in vocational

or professional skills training courses are provided by the Institute of Technical Education, SkillsFuture Singapore, Workforce Singapore and National Trade Union Congress.

About the Institutions

The **National University of Singapore** (NUS) was established in 1980 with the merger of the University of Singapore (founded in 1962) and Nanyang University (founded in 1955).

NUS has 17 faculties and schools, namely:

- Faculty of Arts and Social Sciences;
- NUS Business School;
- School of Computing;
- School of Continuing and Lifelong Education;
- Faculty of Dentistry;
- School of Design and Environment;
- Faculty of Engineering;
- Faculty of Law;
- Yong Loo Lin School of Medicine;
- Yong Siew Toh Conservatory of Music;
- Faculty of Science;
- University Scholars Programme;
- Yale-NUS College;
- Saw Swee Hock School of Public Health;

- NUS Graduate School for Integrative Sciences and Engineering;
- Lee Kuan Yew School of Public Policy;
- Duke-NUS Medical School.

There is also a specialty institute known as the Institute of Systems Science offering higher degree courses and executive education programmes.

The **Nanyang Technological University** (NTU Singapore) was established in 1991 and has roots that go back to 1981 when its predecessor institution, Nanyang Technological Institute (NTI), was set up on the grounds of the former Nanyang University as a teaching university.

NTU is organised into the following colleges and schools:

Colleges and Schools

College of Engineering

- School of Chemical and Biomedical Engineering
- School of Civil and Environmental Engineering
- School of Computer Science and Engineering
- School of Electrical and Electronic Engineering
- School of Materials Science and Engineering
- School of Mechanical and Aerospace Engineering

College of Business

- Nanyang Business School

College of Science

- Asian School of the Environment
- School of Biological Sciences
- School of Physical and Mathematical Sciences

College of Humanities, Arts & Social Sciences

- School of Art, Design and Media
- School of Humanities
- School of Social Sciences
- Wee Kim Wee School of Communication and Information

Lee Kong Chian School of Medicine Graduate College

Autonomous entities

- National Institute of Education (NIE);
- S Rajaratnam School of International Studies (RSIS);
- Earth Observatory of Singapore (EOS);
- Singapore Centre for Environmental Life Sciences Engineering (SCELSE);
- Wealth Management Institute (WMI);
- Chinese Heritage Centre (CHC).

The **Singapore Management University** (SMU) was incorporated in 2000.

SMU comprises six schools, namely:

- Lee Kong Chian School of Business;
- School of Accountancy;
- School of Economics;
- School of Information Systems;
- School of Law; and
- School of Social Sciences.

Together, they offer Bachelor's, Master's and PhD degree programmes and executive development and professional programmes. Through SMU Executive Development and the SMU Academy, SMU also provides customised corporate training and lifelong learning for individuals and organisations.

The **Singapore University of Technology and Design** (SUTD) was established in 2009.

SUTD offers these degree programmes:

- Architecture and Sustainable Design,
- Design and Artificial Intelligence
- Engineering Product Development,
- Engineering Systems and Design, and
- Information Systems Technology and Design.

There are also other undergraduate programmes:

- SUTD-Duke-NUS Special Track
- SUTD Honours and Research Programme (SHARP)

- SUTD Technology Entrepreneurship Programme (STEP)

SUTD also offers Masters and PhD degree programmes. In addition, skill-based professional education and training courses are available at the SUTD Academy.

The **Singapore Institute of Technology** (SIT) was established in 2009.

SIT offers degree programmes targeted at growth sectors of the economy and spanning five clusters:

- Engineering
- Chemical Engineering and Food Technology
- Infocomm Technology
- Health and Social Sciences
- Design and Specialised Businesses

In AY2020, SIT offers a total of 38 degree programmes from across SIT and seven overseas universities, including DigiPen Institute of Technology, Massey University, Newcastle University, Technical University of Munich, The Culinary Institute of America, Trinity College Dublin and University of Glasgow.

The **Singapore University of Social Sciences** (SUSS) was founded in 2005 and became an autonomous university in 2017.

SUSS offers more than 70 undergraduate and graduate programmes, available in full- and part-time study modes which cater to both fresh school leavers and

adult learners. It also has a range of continuing education and training modular courses.

SUSS' programmes and courses are made available through its five schools:

- S R Nathan School of Human Development
- School of Business
- School of Humanities and Behavioural Sciences
- School of Law
- School of Science and Technology.

The **Singapore Institute of Management Group Limited** (SIM Group) was founded in 1964 to support Singapore's economic development. SIM Group offers its educational and training services through the following brands:

- SIM Global Education
- SIM International Academy
- Singapore (Cambodia) International Academy
- SIM Professional Development Enterprise Learning.

The **Singapore Polytechnic** (SP), founded in 1954, is the first polytechnic to be established in Singapore.

In 2019, SP offered 43 full-time courses that lead to diploma qualifications in various fields.

SP is organised into 10 schools (School of Architecture & the Built Environment, SP Business School, School

of Chemical & Life Sciences, School of Computing, School of Electrical & Electronic Engineering, School of Life Skills & Communication, School of Mechanical & Aeronautical Engineering, School of Mathematics & Science, SP Media, Arts & Design School and Singapore Maritime Academy).

The **Ngee Ann Polytechnic** (NP) assumed its name in 1982. It was initially established as a private institution in 1963 under the name of Ngee Ann College. It became a public institution and was renamed Ngee Ann Technical College in 1968.

NP offers full-time diplomas in Arts, Design & Media, Built Environment, Business, Engineering, Health Sciences, Humanities & Social Sciences, Information & Digital Technologies and Sciences. NP also offers part-time Continuing Education and Training (CET) course for adult learners.

The **Temasek Polytechnic** (TP) was established in 1990. It is organised into seven schools, namely Applied Science, Business, Design, Engineering, Humanities & Social Sciences, Informatics & IT, and Centre for Foundation Studies. They offer a total of 37 diploma courses and 39 Polytechnic Foundation Programme courses in 2020. TP also conducts part-time courses for working adults.

The **Nanyang Polytechnic** (NYP) was established as an institution of higher learning in 1992. NYP has seven academic schools offering 40 full-time diploma courses in Business Management, Chemical & Life Sciences, Design, Engineering, Health & Social Sciences, Information Technology and Interactive & Digital Media. It also has continuing education (CET) options for lifelong learning, ranging from specialist and advanced diplomas, to SkillsFuture modules and course.

NYP partnered with SkillsFuture Singapore (SSG) to set up three CET institutes. The Asian Culinary Institute and the Singapore Institute of Retail Studies champion and transform Singapore's F&B and retail sectors respectively, while the National Centre of Excellence for Workplace Learning spearheads the development of progressive workplace learning strategies and programmes for companies in Singapore.

The **Republic Polytechnic** (RP) was established in 2002 as the fifth polytechnic in Singapore. RP has seven schools and one academic centre offering 37 full-time diplomas in Applied Science, Engineering, Management and Communication, Hospitality, Infocomm, Sports, Health & Leisure, and Technology for the Arts. The RP Academy for Continuing Education also offers a range of lifelong learning

programmes to provide adult learners with skills upgrading opportunities.

The **Institute of Technical Education** (ITE) was established in 1992 as a post-secondary institution which provides pre-employment training for secondary school graduates and Continuing Education and Training (CET) for adult learners.

ITE offers full-time and traineeship programmes to secondary school graduates, as well as skills training and academic education programmes to adult learners. Employees can also undergo On-the-Job Training in companies which are Certified On-the-Job Training Centres. In addition, ITE conducts skills evaluation tests for public candidates and instructional skills and related programmes for industry trainers.

Full-time training is offered to secondary school graduates with the GCE 'O' and 'N' Level qualifications in Applied & Health Sciences, Business & Services, Design & Media, Engineering, Hospitality and Electronics & Info-communications Technology. Upon completion of the courses, students are awarded a Higher National ITE Certificate (*Higher Nitec*) or National ITE Certificate (*Nitec*). ITE also offers Technical Diploma programmes in niche areas in collaboration with overseas institutions as another pathway for upgrading.

The Traineeship programme is an 'earn-as-you-learn' scheme for secondary school graduates or adult learners who wish to work and upgrade concurrently. It has two training components - On-the-Job Training (OJT) and Off-the-Job Training (Off-JT). OJT is conducted by the sponsoring companies on their premises while Off-JT could be provided by ITE or companies certified by ITE as Approved Training Centres.

Adult learners may choose from a range of CET programmes from *Nitec*, *Higher Nitec*, *Specialist Nitec* to ITE Skills Certificate (ISC) courses, to upgrade their skills. These programmes are offered in modules, giving adult learners the flexibility to sign up for training based on their needs.

Adult learners who wish to acquire academic qualifications otherwise obtained through the formal school system, can enrol in the part-time General Education Programme from Secondary One (Normal) to GCE 'N' and GCE 'O' Levels.

In April 2019, ITE offered 14 Work-Study Diploma (WSDip) courses in various Engineering, Business & Services and Infocomm sectors.

The WSDip is an apprenticeship-based training programme delivered in partnership with employers to give *Nitec* and *Higher Nitec* graduates a head-start in

careers related to their discipline of study. The training comprises of Off-JT at ITE and OJT at the companies.

The **SkillsFuture Singapore** (SSG) is a statutory board under the Ministry of Education (MOE) that drives and coordinates the implementation of the national SkillsFuture movement, promotes lifelong learning through the pursuit of skills mastery, and strengthens the ecosystem of quality education and training in Singapore.

Together with educational institutions and training partners, SSG brings to students and working adults access to industry-relevant training throughout life. SSG synergises continuing education and training (CET) and pre-employment training (PET) so that skills requirements will continue to meet the demands of different sectors of the economy. SSG also regulates the local Private Education industry, provides student services, consumer education, and facilitates capability development efforts to uplift standards in this industry via the Committee for Private Education.

The **Workforce Singapore** (WSG) is a statutory board under the Ministry of Manpower. It strives to minimise mismatches and maximise matching between jobs and skills, workers and businesses by working with individuals, businesses and partners such that innovation-driven growth of our economy can also provide inclusive growth for our people.

WSG works with individuals to help them find jobs, build careers at all life stages and manage career transitions throughout their lives. WSG also promotes the inclusiveness of all levels of our workforce.

WSG supports businesses to adopt new business models, be more manpower lean and create progressive workplaces, so that businesses can create quality jobs to attract and build a stronger Singaporean core.

The Professional Conversion Programmes (PCPs), which are administered by WSG under the Adapt and Grow Initiative, were introduced in 2007 to help professionals, managers, executives and technicians (PMETs) convert and upgrade their skills and make career switches to jobs in growth areas.

The **Employment and Employability Institute** (e2i) creates solutions for better employment and employability. An initiative of the National Trades Union Congress (NTUC), e2i assists Singapore workers through Career Coaching, Training and Job Matching initiatives, impacting more than 830,000 workers since 2008.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019

Institution/Research Institute/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
National University of Singapore	9,194	9,442	10,056	10,211	10,764	10,748	10,765	10,919	11,153	11,514	11,482
Faculty of Arts and Social Sciences ¹	1,689	1,701	1,895	1,762	1,724	1,761	1,648	1,812	1,878	1,956	1,906
School of Business	806	940	924	891	982	956	963	1,023	992	1,096	1,194
School of Computing ²	814	806	754	747	718	795	855	884	927	989	939
Faculty of Dentistry	62	66	62	56	76	73	75	79	78	83	81
School of Design and Environment	585	540	675	701	726	740	813	741	732	793	774
Duke-NUS Graduate Medical School Singapore	*	*	24	38	45	51	59	55	66	82	69
Faculty of Engineering ³	2,321	2,387	2,568	2,624	2,710	2,623	2,608	2,510	2,621	2,511	2,458
Bioengineering	63	73	70	71	77	11	96	91	89	88	89
Civil	90	85	75	95	81	100	125	100	126	131	124
Chemical	317	301	310	313	366	341	361	267	314	314	329
Computer ⁴	76	84	91	76	10	*	*	*	*	*	*
Electrical	422	392	325	293	286	247	255	243	213	210	182
Electronics	76	92	108	106	75	59	85	86	83	59	43
Engineering Science	33	35	42	58	45	38	35	41	21	21	18
Environmental	30	36	65	65	73	67	64	72	88	73	64
Industrial and Systems Engineering ⁵	64	75	89	110	118	125	158	157	184	157	165

Source : National University of Singapore

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Data include graduates of higher degree programmes from Regional English Language Centre.² Data include graduates of higher degree and graduate diploma programmes from Institute of Systems Science.³ While the total for the Faculty of Engineering comprises graduates of first degree, higher degree and graduate diploma programmes, the breakdown by discipline pertains specifically to first degree graduates only.⁴ From 2012 onwards, data exclude graduates of B.Eng.(Computer Engineering) from the Multi Disciplinary Programme which is co-hosted by the Faculty of Engineering and School of Computing. Graduates of B.Eng.(Computer Engineering) from the Multi Disciplinary Programme will be listed under Joint Multi-Disciplinary Programme separately.⁵ Data include graduates from BTech (Industrial and Management Engineering).

Notes :

1) Data may not add up due to course classification (see footnotes 3, 4 and 6).

2) Data include both graduates of first degree, higher degree and graduate diploma programmes (where applicable), regardless of whether the student pursued the programme on a full-time or part-time basis.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Research Institute/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mechanical	404	344	476	410	464	467	440	345	427	428	416
Manufacturing	3	5	1	1	1	*	*	*	*	*	*
Materials Science and Engineering	43	58	55	57	70	66	66	61	59	60	59
Faculty of Law	480	394	379	428	396	363	352	362	336	369	345
Joint Multi-Disciplinary Programmes	*	*	*	8	119	142	119	108	99	86	107
Yong Loo Lin School of Medicine	574	751	745	866	952	942	986	1,003	1,097	1,056	1,206
Yong Siew Toh Conservatory of Music	27	40	48	42	49	66	53	57	50	58	58
Faculty of Science ⁶	1,531	1,524	1,622	1,653	1,773	1,814	1,836	1,908	1,787	1,920	1,813
Applied Science	92	90	87	66	70	56	56	41	32	*	*
Science	1,037	988	953	984	1,081	1,022	969	1,039	1,004	1,121	1,048
Pharmacy	98	118	107	123	138	151	150	165	198	183	192
Yale-NUS College	*	*	*	*	*	*	*	*	120	149	175
Lee Kuan Yew School of Public Policy	171	191	253	250	263	218	199	204	223	202	212
NUS Graduate School for Integrative Sciences and Engineering	43	18	26	50	115	113	107	89	80	91	90
Singapore-MIT Alliance	46	49	43	21	24	10	22	3	*	*	*
Temasek Defence Systems Institute	31	25	29	28	35	22	23	24	27	22	18
The Logistics Institute-Asia Pacific	14	10	9	17	20	17	14	4	*	*	*
Saw Swee Hock School of Public Health	*	*	*	29	37	42	33	53	40	51	37

Source : National University of Singapore

* Refers to course yet to commence or produce graduates, or was not offered.

⁶ Data include graduates of higher degree programmes from Institute of Molecular and Cell Biology and Institute of Materials Research and Engineering. While the total for the Faculty of Science comprises graduates of first and higher degree programmes, the breakdown by discipline pertains to first degree graduates only.

Notes :

1) Data may not add up due to course classification (see footnotes 3, 4 and 6).

2) Data include both graduates of first degree, higher degree and graduate diploma programmes (where applicable), regardless of whether the student pursued the programme on a full-time or part-time basis.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nanyang Technological University	7,470	7,882	8,138	8,255	8,821	8,467	8,073	8,434	8,960	8,801	8,759
Accountancy	694	624	505	514	538	527	528	481	543	466	485
Accountancy & Business	*	*	*	114	110	157	105	144	162	165	177
Art, Design & Media	92	143	140	152	166	148	171	174	184	164	163
Arts (Education)	216	215	255	399	322	324	239	237	152	165	95
Biomedical Sciences	3	72	73	73	32	55	21	32	32	25	23
Biological Sciences	202	197	229	294	331	291	268	282	266	271	244
Business	495	476	405	331	468	433	448	529	496	495	488
Business and Computing Engineering	*	*	*	*	*	*	6	3	5	4	2
Business and Computing	*	19	16	21	17	29	26	21	20	17	20
Chemistry and Biological Chemistry	102	235	323	283	290	202	219	203	281	252	222
Chinese	66	88	103	101	121	141	112	117	90	91	110
Communication Studies	164	177	174	170	162	158	172	188	176	188	216
Economics	79	91	127	82	160	152	129	119	131	111	141
Education	*	*	*	28	24	17	15	14	9	-	-
Environmental Earth Systems Science	*	*	*	*	*	*	*	*	*	24	35
Engineering	2,694	2,679	2,672	2,566	2,762	2,684	2,469	2,552	2,564	2,543	2,580
Aerospace Engineering	83	59	142	88	93	78	69	84	99	121	117
Aerospace Engineering and Economics	*	*	*	*	2	4	4	1	2	1	7
Bioengineering	106	64	99	61	103	129	104	100	88	92	76
Chemical and Biomolecular Engineering	188	180	240	157	195	165	218	168	192	213	136
Chemical and Biomolecular Engineering and Economics	*	*	*	*	3	-	3	-	2	2	8
Civil Engineering	159	134	122	125	132	145	130	151	162	162	141
Civil Engineering and Economics	*	*	*	*	*	*	*	*	1	-	1
Computer Engineering	260	244	164	153	136	161	76	79	56	69	47
Computer Engineering and Economics	*	*	*	*	*	*	*	*	*	2	-
Computer Science	98	101	115	193	199	337	261	263	144	271	270

Source : Nanyang Technological University

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Research Institute/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Electrical and Electronic Engineering	793	867	711	707	712	682	663	701	659	557	688
Electrical and Electronic Engineering and Economics	*	*	*	1	1	4	-	1	-	-	-
Environmental Engineering	115	92	96	91	118	66	57	44	48	49	36
Environmental Engineering and Economics	*	*	*	*	1	-	2	-	-	2	1
Information Engineering & Media	*	*	43	53	74	74	74	76	79	93	102
Information Engineering & Media and Economics	*	*	*	*	2	2	1	-	1	-	-
Maritime Studies	49	64	74	62	66	60	56	65	91	82	82
Materials Engineering	275	255	247	261	267	251	244	221	217	233	224
Materials Engineering and Economics	*	*	*	*	2	-	-	3	1	-	1
Mechanical Engineering	568	619	619	614	650	525	505	559	667	552	583
Mechanical Engineering and Economics	*	*	*	*	6	1	2	3	2	-	4
Renaissance Engineering	*	*	*	*	*	*	*	33	53	42	56
English	47	62	182	94	91	78	80	77	99	75	106
History	*	*	*	*	*	*	1	61	75	56	52
Linguistics & Multilingual Studies	*	*	1	49	65	63	60	66	61	68	91
Mathematics & Economics	*	32	83	99	125	103	110	98	91	77	64
Mathematical Sciences	50	87	118	135	130	108	134	101	194	159	159
Medicine	*	*	*	*	*	*	*	*	*	52	76
Philosophy	*	*	*	*	*	*	*	*	1	38	33
Physics and Applied Physics	20	30	51	57	57	62	91	100	95	131	113
Psychology	68	85	91	77	124	75	114	101	176	124	129
Public Policy & Global Affairs	*	*	*	*	*	*	*	3	71	44	57
Science (Education)	132	114	151	215	243	142	125	106	42	54	40
Sociology	38	76	87	62	190	78	93	94	143	129	156
Sport Science & Management	*	*	*	*	34	52	63	77	88	75	74

* Refers to course yet to commence or produce graduates, or was not offered.

Source : Nanyang Technological University

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Research Institute/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Master of Applied Science	1	1	-	1	1	-	-	-	-	-	-
Master of Arts	31	34	33	47	41	45	40	45	79	69	79
Master of Business	1	-	-	-	2	-	-	-	-	-	-
Master of Business Administration	215	268	271	260	187	207	194	166	219	196	195
Master of Communication Studies	7	3	8	3	4	4	6	4	1	6	6
Master of Engineering	96	85	57	42	47	39	52	57	47	36	24
Master of Management in Hospitality	22	28	21	25	20	-	-	-	-	-	-
Master of Mass Communication	50	42	35	48	38	51	56	67	58	43	38
Master of Public Administration	82	85	68	77	12	16	23	9	25	40	28
Master of Science	1,534	1,592	1,545	1,369	1,367	1,458	1,345	1,515	1,641	1,691	1,698
PhD	224	213	282	446	518	548	546	591	643	657	540
Graduate Diploma	45	29	32	21	22	20	12	-	-	-	-

Source : Nanyang Technological University

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
National Institute of Education	2,727	2,933	2,954	2,791	2,858	2,391	2,402	2,256	2,151	1,870	2,149
Doctor of Philosophy	19	15	20	22	29	23	27	26	24	33	29
Doctor in Education	*	*	*	*	2	1	2	4	8	9	10
Master of Arts	110	152	137	139	145	147	155	171	197	205	211
Master in Educational Administration	29	61	106	22	58	51	43	32	78	73	50
Master of Education	359	414	394	361	410	381	242	347	311	330	388
Master of Science	66	79	75	66	78	53	83	64	52	48	58
Master of Teaching	*	*	*	*	*	9	5	7	2	5	2
Postgraduate Diploma in Education	1,189	1,461	1,417	1,299	1,347	856	907	798	702	370	559
Diploma in Art Education	35	43	35	36	40	57	34	41	10	27	13
Diploma in Education	491	378	377	341	257	197	212	65	41	55	51
Diploma in Home Economics Education	18	16	25	18	18	21	20	24	8	3	*
Diploma in Music Education	14	11	13	10	6	35	12	12	10	4	6
Diploma in Physical Education	37	24	28	19	25	20	21	19	15	29	14
Diploma in School Counselling	*	*	*	*	*	*	*	*	*	*	16
Diploma in Special Education	70	96	120	90	78	113	95	75	95	135	181
Leaders in Education Programme	40	43	40	29	26	35	35	27	22	25	22
Management and Leadership in Schools	250	140	167	339	339	392	347	379	399	372	382
Teacher-Leaders Programme 1	*	*	*	*	*	*	141	131	128	125	127
Teacher-Leaders Programme 2	*	*	*	*	*	*	21	34	49	22	30

* Refers to course yet to commence or produce graduates, or was not offered.

Source : National Institute of Education

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Singapore Management University	1,382	1,545	1,812	1,954	2,154	2,176	2,403	2,655	2,846	2,966	2,795
Bachelor of Accountancy	202	190	226	269	265	251	247	279	265	292	289
Bachelor of Business Management	537	578	668	655	678	647	681	704	724	725	746
Bachelor of Science (Economics)	134	171	199	197	211	205	186	248	237	234	234
Bachelor of Science (Information Systems)	142	154	187	240	240	260	265	254	235	267	266
Bachelor of Social Science	95	113	118	130	134	120	133	205	173	208	182
Bachelor of Laws	*	*	106	112	131	119	127	114	145	161	145
Doctor of Business Administration	*	*	*	*	*	*	*	*	*	1	9
Doctor of Innovation	*	*	*	*	*	*	*	*	*	1	2
Doctor of Philosophy in Information Systems	*	*	1	3	4	11	6	5	13	17	14
Doctor of Philosophy in Economics	*	*	*	1	2	2	3	3	3	11	6
Doctor of Philosophy in Business (Finance)	*	*	*	*	2	1	3	3	5	5	5
Doctor of Philosophy in Psychology	*	*	*	*	*	*	3	*	6	3	2
Doctor of Philosophy in Business (General Management)	*	*	*	*	*	*	1	5	10	7	10
Doctor of Philosophy in Business (Marketing)	*	*	*	*	*	*	*	*	*	2	2
Doctor of Philosophy in Business (Organisational Behaviour and Human Resources)	*	*	*	*	*	*	*	*	3	*	3
Doctor of Philosophy in Business (Strategic Management and Organisation)	*	*	*	*	*	*	*	*	*	*	1
Master of Applied Information Systems	*	*	*	*	1	6	6	4	8	8	5
Master of Professional Accounting	36	33	25	31	18	14	33	20	62	64	71
Master of Philosophy in Economics	*	*	*	*	*	*	*	*	*	*	2
Master of Philosophy in Psychology	*	*	*	*	*	*	*	*	*	*	5
Master of Science in CFO Leadership	*	*	*	*	*	6	5	4	23	4	*
Master of Science in Applied Economics	1	18	16	20	28	23	24	19	17	*	21
Master of Science in Applied Finance	158	135	86	84	97	*	122	142	187	182	134
Master of Science in Economics	11	8	6	3	1	*	*	*	*	28	12

Source : Singapore Management University

* Refers to course yet to commence or produce graduates, or was not offered.

Note :

Double degrees are counted once only, based on their primary degree.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Master of Science in Finance	13	4	12	5	*	116	*	*	*	*	*
Master of Science in Financial Economics	*	*	*	*	*	28	43	40	33	38	22
Master of Science in Quantitative Finance	*	*	*	*	*	29	23	13	81	56	52
Master of Science in Wealth Management	50	36	36	50	44	37	35	44	47	45	34
Master of Science in Management	3	3	5	8	1	*	40	105	121	117	60
Master of Science in Communication Management	*	*	*	*	31	23	25	41	37	43	16
Master of Science in Innovation	*	*	*	*	43	28	33	37	41	*	20
Master of Business Administration	*	45	45	39	58	93	91	95	171	164	151
Master of Business (General Management)	*	*	*	*	*	*	*	1	*	*	*
Master in Business (Organisational Behaviour and Human Resources)	*	*	*	*	*	*	*	*	1	*	*
Master of Human Capital Leadership	*	*	*	*	*	*	*	*	*	24	25
Master of Information Technology in Business	*	26	25	32	59	49	112	137	101	183	160
Master of Science in Operations Management	*	4	9	6	*	*	*	*	*	*	*
Master of Science in Information Systems	*	*	2	1	4	2	1	*	2	*	*
Executive MBA	*	*	*	29	37	34	31	28	*	*	*
IE-SMU MBA	*	*	*	*	*	*	27	*	*	*	*
Juris Doctor	*	*	18	15	23	30	27	39	36	28	32
Master of Laws in Commercial Law	*	*	*	*	4	14	14	*	*	3	3
Master of Laws in Dispute Desolution	*	*	*	*	4	*	*	*	*	*	*
Master of Laws in Islamic Law & Finance	*	*	*	*	4	4	5	*	*	*	*
Master of Laws in Cross-Border Business and Finance Law in Asia	*	*	*	*	*	*	*	11	13	*	15
Master of Laws in Judicial Studies	*	*	*	*	*	*	*	*	*	6	*
Master of Science in Psychology	*	*	*	*	*	*	*	*	1	*	*
Master of Tri-Sector Collaboration	*	*	*	*	*	*	23	28	18	14	16
Graduate Diploma in Healthcare Management	*	27	22	24	25	21	20	26	25	25	23
Graduate Diploma in Public Relations	*	*	*	*	5	3	8	1	2	*	*

Source : Singapore Management University

* Refers to course yet to commence or produce graduates, or was not offered.

Note :

Double degrees are counted once only, based on their primary degree.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number				
	2015	2016	2017	2018	2019
Singapore University of Technology and Design	298	308	316	386	488
Bachelor of Engineering (Engineering Product Development)	86	94	93	118	122
Bachelor of Engineering (Engineering Systems and Design)	88	45	63	41	101
Bachelor of Engineering (Information Systems Technology and Design)	48	45	49	93	127
Bachelor of Science (Architecture and Sustainable Design)	76	62	62	82	81
Master of Architecture	-	62	49	52	57

Source : Singapore University of Technology and Design

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number				
	2015	2016	2017	2018	2019
Singapore Institute of Technology	1,374	1,285	1,494	1,744	1,759
Bachelor in Science (Diagnostic Radiography)	27	20	25	27	28
Bachelor in Science (Occupational Therapy)	27	30	40	40	38
Bachelor in Science (Physiotherapy)	75	57	74	79	75
Bachelor in Science (Radiation Therapy)	7	4	-	9	8
Bachelor of Arts in Game Design	9	34	12	20	14
Bachelor of Arts with Honours in Communication Design	67	71	68	65	68
Bachelor of Arts with Honours in Criminology and Security	*	38	72	83	97
Bachelor of Arts with Honours in Interior Design	44	46	47	47	37
Bachelor of Business Administration in Food Business Management	*	*	*	40	21
Bachelor of Engineering in Systems Engineering (ElectroMechanical Systems)	*	*	*	*	22
Bachelor of Engineering with Honours in Aeronautical Engineering	56	67	44	61	56
Bachelor of Engineering with Honours in Aerospace Systems	37	54	54	48	38
Bachelor of Engineering with Honours in Chemical Engineering	87	83	84	76	52
Bachelor of Engineering with Honours in Electrical Power Engineering	61	62	73	68	27
Bachelor of Engineering with Honours in Information & Communications Technology (Information Security)	*	*	*	10	50
Bachelor of Engineering with Honours in Information & Communications Technology (Software Engineering)	*	*	*	55	52
Bachelor of Engineering with Honours in Marine Engineering	28	23	31	42	11
Bachelor of Engineering with Honours in Mechanical Design & Manufacturing Engineering	53	70	72	74	15
Bachelor of Engineering with Honours in Mechanical Design Engineering	51	69	68	62	80
Bachelor of Engineering with Honours in Mechatronics	87	92	84	74	79

Source : Singapore Institute of Technology

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number				
	2015	2016	2017	2018	2019
Bachelor of Engineering with Honours in Naval Architecture	35	26	29	18	6
Bachelor of Engineering with Honours in Offshore Engineering	22	23	16	15	8
Bachelor of Engineering with Honours in Pharmaceutical Engineering	*	*	*	*	77
Bachelor of Engineering with Honours in Sustainable Infrastructure Engineering (Building Services)	*	*	*	*	63
Bachelor of Engineering with Honours in Sustainable Infrastructure Engineering (Land)	*	*	*	67	36
Bachelor of Engineering with Honours in Telematics (Intelligent Transportation Systems Engineering)	*	*	*	*	41
Bachelor of Fine Arts in Digital Arts & Animation	36	17	32	40	27
Bachelor of Food Technology with Honours	*	*	*	*	49
Bachelor of Professional Studies in Culinary Arts Management	37	37	37	-	-
Bachelor of Science (Major in Hospitality Management)	186	-	-	-	-
Bachelor of Science in Chemical Engineering	36	40	67	60	72
Bachelor of Science in Computer Science & Game Design	15	17	15	28	16
Bachelor of Science in Computer Science in Real-Time Interactive Simulation	25	21	33	46	25
Bachelor of Science in Early Childhood Education	37	63	66	64	-
Bachelor of Science in Electrical Engineering & Information Technology	38	29	13	38	29
Bachelor of Science with Honours in Computing Science	53	53	76	81	79
Bachelor of Science with Honours in Food & Human Nutrition	48	51	53	59	-
Bachelor of Science with Honours in Nursing	*	*	*	52	64
Bachelor of Science with Honours in Nursing Practice	90	73	71	-	-
Bachelor with Honours in Accountancy	*	15	119	106	136
Bachelor with Honours in Hospitality Business	*	*	19	90	163

Source : Singapore Institute of Technology

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Course/Level	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Singapore University of Social Sciences											
By Course	1,163	1,463	1,705	1,867	2,028	2,197	2,301	2,214	2,189	2,331	2,359
Accountancy	*	*	*	*	*	18	25	26	34	138	155
Adult Learning	*	*	*	*	*	*	*	*	*	*	3
Aerospace	*	*	*	23	28	50	52	56	37	45	44
Applied Linguistics	*	*	*	*	*	*	*	*	6	10	8
Biomedical Engineering	22	36	43	23	36	30	31	35	54	44	31
Building and Project Management	*	*	*	*	*	1	31	50	62	79	92
Business	196	258	262	264	241	223	230	209	228	197	175
Business Administration	*	*	*	*	*	*	*	*	5	8	2
Business Analytics	*	*	36	40	44	52	43	35	20	19	23
Chinese Language	*	*	33	83	87	72	84	65	40	46	53
Communication Studies	35	35	49	48	63	72	63	73	80	94	76
Community Leadership & Social Development	*	*	*	*	*	22	20	26	19	11	9
Computer Science/IT	228	196	201	123	138	113	107	87	95	80	70
Counselling	*	37	78	80	94	80	84	85	60	56	69
Early Childhood Education	*	*	*	*	12	61	107	103	96	116	120
Education	*	*	*	*	*	*	*	*	7	37	44
Electronics	81	131	106	137	98	65	63	66	64	51	40
English	175	217	167	159	144	154	137	132	107	94	75
Engineering	*	*	*	*	*	*	*	*	*	*	1
Environmental Science	*	8	6	12	*	*	*	*	*	*	*
Facilities and Events Management	*	*	*	*	14	62	117	82	87	69	83
Finance	65	102	96	106	126	89	86	78	81	96	129
General Studies	*	*	4	7	10	14	11	19	22	23	26
Gerontology	*	*	*	3	17	37	29	29	28	35	27

Source : Singapore University of Social Sciences

* Refers to course yet to commence or produce graduates, or was not offered.

Note :

Data include programmes of all levels from Bachelor to PostGraduate.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Course/Level	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Human Capital Management	*	*	*	*	15	11	10	20	10	11	12
Human Factors	*	*	*	13	17	32	40	35	46	52	45
Human Resource Management	*	*	9	59	76	85	68	66	67	77	102
Intellectual Property & Innovation Management	*	*	*	*	*	*	*	*	*	*	14
Logistics & Supply Chain	*	*	*	25	70	109	148	117	81	84	100
Malay Language	*	*	*	21	60	40	34	39	28	10	13
Marketing	45	58	80	101	88	95	104	85	86	113	120
Mathematics	95	89	83	57	70	88	46	28	51	30	27
Multimedia Technology & Design	49	35	49	50	58	56	58	37	68	38	36
Non-Profit Management	*	*	*	*	*	*	*	*	1	9	2
Open Source Management	*	3	*	*	*	*	*	*	*	*	*
Professional Life Coaching	*	*	*	*	*	*	*	*	*	*	6
Psychology	139	172	114	113	129	137	147	126	123	138	125
Securities Studies	*	*	44	40	36	47	56	75	55	49	39
Social Science	*	*	*	*	*	*	*	*	*	*	2
Social Work	*	38	111	133	136	178	153	205	208	242	242
Sociology	*	*	19	27	25	32	33	47	42	50	44
Tamil Language	24	46	40	29	26	19	28	26	23	24	15
Taxation	*	2	10	8	6	5	8	9	10	7	4
Technology Entrepreneurship	9	-	12	*	*	*	*	*	*	*	*
Translation & Interpretation	*	*	51	53	42	25	29	26	31	17	16
Urban Transport Management	*	*	*	18	7	7	-	-	7	3	10
Visual Communication	*	*	2	12	15	16	19	17	20	29	30
By Level	1,163	1,463	1,705	1,867	2,028	2,197	2,301	2,214	2,189	2,331	2,359
Graduate Diploma & Master	9	28	73	116	135	205	165	232	179	206	226
Bachelor	1,154	1,435	1,632	1,751	1,893	1,992	2,136	1,982	2,010	2,125	2,133

Source : Singapore University of Social Sciences

* Refers to course yet to commence or produce graduates, or was not offered.

Note :

Data include programmes of all levels from Bachelor to PostGraduate.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Singapore Institute of Management	6,229	6,910	7,109	6,932	7,247	8,838	8,835	8,420	8,220	8,081	7,560
Accountancy	532	781	908	874	1,108	1,277	1,443	1,430	1,498	1,355	1,277
Administration and Management	2,669	3,037	2,896	2,753	3,126	3,970	3,754	3,863	3,566	3,710	3,199
Banking, Insurance and Financial Services	607	692	744	663	819	826	686	467	476	425	364
Behavioural Science	*	44	118	160	216	227	345	325	397	318	359
Building Science and Management	119	154	129	66	47	85	71	64	49	64	63
Business and Administration Not Elsewhere Classified	*	*	*	*	*	*	*	23	20	26	28
Economics	760	834	843	872	707	926	787	718	664	572	540
Hospitality Services	22	*	*	58	*	*	*	*	*	*	*
Humanities and Social Sciences Not Elsewhere Classified	*	*	*	*	*	*	197	197	238	268	311
Information Technology	431	346	418	384	309	220	376	316	270	299	386
Language and Cultural Studies	418	309	218	267	171	132	188	*	*	*	*
Mass Communication	206	239	246	510	252	198	131	165	208	222	170
Mathematics and Statistics	*	*	*	*	46	59	37	28	34	36	33
Media Design/ Production ¹	43	48	60	82	50	62	45	49	52	46	43
Nursing and Health Care	174	88	94	111	120	80	88	80	72	116	167
Sales and Marketing	246	338	435	132	276	776	687	695	628	542	554
Sports and Recreation Services	*	*	*	*	*	*	*	*	23	47	36
Teacher Training	2	*	*	*	*	*	*	*	*	*	*
Transport Services	*	*	*	*	*	*	*	*	25	35	30

Source : Singapore Institute of Management

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Prior to 2019, data were classified as Design & Applied Arts.

Notes :

1) Data include programmes of all levels from Certificate to Doctoral.

2) Data pertain to graduates from SIM Global Education.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Level	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Singapore Institute of Management	6,229	6,910	7,109	6,932	7,247	8,838	8,835	8,420	8,220	8,081	7,560
Doctoral	1	1	-	*	*	*	*	*	*	*	*
Masters	131	77	103	73	49	104	146	112	149	193	161
Bachelor	4,211	5,201	5,447	5,055	5,607	7,144	6,973	6,811	6,496	5,975	5,838
Graduate Diploma	*	9	7	10	27	24	33	46	43	59	53
Graduate Certificate	*	*	*	*	*	*	1	4	4	1	*
Diploma	1,346	1,183	1,167	1,311	1,153	1,223	1,281	1,140	1,157	1,255	876
Certificate	540	439	385	483	411	343	401	289	371	598	632
Professional Short Courses	*	*	*	*	*	*	*	18	*	*	*

Source : Singapore Institute of Management

* Refers to course yet to commence or produce graduates, or was not offered.

Note :

Data pertain to graduates from SIM Global Education.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Singapore Polytechnic	5,012	5,397	6,024	5,900	5,899	5,363	5,192	5,081	4,926	4,380	4,389
Accountancy/Banking and Financial Services	314	316	463	464	432	439	451	443	439	396	429
Architecture and Building ¹	333	375	439	452	464	469	479	471	454	368	399
Biotechnology/Life Science	214	208	240	260	272	182	173	173	165	149	133
Business	503	504	643	656	688	658	685	662	640	535	567
Chemical Process Technology	417	401	465	466	451	445	405	456	438	366	352
Computer Studies	635	660	673	585	663	567	593	557	584	503	516
Humanities	*	66	142	203	202	178	99	100	97	81	75
Engineering ²	2,376	2,564	2,607	2,450	2,369	2,114	1,997	1,935	1,818	1,755	1,647
Aeronautical Engineering	203	227	218	206	225	244	240	232	233	241	236
Aerospace Electronics	157	163	142	149	158	153	171	147	152	160	138
Bioelectronics	69	29	40	28	1	*	*	*	*	*	*
Bioengineering	35	43	32	43	43	49	59	50	50	48	50
Civil and Structural Engineering/ Civil Engineering & Management/ Civil Engineering with Business	132	134	131	124	115	119	114	129	103	127	113
Clean Energy	*	*	108	106	94	89	87	74	7	2	*
Computer and Network Technology/Computer Engineering	165	199	162	167	168	162	135	177	196	142	158

Source : Singapore Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Data include graduates from Quantity Surveying, Facilities and Events Management.² Data for specific fields of studies refer to diploma graduates only (includes full-time & part-time from SP but excludes graduates from PACE).

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Electrical Engineering	67	-	1	*	*	*	*	*	*	*	*
Electrical & Electronic Engineering	288	429	423	471	486	493	482	473	393	398	352
Electronics, Computer and Communication Engineering/ Electronics & Communication Engineering	282	253	128	24	2	1	*	*	*	*	*
Engineering with Business	*	*	*	72	72	89	80	74	74	76	71
Engineering Systems	*	*	*	*	*	*	*	30	25	36	29
Energy Systems and Management	*	*	*	*	*	*	*	*	70	83	57
Environmental Management & Water Technology	*	41	41	40	37	48	48	40	38	*	*
Experience & Product Design	*	35	41	38	34	29	43	36	31	32	36
Info-communication Engineering & Design/Information Communication Technology	141	139	151	104	116	90	81	9	3	*	*
Marine Engineering	105	131	123	117	112	114	103	110	103	73	108
Mechanical Engineering	282	314	267	268	295	322	272	272	259	254	222
Mechatronics/Mechatronics and Robotics	142	116	119	90	100	81	81	82	81	83	77
Resort Facilities Services & Management	*	*	62	72	1	*	*	*	*	*	*
Nautical Studies/ Maritime Transportation/ Maritime Business	164	217	254	275	276	243	229	214	220	159	193
Optometry / Contact Lens Practice	56	86	98	89	82	68	81	70	71	68	78

Source : Singapore Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ngee Ann Polytechnic	4,582	4,534	4,857	4,955	4,983	5,170	5,182	5,259	4,886	4,688	4,484
Accountancy	309	286	338	337	347	357	382	380	346	302	264
Advertising & Public Relations	*	*	*	37	32	39	36	37	39	31	36
Animation & 3D Arts	*	*	*	*	*	23	30	39	30	32	29
Arts Business Management	*	*	*	*	44	45	46	49	42	41	35
Banking and Financial Services	138	117	147	132	136	141	139	125	141	121	80
Biomedical Lab Technology	17	25	20	11	16	19	*	*	*	*	*
Biomedical Science	83	80	84	95	76	84	100	104	101	93	88
Biotechnology	16	1	*	*	*	*	*	*	*	*	*
Building	272	213	231	252	186	181	192	177	181	176	146
Business Information Technology	108	102	87	84	94	114	120	133	112	92	75
Business & Social Enterprise	*	*	42	41	43	44	52	49	48	42	39
Business Studies	375	395	420	378	368	405	402	391	396	329	252
Chemical and Biomolecular Engineering	117	111	110	109	115	112	104	118	100	117	98
Child Psychology & Early Education	*	*	*	80	73	78	88	87	92	90	212
Chinese Media & Communication	*	*	*	48	45	45	51	51	40	41	47
Chinese Studies	75	68	82	40	33	41	36	35	37	39	49
Clean Energy Management	*	*	*	40	38	34	38	42	31	41	35
Digital Visual Effects ¹	*	25	28	25	23	26	23	21	*	*	*
Early Childhood Education	177	174	183	116	123	121	136	137	135	127	192

Source : Ngee Ann Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Digital Visual Effects was renamed Visual Effects in 2016.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Engineering	1,584	1,599	1,627	1,520	1,584	1,629	1,623	1,607	1,502	1,424	1,336
Aerospace Electronics	*	72	70	71	92	83	99	104	109	88	99
Aerospace Technology	80	107	115	130	130	138	153	160	165	165	140
Audio-Visual Technology	*	36	46	44	43	49	55	46	57	51	51
Automation & Mechatronic Systems	*	*	*	*	*	87	104	106	112	106	103
Biomedical	76	72	85	87	81	85	90	97	104	100	76
Business Process & Quality Engineering	*	60	60	*	*	*	*	*	*	*	*
Electrical	267	229	244	242	235	258	225	231	192	181	166
Electronic	456	416	356	355	370	357	358	311	235	211	217
Engineering Informatics	74	61	75	6	1	*	*	*	*	*	*
Engineering Science	*	*	*	*	*	39	40	44	46	56	58
Environmental & Water Technology	*	38	47	37	42	38	44	39	33	38	35
Marine and Offshore Technology	84	93	114	118	140	143	138	154	148	138	116
Mechanical	206	168	192	190	214	237	204	217	205	200	192
Mechatronic	112	104	94	106	115	24	2	*	*	*	*
Network Systems and Security	71	75	65	77	66	54	66	59	51	51	48
Product Design and Innovation	69	65	64	57	55	37	45	39	45	39	35
Quality Management and Engineering	89	3	*	*	*	*	*	*	*	*	*
Film, Sound and Video	75	55	59	58	51	50	58	55	54	68	74
Financial Informatics	*	*	59	82	75	74	95	118	92	86	55
Health Sciences (Nursing)	269	357	422	467	435	429	383	387	331	445	489
Horticulture and Landscape Management	45	65	57	65	55	6	*	*	*	*	*

Source : Ngee Ann Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution//Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Information Technology	244	191	98	84	150	153	162	157	155	119	106
Information Security & Forensics	*	*	*	*	*	*	*	*	*	38	46
International Business	*	*	*	41	44	47	45	46	43	47	43
International Supply Chain Management ²	*	*	42	78	92	95	1	*	*	*	*
International Logistics & Supply Chain Management ²	*	*	*	*	*	*	143	173	134	119	85
Landscape Design & Horticulture	*	*	*	*	*	46	46	78	71	41	33
Logistics Management	98	117	76	79	80	98	*	*	*	*	*
Mass Communication	193	169	176	176	166	171	177	182	175	151	149
Mobile Business Solutions ³	72	67	89	67	8	*	*	*	*	*	*
Mobile Computing ³	1	*	*	*	*	*	*	*	*	*	*
Molecular Biotechnology	117	89	89	91	63	56	65	64	60	46	45
Multimedia and Animation	78	73	72	67	78	46	48	45	37	43	36
Optometry	*	*	*	36	32	43	42	41	36	41	44
Pharmacy Science	38	33	44	52	38	44	45	50	41	42	33
Psychology and Community Services ⁴	*	38	81	75	79	80	*	*	*	*	*
Psychology Studies ⁴	*	*	*	*	*	*	80	76	73	70	55
Sustainable Urban Design & Engineering	*	*	*	*	31	46	38	47	38	33	45
Tourism and Resort Management	81	84	94	92	92	106	108	111	108	93	73
Veterinary Bioscience	*	*	*	*	38	42	48	47	40	42	36
Visual Effects ¹	*	*	*	*	*	*	*	*	25	26	24

Source : Ngee Ann Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Digital Visual Effects was renamed Visual Effects in 2016.² International Supply Chain Management was renamed International Logistics & Supply Chain Management in 2012.³ Mobile Computing was renamed Mobile Business Solutions in 2007.⁴ Psychology and Community Services was renamed Psychology Studies in 2012.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Temasek Polytechnic	4,848	5,020	5,133	4,886	5,116	5,119	5,064	5,012	4,556	4,304	4,610
3D Interactive Media Technology ¹	*	*	*	*	32	48	49	45	39	40	52
Accounting & Finance	132	159	150	155	165	150	169	171	147	145	146
Aerospace Electronics	*	*	81	86	124	142	139	129	137	128	116
Aerospace Engineering	*	*	82	85	137	148	146	136	133	134	122
Apparel Design & Merchandising	52	68	45	61	74	68	66	63	55	46	61
Applied Food Science & Nutrition	102	93	100	103	121	114	110	113	97	75	66
Aviation Management & Services	79	86	102	115	138	161	167	160	160	158	151
Baking & Culinary Science	34	41	49	40	43	49	39	45	37	35	37
Big Data Management & Governance	*	*	*	*	*	*	*	*	36	42	24
Biomedical Engineering ²	*	*	*	*	*	*	70	86	78	85	123
Biomedical Informatics & Engineering	71	62	67	65	82	81	9	2	*	*	*
Biomedical Science	120	119	66	54	53	48	43	50	47	50	46
Biotechnology	74	104	95	94	94	94	86	88	92	86	72
Business	310	340	356	317	330	337	336	339	290	266	279
Business Information Technology	106	114	116	139	136	134	145	137	121	111	126
Business Intelligence & Analytics	*	*	*	*	*	40	45	46	43	40	51
Business Process & Systems Engineering	164	158	173	157	153	148	159	164	152	147	133

Source : Temasek Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

¹ Before AY2011, the course was named "Interactive Media Technology".² Before AY2013, the course was named "Biomedical Informatics & Engineering".

Note :

Year refers to Academic Year. E.g. for AY2019, graduates refer to those who completed their courses in October 2019 and April 2020.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chemical Engineering	113	121	139	135	135	134	142	152	146	128	142
Clean Energy	*	*	50	53	88	86	83	86	59	54	100
Communication Design ³	*	*	*	*	*	*	*	106	101	101	121
Communications & Media Management	88	91	84	77	74	90	85	90	81	79	85
Computer Engineering	111	80	76	74	57	56	68	56	66	49	114
Consumer Science & Technology	27	17	22	20	19	23	8	4	*	*	*
Culinary & Catering Management	54	53	60	57	57	59	53	56	51	44	48
Cyber & Digital Security	65	61	61	64	61	49	58	51	48	47	48
Digital Film & Television ⁴	*	*	*	*	*	*	66	78	72	71	72
Digital Forensics	*	*	*	*	46	53	42	47	49	49	47
Early Childhood Studies	*	*	*	66	61	68	83	93	116	151	198
Electronics	345	267	187	196	211	192	174	171	146	116	155
Environment Design	30	32	39	46	45	33	43	37	42	43	36
Financial Business Informatics	83	98	99	88	86	112	89	80	57	47	68
Game & Entertainment Technology	57	68	71	83	77	50	81	*	*	*	*
Game Design & Development ⁵	*	*	*	*	*	*	*	64	48	60	86
Gerontological Management Studies	*	*	45	64	60	61	66	67	51	50	47
Green Building & Sustainability ⁶	*	*	*	86	145	146	123	110	111	79	92

Source : Temasek Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

³ From AY2014, "Interactive Media Design" and "Visual Communication" merged into "Communication Design".⁴ Before AY2013, the course was named "Moving Images".⁵ Before AY2014, the course was named "Game & Entertainment Technology".⁶ Before AY2010, the course was named "Intelligent Building Technology".

Note :

Year refers to Academic Year. E.g. for AY2019, graduates refer to those who completed their courses in October 2019 and April 2020.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hospitality & Tourism Business	172	134	117	*	*	*	*	*	*	*	*
Hospitality & Tourism Management	290	283	283	253	227	240	224	237	201	191	190
Info-Communications	180	152	150	93	33	2	*	*	*	*	*
Infocomm & Network Engineering ⁷	*	*	*	*	83	131	129	101	77	46	7
Information Technology (3-year programme)	134	166	158	130	96	68	87	89	73	71	120
Integrated Facility Design & Management	94	95	83	1	*	*	*	*	*	*	*
Integrated Facility Management ⁸	*	*	*	103	113	132	134	137	109	95	96
Intelligent Building Technology	139	150	121	37	*	*	*	*	*	*	*
Interactive Media Design ³	44	42	42	53	50	49	51	2	*	*	*
Interactive Media Informatics	*	86	93	98	86	63	*	*	*	*	*
Interactive Media Technology	*	37	42	36	5	*	*	*	*	*	*
Interior Architecture & Design ⁹	26	40	43	56	53	63	61	72	55	50	87
Internet & Multimedia Development ¹⁰	98	2	1	*	*	*	*	*	*	*	*
Law & Management	108	95	114	132	122	126	126	120	124	96	93
Leisure & Events Management ¹¹	*	*	*	*	*	*	*	*	142	138	159
Leisure & Resort Management	173	183	193	188	167	168	165	161	11	*	*
Logistics & Operations Management	111	102	108	124	117	99	116	106	102	101	65

Source : Temasek Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

³ From AY2014, "Interactive Media Design" and "Visual Communication" merged into "Communication Design".⁷ Before AY2011, the course was named "Info-Communications".⁸ Before AY2010, the course was named "Integrated Facility Design & Management".⁹ From 2017, "Interior Architecture & Design" and "Retail & Hospitality Design" merged into "Interior Architecture & Design".¹⁰ In AY2008, the course was renamed as "Interactive Media Informatics".¹¹ Before 2015, the course was named "Leisure & Resort Management".

Note :

Year refers to Academic Year. E.g. for AY2019, graduates refer to those who completed their courses in October 2019 and April 2020.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Marketing	96	105	118	117	93	115	85	100	82	96	94
Mechatronics	379	402	260	181	271	251	239	238	219	213	246
Media & Communication Technology	55	134	109	92	57	28	33	46	27	2	1
Microelectronics	70	66	46	34	14	18	18	16	16	32	44
Mobile & Network Services ¹²	*	*	*	56	65	56	53	71	43	48	24
Mobile & Wireless Computing	115	84	125	23	1	*	*	*	*	*	*
Moving Images	54	67	68	57	57	61	10	*	*	*	*
Pharmaceutical Science	*	*	62	72	105	103	107	98	93	93	94
Product & Industrial Design	47	37	30	37	39	27	47	44	40	44	41
Psychology Studies	*	55	78	63	65	68	68	70	57	63	65
Retail & Hospitality Design ⁹	27	36	27	32	35	43	43	43	43	41	3
Retail Management	83	111	96	95	106	90	92	86	88	72	74
Telecommunications	24	*	*	*	*	*	*	*	*	*	*
Veterinary Technology	30	38	57	46	47	43	46	47	45	56	43
Visual Communication ³	82	86	94	97	105	101	88	6	1	*	*

Source : Temasek Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

³ From AY2014, "Interactive Media Design" and "Visual Communication" merged into "Communication Design".⁹ From 2017, "Interior Architecture & Design" and "Retail & Hospitality Design" merged into "Interior Architecture & Design".¹² Before AY2010, the course was named "Mobile & Wireless Computing".

Note :

Year refers to Academic Year. E.g. for AY2019, graduates refer to those who completed their courses in October 2019 and April 2020.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nanyang Polytechnic	5,381	5,451	5,834	6,071	6,042	6,171	5,645	6,251	6,228	5,753	5,693
Diploma (Conversion) in Paramedicine	*	*	*	*	*	*	*	*	10	15	16
Diploma in Accountancy & Finance	113	110	147	114	143	151	153	145	150	145	141
Diploma in Aeronautical & Aerospace Technology	*	*	*	46	49	48	42	112	112	130	121
Diploma in Aerospace Systems & Management	*	*	*	44	38	44	37	63	59	69	80
Diploma in Animation	*	*	*	*	*	*	*	*	71	73	84
Diploma in Banking and Financial Services	107	94	175	101	106	122	142	138	124	4	1
Diploma in Banking and Finance	*	*	*	*	*	*	*	*	*	102	119
Diploma in Biologics & Process Technology	*	*	*	36	51	50	40	48	47	43	36
Diploma in Biomedical Engineering	53	65	56	67	61	51	50	67	91	102	96
Diploma in Business & Administration	*	*	*	38	*	*	*	*	*	*	*
Diploma in Business & Management Studies	*	*	*	*	*	27	16	23	13	16	16
Diploma in Business Enterprise IT	*	86	79	60	68	57	56	54	60	54	41
Diploma in Business Informatics	195	173	190	157	148	153	143	135	132	90	78
Diploma in Business Intelligence & Analytics	*	*	*	*	*	*	48	53	57	45	37
Diploma in Business Management	325	356	447	356	363	372	368	433	395	308	318
Diploma in Business Practice (Accounting)	*	*	*	*	*	*	20	27	28	27	17
Diploma in Business Practice (Customer Relationship and Service Management)	*	*	*	*	*	*	66	35	43	36	32
Diploma in Business Practice (Hospitality & Tourism Management)	*	*	*	*	*	*	*	*	*	*	13
Diploma in Business Practice (Supply Chain Management)	*	*	*	*	*	*	19	11	21	25	22
Diploma in Chemical & Green Technology	*	*	*	37	51	45	44	44	47	39	38
Diploma in Chemical and Pharmaceutical Technology	136	120	117	119	118	122	120	138	130	100	90
Diploma in Correctional Administration	*	*	*	*	*	*	20	*	*	*	*
Diploma in Correctional & Management Studies	*	*	*	*	*	*	*	*	29	*	*
Diploma in Cyber Security and Forensics	*	*	*	*	*	*	*	*	*	57	55

Source : Nanyang Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Diploma in Dental Hygiene & Therapy	15	20	24	22	19	22	17	23	24	23	22
Diploma in Diagnostic Radiography	47	38	42	73	68	64	36	38	40	61	1
Diploma in Digital & Precision Engineering	*	*	101	126	133	112	133	127	110	113	63
Diploma in Digital Entertainment Technology	95	90	106	21	2	*	*	*	*	*	*
Diploma in Digital Entertainment Technology (Games)	*	*	*	64	57	50	66	69	5	2	*
Diploma in Digital Game Art & Design	*	*	*	*	*	*	*	*	62	65	59
Diploma in Digital Media Design	148	141	161	44	6	1	*	*	*	*	*
Diploma in Digital Media Design (Animation)	*	*	*	74	79	79	76	86	9	1	*
Diploma in Digital Media Design (Games)	*	*	*	43	65	58	59	76	8	*	*
Diploma in Digital Media Design (Interaction Design)	*	*	*	40	66	67	60	67	6	*	*
Diploma in Digital Visual Effects	*	*	*	28	37	37	29	35	42	37	34
Diploma in Electrical Engineering With Eco-Design	*	*	*	*	45	38	40	74	94	85	92
Diploma in Electronics, Computer and Communications Engineering	564	559	581	550	574	525	373	357	270	177	187
Diploma in Engineering (Aerospace Manufacturing)	*	*	*	*	*	18	16	20	20	19	18
Diploma in Engineering (Mechatronics)	*	*	*	*	*	*	*	8	19	18	18
Diploma in Engineering Informatics	272	258	236	203	209	198	166	131	131	98	13
Diploma in Engineering with Business	*	*	*	*	*	*	*	*	94	122	89
Diploma in Financial Informatics	*	*	*	59	55	61	68	67	55	53	56
Diploma in Financial Services	*	1	*	*	*	*	*	*	*	*	*
Diploma in Food & Beverage Business	*	*	*	*	*	41	41	52	63	55	55
Diploma in Food Science & Nutrition	*	*	*	*	71	96	75	92	70	62	55
Diploma in Food Science	51	52	68	78	6	1	*	*	*	*	*
Diploma in Fund Management & Administration	*	*	*	87	58	55	57	63	64	51	51
Diploma in Game Development & Technology	*	*	*	*	*	*	*	*	49	62	67
Diploma in Hospitality & Resort Management	88	89	112	119	1	*	*	*	*	*	*
Diploma in Hospitality & Tourism Management	*	*	*	*	161	165	158	164	168	112	108

* Refers to course yet to commence or produce graduates, or was not offered.

Source : Nanyang Polytechnic

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Diploma in Industrial Design	48	42	51	52	55	52	58	58	47	38	40
Diploma in Infocomm & Design Media (IT Network And System Administration)	*	*	*	*	*	19	36	40	26	15	22
Diploma in Infocomm and Security	*	*	*	*	*	*	*	*	*	*	85
Diploma in Information Security	*	*	*	54	61	51	54	58	64	2	1
Diploma in Information Technology	243	212	220	153	167	147	128	120	122	108	126
Diploma in Interaction Design	*	*	*	*	*	*	*	*	48	60	60
Diploma in Manufacturing Engineering	274	250	187	164	171	187	122	120	21	*	1
Diploma in Marketing	108	110	108	112	99	92	82	71	80	75	62
Diploma in Mass Media Management	*	*	*	*	*	53	51	54	61	52	52
Diploma in Mechatronics Engineering	286	226	232	174	177	192	158	169	184	230	165
Diploma in Media Studies and Management	57	52	57	54	58	1	*	*	*	*	*
Diploma in Medicinal Chemistry	*	*	*	*	*	50	56	52	54	48	42
Diploma in Molecular Biotechnology	128	111	122	102	93	84	72	66	73	64	59
Diploma in Motion Graphics & Broadcast Design	*	27	33	32	43	31	33	30	33	28	42
Diploma in Multimedia and Infocomm Technology	296	303	312	211	214	215	170	205	228	171	165
Diploma in Nanotechnology & Materials Science	*	*	*	44	49	41	40	40	54	61	57
Diploma in Nursing	730	691	675	724	669	626	493	681	610	690	734
Diploma in Occupational Therapy	32	41	49	64	54	55	55	63	61	48	3
Diploma in Pharmaceutical Sciences	*	49	53	66	72	64	80	75	77	53	59
Diploma in Physiotherapy	38	32	62	77	78	82	90	88	90	90	1
Diploma in Precision Engineering	66	66	67	54	40	27	3	2	*	*	*
Diploma in Radiation Therapy	7	11	10	15	9	4	7	5	15	13	*
Diploma in Social Sciences (Social Work)	*	*	*	*	25	24	38	51	48	52	66
Diploma in Space & Interior Design	*	37	37	50	45	52	58	68	69	59	4
Diploma in Spatial Design	*	*	*	*	*	*	*	*	*	*	67
Diploma in Sport and Wellness Management	50	62	61	57	61	54	55	67	58	47	51
Diploma in Telematics & Media Technology	*	*	*	35	47	43	36	37	42	41	30
Diploma in Visual Communication	*	39	42	59	62	53	55	64	59	65	57

Source : Nanyang Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Advanced Diploma in Counselling	*	*	*	*	*	*	*	23	24	15	18
Advanced Diploma in Nursing	382	481	530	559	615	562	543	504	531	504	471
Advanced Diploma in Paramedicine	*	*	*	*	6	*	9	*	10	*	10
Advanced Diploma in Pharmaceutical Sciences	*	*	*	*	*	*	*	*	*	*	24
Advanced Diploma in Sonography	25	*	*	19	1	*	17	2	*	*	*
Specialist Diploma in Adolescent and Youth Health	*	*	*	*	*	15	*	*	*	*	*
Specialist Diploma in Advanced Networking	*	*	*	*	*	*	*	*	21	12	4
Specialist Diploma in Biomedical and Pharmaceutical Engineering	*	*	*	*	*	*	*	*	*	*	21
Specialist Diploma in Business & Big Data Analytics	*	*	*	*	*	*	29	44	49	57	92
Specialist Diploma in Clinical Diagnostics & Infectious Diseases	*	*	*	*	*	*	*	10	*	10	*
Specialist Diploma in Clinical Education	*	*	*	*	*	*	*	*	*	63	45
Specialist Diploma in Clinical Trials Management	*	*	33	*	24	18	*	14	18	11	*
Specialist Diploma in Cloud Data Centre Technology and Management	*	*	*	*	*	12	21	24	15	14	7
Specialist Diploma in Converged Infocomm Infrastructure	*	*	*	*	*	*	*	*	*	11	11
Specialist Diploma in Counselling	25	24	28	29	25	28	1	*	*	*	*
Specialist Diploma in Design and Make	*	*	*	*	*	*	*	*	*	*	11
Specialist Diploma in Design Strategy and Management	*	*	*	*	*	*	*	*	14	*	13
Specialist Diploma in Digital Media Production	*	*	*	*	*	*	*	*	*	15	10

* Refers to course yet to commence or produce graduates, or was not offered.

Source : Nanyang Polytechnic

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Specialist Diploma in Electronic Systems Development	*	*	*	*	*	*	*	*	8	7	5
Specialist Diploma in Embedded Systems	70	*	38	21	21	*	13	16	11	7	9
Specialist Diploma in Energy and Environment Management For Process Industry	*	*	*	*	*	*	*	11	13	14	*
Specialist Diploma in Fund Management & Administration	43	41	2	61	1	46	3	26	12	*	31
Specialist Diploma in Games Development	18	31	27	15	12	*	*	*	*	*	*
Specialist Diploma in Games Development (Art/Programming/Design)	*	*	*	*	*	*	*	*	*	*	10
Specialist Diploma in Games Development (Design)	*	*	*	*	*	*	*	*	9	7	*
Specialist Diploma in Health Promotion	*	*	28	21	20	*	23	14	*	*	*
Specialist Diploma in Hospitality and MICE Management	*	*	*	*	*	14	13	*	*	*	*
Specialist Diploma in Hospitality and Resort Management	51	36	30	17	1	*	*	*	*	*	*
Specialist Diploma in Human Capital Management	*	*	*	*	*	*	*	*	*	*	47
Specialist Diploma in Human Resource Management	*	*	*	*	*	50	*	32	35	*	74
Specialist Diploma in Immunology & Infectious Diseases	10	12	*	*	*	*	*	*	*	*	*
Specialist Diploma in Infocomm Technology	*	*	19	14	11	24	*	*	*	*	*
Specialist Diploma in Information Technology Security	137	89	78	44	34	*	*	*	*	*	*
Specialist Diploma in Information Security	*	*	*	*	*	24	31	35	39	31	15
Specialist Diploma in Information Systems Development	*	*	*	*	*	*	*	24	28	39	23

Source : Nanyang Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Specialist Diploma in Mobile Computing	*	*	*	*	*	19	18	9	14	15	13
Specialist Diploma in Nursing (Diabetes Management And Education)	*	*	*	26	14	23	*	22	21	29	18
Specialist Diploma in Nursing (Endoscopy)	*	*	*	*	*	*	*	*	*	*	23
Specialist Diploma in Nursing (ENT)	*	*	*	*	*	*	*	*	*	*	9
Specialist Diploma in Nursing (Gerontology)	*	*	*	*	*	*	*	*	*	11	*
Specialist Diploma in Nutrition Science	*	*	*	*	*	*	13	12	33	10	2
Specialist Diploma in Precision Engineering	*	*	*	*	*	*	*	*	*	*	13
Specialist Diploma in Radiology Nursing	*	*	*	*	*	16	*	*	*	*	25
Specialist Diploma in Renal Dialysis Management	*	*	*	*	*	*	*	19	26	26	24
Specialist Diploma in Retail Business & Entrepreneurship	*	*	*	*	*	17	*	12	*	*	*
Specialist Diploma in Retail Management	17	35	*	*	*	*	*	*	*	*	*
Specialist Diploma in Spatial Design	*	*	*	*	*	*	*	*	*	17	12
Specialist Diploma in Sport Management and Marketing	*	*	*	*	*	*	*	*	17	*	15
Specialist Diploma in Supply Chain Management	31	89	1	64	*	34	2	28	23	*	39
Specialist Diploma in User Experience Design & Management	*	*	*	*	*	*	*	*	*	*	12
Specialist Diploma in Visual Communication	*	*	*	*	*	*	*	*	*	15	20
Specialist Diploma in Visual Effects	*	*	*	22	*	19	14	11	*	*	17
Specialist Diploma in Wireless Technology	*	*	*	*	*	21	11	*	11	7	10

Source : Nanyang Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Republic Polytechnic	2,157	2,991	3,393	4,037	4,153	4,566	4,783	4,845	4,752	4,755	4,500
Diploma in Aerospace Avionics	64	135	110	152	134	112	95	99	87	111	91
Diploma in Aerospace Engineering	*	*	*	*	*	*	100	96	107	107	102
Diploma in Aerospace Engineering (Quality Systems)	*	*	*	57	108	112	21	1	*	*	*
Diploma in Applied Science (Nutrition and Food Science)	*	*	*	*	*	*	*	9	22	17	19
Diploma in Arts and Theatre Management	*	*	*	*	*	*	*	*	72	91	72
Diploma in Aviation Management	*	*	*	*	*	*	*	*	101	115	103
Diploma in Biomedical Electronics	122	144	117	104	107	111	97	12	1	*	*
Diploma in Biomedical Electronics Engineering	2	*	*	*	*	*	*	*	*	*	*
Diploma in Biomedical Sciences	228	170	232	243	302	165	139	148	147	141	148
Diploma in Biotechnology	135	133	100	164	139	128	108	118	126	125	104
Diploma in Business Applications	180	208	280	271	293	312	246	214	144	150	132
Diploma in Business Computing	181	195	174	37	4	*	1	*	*	*	*
Diploma in Business Information Systems	*	*	*	229	210	280	316	218	150	140	152
Diploma in Business Practice (Hospitality Management)	*	*	*	*	*	*	15	35	20	20	60
Diploma in Business Practice (International Human Resources Management)	*	*	*	*	*	*	*	8	31	22	25
Diploma in Civil Aviation	*	*	112	130	108	108	104	102	12	1	1
Diploma in Communications and Automation Electronics	109	128	10	6	2	*	*	*	*	*	*
Diploma in Communication and Information Design	*	68	87	110	107	89	96	6	1	*	1
Diploma in Consumer Behaviour and Research	*	*	*	*	*	*	48	54	49	48	51
Diploma in Customer Experience Management with Business	*	*	*	*	*	*	*	*	*	*	170
Diploma in Customer Relationship and Service Management	*	117	124	161	169	209	219	283	234	207	11

Source : Republic Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Diploma in Design for Interactivity	*	43	26	49	56	62	63	76	98	4	2
Diploma in Design for User Experience	*	*	*	*	*	*	*	*	*	78	65
Diploma in Digital Entertainment Electronics	*	*	102	93	97	95	115	11	*	*	*
Diploma in Electronics Engineering	*	1	1	*	*	*	*	*	*	*	*
Diploma in Electrical and Electronic Engineering	*	*	*	*	*	*	*	221	189	238	223
Diploma in Engineering (Electrical and Electronics)	*	*	*	*	*	*	*	18	19	16	22
Diploma in Engineering (Operations and Engineering Management)	*	*	*	*	*	*	13	19	14	28	13
Diploma in Engineering Design with Business	*	*	*	*	*	*	*	*	*	*	60
Diploma in Engineering Systems and Management	*	*	*	*	*	*	*	*	*	68	95
Diploma in Environmental Science	*	35	102	124	81	101	167	92	116	99	82
Diploma in Game Design	*	*	28	60	80	68	71	72	56	62	44
Diploma in Green Building Energy Management	*	*	*	*	*	*	*	*	*	78	78
Diploma in Healthcare Administration	*	*	*	*	*	42	105	133	128	16	*
Diploma in Health Management and Promotion	*	*	*	*	54	75	99	83	129	109	117
Diploma in Health Services Management	*	*	*	*	*	*	*	*	*	106	122
Diploma in Hotel and Hospitality Management	*	*	113	138	169	170	112	169	157	158	146
Diploma in Human Resource Management with Psychology	*	*	*	*	*	*	*	*	42	47	70
Diploma in Industrial and Operations Management	150	135	165	120	95	123	229	131	122	146	112
Diploma in Industrial and Systems Engineering	*	1	1	*	*	*	*	*	*	*	*
Diploma in Infocomm and Digital Media (Information Systems)	*	*	*	*	*	*	*	13	6	4	6
Diploma in Infocomm Security Management	*	*	*	*	*	*	*	*	*	51	70
Diploma in Information Technology	193	215	160	196	168	215	175	209	182	149	141

Source : Republic Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Diploma in Integrated Events Management	108	134	149	168	188	188	217	253	215	191	173
Diploma in Interactive and Digital Media	*	88	89	117	91	115	110	107	90	90	70
Diploma in IT Service Management	36	37	38	48	37	52	57	58	60	60	12
Diploma in Marine Science and Aquaculture	*	*	*	*	*	*	*	*	49	40	44
Diploma in Mass Communication	*	*	*	*	*	*	*	132	141	99	102
Diploma in Materials Science	82	128	102	79	74	76	88	109	131	115	92
Diploma in Media Production and Design	*	*	*	*	*	*	*	*	118	151	119
Diploma in Micro and Nanotechnology	*	59	65	60	68	79	64	11	*	*	*
Diploma in Mobile Software Development	*	*	*	*	*	*	35	42	60	52	37
Diploma in New Media	100	106	99	163	184	181	183	160	31	1	*
Diploma in Outdoor and Adventure Learning	*	68	57	69	134	142	94	116	94	64	73
Diploma in Pharmaceutical Sciences	92	135	147	196	194	278	223	218	208	186	163
Diploma in Renewable Energy Engineering	*	*	*	*	48	81	75	75	82	13	4
Diploma in Restaurant and Culinary Operations	*	*	*	*	*	47	73	79	83	96	82
Diploma in Social Enterprise Management	*	*	*	*	*	*	*	36	40	42	38
Diploma in Sonic Arts	40	47	40	40	50	48	59	69	55	71	68
Diploma in Sports and Exercise Sciences	78	101	116	132	117	161	145	114	121	140	115
Diploma in Sports and Leisure Management	106	165	153	187	127	136	159	149	98	91	98
Diploma in Sports Coaching	*	*	*	*	*	*	35	42	52	48	56
Diploma in Sports (Coaching)	*	*	*	*	*	*	12	15	19	27	19
Diploma in Supply Chain Management	60	116	156	177	127	136	135	122	111	138	92
Diploma in Technology and Arts Management	40	41	36	50	95	79	76	87	13	1	*
Diploma in Wellness, Lifestyle and Spa Management	*	*	*	*	43	54	77	87	87	73	63

Source : Republic Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.1 GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING BY INSTITUTION AND COURSE, 2009 – 2019 (continued)

Institution/Course											Number
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Specialist Diploma in Advanced Composites	*	*	*	*	*	*	*	17	11	15	6
Specialist Diploma in Applied Learning and Teaching	*	*	*	*	39	66	68	16	51	29	45
Specialist Diploma in Business Analytics	*	*	*	*	*	*	*	12	7	14	15
Specialist Diploma in Career Counselling	*	*	*	*	*	*	*	27	98	18	46
Specialist Diploma in Communication Strategies for Social Media	*	*	*	*	*	*	*	*	*	18	7
Specialist Diploma in Events, Sports and Leisure Management	*	*	26	18	14	13	*	*	*	*	*
Specialist Diploma in Healthcare Education	18	1	23	*	*	*	*	*	*	*	*
Specialist Diploma in Hospitality Business Management	*	*	*	*	*	*	*	*	*	43	47
Specialist Diploma in Mobile Applications	*	*	*	*	*	18	14	17	10	12	8
Specialist Diploma in Integrated Care Management	*	*	*	*	*	*	*	*	*	*	16
Specialist Diploma in Internet of Things	*	*	*	*	*	*	*	*	*	*	10
Specialist Diploma in Outdoor and Adventure Learning	*	*	*	16	14	7	2	*	*	*	*
Specialist Diploma in Sports and Exercise Science	33	3	32	20	*	17	17	12	20	24	13
Specialist Diploma in Sports and Leisure Management	*	14	*	*	*	*	*	*	*	*	*
Specialist Diploma in Supply Chain Management	*	*	*	53	26	15	11	13	35	41	57
Specialist Diploma in Wireless Communication and Networking	*	20	21	*	*	*	*	*	*	*	*

Source : Republic Polytechnic

* Refers to course yet to commence or produce graduates, or was not offered.

H.2 KEY STATISTICS ON EMPLOYMENT OUTCOME OF GRADUATES FROM INSTITUTIONS OF HIGHER LEARNING, 2009 – 2019

Institutions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Universities (NTU, NUS, SMU, SUSS)											
Proportion Of Graduates In The Labour Force Who Are Employed (%)	90.6	90.7	91.4	91.0	89.3	89.1	89.5	89.5	88.9	90.2	90.7
Full-Time Permanent	84.7	84.8	86.4	85.6	83.4	82.7	83.1	79.9	78.4	81.2	81.7
Part-Time/Temporary/Freelance	5.8	5.9	5.0	5.4	5.9	6.4	6.5	9.7	10.5	9.0	9.0
Median Gross Monthly Starting Salary Of Graduates In Full-Time Permanent Employment (\$)	2,700	2,900	3,000	3,050	3,050	3,200	3,300	3,300	3,400	3,500	3,600
Polytechnics											
Fresh Graduates											
Proportion Of Graduates In The Labour Force Who Are Employed (%)	88.5	91.5	92.1	91.0	89.8	89.2	88.9	90.6	86.4	89.0	89.1
Full-Time Permanent	62.8	68.5	67.0	65.4	62.7	59.4	57.9	55.8	52.8	55.9	56.6
Part-Time/Temporary/Freelance	25.7	23.0	25.1	25.7	27.1	29.8	31.0	34.8	33.7	33.2	32.5
Median Gross Monthly Starting Salary Of Graduates In Full-Time Permanent Employment (\$)	1,700	1,800	1,850	1,950	2,000	2,000	2,100	2,180	2,200	2,270	2,300
Post-NS Graduates											
Proportion Of Graduates In The Labour Force Who Are Employed (%)	87.7	95.4	94.7	93.1	92.8	92.4	91.5	95.4	89.8	90.5	94.1
Full-Time Permanent	71.1	81.3	80.1	77.8	74.2	73.0	70.8	70.2	64.0	65.7	70.7
Part-Time/Temporary/Freelance	16.6	14.1	14.6	15.3	18.7	19.3	20.7	25.2	25.8	24.8	23.4
Median Gross Monthly Starting Salary Of Graduates In Full-Time Permanent Employment (\$)	2,000	2,000	2,100	2,253	2,250	2,400	2,500	2,517	2,480	2,501	2,540
Institute of Technical Education (ITE)											
Fresh Graduates											
Proportion Of Graduates In The Labour Force Who Are Employed (%)	81.1	84.7	84.1	83.2	81.7	83.0	83.2	86.7	79.9	75.9	85.0
Full-Time Permanent	57.6	57.8	63.5	51.5	62.4	59.3	48.4	40.3	40.2	35.2	47.0
Part-Time/Temporary/Freelance	23.5	26.9	20.6	31.7	19.4	23.7	34.7	46.5	39.7	40.7	38.1
Median Gross Monthly Starting Salary Of Graduates In Full-Time Permanent Employment (\$)	1,200	1,291	1,300	1,350	1,410	1,500	1,700	1,655	1,700	1,700	1,700
Post-NS Graduates											
Proportion Of Graduates In The Labour Force Who Are Employed (%)	88.4	90.4	89.6	89.6	89.9	89.4	86.8	86.1	85.3	87.2	89.1
Full-Time Permanent	78.4	78.3	79.7	79.4	80.4	78.6	63.0	67.3	63.7	61.7	67.3
Part-Time/Temporary/Freelance	10.0	12.0	10.0	10.2	9.4	10.8	23.8	18.8	21.6	25.5	21.8
Median Gross Monthly Starting Salary Of Graduates In Full-Time Permanent Employment (\$)	1,500	1,600	1,600	1,700	1,743	1,835	1,950	2,000	2,100	2,200	2,050

Source: Graduate Employment Survey conducted by various local publicly-funded institutions of higher learning

Notes :

- 1) Proportion in employment refers to the employed as a proportion of graduates who have entered the labour market as at the reference date, approximately 6 months after completion of final examinations.
- 2) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 3) Part-time/temporary/freelance employment refers to employment of less than 35 hours a week and where employment is casual, interim or seasonal. It includes those on contracts of less than one year.
- 4) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 5) Fresh graduates refer to those who had completed their studies in the year, comprising mostly females and males who are not liable for National Service (NS) after graduation.
- 6) Post-NS graduates refer to male graduates who had completed their studies about 2 years earlier. For example, 2019 data refers to male graduates who completed their full-time NS between April 2018 and March 2019 for Polytechnics and ITE graduates.
- 7) Universities refer to Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore Management University (SMU) and Singapore University of Social Sciences (SUSS). SUSS was included from 2018 onwards as its first batch of undergraduate students graduated in 2018.
- 8) Polytechnics refer to Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Republic Polytechnic (RP), Singapore Polytechnic (SP) and Temasek Polytechnic (TP).

H.3 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM NUS, NTU, SMU AND SUSS IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2019

Degree	Universities conducting the courses	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)	
<u>Three-Year Degree Programme</u>				
Bachelor of Accountancy	NTU	376	94.0	3,000
Bachelor of Arts	NUS	60	64.5	3,200
Bachelor of Business Administration; Bachelor of Business	NUS, NTU	357	83.0	3,600
Bachelor of Science	NUS	48	59.3	3,100
Bachelor of Science (Nursing)	NUS	41	89.1	3,358
<u>Four-Year Degree Programme</u>				
Bachelor of Accountancy	SMU	208	93.7	3,050
Bachelor of Accountancy	SUSS	75	83.3	3,000
Bachelor of Accountancy & Bachelor of Business	NTU	138	95.2	4,000
Bachelor of Arts (Chinese) (Honours)	NTU	64	79.0	3,210
Bachelor of Arts (Economics) (Honours)	NTU	95	79.8	3,400
Bachelor of Arts (Education) / Bachelor of Arts with Diploma in Education	NTU	79	100.0	3,800
Bachelor of Arts (English) (Honours)	NTU	48	64.9	3,000
Bachelor of Arts (Honours)	NUS	122	68.2	3,500
Bachelor of Arts (Linguistics and Multilingual Studies) (Honours)	NTU	39	65.0	3,200
Bachelor of Arts (Psychology) (Honours)	NTU	68	73.1	3,400
Bachelor of Arts (Sociology) (Honours)	NTU	86	70.5	3,300
Bachelor of Arts with Honours	NUS	77	77.0	3,684
Bachelor of Business Administration (Accountancy) (Honours)	NUS	175	97.8	3,600
Bachelor of Business Administration (Honours); Bachelor of Business Management	NUS, SMU	736	87.1	3,934

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Universities refer to Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore Management University (SMU) and Singapore University of Social Sciences (SUSS). SUSS was included from 2018 onwards as its first batch of undergraduate students graduated in 2018.
- 2) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 November 2019.
- 3) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 November 2019, approximately 6 months after completing their final examinations.
- 4) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 5) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 6) Data on law, medical, pharmacy and architecture graduates were not reflected as a significant number of them were still doing practical law course/ reading in chambers/ under pupillage or serving housemanship.

H.3 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM NUS, NTU, SMU AND SUSS IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2019 (continued)

Degree	Universities conducting the courses	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)	
Four-Year Degree Programme (Continued)				
Bachelor of Communication Studies (Honours)	NTU	109	69.4	3,200
Bachelor of Computing (Computer Science)	NUS	126	90.6	5,000
Bachelor of Computing (Information Systems)	NUS	47	95.9	4,228
Bachelor of Dental Surgery	NUS	36	97.3	4,200
Bachelor of Engineering (Aerospace Engineering)	NTU	71	80.7	3,800
Bachelor of Engineering (Biomedical Engineering); Bachelor of Engineering (Bioengineering)	NUS, NTU	76	66.1	3,500
Bachelor of Engineering (Chemical & Biomolecular Engineering)	NTU	89	78.1	3,800
Bachelor of Engineering (Chemical Engineering)	NUS	183	86.7	3,950
Bachelor of Engineering (Civil Engineering)	NUS, NTU	199	91.7	3,500
Bachelor of Engineering (Computer Science)	NTU	187	95.9	4,200
Bachelor of Engineering (Computer Engineering)	NUS, NTU	112	92.6	4,000
Bachelor of Engineering (Electrical Engineering); Bachelor of Engineering (Electrical & Electronic Engineering)	NUS, NTU	501	86.7	3,800
Bachelor of Engineering (Environmental Engineering)	NUS, NTU	70	79.5	3,500
Bachelor of Engineering (Industrial And Systems Engineering)	NUS	82	96.5	4,000
Bachelor of Engineering (Information Engineering and Media)	NTU	64	85.3	4,000
Bachelor of Engineering (Materials Engineering)	NTU	114	76.0	3,600
Bachelor of Engineering (Materials Science & Engineering)	NUS	32	76.2	4,000
Bachelor of Engineering (Mechanical Engineering)	NUS, NTU	537	84.0	3,650
Bachelor of Fine Arts (Arts, Design & Media)	NTU	59	50.9	3,000

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Universities refer to Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore Management University (SMU) and Singapore University of Social Sciences (SUSS). SUSS was included from 2018 onwards as its first batch of undergraduate students graduated in 2018.
- 2) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 November 2019.
- 3) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 November 2019, approximately 6 months after completing their final examinations.
- 4) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 5) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 6) Data on law, medical, pharmacy and architecture graduates were not reflected as a significant number of them were still doing practical law course/ reading in chambers/ under pupillage or serving housemanship.

H.3 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM NUS, NTU, SMU AND SUSS IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2019 (continued)

Degree	Universities conducting the courses	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)	
<u>Four-Year Degree Programme (Continued)</u>				
Bachelor of Human Resource Management	SUSS	23	74.2	3,000
Bachelor of Science (Physics & Applied Physics)	NTU	55	78.6	3,500
Bachelor of Science (Biological Sciences) (Honours)	NTU	108	66.3	3,300
Bachelor of Science (Business Analytics)	NUS	41	100.0	5,000
Bachelor of Science (Chemistry & Biological Chemistry) (Honours)	NTU	104	66.2	3,400
Bachelor of Science (Economics)	SMU	139	81.3	3,900
Bachelor of Science (Education) / Bachelor of Science with Diploma in Education	NTU	39	100.0	3,800
Bachelor of Science (Honours)	NUS	452	72.3	3,500
Bachelor of Science (Information Systems Management)	SMU	203	90.2	4,300
Bachelor of Science (Maritime Studies)	NTU	55	93.2	3,500
Bachelor of Science (Mathematical Sciences)	NTU	90	79.6	3,599
Bachelor of Science (Mathematics & Economics)	NTU	39	84.8	3,700
Bachelor of Science (Nursing) (Honours)	NUS	78	97.5	3,650
Bachelor of Science (Project & Facilities Management)	NUS	83	80.6	3,155
Bachelor of Science (Real Estate)	NUS	95	89.6	3,400
Bachelor of Science in Finance	SUSS	31	88.6	3,450
Bachelor of Science in Marketing	SUSS	42	70.0	3,000
Bachelor of Social Sciences (Honours); Bachelor of Social Sciences	NUS, SMU	702	76.9	3,500
Bachelor of Social Sciences (Public Policy And Global Affairs) (Honours)	NTU	36	87.8	3,850
Bachelor of Sports Science and Management	NTU	30	55.6	3,350

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Universities refer to Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore Management University (SMU) and Singapore University of Social Sciences (SUSS). SUSS was included from 2018 onwards as its first batch of undergraduate students graduated in 2018.
- 2) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 November 2019.
- 3) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 November 2019, approximately 6 months after completing their final examinations.
- 4) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 5) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 6) Data on law, medical, pharmacy and architecture graduates were not reflected as a significant number of them were still doing practical law course/ reading in chambers/ under pupillage or serving housemanship.

**H.4 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM SUTD
IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2019**

Degree	Employment		Median Gross Monthly Starting Salary (\$)
	Number	Proportion (%)	
Bachelor of Engineering (Engineering Product Development)	81	80.2	4,000
Bachelor of Engineering (Engineering Systems and Design)	69	87.3	4,000
Bachelor of Engineering (Information Systems Technology and Design)	84	85.7	4,400

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 21 February 2020.
- 2) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 21 February 2020, approximately 6 months after completing their final examinations.
- 3) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 4) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 5) Data on other offered degrees have been suppressed because the number covered was too small.

**H.5 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM SIT
IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2018**

Degree	Employment		Median Gross Monthly Starting Salary (\$)
	Number	Proportion (%)	
<u>DigiPen Institute of Technology</u>			
Bachelor of Science in Computer Science in Real-Time Interactive Simulation	30	96.8	s
<u>The Glasgow School of Art</u>			
Bachelor of Arts with Honours in Interior Design	30	76.9	2,775
<u>Newcastle University</u>			
Bachelor of Engineering in Chemical Engineering (Honours)	50	76.9	3,300
Bachelor of Engineering in Electrical Power Engineering (Honours)	45	81.8	3,343
Bachelor of Engineering in Marine Engineering Engineering (Honours)	33	94.3	3,250
Bachelor of Engineering in Mechanical Design and Manufacturing Engineering (Honours)	51	82.3	3,253
Bachelor of Science with Honours in Food & Human Nutrition	36	69.2	2,900
<u>Singapore Institute of Technology (SIT)</u>			
Bachelor of Accountancy with Honours	75	91.5	3,075
Bachelor of Engineering with Honours in Information & Communications Technology (Software Engineering)	45	95.7	4,000
Bachelor of Engineering with Honours in Sustainable Infrastructure Engineering (Land)	56	96.6	3,550
Bachelor of Hospitality Business with Honours	62	81.6	2,825

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 March 2019.
- 2) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 March 2019, approximately 6 months after completing their final examinations.
- 3) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 4) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 5) Figures are based on latest available data.

**H.5 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF UNIVERSITY GRADUATES FROM SIT
IN FULL-TIME PERMANENT EMPLOYMENT BY DEGREE, 2018** (continued)

Degree	Employment		Median Gross Monthly Starting Salary (\$)
	Number	Proportion (%)	
<u>SIT-Trinity College Dublin / Trinity College Dublin</u>			
Bachelor in Science (Physiotherapy)	57	100.0	3,300
<u>SIT-University of Glasgow</u>			
Bachelor of Science with Honours in Nursing	39	90.7	3,500
<u>Technical University of Munich</u>			
Bachelor of Science in Chemical Engineering	37	75.5	3,200
<u>University of Glasgow</u>			
Bachelor of Engineering in Mechanical Design Engineering (Honours)	48	90.6	3,500
Bachelor Of Engineering In Mechatronics (Honours)	55	87.3	3,600
Bachelor of Science in Computing Science (Honours)	67	89.3	4,000
<u>University of Liverpool</u>			
Bachelor of Arts with Honours in Criminology and Security	46	74.2	3,729
<u>Wheelock College</u>			
Bachelor of Science in Early Childhood Education	56	98.2	2,925

Source: Graduate Employment Survey conducted by various universities

Notes :

- 1) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 March 2019.
- 2) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 March 2019, approximately 6 months after completing their final examinations.
- 3) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 4) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 5) Figures are based on latest available data.

H.6 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF POLYTECHNIC GRADUATES IN FULL-TIME PERMANENT EMPLOYMENT BY COURSE, 2019

Course	Polytechnics conducting the courses	Fresh Graduates			Post-NS Graduates		
		Employment		Median Gross Monthly Starting Salary (\$)	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)		Number	Proportion (%)	
ENGINEERING		500	58.8	2,350	770	77.5	2,550
Aeronautical & Aerospace Technology; Aeronautical Engineering; Aerospace Engineering; Aerospace Technology	NYP,NP,RP,SP,TP	32	58.2	2,200	63	79.7	2,420
Aerospace Avionics; Aerospace Electronics; Aerospace Systems & Management	NYP,NP,RP,SP,TP	30	58.8	2,350	74	75.5	2,500
Automation & Mechatronic Systems; Mechatronics; Mechatronics & Robotics; Mechatronics Engineering	NYP,NP,SP,TP	48	66.7	2,350	60	75.0	2,800
Business Process & Systems Engineering; Industrial and Operations Management	RP,TP	41	61.2	2,175	s	s	s
Chemical & Biomolecular Engineering; Chemical Engineering	NP,SP,TP	s	s	s	36	85.7	2,873
Computer Engineering; Electronics; Electronic & Computer Engineering; Electronics, Computer & Communications Engineering; Media & Communication Technology; Microelectronics	NYP,NP,TP	63	60.6	2,370	102	70.3	2,500
Electrical & Electronic Engineering	RP	s	s	s	39	83.0	2,500
Electrical & Electronic Engineering; Electrical Engineering; Electrical Engineering with Eco-Design	NYP,NP,SP	58	65.2	2,355	95	77.2	2,600
Mechanical Engineering	NP,SP	s	s	s	52	82.5	2,500
BUILT ENVIRONMENT		98	57.0	2,300	81	81.0	2,500
Green Building Energy Management; Green Building & Sustainability; Renewable Energy Engineering	RP,TP	s	s	s	30	88.2	2,488
Hotel & Leisure Facilities Management; Integrated Facility Management	NP,SP,TP	43	53.8	2,300	s	s	s

Source: Graduate Employment Survey conducted by polytechnics

Notes :

- 1) Polytechnics refer to Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Republic Polytechnic (RP), Singapore Polytechnic (SP) and Temasek Polytechnic (TP).
- 2) Fresh graduates refer to those who had completed their studies in 2019, comprising mostly females and males who are not liable for National Service (NS) after graduation.
- 3) Post-NS graduates refer to male graduates who had completed their studies in 2016 and their full-time NS between April 2018 and March 2019.
- 4) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 October 2019.
- 5) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 October 2019, approximately 6 months after completing their final examinations.
- 6) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 7) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 8) s : Data have been suppressed because the number covered was too small.

H.6 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF POLYTECHNIC GRADUATES IN FULL-TIME PERMANENT EMPLOYMENT BY COURSE, 2019 (continued)

Course	Polytechnics conducting the courses	Fresh Graduates			Post-NS Graduates		
		Employment		Median Gross Monthly Starting Salary (\$)	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)		Number	Proportion (%)	
<u>INFORMATION & DIGITAL TECHNOLOGIES</u>		205	52.7	2,300	208	68.4	2,600
Business Applications; Business Informatics; Business Information Systems; Business Information Technology	NYP,NP,RP,SP,TP	81	51.9	2,300	68	68.7	2,700
Information Technology	NYP,NP,RP,SP,TP	39	54.2	2,250	63	75.9	2,500
<u>SCIENCES</u>		184	44.6	2,023	73	62.9	2,500
Applied Food Science & Nutrition; Food Science & Nutrition; Food Science & Technology	NYP,SP,TP	36	54.5	2,000	s	s	s
Biotechnology; Molecular Biotechnology	NYP,NP,RP,SP,TP	33	36.7	2,000	s	s	s
<u>HEALTH SCIENCES</u>		737	85.0	2,580	67	87.0	2,627
Health Sciences (Nursing); Nursing	NYP,NP	599	88.6	2,600	36	90.0	2,619
Optometry	NP,SP	38	77.6	2,625	s	s	s
Pharmaceutical Science; Pharmaceutical Sciences; Pharmacy Science	NYP,NP,RP,TP	88	68.2	2,150	s	s	s
<u>HUMANITIES & SOCIAL SCIENCES</u>		414	67.8	2,400	92	64.3	2,656
Child Psychology & Early Education; Early Childhood Education; Early Childhood Studies	NP,TP	261	88.2	2,500	s	s	s
Health Management and Promotion; Healthcare Administration; Health Services Management	RP	70	55.6	2,100	s	s	s

Source: Graduate Employment Survey conducted by polytechnics

Notes :

- 1) Polytechnics refer to Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Republic Polytechnic (RP), Singapore Polytechnic (SP) and Temasek Polytechnic (TP).
- 2) Fresh graduates refer to those who had completed their studies in 2019, comprising mostly females and males who are not liable for National Service (NS) after graduation.
- 3) Post-NS graduates refer to male graduates who had completed their studies in 2016 and their full-time NS between April 2018 and March 2019.
- 4) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 October 2019.
- 5) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 October 2019, approximately 6 months after completing their final examinations.
- 6) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 7) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 8) s : Data have been suppressed because the number covered was too small.

H.6 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF POLYTECHNIC GRADUATES IN FULL-TIME PERMANENT EMPLOYMENT BY COURSE, 2019 (continued)

Course	Polytechnics conducting the courses	Fresh Graduates			Post-NS Graduates		
		Employment		Median Gross Monthly Starting Salary (\$)	Employment		Median Gross Monthly Starting Salary (\$)
		Number	Proportion (%)		Number	Proportion (%)	
<u>BUSINESS</u>		484	44.9	2,155	279	63.0	2,500
Accountancy; Accountancy & Finance; Accounting & Finance	NYP,NP,SP,TP	67	62.0	2,100	41	56.2	2,570
Business; Business Administration; Business Management; Business Studies; International Business	NYP,NP,SP,TP	79	43.6	2,110	49	58.3	2,546
Culinary & Catering Management; Food & Beverage Business; Restaurant and Culinary Operations	NYP,RP,TP	32	53.3	2,200	s	s	s
Customer Experience Management with Business; Customer Relationship and Service Management	RP	40	51.3	2,271	s	s	s
Hospitality & Tourism Management; Hotel and Hospitality Management; Integrated Events & Project Management; Integrated Events Management; Leisure & Resort Management; Leisure & Events Management; Tourism & Resort Management	NYP,NP,RP,SP,TP	123	38.8	2,100	54	67.5	2,470
<u>ART, DESIGN & MEDIA</u>		343	39.8	2,200	185	60.3	2,400
Advertising & Public Relations; Communications & Media Management; Communication and information Design; Mass Communication; Mass Media Management; Media and Communication; Media Production and Design; New Media	NYP,NP,RP,SP,TP	67	32.8	2,100	43	67.2	2,400
Animation; Animation & 3D Arts; Digital Animation; Digital Film & Television; Digital Media Design (Animation); Digital Visual Effects; Film, Sound & Video; Motion Graphics & Broadcast Design; Moving Images; Visual Effects; Visual Effects & Motion Graphics	NYP,NP,SP,TP	56	37.1	2,100	36	69.2	2,500
Communication Design; Visual Communication; Visual Communication & Media Design	NYP,SP,TP	40	43.5	2,100	s	s	s
Interior Architecture & Design; Interior Design; Retail & Hospitality Design; Space & Interior Design; Spatial Design	NYP,SP,TP	46	50.5	2,200	s	s	s

Source: Graduate Employment Survey conducted by polytechnics

Notes :

- 1) Polytechnics refer to Nanyang Polytechnic (NYP), Ngee Ann Polytechnic (NP), Republic Polytechnic (RP), Singapore Polytechnic (SP) and Temasek Polytechnic (TP).
- 2) Fresh graduates refer to those who had completed their studies in 2019, comprising mostly females and males who are not liable for National Service (NS) after graduation.
- 3) Post-NS graduates refer to male graduates who had completed their studies in 2016 and their full-time NS between April 2018 and March 2019.
- 4) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 October 2019.
- 5) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 October 2019, approximately 6 months after completing their final examinations.
- 6) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 7) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 8) s : Data have been suppressed because the number covered was too small.

H.7 EMPLOYMENT AND GROSS MONTHLY STARTING SALARY OF ITE GRADUATES IN FULL-TIME PERMANENT EMPLOYMENT BY COURSE, 2019

Course	Fresh Graduates			Post-NS Graduates		
	Employment		Median Gross Monthly Starting Salary (\$)	Employment		Median Gross Monthly Starting Salary (\$)
	Number	Proportion (%)		Number	Proportion (%)	
Higher Nitec (Engineering)	96	54.2	1,800	415	70.9	2,100
Cyber & Network Security	s	s	s	30	75.0	s
Electrical Engineering	s	s	s	58	78.4	2,075
Electronics Engineering	s	s	s	82	65.6	2,125
Mechanical Engineering	s	s	s	75	75.0	2,300
Mechatronics Engineering	s	s	s	37	72.5	2,000
Higher Nitec (Business & Services)	216	49.2	1,650	188	68.1	2,175
Accounting	39	52.0	1,600	39	72.2	2,200
Higher Nitec (Info & Communications Technology)	32	43.8	s	123	64.4	2,100
IT Systems & Network	s	s	s	58	60.4	2,150
Nitec (Engineering)	67	36.8	1,600	374	61.9	2,000
Electronics, Computer Networking & Communications	s	s	s	57	58.8	2,288
Mechanical Technology	s	s	s	52	66.7	2,000
Mechatronics	s	s	s	38	62.3	2,000
Nitec (Business & Services)	241	47.3	1,700	174	72.2	1,950
Business Services	31	32.0	s	39	72.2	s
Community Care & Social Services	31	70.5	s	s	s	s
Nursing	75	72.1	1,750	s	s	s
Nitec (Info & Communications Technology)	s	s	s	112	65.9	2,046
Info-Communications Technology	s	s	s	54	76.1	2,100

Source: Graduate Employment Survey conducted by Institute of Technical Education

Notes :

- 1) Data covered graduates who completed their full-time training in December 2018 and March 2019, and were surveyed on their employment status as at July 2019 and October 2019 respectively (i.e. approximately 6 months after completing their final examinations).
- 2) Fresh graduates refer to those who had completed their studies in the year, comprising mostly females and males who are not liable for National Service (NS) after graduation.
- 3) Post-NS graduates refer to male graduates who had completed their studies in 2016 and their full-time NS between April 2018 and March 2019.
- 4) Employment Number refers to the actual number of employed persons who responded to the survey and indicated they were employed on a full-time permanent basis as at 1 October 2019.
- 5) Employment Proportion refers to the full-time permanently employed as a proportion of graduates who have entered the labour market as at 1 October 2019, approximately 6 months after completing their final examinations.
- 6) Full-time permanent employment refers to employment of at least 35 hours a week and where the employment is not temporary. It includes those on contracts of one year or more.
- 7) Gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded.
- 8) s : Data have been suppressed because the number covered was too small.

**H.8 SECONDARY SCHOOL GRADUATES WHO COMPLETED FULL-TIME AND TRAINEESHIP PROGRAMMES
AT INSTITUTE OF TECHNICAL EDUCATION, 2009 – 2019**

Type of Training	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	11,323	11,608	11,427	11,813	12,183	11,398	13,680	12,800	13,111	13,643	12,811
Engineering											
Technical Engineer Diploma	*	42	40	40	75	46	52	48	58	66	70
Higher National ITE Certificate (<i>Higher Nitec</i>)	1,659	1,857	1,765	1,792	1,765	1,820	2,196	2,265	2,489	2,600	2,599
National ITE Certificate (<i>Nitec</i>)	4,088	3,802	3,824	4,063	3,967	4,019	4,344	3,605	3,555	3,844	3,247
Business and Services											
Technical Diploma	*	*	*	*	19	15	17	18	17	19	14
Higher National ITE Certificate (<i>Higher Nitec</i>)	1,530	1,688	1,682	1,806	1,962	2,017	2,163	2,176	1,981	2,119	2,356
National ITE Certificate (<i>Nitec</i>)	2,536	2,558	2,496	2,467	2,781	1,829	3,052	2,915	3,078	3,081	2,847
Info-Communications Technology											
Higher National ITE Certificate (<i>Higher Nitec</i>)	469	508	478	549	549	523	692	744	830	769	719
National ITE Certificate (<i>Nitec</i>)	1,041	1,153	1,142	1,096	1,065	1,129	1,164	1,029	1,103	1,145	959

Source : Institute of Technical Education

* Refers to course not offered under the certificate level.

H.9 WORKERS WHO COMPLETED SKILLS TRAINING PROGRAMMES AT INSTITUTE OF TECHNICAL EDUCATION, 2009 – 2019

Type of Training	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	6,778	5,522	4,958	4,026	3,980	4,281	3,855	2,578	2,949	2,993	2,797
Engineering											
Higher National ITE Certificate (<i>Higher Nitec</i>)	191	161	113	135	192	195	158	192	189	170	174
Specialist National ITE Certificate (<i>Specialist Nitec</i>)	-	-	-	-	-	-	-	-	8	-	-
National ITE Certificate (<i>Nitec</i>)	496	656	280	329	542	571	521	310	298	370	292
ITE Skills Certificate (ISC)	5,141	3,508	3,384	2,679	2,188	2,526	2,363	1,127	1,722	1,342	1,357
Business and Services											
Higher National ITE Certificate (<i>Higher Nitec</i>)	300	386	240	150	119	105	104	79	92	86	111
National ITE Certificate (<i>Nitec</i>)	197	261	203	155	503	343	214	204	197	330	184
ITE Skills Certificate (ISC)	408	518	709	550	410	503	468	607	365	623	602
Info-Communications Technology											
Higher National ITE Certificate (<i>Higher Nitec</i>)	18	8	9	13	13	24	13	15	30	18	22
National ITE Certificate (<i>Nitec</i>)	27	24	20	15	13	14	14	44	48	54	55

Source : Institute of Technical Education

Notes :

- 1) Data refer to the number of workers who graduated or completed their programmes, unless otherwise stated.
- 2) Data exclude other short and customised courses not classified within the stated categories.

H.10 PERSONS WHO COMPLETED CONTINUING ACADEMIC EDUCATION COURSES AT INSTITUTE OF TECHNICAL EDUCATION, 2009 – 2019

Type of Training	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Continuing Education (Secondary)	2,814	2,355	1,925	1,957	1,091	930	772	853	755	726	725

Source: Institute of Technical Education

Note :

Data refer to the number of continuing academic education places taken up and completed by workers.

H.11 PERSONS WHO PASSED SKILLS EVALUATION TESTS AT INSTITUTE OF TECHNICAL EDUCATION, 2009 – 2019

Type of Training	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	4,492	3,259	2,792	2,819	2,484	1,615	1,253	831	651	333	655
Skills Evaluation Test Level 2	408	327	240	175	172	139	16	-	32	-	-
Skills Evaluation Test Level 1	4,084	2,932	2,552	2,644	2,312	1,476	1,237	831	619	333	655

Source : Institute of Technical Education

**H.12 SINGAPORE WORKFORCE SKILLS QUALIFICATIONS (WSQ) TRAINEES BY AGE,
HIGHEST QUALIFICATION ATTAINED AND SEX, 2011 – 2019**

	Number								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL	192,249	198,322	231,009	267,423	267,655	289,699	310,491	327,996	322,843
Age (Years)									
Under 20	10,860	11,575	13,641	14,221	16,016	13,515	18,597	21,607	24,591
20 – 29	37,056	40,260	45,947	52,170	54,876	56,649	65,219	61,703	62,223
30 – 39	44,643	46,722	52,223	56,622	56,326	57,849	56,487	56,205	55,112
40 – 49	44,489	43,950	50,793	56,065	53,375	58,179	58,635	60,570	59,617
50 – 59	38,461	37,916	45,233	54,096	50,673	56,543	58,822	63,575	60,728
60 – 69	13,560	14,812	18,990	27,614	29,108	36,787	40,638	47,828	45,307
70 & Over	3,180	3,087	4,182	6,635	7,281	10,177	12,093	16,508	15,265
Highest Qualification Attained									
Below Primary	5,695	5,531	8,863	12,074	16,136	16,454	16,993	21,309	15,730
Primary	28,343	28,516	26,391	33,538	25,031	25,732	24,546	24,872	18,092
Lower Secondary	27,824	22,120	26,606	30,313	27,975	31,491	34,274	36,776	32,246
Secondary	54,012	55,977	60,134	64,020	60,786	64,041	67,141	70,332	64,197
Post Secondary	12,663	17,318	20,601	21,856	25,276	27,755	32,080	29,183	27,840
Professional Qualification and Other Diploma	8,624	9,620	10,744	14,030	11,839	14,634	15,057	14,963	19,004
Polytechnic Diploma	17,224	19,790	24,144	26,612	31,610	32,133	41,764	42,125	36,999
Degree & Above	23,926	27,144	34,032	45,011	48,395	56,295	57,893	59,478	60,014
Modular Certification	na	na	na	na	na	na	na	1,241	15,348
Others/ Not Reported	13,938	12,306	19,494	19,969	20,607	21,164	20,743	27,717	33,373
Sex									
Female	98,582	101,438	109,391	120,818	122,291	133,816	134,715	142,266	138,469
Male	90,364	95,154	119,170	144,166	143,142	153,730	173,394	183,670	182,589
Not Reported	3,303	1,730	2,448	2,439	2,222	2,153	2,382	2,060	1,785

Source : SkillsFuture Singapore

Notes :

- 1) Data pertains to local WSQ trainees who have attained at least one WSQ Statement of Attainment.
- 2) Tracking of Modular Certification started in September 2018.

H.13 SINGAPORE WORKFORCE SKILLS QUALIFICATIONS (WSQ) TRAINEES BY LEVEL OF WSQ STATEMENT OF ATTAINMENT, 2011 – 2019

Level of WSQ Statement of Attainment	Number								
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	192,249	198,322	231,009	267,423	267,655	289,699	310,491	327,996	322,843
Certificate	147,901	155,148	164,867	188,700	190,680	203,627	220,810	226,721	179,164
Higher Certificate	11,678	7,294	11,146	10,728	13,457	15,743	17,478	26,856	83,413
Advanced Certificate	48,433	31,628	45,699	55,944	50,727	60,041	61,907	71,782	70,269
Diploma	23,363	19,771	32,873	36,117	35,887	41,918	46,436	52,796	49,483
Specialist Diploma	5,417	5,760	7,604	8,790	7,902	9,514	10,986	14,664	12,117
Graduate Certificate	1,029	751	784	756	483	580	488	594	774
Graduate Diploma	390	393	550	738	847	980	1,007	653	406

Source : SkillsFuture Singapore

Notes :

1) Data pertains to local WSQ trainees who have attained at least one WSQ Statement of Attainment.

2) Figures for each certification level are based on unique headcounts. That is, a trainee with more than one WSQ Statement of Attainment of the same certification level is counted once. A trainee with more than one WSQ Statement of Attainment at different certification levels is counted once in each certification level. Total refers to unique trainee headcounts across all certification levels.

H.14 PROFESSIONAL CONVERSION PROGRAMME (PCP) PLACEMENTS, 2012 – 2019

	Number							
	2012	2013	2014	2015	2016	2017	2018	2019
Number of Placements	810	1,052	994	881	1,331	3,773	4,973	4,450

Source : Workforce Singapore

Note :

PCPs run by Employment and Employability Institute (e2i) are included from 2016 onwards.

H.15 KEY INDICATORS OF EMPLOYMENT AND EMPLOYABILITY INSTITUTE (e2i), 2009 – 2019

	Number										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Number of Workers Assisted	53,347	40,466	45,985	58,024	65,439	81,898	81,362	84,057	79,816	106,354	120,744
Number of Workers Placed	17,127	14,716	19,287	11,752	10,434	8,741	9,488	10,017	10,561	11,221	13,393
Number of Workers Upgraded in Jobs	36,220	25,750	26,698	46,272	55,005	73,157	71,874	74,040	69,255	95,133	107,351

Source : National Trades Union Congress



Key Economic Indicators



I.1 CHANGE IN VALUE ADDED PER WORKER BY INDUSTRY¹, 2009 – 2019

Industry (SSIC 2015)	Per Cent										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL²	-2.6	10.7	2.6	0.5	0.7	0.2	0.8	2.2	4.5	2.7	-0.8
Total² (excluding Construction)	-2.4	11.0	2.6	0.9	1.6	0.2	0.6	2.4	3.9	2.2	-1.0
Goods Producing Industries	-0.3	23.2	5.3	-2.0	-3.2	1.1	-2.1	3.9	12.1	7.8	-0.8
Manufacturing	1.9	30.3	7.4	-0.6	0.2	2.5	-2.7	6.9	13.8	8.3	-0.9
Construction	8.6	4.4	0.6	1.8	-6.6	2.9	4.2	-1.7	1.4	0.9	2.1
Services Producing Industries	-3.7	7.1	2.3	1.6	3.1	0.1	1.0	0.6	1.7	1.4	-1.0
Wholesale & Retail Trade	-5.5	14.0	4.2	3.6	3.3	1.0	2.7	0.7	2.1	2.6	-2.6
Transportation & Storage	-9.5	4.4	2.9	1.0	-0.9	-1.3	0.4	0.2	3.3	-3.3	-0.9
Accommodation & Food Services	-7.5	8.5	5.8	1.0	0.4	-1.7	-3.5	1.6	-0.4	2.2	-1.1
Information & Communications	1.8	0.4	-2.1	2.4	2.7	2.0	-5.1	2.2	5.3	1.7	-1.3
Finance & Insurance	-1.5	10.0	1.4	1.8	13.6	4.6	1.0	-1.2	3.1	4.7	1.3
Business Services	-0.8	2.7	1.7	-0.4	0.9	-3.2	4.2	2.9	-	0.1	-0.9
Other Services Industries	0.3	6.7	1.0	-0.3	-1.2	-0.7	-1.3	0.4	0.7	-	0.2

Sources : Singapore Department of Statistics and Manpower Research and Statistics Department, Ministry of Manpower

¹ Based on Gross Value Added in Chained (2015) Dollars.

² Based on Gross Domestic Product in Chained (2015) Dollars.

I.2 CHANGE IN VALUE ADDED PER ACTUAL HOUR WORKED BY INDUSTRY¹, 2010 – 2019

Industry (SSIC 2015)	Per Cent									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TOTAL²	9.1	4.4	0.2	1.1	1.8	2.0	2.7	5.3	3.9	-1.5
Manufacturing	26.6	9.3	-1.1	0.6	3.9	-1.5	8.0	15.0	9.8	-2.1
Construction	2.9	1.5	0.8	-7.0	4.3	6.6	-2.0	4.0	1.9	2.4
Wholesale & Retail Trade	12.2	6.9	2.7	4.7	3.7	4.0	2.0	2.8	4.0	-3.5
Transportation & Storage	3.0	5.0	1.8	-0.4	0.6	-0.1	2.0	4.2	-0.9	-1.6
Accommodation & Food Services	7.8	8.6	0.5	1.6	0.3	-0.8	2.3	0.2	5.2	-0.4
Information & Communications	-1.9	-0.1	2.6	3.5	3.9	-4.5	3.7	3.6	3.3	-3.4
Finance & Insurance	6.9	2.9	2.0	14.0	5.8	2.2	0.3	3.6	5.4	0.1
Business Services	2.0	2.6	-0.5	1.2	-1.5	6.0	3.8	0.9	0.9	-1.9
Other Services Industries	6.4	2.7	-0.3	-1.0	0.6	-0.8	-	0.8	0.6	-0.3

Sources : Ministry of Trade and Industry and
Manpower Research and Statistics Department,
Ministry of Manpower

¹ Based on Gross Value Added in Chained (2015) Dollars.

² Based on Gross Domestic Product in Chained (2015) Dollars.

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