Conditions of Employment 2018

By:

Ong Si Ying

Ng Bin Shen, Lucas



Manpower Research and Statistics Department
Singapore

January 2019

COPYRIGHT NOTICE

CONDITIONS OF EMPLOYMENT 2018

© Manpower Research and Statistics Department
Ministry of Manpower
Republic of Singapore

All rights reserved. Further reproduction of this material is prohibited without the written permission of the copyright holder. Application to reproduce any part of this publication should be addressed to:

Director
Manpower Research and Statistics Department
Ministry of Manpower
18 Havelock Road #05-01
Singapore 059764
Republic of Singapore

Email: mom_rsd@mom.gov.sg

In citation, please credit the source when you extract and use the information/data from the publication.

MISSION

To provide timely and reliable

national statistical information on the labour market

to facilitate informed decision-making within the government and community-at-large

Statistical activities conducted by the Manpower Research and Statistics Department (MRSD) are governed by the provisions of the Statistics Act (Chapter 317). The Act guarantees the confidentiality of information collected from individuals and companies. It spells out the legislative authority and responsibility of the Director, Manpower Research and Statistics Department.

Statistics compiled and disseminated by the MRSD adhere to international standards on official statistics set by the International Labour Organisation and International Monetary Fund.

For insights on the labour market, visit us at stats.mom.gov.sg.

Contents

Page

Highlights v

1 Introduction 1

2 The Extent of Workplace Practices' Impact on Staff Turnover 1

3 Flexible Work Arrangements 3

4 Annual Leave Entitlement 7

5 Work-Week Pattern 9

6 Non-statutory Leave Benefits 11

7 Sickness Absenteeism 13

8 Concluding Remarks 14

Annex A: Survey Coverage and Methodology A1

Annex B: Statistical Tables B1

Annex C: Study of Various Workplace Practices on Staff Turnover C1

Notations:

-	: nil or negligible
No.	: Number
s	: Data suppressed due to small number of observations

List of Abbreviations:

M&Es	: Management & Executives
RAF	: Rank-And-File
Sat	: Saturday
FWAs	: Flexible Work Arrangements
MC	: Medical Certificate

Highlights

- Efforts to boost the adoption of FWAs translated well in 2018 as more firms provided FWAs on both formal and ad-hoc basis. The proportion of firms offering at least 1 formal FWA increased to 53% from 50% in 2017 and the proportion offering at least 1 ad-hoc FWA surged to 84% from 75% in 2017.

- Due to the efforts of companies in offering FWAs, more employees had access to FWAs. In firms that had at least 1 formal FWA, the proportion of employees increased from 70% in 2017 to 72.0% in 2018. In firms that provided at least 1 ad-hoc FWA, the proportion of employees also increased, from 81% in 2017 to 87% in 2018.

- In 2018, the proportion of full-time employees given 14 days and below of paid annual leave marked the biggest fall (-3.5%), as more firms placed management & executives and rank-and-file employees on at least 15 days of annual leave.

- Although work-week pattern is largely contingent on the nature of work and business operations, more firms took into account employees' needs. In 2018, the proportion of employees that were on 5-day work week arrangement rose by 3.3% and this trend was seen across all broad sectors, i.e., construction, manufacturing, and services.

- Reflecting our ageing population, and the changing profile and demographics of employees, the provision of family care leave and marriage leave benefits increased. At the same time, decreases were seen in the provision of other types of non-statutory leave benefits.

- Outpatient sickness absence held steady at 60% from 2015 to 2017, which could partly be a result of healthy living initiatives, e.g. step trackers, and reflected the ongoing efforts by firms and the government in introducing progressive, accommodative and welfare-oriented work practices to improve the general well-being of employees.

- A recursive partitioning model was used to sieve out the workplace practices that affected firms' resignation rates. These practices were ranked according to their degree of impact on staff turnover. Results showed that the provision of flexible work life arrangements had the greatest impact, followed by increases in annual leave entitlement, reduction in work-day per week, and increases in the number of non-statutory leave.

- The results from a Wilcoxon rank-sum test showed that three factors can encourage employees to take up FWAs offered by their companies: 1) the presence of at least one senior management championing work-life arrangements, 2) having a system in place to manage work-life arrangements requests be it through informal or formal means, and 3) providing training on work-life arrangements for supervisors and/or employees.

1. Introduction

1.1 The Conditions of Employment report analyses the current employment conditions and workplace practices that firms are increasingly adopting to retain and attract employees, and remain competitive.

1.2 Using a statistical model to sieve out the workplace practices that affect firms' resignation rates, this report also analyses workplace practices in the order of their importance, with flexible work life arrangements having the greatest impact on resignation rates, followed by annual leave entitlement, work-week pattern, non-statutory leave, and sick leave.

1.3 The data used in this report are mostly obtained from the Conditions of Employment Survey 2018 conducted by the Manpower Research and Statistics Department. The survey covered establishments from both the private sector (each with at least 25 employees) and the public sector. A total of 3,700 establishments employing 1,301,400 employees responded, yielding a response rate of 91.4%. Details of the survey coverage and methodology are in Annex A.

2. The Extent of Workplace Practices' Impact on Staff Turnover

2.1 High staff turnover is a cost and a concern for companies; the inability to retain talent would also mean losing a competitive edge over other companies. To be competitive and cost-effective, implementing workplace practices that allow employees to be in their best condition and perform at optimum level is vital. When employees are working in their best condition, this can reduce the likelihood of resignation. As such, it is important to study the various workplace practices alongside the resignation rate.

2.2 A recursive partitioning model, in the form of conditional inference trees, was used to determine the workplace practices that actually affected the resignation rate of firms. This method also ranked the variables, i.e., workplace practices, according to the degree of their impact on the resignation rate. Ranked in descending order (greatest to smallest impact), the results showed that:

1st: Flexible Work Arrangements

Not offering flexible work arrangements played the most significant role in a firm's resignation rate, as among all the variables fitted into the model, the proportion of employees enjoying FWAs ranked 1st.

2nd: Annual Leave Entitlement

Minimum entitlement in days for paid annual leave ranked 2nd, followed by the proportion of employees with <15 days of annual leave. This suggests that increasing the minimum entitlement in days and granting employees at least 15 days of annual leave can help to reduce the resignation rate to a large extent.

3rd: Work Week Patterns

Employees working more than 5 days were more likely to contribute to firms' resignation rate, as having a high proportion of employees placed on more than 5-day work week was ranked 4th in its impact on the resignation rate.

4th: Non-statutory Leave

The number of non-statutory leave an employee is entitled to ranked 5th. This suggests that offering non-statutory leave, and in greater variety, may help to reduce the resignation rate.

5th: Sickness Absenteeism

Among the five common types of workplace practices, as aforementioned, sickness absence had the least significant impact on the firms' resignation rate. The average number of outpatient sick leaves taken by sick absentees ranked 6th. Variables related to inpatient sick leave were ranked even lower (10th and below), signifying its even smaller degree of impact.

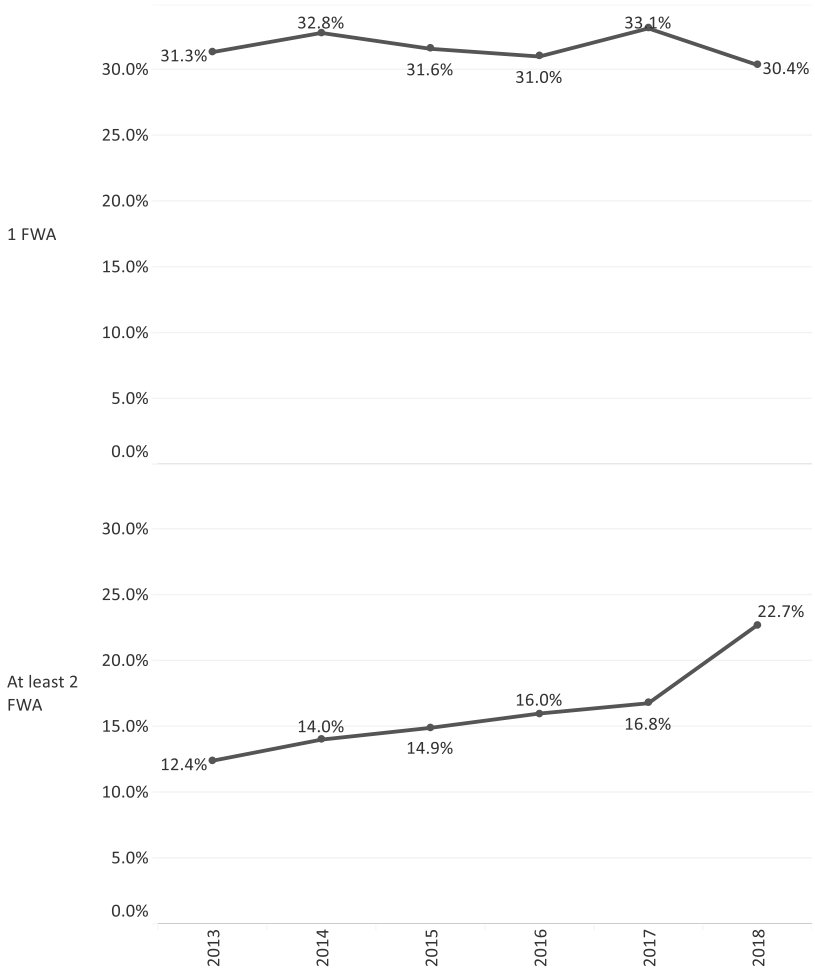
(Details of all variables in Annex C).

3. Flexible Work Arrangements

More establishments are offering FWAs and in greater variety.

3.1 The ranking results indicated that having flexible work arrangements that accommodated and provided employees with flexibility is crucial in reducing the likelihood of employees' resigning. This would be especially so for employees with important commitments such as family responsibilities. Offering FWAs enable employees once held back by other commitments to work. In turn, companies can retain and attract employees, allowing them to tap on a wider pool of talents.

Chart 1: Proportion of Establishments Offering Formal Flexible Work Arrangements by Number of Formal FWAs, 2013 to 2018



Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

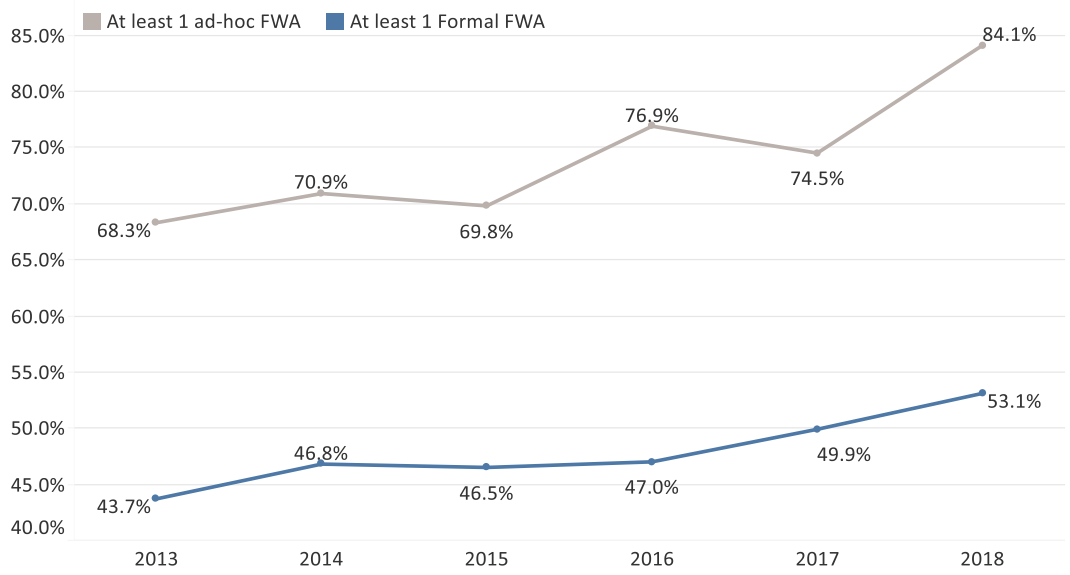
Notes:

(1) For years in which the Conditions of Employment Survey (i.e. 2013, 2015 and 2017) is not conducted, data on flexible work arrangements are obtained from a MOM Supplementary Survey.

(2) Figures refer to establishments that offered the respective FWA as a proportion of all establishments.

3.2 More firms are recognising the importance and benefits of FWAs as the proportion of establishments not offering formal FWAs decreased from 50% in 2017 to 47% in 2018. The fall was seen across all broad sectors, with *services* registering a steep drop of 3.6% while *manufacturing* (-2.6%) and *construction* (-1.8%) saw moderate declines. In fact, more firms provided formal FWAs in greater variety, as the proportion of firms offering only 1 formal FWA fell while at least 2 formal FWAs increased. The shift from only 1 FWA to at least 2 FWAs was observed across all broad sectors. Co*nstruction* marked the greatest increase (+6.8%) and *services* trailed close behind (+6.1%).

Chart 2: Proportion of Establishments Offering Flexible Work Arrangements, 2013 to 2018



Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

Notes:

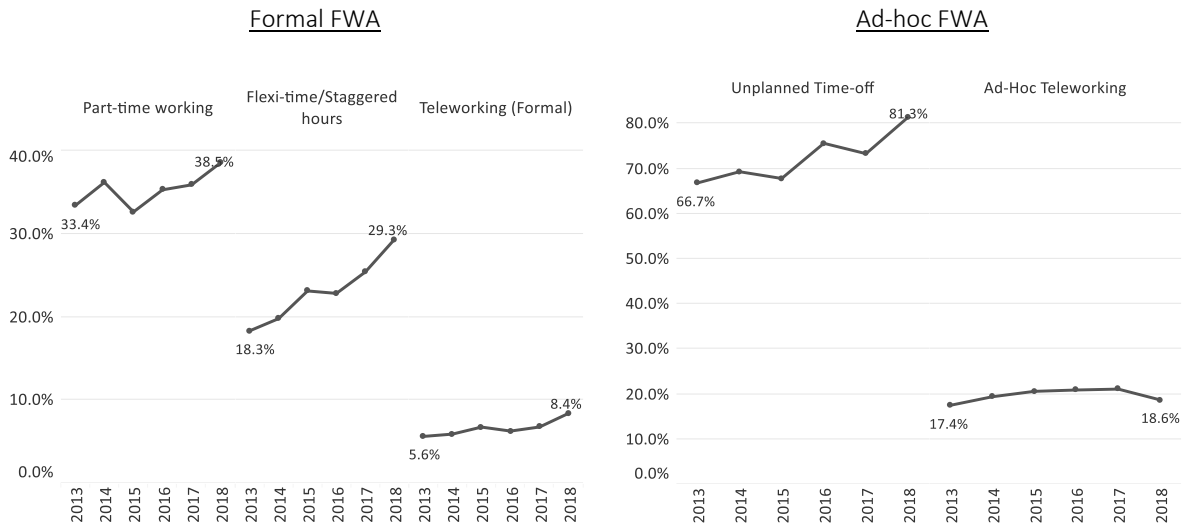
(1) For years in which the Conditions of Employment Survey (i.e. 2013, 2015 and 2017) is not conducted, data on flexible work arrangements are obtained from a MOM Supplementary Survey.

(2) "At least 1 formal FWA" refers to establishments offering at least one type of formal FWA, i.e. part-time work, flexi-time/staggered hours, formal tele-working, homeworking, job sharing and compressed work week.

(3) "At least 1 ad-hoc FWA" refers to establishments offering at least one type of ad-hoc FWA, i.e. unplanned time-off and ad-hoc tele-working.

3.3 Alongside the increase in the proportion of firms offering at least one formal FWAs (from 50% in 2017 to 53% in 2018), the proportion of firms offering at least 1 ad-hoc FWAs also rose from 75% in 2017 to 84% in 2018. With more than half the proportion of firms providing at least 1 formal FWA and a good majority providing at least 1 ad-hoc FWA, this reinforced the fact that firms are providing a greater variety of FWAs.

Chart 3: Proportion of Establishments Offering Flexible Work Arrangements by Type of FWAs, 2013 to 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

Notes:

(1) For years in which the Conditions of Employment Survey (i.e. 2013, 2015 and 2017) is not conducted, data on flexible work arrangements are obtained from a MOM Supplementary Survey.

(2) Data pertain to permanent employees and employees on term contract of at least one year.

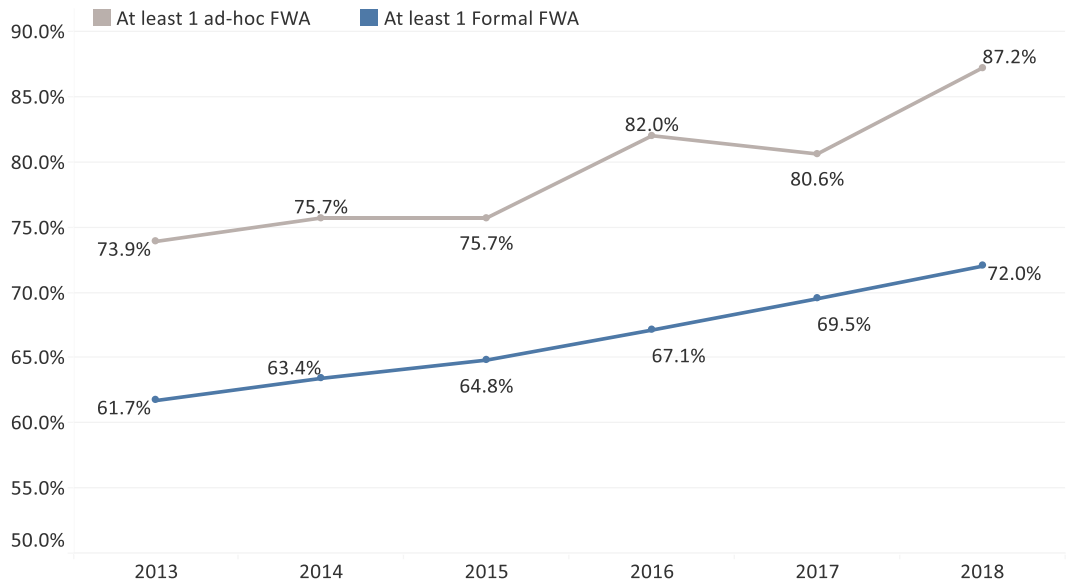
(3) Less common formal FWA such as "job sharing", "homeworking" and "compressed work week" are not separately shown here.

(4) Figures refer to establishments that offered the respective FWA as a proportion of all establishments.

3.4 Among the formal FWAs, part-time work remained the most prevalent, with 2 in 5 firms offering this arrangement to their staff in 2018. This was followed by flexi-time or staggered hours (29%) and formal tele-working (8.4%). Among the ad-hoc FWAs, unplanned time off (81%) was more common than tele-working (19%).

3.5 As firms have differing nature of business, the types of FWAs offered varied across the different industries. Part-time work was the most preferred form of FWA for companies in *manufacturing* and *services*. In *construction* sector, flexi-time or staggered hours took precedence. In short, more firms offered a greater variety of FWAs that were best suited to their nature of work.

Chart 4: Proportion of Employees Working in Establishments Offering Flexible Work Arrangements, 2013 to 2018



Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

Notes:

(1) For years in which the Conditions of Employment Survey (i.e. 2013, 2015 and 2017) is not conducted, data on flexible work arrangements are obtained from a MOM Supplementary Survey.

(2) "At least 1 formal FWA" refers to establishments offering at least one type of formal FWA, i.e. part-time work, flexi-time/staggered hours, formal tele-working, homeworking, job sharing and compressed work week.

(3) "At least 1 ad-hoc FWA" refers to establishments offering at least one type of ad-hoc FWA, i.e. unplanned time-off and ad-hoc tele-working.

3.6 Due to the efforts of companies in offering FWAs, more employees had access to FWAs. In firms that had at least 1 formal FWA, the proportion of employees increased from 70% in 2017 to 72.0% in 2018. In firms that provided at least 1 ad-hoc FWA, the proportion of employees also increased, from 81% in 2017 to 87% in 2018.

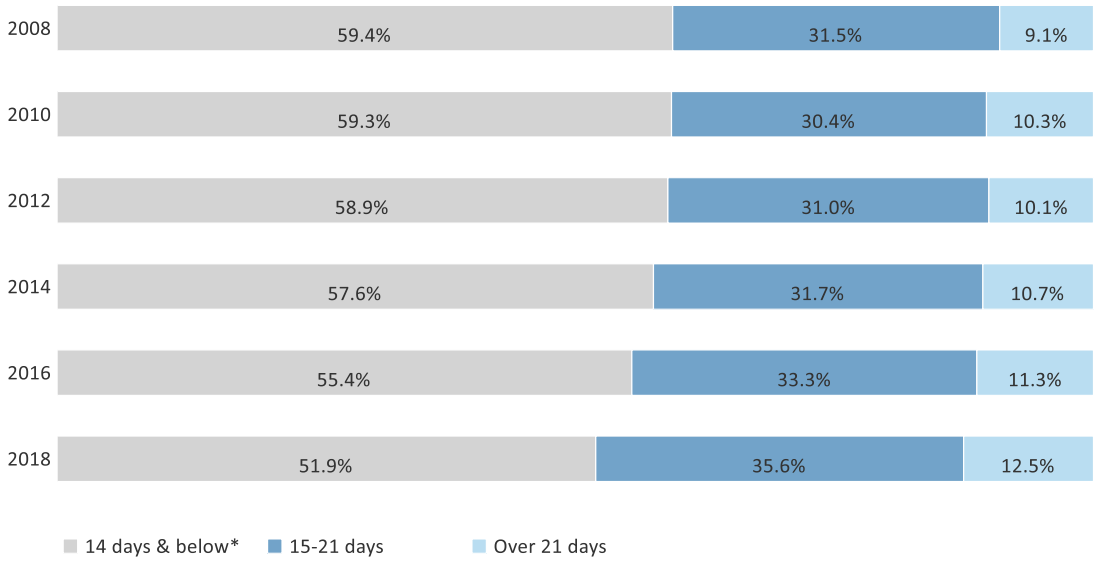
3.7 To identify the practices companies can put in place to maximise the benefits of their FWA provision efforts, a Wilcoxon Rank Sum Test was used (Details in Annex C). The results showed that the adoption of FWAs by employees was largely influenced by the presence of at least one senior management championing work-life arrangements, having a system in place to manage work-life arrangements requests be it through informal or formal means, as well as providing training on work-life arrangements for supervisors and/or employees. These three factors can encourage employees to take up FWAs offered by their companies.

4. Annual Leave Entitlement

More firms are moving toward at least 15 days of annual leave.

4.1 Minimum entitlement in days of paid annual leave ranked high (2nd) in its impact on resignation rate as having sufficient breaks from work is intrinsic to employees' well-being. The proportion of employees on less than 15 days of annual leave also played a major role in firms' resignation rate (3rd). Companies can sustain competitiveness by pre-empting resignations that are within their control via the provision of an adequate number of annual leaves — this allows employees to rejuvenate and work at their best condition while being satisfied with their entitlements and by extension, their workplace.

Chart 5: Distribution of Full-time Employees by Annual Leave Entitlement, 2008 to 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

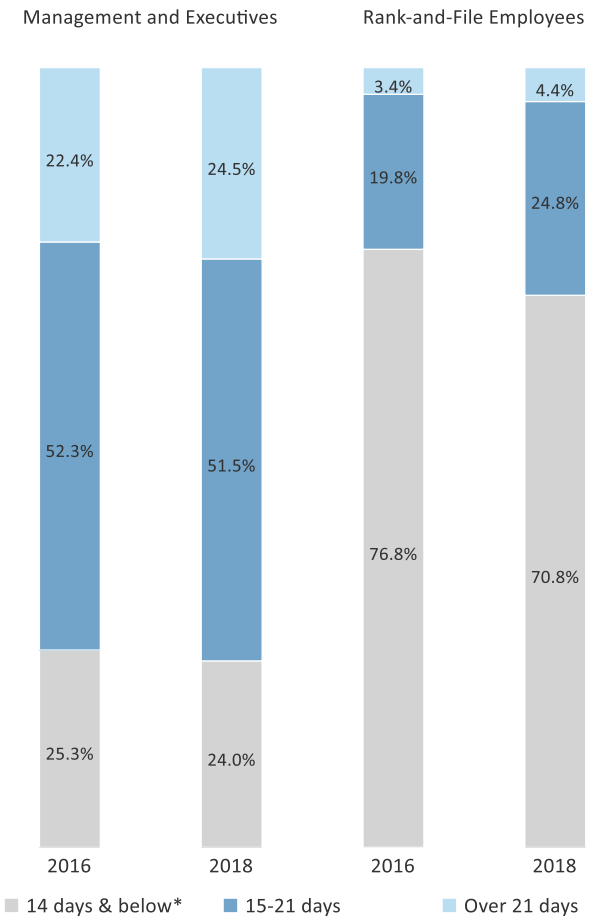
Notes:

(1) *Employees who have leave entitlement of "14 Days and below" include those who were not entitled to a fixed number of paid annual leave days.

(2) Data may not add up to 100% due to rounding.

4.2 In 2018, more firms placed employees on at least 15 days of annual leave. The share of full-time employees who were entitled to at least 15 days of paid annual leave increased to 48% from 45% in 2016, keeping a stronghold of its upward trend. Correspondingly, the proportion of employees given 14 days and below was on a consistent decline from 2014 onwards, with 2018 marking the biggest fall (-3.5%).

Chart 6: Proportion of Full-time Employees by Annual Leave Entitlement and Type of Employee, 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

Notes:

(1) *Employees who have leave entitlement of "14 Days and below" include those who were not entitled to a fixed number of paid annual leave days.

(2) Data may not add up to 100% due to rounding.

4.3 A higher proportion of management and executives (M&Es) enjoyed better leave benefits than rank-and-file (RAF). Three in four M&Es were entitled to 15 days & over of paid annual leave, while this entitlement only applied to three in ten RAF.

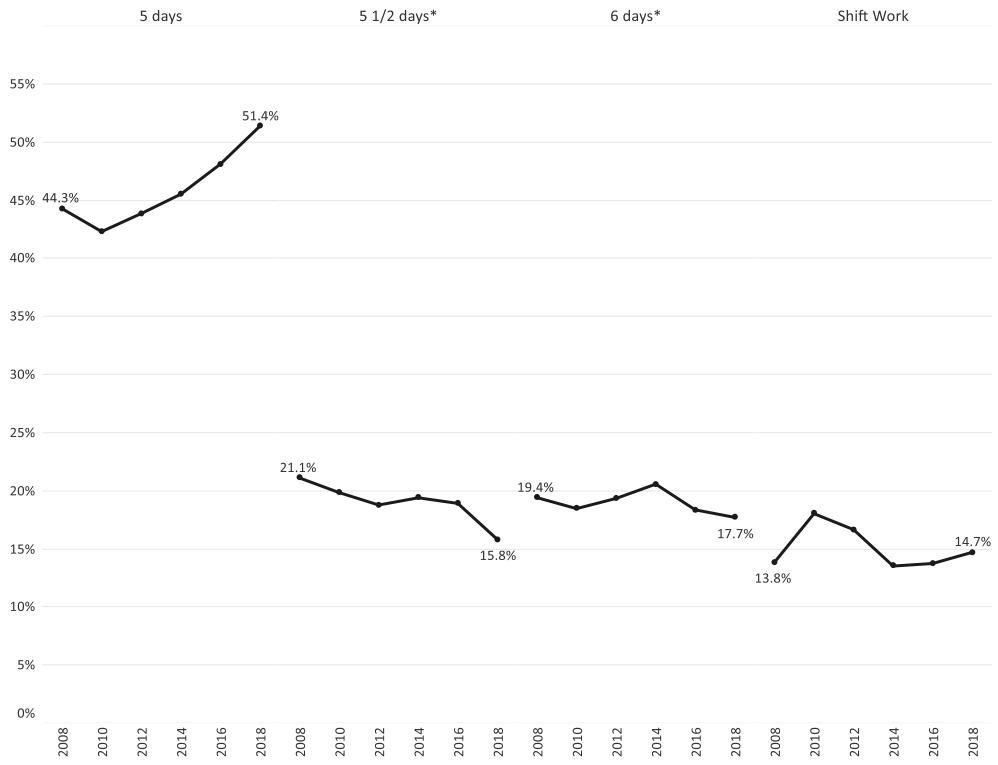
4.4 However, over the years, more firms offered 15 days & over of annual leave to RAF employees. The proportion of RAF employees entitled to at least 15 days of annual leave went up from 23% in 2016 to 29% in 2018, with 15-21 days of annual leave experiencing an increase across all broad sectors.

5. Work-Week Pattern

More employees on 5-day work week even across all industries.

5.1 Employees working more than 5 days were more likely to contribute to firms' resignation rate, as having a high proportion of employees placed on more than 5-day work week was ranked 4th in its impact on the resignation rate. Although work-week pattern is contingent on business operations, making adjustments to accommodate employees' needs can lower staff turnover.

Chart 7: Proportion of Full-time Employees by Work-Week Pattern, 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

Notes:
(1) Data may not add up to 100% as irregular work-week patterns including work-week of less than 5 days are not shown.
(2) *Includes those with periodic Sat off – e.g. off on a Sat on alternate week/ once in three weeks/ once a month.

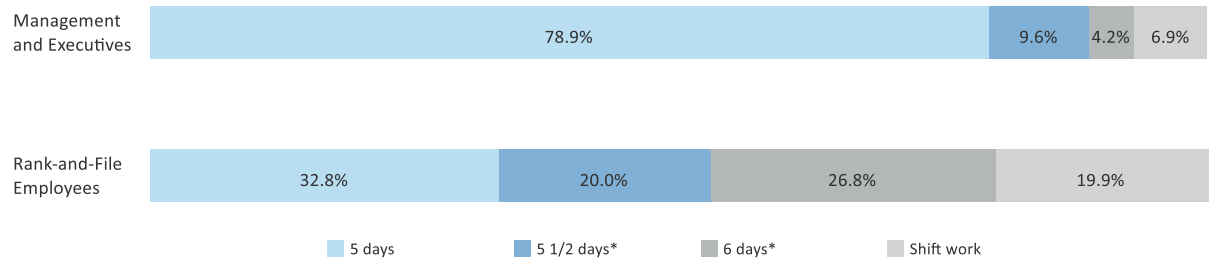
5.2 Over the past years, firms have actively taken into account employees' needs as the proportion of employees on a 5-day work week observed a steep upward trend since 2012. In 2018, an additional 3.3% of full-time employees were on a 5-day work week arrangement. Furthermore, this addition was contributed by all broad sectors, with *services* experiencing the greatest increase (+2.0%).

5.3 With more firms adjusting their workplace practices to accommodate employees' needs, this occasioned the fall in the proportion of employees on 5½-day and 6-day work week. 2018 saw the steepest decline in the proportion of employees on a 5½-day work week (-3.1%), as compared to past years.

5.4 However, the proportion of employees on shift work increased slightly by 1%. *Manufacturing* sector led the increase by 1.3%, specifically *electronic, computer & optical products* (+4.6%), *other manufacturing industries* (+3.3%), and *petroleum, chemical & pharmaceutical products* (+0.6%). The maintenance and operation of plants, and other manufacturing activities, would typically require a 24-hour rotation through shift work. While more firms are becoming progressive, work-week patterns are still subject to the type of industries and business operations.

5.5 As such, the 5-day work arrangement was a commonplace in *information & communications*, *financial & insurance services*, and *professional services* due to the higher share of M&Es and the need for firms to be globally attractive (see Chart 8). A 5½-day or 6-day work-week was more common in *construction*. In industries that provided round-the-clock services, such as *accommodation*, shift work was more common.

Chart 8: Proportion of Full-time Employees by Work-Week Pattern and Type of Employee, 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

Notes:
(1) Data may not add up to 100% as irregular work-week patterns including work-week of less than 5 days are not shown.
(2) *Includes those with periodic Sat off – e.g. off on a Sat on alternate week/ once in three weeks/ once a month.

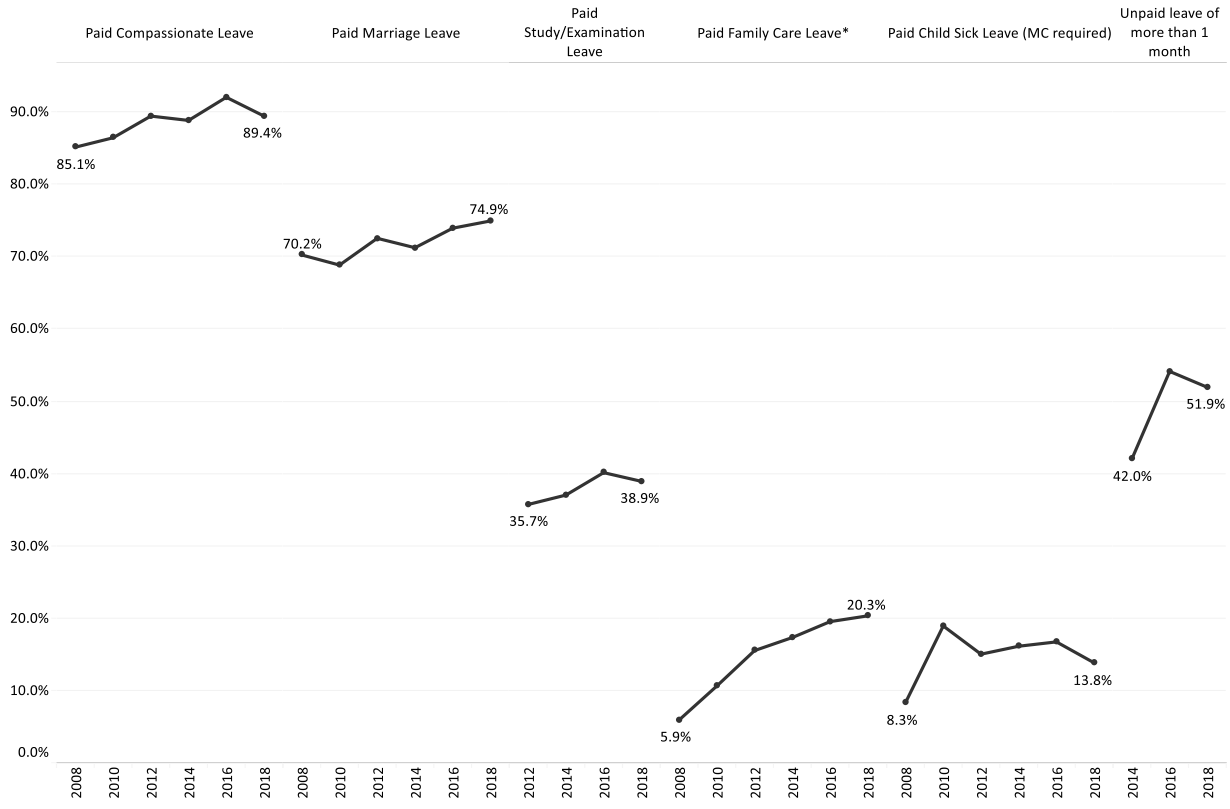
6. Non-statutory Leave

More establishments offered marriage leave and family care leave benefits beyond statutory requirements.

6.1 The number of non-statutory leave an employee is entitled to ranked 5th. This suggests that offering non-statutory leave, and in greater variety, may help to reduce the resignation rate. Employees are less inclined to be dissatisfied with firms that actively take steps to accommodate employees' needs by providing them with leave benefits beyond what is mandatory.

6.2 While firms were more progressive with the provision of FWA, annual leave entitlement, and work-week pattern, the proportion of firms offering at least 1 non-statutory leave remained unchanged at 96% in 2018. Nevertheless, most firms offered leave benefits beyond statutory requirements.

Chart 9: Proportion of Establishments That Provided Non-Statutory Leave by Type, 2018



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

Notes:

(1) *Paid family care leave refers to paid leave granted to employees for taking care of their family members or to accompany them for medical appointment when they are sick or when the main caregiver is not available.

6.3 Among the different leave benefits, compassionate leave (89%) and marriage leave (75%) remained the most commonly offered (see Chart 9). In most industries, the nature of non-statutory leave offered corresponded with the age profile of their employees. For instance, industries that had more mature employees as their fixed capital, such as *cleaning & landscaping*, were less likely to offer marriage leave and study/examination leave.

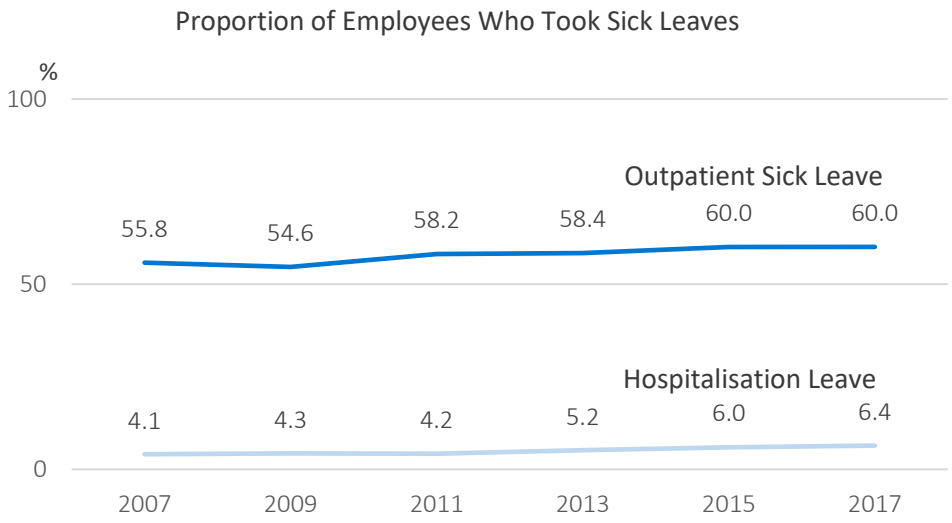
6.4 Reflecting our ageing population, and the changing profile and demographics of employees, the provision of family care leave (e.g. taking care of ageing parents) and marriage leave benefits increased. At the same time, decreases were seen in the provision of other types of non-statutory leave benefits as companies need to adjust the type of non-statutory leave they offer to ensure the benefits are applicable and relevant to their employees' needs.

7. Sickness Absenteeism

Outpatient sick leave trend held steady while hospitalization leave continued to trend up.

7.1 The average number of outpatient sick leave taken by absentees at work ranked 6th on its impact on resignation rate, lowest among the other common types of work practices. Other variables related to sick leave ranked even lower (10th and below). Although sickness absence does not directly cause resignation, as it is affected by a multitude of factors such as flu season, the severity of illness, and an individual's immune system, high sickness absence can be signs of burnout and implies a stressful workplace. When employees' well-being is compromised, this can increase the likelihood of resignation.

Chart 10: Sickness Absenteeism, 2007 to 2017



Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

7.2 From 2011 to 2015, outpatient sickness absence had gentle and subtle increases. However, in 2017, the proportion of employees who took outpatient sick leave held steady at 60% from 2015 (see Chart 10). Their average number of outpatient leave taken only increased by a marginal 0.3, from 4.8 days to 5.1 days. This stabilisation could partly be a result of healthy living initiatives, e.g. step trackers, and a reflection of the continuous efforts of firms and the government in endorsing progressive workplace practices over the years. While external factors such as influenza cannot be avoided, providing flexibility, increasing the number of annual leaves, and reducing the number of working days per week can help to improve the general well-being of employees.

7.3 Meanwhile, the proportion of employees who took hospitalization leave continued to trend up. It rose from 6.0% in 2015 to 6.4% in 2017 and the average number of hospitalization leave taken per absentee increased from 14.2 days in 2016 to 14.9 days in 2017. The duration of absence due to hospitalization was likely influenced by external factors such as the varying severity of medical conditions and ailments.

8. Concluding Remarks

8.1 The study of various workplace practices with firms' resignation rate showed that offering flexible work-life arrangements, increasing the number of annual leave, reducing work-day per week, and increasing the number of non-statutory leave can help companies lower turnover. Over the years, more firms are taking into account employees' needs by adopting progressive workplace practices to help employees cope with family commitments and achieve work-life balance.

Annex A

SURVEY COVERAGE & METHODOLOGY

Introduction

The *Conditions of Employment Survey, 2018* was conducted by the Manpower Research and Statistics Department of the Ministry of Manpower under the Statistics Act (Chapter 317). The survey was conducted from 27 June 2018 to 2 September 2018.

Objective

The survey was conducted to study the general employment conditions and workplace practices covering flexible work arrangements, non-statutory family-friendly leave, annual leave entitlement, work-week pattern and sickness absenteeism.

Coverage

The survey covered private sector establishments each with at least 25 employees and the public sector comprising government ministries, organs of state and statutory boards. A total of 3,700 establishments employing 1,301,400 employees responded to the survey, yielding a response rate of 91.4%.

The results were weighted to reflect the population of private sector establishments with at least 25 employees by using expansion factors based on sampling fraction.

Methodology

The survey was conducted using mail questionnaires. Respondents could submit their returns online, by post, email or fax, with clarifications made over the phone.

Reference Period

Most of the information provided in the survey returns was based on the establishments' practices as at 30 June 2018, except for information on sickness absenteeism which was based on data for calendar year 2017.

Data Collected

Establishments were asked to provide information pertaining to the following topics:

- Flexible work arrangements
- Non-statutory family-friendly leave
- Annual leave entitlement
- Work-week pattern
- Sickness absenteeism

Classification

The industries of the surveyed establishments were classified according to the Singapore Standard Industrial Classification (SSIC) 2015.

Concepts And Definitions

Management and executives	:	These refer to employees who hold managerial and supervisory responsibilities. They may or may not have substantial influence over the hiring, firing, promotion, transfer, reward or discipline of employees. Also, they may or may not have access to confidential information.
Rank-and-file employees	:	These refer to employees who are in the technical, clerical, sales, service, craftsmen, production, transport, cleaning and related positions. They are not employees in managerial or executive positions.
Full-time employees	:	These refer to employment where the normal hours of work are at least 35 hours a week.
Annual leave entitlement	:	This refers to the leave entitlement of full-time employees for a year of service. For employees on probation, their annual leave is reported based on the entitlement after their probation period.
Sickness absenteeism	:	This refers to the actual sick leave taken, regardless of whether it is paid or unpaid.

Paid family care leave	:	This refers to paid leave granted to employees for taking care of their family members (e.g. parents, step parents, parents-in-law, children, spouse) or to accompany them for medical appointment when they are sick or when the main caregiver is not available.
Part-time work	:	This refers to total working hours of less than 35 hours in a week. This work arrangement includes those who work half-days or only some days per week but excludes workers who work 'on and off' and temporary employees who work the normal hours.
Flexi-time	:	This 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 office.
Staggered hours	:	This 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).
Tele-working	:	This 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	:	This is an arrangement where employees undertake work mainly in their homes without using information and communication technologies. Such jobs usually involved 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	:	This 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 their and their employers' circumstances) on an ongoing, regular basis.
Compressed work week	:	This 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.

RELIABILITY OF DATA

In a sample survey, inferences about the target population are drawn from the data collected from the sample. Errors due to extension of the conclusions based on one sample to the entire population are known as sampling errors. The sampling error of an estimate is the extent of variation between the estimated value obtained from a sample and the true value from the population. Factors influencing the sampling error include the sample size, the sample design, method of estimation, the variability of the population and the characteristics studied.

A common measure of the sampling error of an estimate is its standard error, which is a measure of the variation among the estimates derived from all possible samples. An alternative measure is the relative standard error of an estimate which indicates the standard error relative to the magnitude of the estimate. A sample estimate and an estimate of its standard error can be used to construct an interval that will, at specified levels of confidence, include true estimate. By statistical convention, the confidence level has been set at 95 percent.

Estimates of the sampling variability of selected indicators are as follows:

		Estimate (%)	Standard Error (%-points)	Relative Standard Error (%)	95% Confidence Interval (%)	
					Lower	Upper
Distribution of Establishments by [1], [2]						
Flexible Work Arrangements (FWA)	Offered at least one formal FWA	53.1	0.9	1.7	51.3	54.9
	Offered at least one ad-hoc FWA	84.1	0.7	0.8	82.7	85.5
Distribution of Employees by [1]						
Flexible Work Arrangements (FWA)[2]	Working in establishment offering at least one formal FWA	72.0	0.1	0.1	71.8	72.1
	Working in establishment offering at least one ad-hoc FWA	87.2	0.0	0.0	87.1	87.2
Annual Leave Entitlement[3]	Over 21 Days	12.5	0.1	1.0	12.3	12.8
	15 to 21 Days	35.6	0.3	0.7	35.0	36.1
	14 Days & Below	51.9	0.3	0.5	51.4	52.5
Work-Week Pattern[3]	5 Days	51.4	0.3	0.6	50.7	52.0
	5½ Days[4]	15.8	0.3	2.0	15.2	16.4
	6 Days[4]	17.7	0.3	1.7	17.1	18.3
	Shift Work	14.7	0.2	1.0	14.4	15.0
Sickness Absenteeism	Outpatient Sick Leave	60.0	0.3	0.4	59.5	60.6
	Hospitalisation Leave	6.4	0.1	1.0	6.3	6.5

Notes:

(1) Data pertain to private sector establishments 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) Data pertain to full-time employees.

(4) Includes periodic Sat off – e.g.off on a Sat on alternate week/ once in three weeks/ once a month.

Annex B

Table B1: Proportion of Establishments Offering Formal Flexible Work Arrangements, June 2018

Percent

SSIC 2015	Total	Part-time Work	Flexi-hours/ Staggered Hours	Formal Tele-working	Compressed Work Week	Job Sharing	Homeworking
OVERALL (PUBLIC & PRIVATE SECTORS)	**53.1**	**38.5**	**29.3**	**8.4**	**3.1**	**1.8**	**1.1**
BY INDUSTRY (PRIVATE SECTOR)							
MANUFACTURING	**42.7**	**28.9**	**21.9**	**5.4**	**1.7**	**1.1**	**1.2**
Food, Beverages & Tobacco	51.6	39.1	25.4	3.1	-	2.7	0.8
Paper/ Rubber/ Plastic Products & Printing	47.2	35.7	20.1	4.5	-	-	2.5
Petroleum, Chemical & Pharmaceutical Products	57.2	39.5	32.9	5.3	1.3	-	-
Fabricated Metal Products, Machinery & Equipment	40.1	29.0	17.4	4.0	1.3	1.3	1.3
Electronic, Computer & Optical Products	60.3	35.3	40.4	14.7	1.9	1.3	-
Transport Equipment	38.6	19.9	21.8	6.8	4.4	1.5	1.1
Other Manufacturing Industries	28.2	20.6	15.8	4.8	1.0	-	1.7
CONSTRUCTION	**32.0**	**17.4**	**19.1**	**1.7**	**2.9**	**2.6**	**1.6**
SERVICES	**62.8**	**47.9**	**34.1**	**10.7**	**3.5**	**1.6**	**1.0**
WHOLESALE AND RETAIL TRADE	51.9	36.2	27.2	7.3	2.5	0.6	0.7
Wholesale Trade	47.1	29.9	26.9	8.1	1.6	0.6	0.6
Retail Trade	73.7	64.2	28.6	3.6	6.4	0.5	1.3
TRANSPORTATION AND STORAGE	49.2	34.1	30.3	7.3	2.6	0.7	0.1
Land Transport & Supporting Services	52.0	41.9	23.5	10.1	3.9	2.8	0.6
Water Transport & Supporting Services	58.9	36.8	39.5	5.9	2.7	-	-
Air Transport & Supporting Services	s	s	s	s	s	s	s
Other Transport & Storage Services	39.8	27.0	25.7	5.9	1.0	-	-
ACCOMMODATION AND FOOD SERVICES	75.5	65.5	36.8	7.6	6.5	2.5	1.6
Accommodation	78.5	57.9	55.1	1.9	8.4	-	1.9
Food & Beverage Services	75.2	66.3	34.8	8.2	6.3	2.8	1.5
INFORMATION AND COMMUNICATIONS	66.0	38.9	45.7	21.7	1.1	3.3	-
Telecommunications, Broadcasting & Publishing	77.2	51.8	52.6	24.6	3.5	5.3	-
IT & Other Information Services	61.0	33.1	42.5	20.5	-	2.4	-
FINANCIAL AND INSURANCE SERVICES	65.1	50.4	43.8	20.4	6.6	3.8	0.2
Financial Services	62.8	48.2	41.7	22.1	6.3	3.9	0.3
Insurance Services	75.6	60.5	53.5	12.8	8.1	3.5	-
REAL ESTATE SERVICES	64.2	57.9	26.8	13.2	5.8	7.4	2.6
PROFESSIONAL SERVICES	59.8	35.7	41.0	18.5	4.2	1.0	1.5
Legal, Accounting & Management Services	70.8	42.9	48.9	21.3	5.0	0.3	-
Architectural & Engineering Services	52.7	32.9	32.9	17.0	5.1	2.0	4.0
Other Professional Services	50.3	26.0	40.1	15.3	0.6	0.6	-
ADMINISTRATIVE AND SUPPORT SERVICES	66.1	52.6	26.0	9.8	2.1	1.7	1.5
Security & Investigation	77.4	62.1	16.1	8.9	2.4	4.0	-
Cleaning & Landscaping	67.2	61.6	19.8	4.2	2.8	0.8	-
Other Administrative & Support Services	60.6	39.7	36.1	16.1	1.2	1.8	3.6
COMMUNITY, SOCIAL AND PERSONAL SERVICES	78.3	69.1	40.6	8.3	3.0	1.3	1.0
Education	86.3	75.7	44.7	7.5	4.4	0.4	-
Health & Social Services	91.0	85.4	51.9	9.7	3.4	3.0	2.2
Other Community, Social & Personal Services	69.5	59.2	33.9	8.0	2.2	0.8	0.8
***OTHERS**	**33.3**	**25.3**	**16.0**	**14.7**	**1.3**	**1.3**	**-**

Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Notes:

(1) Data pertain to permanent employees and employees on term contract of at least one year.
(2) 'Total' refers to establishments offering at least one type of formal FWA.
(3) Figures refer to establishments that offered the respective formal FWA as a proportion of all establishments.
(4) Data do not add up to 'total' as establishments can offer more than one formal FWA.
(5) '-': Nil or negligible.
(6) 's': Data suppressed due to small number of observations.

Table B2: Proportion of Establishments Offering Ad-hoc Flexible Work Arrangements, June 2018

Percent

SSIC 2015	Total	Unplanned Time-off	Ad-hoc Tele-working
OVERALL (PUBLIC & PRIVATE SECTORS)	**84.1**	**81.3**	**18.6**
BY INDUSTRY (PRIVATE SECTOR)			
MANUFACTURING	**80.7**	**78.1**	**15.9**
Food, Beverages & Tobacco	67.2	65.6	10.5
Paper/ Rubber/ Plastic Products & Printing	83.4	82.9	13.1
Petroleum, Chemical & Pharmaceutical Products	86.8	82.9	27.0
Fabricated Metal Products, Machinery & Equipment	76.6	74.1	13.0
Electronic, Computer & Optical Products	81.4	78.2	34.0
Transport Equipment	88.3	85.6	18.0
Other Manufacturing Industries	85.2	81.8	11.3
CONSTRUCTION	**81.7**	**80.6**	**8.7**
SERVICES	**85.7**	**82.2**	**21.7**
WHOLESALE AND RETAIL TRADE	83.4	80.2	19.9
Wholesale Trade	84.8	81.3	22.3
Retail Trade	77.1	75.0	9.5
TRANSPORTATION AND STORAGE	80.2	77.4	17.1
Land Transport & Supporting Services	77.1	73.2	17.9
Water Transport & Supporting Services	81.1	77.3	17.8
Air Transport & Supporting Services	s	s	s
Other Transport & Storage Services	81.3	79.3	15.8
ACCOMMODATION AND FOOD SERVICES	84.9	83.4	10.1
Accommodation	89.7	89.7	14.0
Food & Beverage Services	84.4	82.8	9.7
INFORMATION AND COMMUNICATIONS	89.1	83.4	48.4
Telecommunications, Broadcasting & Publishing	87.7	81.6	51.8
IT & Other Information Services	89.8	84.3	46.9
FINANCIAL AND INSURANCE SERVICES	92.1	88.7	43.0
Financial Services	93.5	89.8	42.4
Insurance Services	86.0	83.7	45.3
REAL ESTATE SERVICES	64.2	55.3	16.8
PROFESSIONAL SERVICES	91.2	85.6	34.3
Legal, Accounting & Management Services	95.0	84.5	45.5
Architectural & Engineering Services	86.4	84.1	19.3
Other Professional Services	92.7	91.0	40.1
ADMINISTRATIVE AND SUPPORT SERVICES	84.7	81.8	14.9
Security & Investigation	82.3	80.6	11.3
Cleaning & Landscaping	85.0	83.3	5.1
Other Administrative & Support Services	85.4	80.6	26.6
COMMUNITY, SOCIAL AND PERSONAL SERVICES	90.1	87.3	17.2
Education	96.9	96.5	22.6
Health & Social Services	94.4	91.8	13.1
Other Community, Social & Personal Services	85.6	81.7	16.9
***OTHERS**	**90.7**	**89.3**	**21.3**

Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Notes:

(1) Data pertain to permanent employees and employees on term contract of at least one year.
(2) 'Total' refers to establishments offering at least one type of ad-hoc FWA.
(3) Figures refer to establishments that offered the respective ad-hoc FWA as a proportion of all establishments.
(4) Data do not add up to 'total' as establishments can offer more than one ad-hoc FWA.
(5) 's': Data suppressed due to small number of observations.

Table B3: Distribution of Full-time Employees by Annual Leave Entitlement, June 2018

Percent

SSIC 2015	Total	Over 21 Days	15 to 21 Days	14 Days & Below
OVERALL (PUBLIC & PRIVATE SECTORS)	**100.0**	**12.5**	**35.6**	**51.9**
BY TYPE OF EMPLOYEES				
Management & Executives	100.0	24.5	51.5	24.0
Rank & File	100.0	4.4	24.8	70.8
BY INDUSTRY (PRIVATE SECTOR)				
MANUFACTURING	**100.0**	**4.3**	**39.7**	**56.0**
Food, Beverages & Tobacco	100.0	4.2	23.8	72.0
Paper/ Rubber/ Plastic Products & Printing	100.0	1.5	35.5	63.0
Petroleum, Chemical & Pharmaceutical Products	100.0	21.2	58.2	20.6
Fabricated Metal Products, Machinery & Equipment	100.0	1.9	31.7	66.4
Electronic, Computer & Optical Products	100.0	4.3	51.4	44.2
Transport Equipment	100.0	1.9	40.4	57.7
Other Manufacturing Industries	100.0	2.1	30.1	67.8
CONSTRUCTION	**100.0**	**0.8**	**7.7**	**91.4**
SERVICES	**100.0**	**15.9**	**39.0**	**45.0**
WHOLESALE AND RETAIL TRADE	100.0	7.0	45.0	48.1
Wholesale Trade	100.0	6.9	49.4	43.7
Retail Trade	100.0	7.2	33.2	59.7
TRANSPORTATION AND STORAGE	100.0	11.5	41.2	47.3
Land Transport & Supporting Services	100.0	3.0	38.2	58.8
Water Transport & Supporting Services	100.0	10.5	46.3	43.2
Air Transport & Supporting Services	s	s	s	s
Other Transport & Storage Services	100.0	5.3	34.4	60.3
ACCOMMODATION AND FOOD SERVICES	100.0	1.7	15.1	83.2
Accommodation	100.0	6.0	34.0	60.0
Food & Beverage Services	100.0	0.4	9.1	90.5
INFORMATION AND COMMUNICATIONS	100.0	9.8	58.6	31.6
Telecommunications, Broadcasting & Publishing	100.0	10.7	67.8	21.5
IT & Other Information Services	100.0	9.3	53.4	37.3
FINANCIAL AND INSURANCE SERVICES	100.0	58.1	36.7	5.2
Financial Services	100.0	63.1	32.3	4.6
Insurance Services	100.0	16.6	73.7	9.7
REAL ESTATE SERVICES	100.0	3.7	28.1	68.2
PROFESSIONAL SERVICES	100.0	12.8	56.5	30.7
Legal, Accounting & Management Services	100.0	17.5	66.7	15.8
Architectural & Engineering Services	100.0	6.4	39.6	54.0
Other Professional Services	100.0	13.9	66.1	20.1
ADMINISTRATIVE AND SUPPORT SERVICES	100.0	2.0	13.3	84.7
Security & Investigation	100.0	0.3	3.7	96.0
Cleaning & Landscaping	100.0	0.2	2.7	97.1
Other Administrative & Support Services	100.0	5.8	35.1	59.1
COMMUNITY, SOCIAL AND PERSONAL SERVICES	100.0	22.4	42.9	34.7
Education	100.0	26.7	40.1	33.3
Health & Social Services	100.0	32.2	47.2	20.6
Other Community, Social & Personal Services	100.0	3.3	38.1	58.6
***OTHERS**	**100.0**	**11.9**	**41.0**	**47.1**

Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Notes:
(1) "14 Days and Below" includes employees who were not entitled to a fixed number of paid annual leave days.
(2) Data may not add up to 100% due to rounding.
(3) 's': Data suppressed due to small number of observations.

Table B4: Proportion of Establishments That Provided Non-Statutory Leave by Type, June 2018

Percent

SSIC 2015	Compassionate Leave	Marriage Leave	Unpaid Leave Of More Than 1 Month	Study/ Examination Leave	Childcare Sick Leave (MC Required)	Family Care Leave
OVERALL (PUBLIC & PRIVATE SECTORS)	**89.4**	**74.9**	**51.9**	**38.9**	**13.8**	**20.3**
BY INDUSTRY (PRIVATE SECTOR)						
MANUFACTURING	**89.6**	**75.2**	**54.5**	**36.8**	**12.5**	**15.0**
Food, Beverages & Tobacco	92.6	78.1	44.1	23.8	18.4	19.5
Paper/ Rubber/ Plastic Products & Printing	97.5	76.4	43.2	29.6	6.0	15.6
Petroleum, Chemical & Pharmaceutical Products	100.0	96.7	34.2	75.7	11.2	25.0
Fabricated Metal Products, Machinery & Equipment	92.4	75.2	53.0	35.3	10.2	12.5
Electronic, Computer & Optical Products	100.0	93.6	55.1	48.7	15.4	23.7
Transport Equipment	72.0	59.7	75.8	30.7	16.7	14.2
Other Manufacturing Industries	91.4	75.9	50.9	40.2	10.3	8.6
CONSTRUCTION	**77.7**	**60.7**	**56.4**	**28.4**	**15.4**	**18.3**
SERVICES	**93.3**	**79.3**	**49.2**	**42.6**	**12.9**	**21.7**
WHOLESALE AND RETAIL TRADE	95.4	86.5	43.7	37.7	9.2	15.0
Wholesale Trade	95.1	87.1	42.7	40.3	8.4	15.1
Retail Trade	96.6	83.8	47.9	26.0	12.4	14.2
TRANSPORTATION AND STORAGE	95.4	83.4	42.2	45.4	6.7	18.2
Land Transport & Supporting Services	90.5	73.7	50.3	41.9	14.5	26.3
Water Transport & Supporting Services	97.8	97.3	33.5	57.3	3.2	19.5
Air Transport & Supporting Services	s	s	s	s	s	s
Other Transport & Storage Services	96.7	80.6	42.1	44.1	3.6	13.5
ACCOMMODATION AND FOOD SERVICES	85.8	67.0	47.5	27.9	19.2	18.6
Accommodation	100.0	86.0	49.5	61.7	14.0	24.3
Food & Beverage Services	84.3	64.9	47.3	24.2	19.8	18.0
INFORMATION AND COMMUNICATIONS	94.3	87.5	60.9	48.4	13.3	36.4
Telecommunications, Broadcasting & Publishing	94.7	95.6	61.4	60.5	11.4	42.1
IT & Other Information Services	94.1	83.9	60.6	42.9	14.2	33.9
FINANCIAL AND INSURANCE SERVICES	98.5	88.3	60.4	70.0	9.1	34.0
Financial Services	98.2	89.6	62.8	66.4	10.4	33.9
Insurance Services	100.0	82.6	50.0	86.0	3.5	34.9
REAL ESTATE SERVICES	95.3	80.0	47.4	48.9	11.1	14.7
PROFESSIONAL SERVICES	95.1	76.7	58.0	53.3	11.3	21.6
Legal, Accounting & Management Services	97.1	80.8	59.2	63.9	5.8	23.2
Architectural & Engineering Services	90.4	66.9	56.7	40.8	12.5	15.9
Other Professional Services	100.0	87.6	58.2	55.4	20.9	29.9
ADMINISTRATIVE AND SUPPORT SERVICES	91.8	65.9	50.7	34.7	15.5	20.2
Security & Investigation	93.5	65.3	39.5	22.6	25.8	22.6
Cleaning & Landscaping	88.1	50.8	47.7	25.1	20.3	19.2
Other Administrative & Support Services	94.9	82.1	57.9	49.3	6.6	20.3
COMMUNITY, SOCIAL AND PERSONAL SERVICES	91.7	80.2	48.9	47.1	19.5	32.7
Education	92.9	79.2	53.5	56.2	29.6	31.4
Health & Social Services	97.4	92.9	63.4	67.2	26.1	44.0
Other Community, Social & Personal Services	88.6	74.7	40.5	34.6	12.5	28.0
***OTHERS**	**92.0**	**84.0**	**57.3**	**36.0**	**12.0**	**29.3**

Source: Conditions of Employment Survey, Manpower Research & Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Notes:

(1) Data pertain to permanent employees and employees on term contract of at least one year.

(2) 's': Data suppressed due to small number of observations.

Table B5: Distribution of Full-time Employees by Work-week Pattern, June 2018

Percent

SSIC 2015	Total	5 Days	5½ Days^	6 Days^	Shift Work	Others
OVERALL (PUBLIC & PRIVATE SECTORS)	**100.0**	**51.4**	**15.8**	**17.7**	**14.7**	**0.4**
BY TYPE OF EMPLOYEES						
Management & Executives	100.0	78.9	9.6	4.2	6.9	0.4
Rank & File	100.0	32.8	20.0	26.8	19.9	0.4
BY INDUSTRY (PRIVATE SECTOR)						
MANUFACTURING	**100.0**	**54.6**	**14.8**	**8.5**	**21.7**	**0.4**
Food, Beverages & Tobacco	100.0	29.9	19.1	37.4	12.7	0.8
Paper/ Rubber/ Plastic Products & Printing	100.0	57.1	17.7	13.2	11.9	-
Petroleum, Chemical & Pharmaceutical Products	100.0	71.1	1.4	1.2	25.5	0.8
Fabricated Metal Products, Machinery & Equipment	100.0	56.8	25.4	9.8	7.9	0.2
Electronic, Computer & Optical Products	100.0	52.1	0.5	0.3	46.9	0.2
Transport Equipment	100.0	59.4	21.1	7.0	11.8	0.6
Other Manufacturing Industries	100.0	48.3	15.5	10.0	25.7	0.5
CONSTRUCTION	**100.0**	**12.8**	**32.8**	**52.4**	**1.8**	**0.3**
SERVICES	**100.0**	**54.6**	**14.2**	**15.0**	**15.8**	**0.5**
WHOLESALE AND RETAIL TRADE	100.0	57.4	13.4	18.6	9.1	1.5
Wholesale Trade	100.0	64.7	14.0	12.1	7.5	1.6
Retail Trade	100.0	38.1	11.9	35.7	13.1	1.2
TRANSPORTATION AND STORAGE	100.0	38.6	18.2	11.5	31.2	0.5
Land Transport & Supporting Services	100.0	25.2	19.0	33.5	22.2	0.1
Water Transport & Supporting Services	100.0	49.0	6.5	1.9	41.3	1.2
Air Transport & Supporting Services	s	s	s	s	s	s
Other Transport & Storage Services	100.0	51.0	35.9	5.5	7.5	0.2
ACCOMMODATION AND FOOD SERVICES	100.0	22.1	9.8	37.9	29.6	0.6
Accommodation	100.0	38.7	5.7	11.6	43.8	0.2
Food & Beverage Services	100.0	17.2	11.1	45.7	25.4	0.7
INFORMATION AND COMMUNICATIONS	100.0	89.1	5.7	0.7	4.4	0.1
Telecommunications, Broadcasting & Publishing	100.0	78.3	9.1	1.7	10.5	0.4
IT & Other Information Services	100.0	95.2	3.8	0.1	0.9	-
FINANCIAL AND INSURANCE SERVICES	100.0	91.1	4.4	0.5	3.7	0.3
Financial Services	100.0	90.1	4.9	0.6	4.1	0.3
Insurance Services	100.0	99.6	-	-	-	0.3
REAL ESTATE SERVICES	100.0	35.3	27.6	25.2	11.9	-
PROFESSIONAL SERVICES	100.0	79.5	13.1	3.4	3.9	0.1
Legal, Accounting & Management Services	100.0	85.4	6.7	1.9	6.0	0.1
Architectural & Engineering Services	100.0	67.3	24.8	6.1	1.6	0.2
Other Professional Services	100.0	89.8	5.0	2.0	3.1	0.1
ADMINISTRATIVE AND SUPPORT SERVICES	100.0	30.0	18.8	34.1	16.8	0.3
Security & Investigation	100.0	9.6	5.5	42.4	41.7	0.8
Cleaning & Landscaping	100.0	16.1	29.7	41.0	12.9	0.3
Other Administrative & Support Services	100.0	63.6	10.7	18.6	7.0	-
COMMUNITY, SOCIAL AND PERSONAL SERVICES	100.0	45.4	18.8	10.8	24.7	0.3
Education	100.0	81.9	14.2	2.3	1.5	0.2
Health & Social Services	100.0	34.4	25.7	8.1	31.6	0.2
Other Community, Social & Personal Services	100.0	34.8	11.3	21.8	31.6	0.4
***OTHERS**	**100.0**	**55.3**	**19.4**	**20.1**	**5.2**	**-**

Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Notes:

(1) “Others” refer to irregular work-week patterns which include work-week of less than 5 days.

(2) ^ Includes those with periodic Sat off – e.g. off on a Sat on alternate week/ once in three weeks/ once a month.

(3) Data may not add up to 100% due to rounding.

(4) ‘s’: Data suppressed due to small number of observations.

Table B6: Proportion of Employees That Took Sick Leave and The Average Days of Sick Leave Taken, 2017

Percent

SSIC 2015	Outpatient Sick Leave			Hospitalisation Leave		
	Proportion of employees who took outpatient sick leave (%)	Average no. of outpatient sick leave taken per outpatient sick absentee (Days)	Average no. of outpatient sick leave taken per employee (Days)	Proportion of employees who took hospitalisation leave (%)	Average no. of hospitalisation leave taken per hospitalisation sick absentee (Days)	Average no. of hospitalisation leave taken per employee (Days)
OVERALL (PUBLIC & PRIVATE SECTORS)	**60.0**	**5.1**	**3.0**	**6.4**	**14.9**	**1.0**
BY TYPE OF EMPLOYEES						
Management & Executives	62.6	4.8	3.0	7.0	12.8	0.9
Rank & File	58.3	5.2	3.1	6.0	16.4	1.0
BY INDUSTRY (PRIVATE SECTOR)						
MANUFACTURING	**65.6**	**5.1**	**3.4**	**5.7**	**14.3**	**0.8**
Food, Beverages & Tobacco	49.2	4.6	2.3	3.7	16.7	0.6
Paper/ Rubber/ Plastic Products & Printing	70.1	5.0	3.5	6.9	12.6	0.9
Petroleum, Chemical & Pharmaceutical Products	61.9	5.1	3.2	6.8	12.2	0.8
Fabricated Metal Products, Machinery & Equipment	66.5	5.2	3.5	5.4	15.9	0.9
Electronic, Computer & Optical Products	71.2	5.4	3.9	5.4	12.6	0.7
Transport Equipment	63.0	4.7	3.0	6.2	13.8	0.9
Other Manufacturing Industries	69.3	5.2	3.6	5.6	17.6	1.0
CONSTRUCTION	**44.0**	**3.5**	**1.5**	**2.2**	**20.6**	**0.5**
SERVICES	**59.9**	**5.1**	**3.0**	**7.0**	**14.7**	**1.0**
WHOLESALE AND RETAIL TRADE	60.2	5.2	3.2	6.4	13.1	0.8
Wholesale Trade	62.0	5.1	3.1	6.4	11.9	0.8
Retail Trade	56.2	5.6	3.2	6.6	15.7	1.0
TRANSPORTATION AND STORAGE	66.3	5.6	3.7	8.2	18.7	1.5
Land Transport & Supporting Services	60.7	5.7	3.5	6.7	20.9	1.4
Water Transport & Supporting Services	64.3	5.4	3.5	6.7	21.4	1.4
Air Transport & Supporting Services	s	s	s	s	s	s
Other Transport & Storage Services	69.3	5.8	4.0	8.6	13.5	1.2
ACCOMMODATION AND FOOD SERVICES	41.6	4.1	1.7	6.0	12.1	0.7
Accommodation	65.9	5.0	3.3	19.7	8.9	1.7
Food & Beverage Services	35.2	3.7	1.3	2.4	18.8	0.5
INFORMATION AND COMMUNICATIONS	64.4	4.7	3.0	4.8	11.2	0.5
Telecommunications, Broadcasting & Publishing	62.2	4.6	2.8	5.6	11.9	0.7
IT & Other Information Services	66.0	4.7	3.1	4.1	10.6	0.4
FINANCIAL AND INSURANCE SERVICES	63.9	4.6	2.9	6.8	14.4	1.0
Financial Services	61.9	4.6	2.8	6.5	14.7	1.0
Insurance Services	81.1	4.7	3.8	8.9	12.4	1.1
REAL ESTATE SERVICES	57.9	5.0	2.9	5.5	16.6	0.9
PROFESSIONAL SERVICES	66.6	4.7	3.1	6.2	11.7	0.7
Legal, Accounting & Management Services	68.3	4.9	3.4	7.6	11.2	0.9
Architectural & Engineering Services	62.1	4.4	2.7	4.7	12.8	0.6
Other Professional Services	72.2	4.6	3.3	5.5	11.1	0.6
ADMINISTRATIVE AND SUPPORT SERVICES	46.6	4.6	2.1	5.5	16.4	0.9
Security & Investigation	41.4	4.0	1.7	8.2	10.6	0.9
Cleaning & Landscaping	39.7	4.4	1.7	4.5	17.5	0.8
Other Administrative & Support Services	61.3	5.1	3.1	5.2	21.9	1.1
COMMUNITY, SOCIAL AND PERSONAL SERVICES	65.2	5.7	3.7	9.6	15.2	1.5
Education	50.9	5.2	2.7	6.2	10.9	0.7
Health & Social Services	77.4	6.0	4.6	13.4	14.8	2.0
Other Community, Social & Personal Services	59.1	5.5	3.2	6.6	19.9	1.3
***OTHERS**	**70.3**	**6.4**	**4.5**	**7.3**	**17.0**	**1.2**

Source: Conditions of Employment Survey, Manpower Research and Statistics Department, MOM

* Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management

Note:
's': Data suppressed due to small number of observations.

Annex C

A. A Study on Workplace Practices and Employee Turnover

1 To study the factors influencing the resignation rate of a company, a total of 20 factors was constructed based on the survey responses gathered. These factors, which from here on would be referred to as independent variables, are related to the five main categories of work practices: 1) annual leave entitlements, 2) work-week patterns, 3) non-statutory leaves, 4) flexi-work arrangements, and 5) sickness leaves. (see table below for the full list of independent variables)

2 Due to differences in the scale of measurement as well as the number of categories of each independent variable, Brieman's original random forest method was proved to produce biased results where suboptimal predictor variables are artificially preferred.

3 To circumvent point 2, a recursive partitioning method was used to model the relationship between the resignation rate (dependent variable) against the independent variables. These 20 independent variables were fitted using an unbiased conditional inference tree with subsampling without replacement.

4 Permutation importance was used over the mean decrease of Gini impurity with the latter favouring predictors with many categories during variable selection.

5 The top 6 independent variables from greatest to smallest degree of impact is shown below (1st being the greatest in impact):

Rank	Independent Variables
1	Proportion of total employees on work life arrangement schemes
2	Minimum entitlement in days for paid annual leave
3	Proportion of employees with <15 days of annual leave
4	Proportion of employees with >5 days of work
5	Number of non-statutory leaves offered
6	Average number of days of outpatient sick leave taken by employees who took outpatient sick leave

6 The results showed that the top 4 independent variables affecting the mean squared error upon it being randomly permutated are the "proportion of total employees on work-life arrangement schemes", "minimum entitlement in days for paid annual leave", "proportion of employees with <15 days of annual leave", and "proportion of employees with >5 days of work-week". This means that the top 3 work practices that played a key role in staff turnover were flexible work arrangements, annual leave entitlement, and work-week pattern. As such, the report was structured in descending order of the variable importance so as to allow firms to prioritise which work practices to focus on.

List of Independent Variables (not arranged in any order)	
Proportion of total employees on work life arrangement schemes	Minimum entitlement in days for paid annual leave
Proportion of employees with <15 days of annual leave	Proportion of employees with >5 days of work
Number of non-statutory leaves offered	Average number of days of outpatient sick leave taken by employees who took outpatient sick leave
Number of work life arrangements	Proportion of employees on outpatient sick leave
Minimum entitlement in days for family related leaves	Average number of days of hospitalisation leave taken by employees who took hospitalisation leave
Number of type of leave groups (i.e., annual Leave, medical related, family related) entitled from first day of employment	Proportion of total employees on work life related facilities/subsidies
Number of months before being entitled to paid family related leave	Minimum entitlement in days for medical related leave
Number of statutory leaves offered	Number of months before being entitled to paid medical related leave
Number of employees on unpaid leave	Number of months before being entitled to paid annual leave
Number of work life facilities/subsidies	Proportion of employees on inpatient sick leave

B. Wilcoxon Rank-sum Test: Practices that Can Encourage Employees to Take up Flexible Work Arrangements

1 Our variable of interest was the proportion of employees benefitting from work-life arrangements schemes. The sample frame was split into 3 sets of 2 distinct groups:

i. Those in companies that had a system in place for FWA requests versus those in companies that do not have.
ii. Those in companies that provided training to supervisors/employees on FWAs versus those in companies that do not provide training.
iii. Those in companies that had at least one senior management championing work-life arrangements versus those in companies that lacked the presence of at least one senior management to champion WLA.

For each variable, a nonparametric two-sided Wilcoxon rank-sum test was conducted.

2 The null hypothesis of the Wilcoxon Rank-sum test assumes that the distribution of A is the same as that of the distribution of B. This means that for each variable, the distribution of the proportion of employees on work-life arrangement schemes for companies that had system/training/championship against those that do not are the same. For each variable, since the p-value is <0.05, we reject the null hypothesis that the variables have no effect on the proportion of employees on work-life arrangement schemes.

FEEDBACK FORM

Report Title: Conditions of Employment 2018

1. How would you rate this report in terms of:

	Excellent	Good	Average	Poor
a) Relevance to your work	☐	☐	☐	☐
b) Providing useful insights on prevailing labour market trends/development	☐	☐	☐	☐
c) Ease of understanding	☐	☐	☐	☐

2. Which area(s) of the report do you find most useful? Please provide reasons.

_____

_____

3. How do you find the length of the report?

☐ Too detailed ☐ Just right ☐ Too brief

	Excellent	Good	Average	Poor
4. Overall, how would you rate this report?	☐	☐	☐	☐

5. What additional information (if any) would you like us to include in our future issues?

_____

_____

6. Any other comments or suggestions you wish to bring to our attention?

_____

_____

Thank you for your valuable feedback

Name of Officer : _____ Designation : _____

Department : _____

Please return the above to:

Director
Manpower Research and Statistics Department
Ministry of Manpower
18 Havelock Road #05-01
Singapore 059764
Republic of Singapore
Fax : 6317 1804
Email : mom_rsd@mom.gov.sg

OTHER RELEASES





UPCOMING ...

Labour Market Advance Release 2018	31/01/2019
Labour Force in Singapore 2018	31/01/2019
Labour Market 2018	14/03/2019
Job Vacancies 2018	19/03/2019

PAST ...

Growing Alongside Our Ageing Workforce	31/12/2018
Labour Market Third Quarter 2018	13/12/2018
Statistics On Hours Worked	13/12/2018
What The Gender Pay Gap Is Not Telling You	13/12/2018
Labour Force in Singapore Advance Release 2018	29/11/2018
Retrenchment Benefits 2017	19/09/2018
Labour Market Second Quarter 2018	13/09/2018
About Singapore's Unemployment Rate	13/09/2018
Singapore Yearbook of Manpower Statistics 2018	28/06/2018
Manpower Statistics in Brief 2018	20/06/2018
Labour Market First Quarter 2018	13/06/2018
Seasonally Adjusting Unemployment Time Series	13/06/2018

More releases are available online @ https://stats.mom.gov.sg
You may also subscribe to our email alert for the latest releases