

# **Yearbook of Statistics Singapore**

2016



# YEARBOOK OF STATISTICS SINGAPORE, 2016 ISSN 0583-3655

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#### **PREFACE**

The "Yearbook of Statistics Singapore, 2016" is the forty-ninth edition of an annual flagship publication by the Singapore Department of Statistics (DOS). It provides a comprehensive and current statistical record of the key socio-demographic and economic characteristics of Singapore. Through this publication, users are able to gain a snapshot of the Singapore economy and population based on the latest available information.

Improvements are continually made to the Yearbook to enhance its value to users. New data series on topics of interest are added as and when appropriate. The Yearbook currently contains a chapter on infographics and 264 tables organised into 28 chapters.

In addition to the Yearbook, the Department disseminates official statistics on Singapore through a range of electronic and mobile services. These include the Statistics Singapore website, SingStat mobile application and SingStat Express. Users may download softcopies of statistical publications via the SingStat website for free. For users with specific data requirements, the Department's Statistical Information Services offer personalised assistance on a cost-recovery basis.

The data series in the Yearbook are compiled by DOS as well as other government ministries and departments, statutory boards and private organisations. I would like to extend my deep appreciation to all the organisations that have contributed to the success of this publication. I look forward to your continued readership and support.

Wong Wee Kim Chief Statistician Singapore

Jul 2016

#### **Our Vision**

A National Statistical System of Quality, Integrity and Expertise.

#### **Our Mission**

We Provide Reliable, Relevant and Timely Statistics to Support Singapore's Social and Economic Development.

## **Our Guiding Principles**

**Professionalism** We adhere to professional ethics and **& Expertise** proficiently produce quality statistics that

proficiently produce quality statistics that comply with international concepts and

best practices.

**Relevance** We constantly innovate our processes and

produce statistics that meet users' needs.

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**Confidentiality** We protect the confidentiality of

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earliest possible date while maintaining

data quality.

**Cost** We use resources effectively, minimising

**Effectiveness** respondent burden and leveraging on

administrative data.

#### Yearbook of Statistics Singapore, 2016

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#### **NOTATIONS**

na not available

nec not elsewhere classified
nil or negligible
not significant

#### **NOTES**

The Yearbook of Statistics contains statistics that are the most recent available at the time of its preparation.

Numbers may not add up to the totals due to rounding.

Some statistics, particularly those for the most recent time periods, are provisional and may be subject to revision in later issues.

Values are shown in Singapore dollars (unless otherwise stated).

#### NOTES ON CHANGES AND REVISIONS

To maintain currency and relevance of the Yearbook of Statistics Singapore, new series are added and existing series are replaced. In this edition, changes have been incorporated in the following tables:

#### **Addition of New Tables**

| Table 13.10 | Indices of Unit Labour Cost by Industry  |
|-------------|--|
| Table 17.13 | Public Transport Operation and Ridership |
| Table 25.6  | Senior Activity Centres                  |

#### **Addition of New Series**

| Table 7.2  | Singapore International Investment Position |
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| Table 22.1 | Consumer Price Index                        |
| Table 24.4 | Registered Health Personnel                 |
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#### **Replacement of Existing Series**

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| Table 27.2 | Electricity Generation and Consumption                       |
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#### **Other Changes**

Selected data series have been discontinued in the following tables:

| Table 24.10 | Student Medical Check-up                    |
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| Table 24.11 | Common Health Problems of Students Examined |
| Table 25.5  | Comcare Schemes                             |
| Table 26.2  | Volunteers                                  |
| Table 26.9  | The Arts                                    |

The following tables (in previous edition) have been discontinued:

| Table 15.2  | Selected Averages and Ratios of Services            |
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| Table 24.2  | Licensed Hawkers Under JTC Corporation              |
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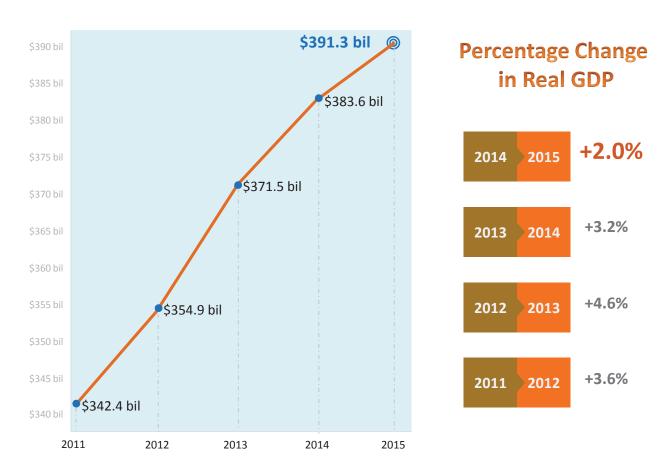
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# Key Indicators-Infographics

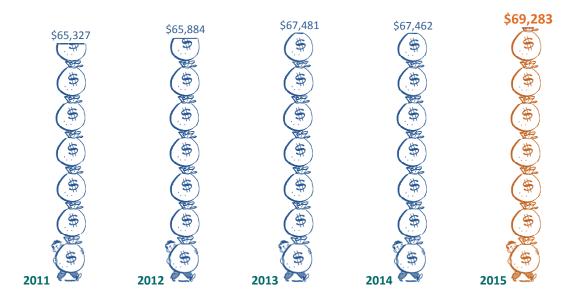
#### **National Income**



#### Gross Domestic Product (GDP) at 2010 Market Prices



Per Capita Gross National Income at Current Market Prices



#### **Inflation, Labour and Business Costs**



#### Consumer Price Index Year-on-Year Change

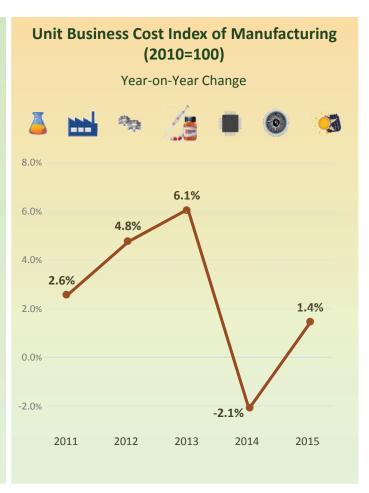






<sup>\*</sup> Excludes the components of "Accommodation" and "Private Road Transport".

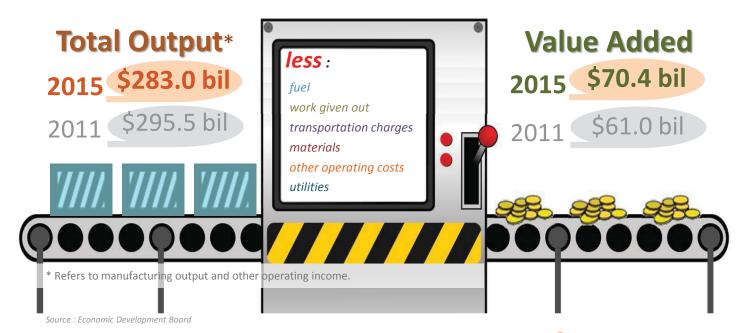
#### **Unit Labour Cost Index (2010=100)** Year-on-Year Change Overall Manufacturing Economy LI REFEE + 2.8 % 2015 +6.3 % + 2.3 % + 3.2 % 2014 + 1.4 % + 3.4 % 2013 + 3.0 % + 2.9 % 2012 - 2.1 % + 1.6 % 2011



#### **Manufacturing and Building & Construction**



# **Manufacturing**



# **Building Commencement**



**Private Residential Properties**\*\* (Units)

2015 8,082 2011 20,736



#### Office Space Retail Space

(Thousand Square Metres of Gross Floor Area)

 11
 2015
 225

 254
 2011
 285



#### Factory Space Warehouse Space

(Thousand Square Metres of Gross Floor Area)

| 1,081 | 2015 | 686 | Z |
|-------|------|-----|---|
| 1,477 | 2011 | 447 |   |

 $<sup>\</sup>ensuremath{^{**}}$  Excludes hostels, HDB flats, tenement houses, parsonages and Executive Condominiums.

Source : Urban Redevelopment Authority, JTC Corporation

#### **International Trade and Tourism**



#### **Merchandise Trade**

\$884.1 bil in 2015



#### **Trade in Services**

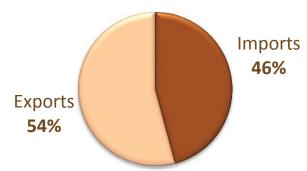
\$389.2 bil in 2015

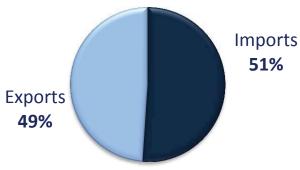


Source: International Enterprise Singapore

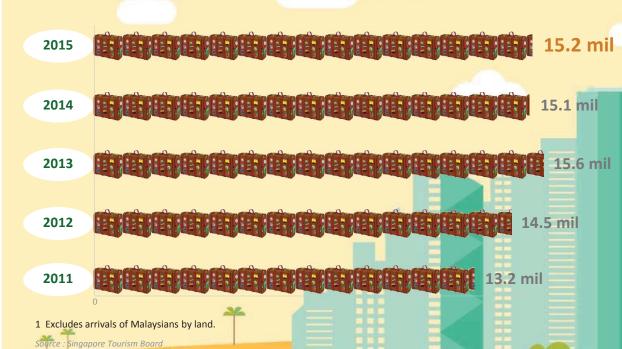








# **International Visitor Arrivals 1**



#### **Transport**



# 1,853 Thousand Tonnes of

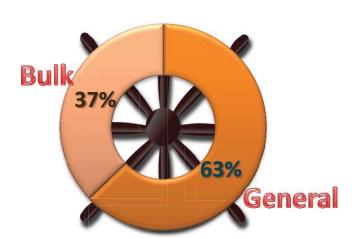
# Air Cargo <sup>1</sup> Handled



Source : Civil Aviation Authority of Singapore

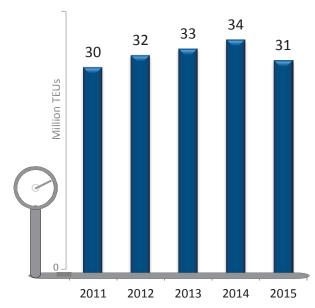
**576** Million Tonnes of





# **Container throughput**





1 Refers to Changi Airport only. Data exclude passenger baggage, diplomatic cargo and aircraft stores.

Source : Maritime and Port Authority of Singapore

#### Info-communications and Media

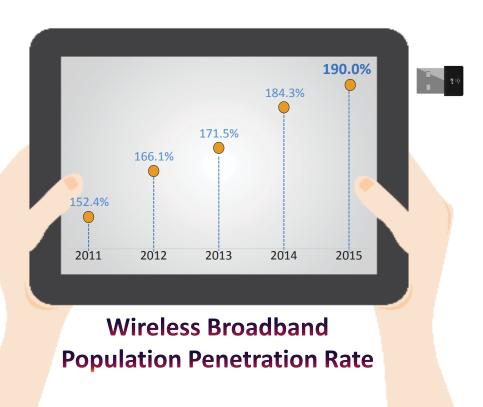


Mobile
Population
Penetration Rate

# RESIDENTIAL WIRED BROADBAND HOUSEHOLD PENETRATION RATE

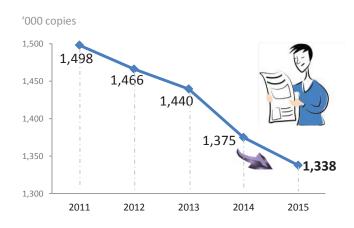
148.4% in 2015

102.8 % in 2015



Source: Infocomm Development Authority of Singapore

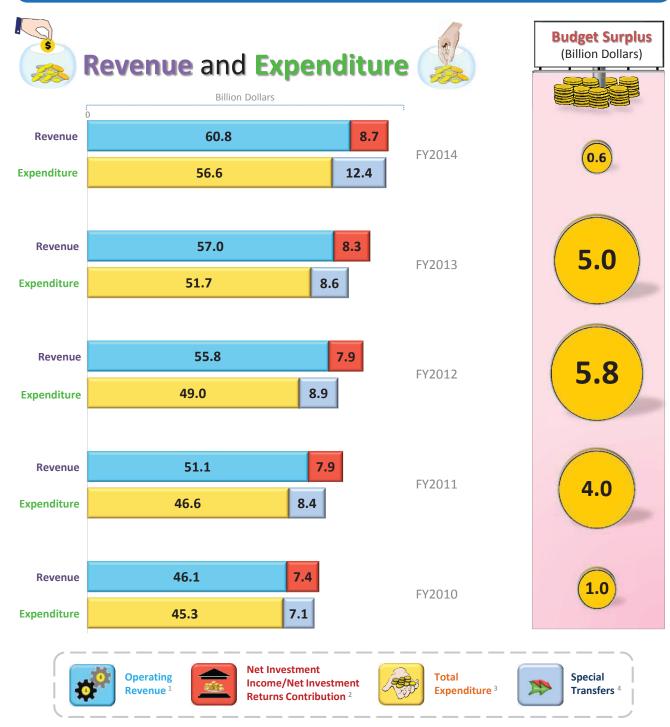




Source : Singapore Press Holdings Ltd, Mediacorp Press Ltd

#### **Government Finance**





Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year.

- 1 Operating Revenue excludes the repayment of loans and advances, interest income, investment income and capital receipts.
- 2 Net Investment Returns Contribution (NIRC) is the sum of: (1) up to 50% of the expected long-term real return on the relevant assets specified in the Constitution; and (2) up to 50% of the net investment income on the remaining assets.
- 3 Total Expenditure comprises Operating Expenditure and Development Expenditure. Development Expenditure excludes loans to statutory boards, industrial and commercial enterprises and land-related expenditure items.
- 4 Special Transfers refer to discretionary transfers made by the Government and these include one-off direct transfers to businesses and households, as well as top-ups to endowment and trust funds created by the Government for specific expenditure objectives.

#### **Finance**





# **Household Sector Balance Sheet 2015**

| ASSETS                      | Billion Dollars |
|-----------------------------|-----------------|
| Financial Assets            | 985.8           |
| Residential Property Assets | 833.5           |
| Total Assets                | 1,819.3         |
|                             |                 |

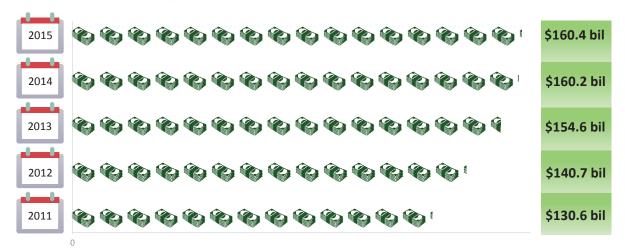
| LIABILITIES       | Billion Dollars |
|-------------------|-----------------|
| Mortgages         | 224.8           |
| Personal Loans    | 76.6            |
| Total Liabilities | 301.3           |
| NET WORTH         | Billion Dollars |
| Net Worth         | 1,518.0         |

Note: Data are non-seasonally adjusted.

Numbers may not add up due to rounding.



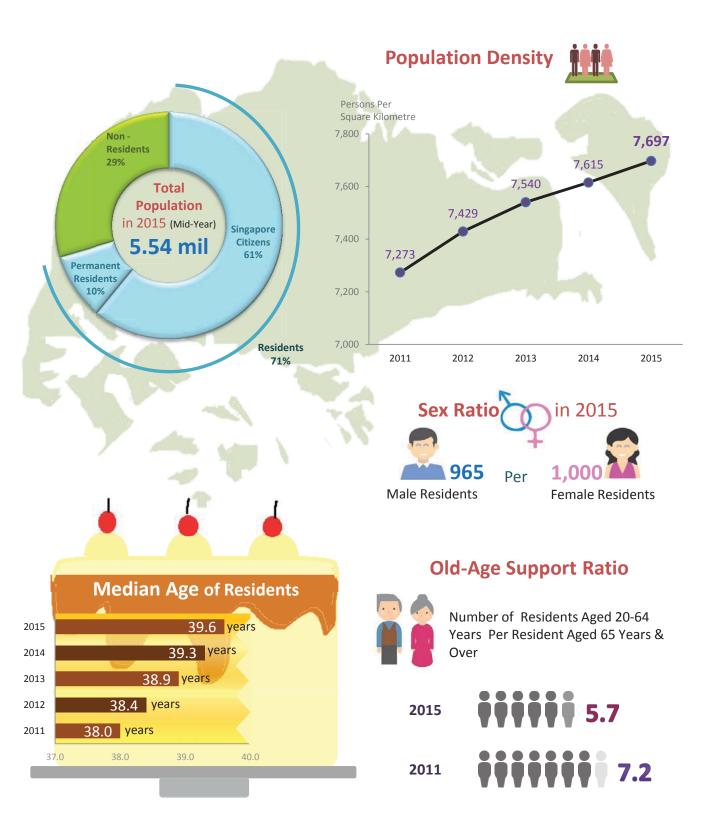
## **Money Supply, M1**



Source : Monetary Authority of Singapore

#### **Population and Land Area**



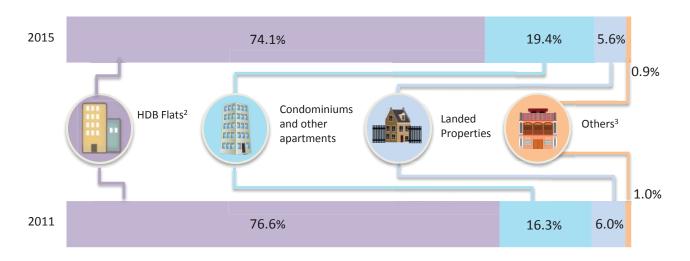


#### **Residential Dwellings**





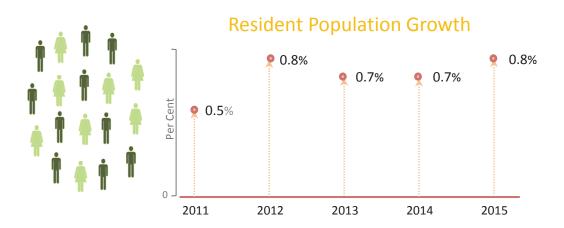
#### Residential Dwellings by Type 1



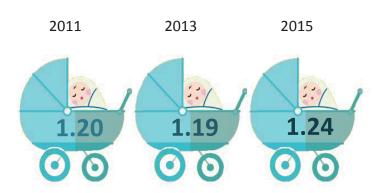
- 1 Data are based on the Singapore Standard Classification of Type of Dwelling. Excludes collective dwellings such as skilled nursing facilities, serviced apartments, school hostels and workers' dormitories etc.
- 2 Includes non-privatised Housing and Urban Development Corporation (HUDC) flats.
- 3 Includes other housing units such as shophouses and attap/zinc-roofed houses etc.

#### **Resident Population Growth and Vital Statistics**





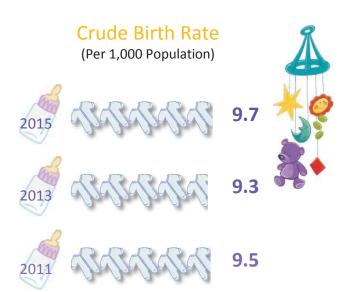
Total Fertility Rate (Per Female)



**Infant Mortality Rate** 

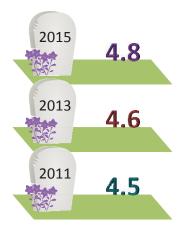
(Per 1,000 Live-Births)





## Crude Death Rate

(Per 1,000 Population)



## **Employment**



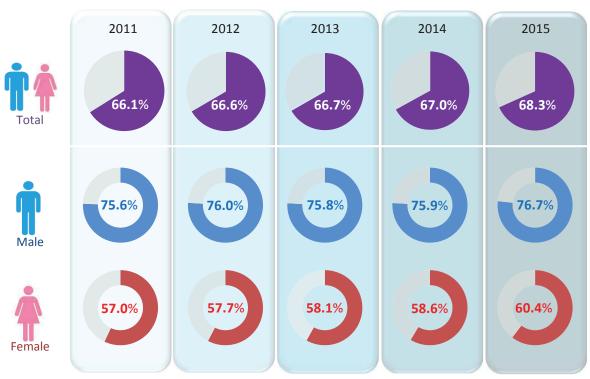




**Total Unemployment**  ${f Rate}\ ^1$  (Seasonally Adjusted in June) was about 2% per year between 2011-2015

# Participation

#### **Resident Labour Force Participation Rate** <sup>1</sup>

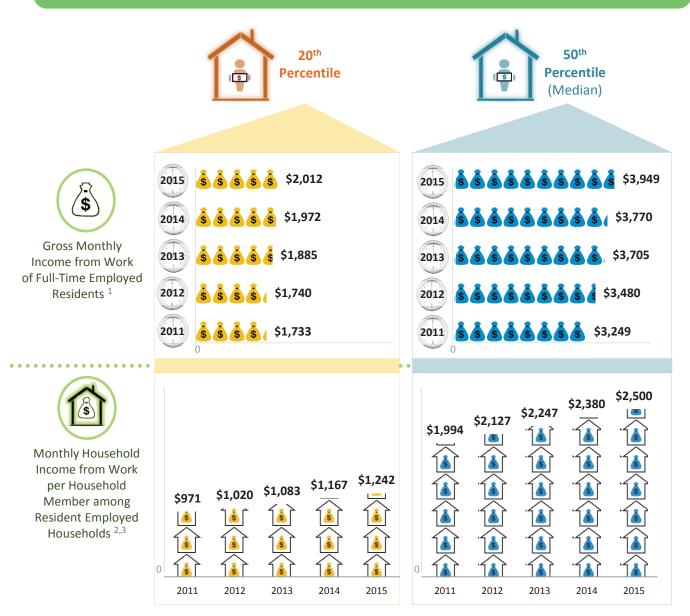


1 Refer to persons aged 15 years and over in June of the respective years.

Source: Comprehensive Labour Force Survey, Manpower Research & Statistical Department, Ministry of Manpower.

#### **Income From Work**





Note: Data are for mid-year. As the income data are captured from a sample survey, the income changes for the 20th percentile nearer the end of the income spectrum tend to be more volatile over shorter (e.g. year-on-year) than longer periods (e.g. 5 or 10 years).

Income from work includes employer CPF contributions.

- 1 Refers to income earned from employment. For employees, it refers to the gross wages or salaries before deduction of employee CPF 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. Data exclude full-time National Servicemen.

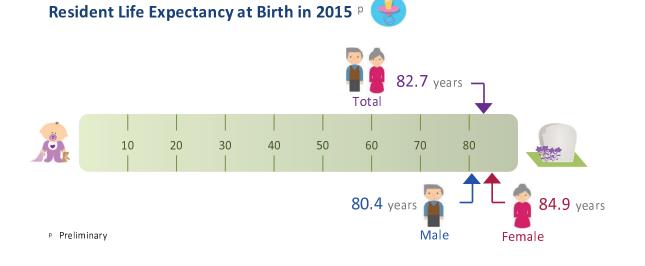
  Residents refer to Singapore citizens and permanent residents.
  - Full-time employment refers to employment where the normal hours of work is 35 hours or more in a week.
- 2 Refers to the household income from work divided by the total number of members in the household. For example, if there is one person in a household of four who is working, his income is divided by four to derive the income per household member.
- 3 A resident employed household refers to a household headed by a Singapore citizen or permanent resident and with at least one working person.

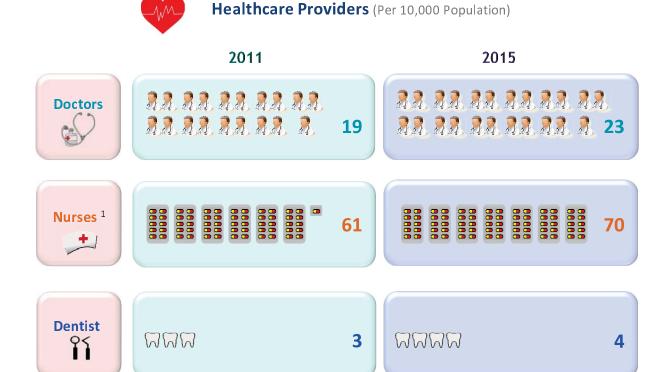
Sources:

Singapore Department of Statistics Comprehensive Labour Force Survey, Ministry of Manpower

#### Health





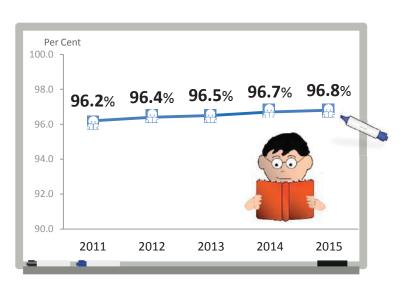


<sup>1</sup> Refers to registered and enrolled nurses, as well as registered midwives.

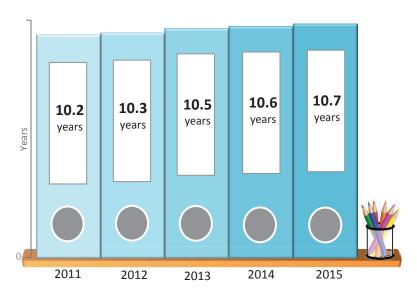
## **Education and Literacy**

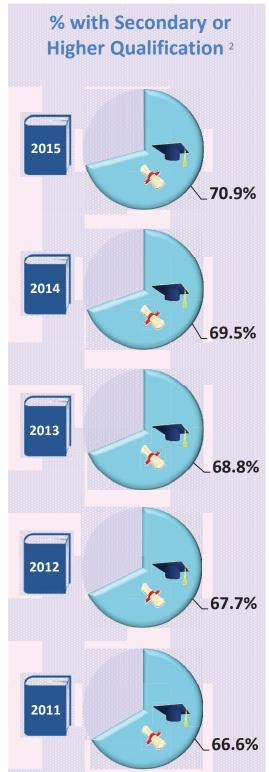


#### Literacy Rate 1



## Mean Years of Schooling <sup>2</sup>





- 1 Refers to resident population aged 15 years and over.
- 2 Refers to residents aged 25 years and over who are not attending educational institutions as full-time students. The data include those who are upgrading their qualifications through part-time courses while working.

## **Public Housing and Utilities Usage**



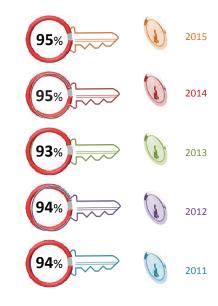


Total Number of Public Flats Managed 1 by Housing Development Board





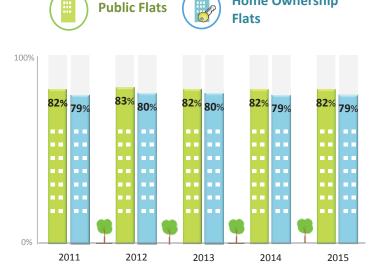
**Public Flats Home** Ownership<sup>2</sup>





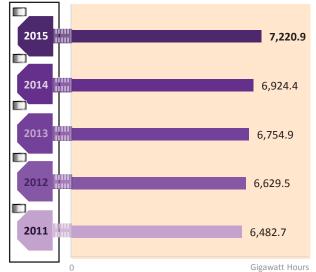
Resident Population <sup>3</sup> Living in Public Flats and Home Ownership Flats

**Home Ownership** 





**Household Electricity** Consumption



- 1 As at end of year.
- 2 Refers to percentage of sold flats over total units under management.
- 3 Data as at 31 March of each calendar year.

Sources: Housing Development Board Energy Market Authority

# 2



# Climate and Air Quality

### Geography

The Republic of Singapore is located between latitudes 1° 09'N and 1° 29'N and longitudes 103° 36'E and 104° 25'E.

The land area of Singapore is approximately 719.1 square kilometres as at end June 2015. This area comprises the mainland and other islands. The mainland measures 49 kilometres from east to west and 25 kilometres from north to south with a coastline of 195 kilometres. The figures are based on 2.515m High Water Mark cadastral survey boundaries.

Singapore can be geographically divided into three major areas – the central hilly area with heavy deposits of granite in Bukit Timah, Bukit Panjang, Bukit Mandai and Bukit Batok; the western undulating area comprising Mount Faber Ridge and Pasir Panjang Ridge; and the eastern coastal area consisting of alluvium and sediment stretches from Katong to Bedok and Changi.

### Climate

Singapore is situated near the equator and has a tropical climate, with abundant rainfall, high and uniform temperatures, and high humidity all year round. The average daily maximum and minimum temperatures are around 31°C and 24°C respectively. The relative humidity is usually around 60 per cent on dry afternoons but frequently exceeds 90 per cent in the early hours of the morning before sunrise. Although rain falls throughout the year, the wettest months are usually during the first part of the Northeast Monsoon season from November to January. The drier months are normally between April and September; however widespread heavy rain and gusty winds associated with Sumatra squalls typically occur during this time of the year.

### **Air Pollution**

The ambient air quality in Singapore is monitored by the National Environment Agency (NEA) through the Telemetric Air Quality Monitoring and Management System. The system comprises remote air monitoring stations linked to a Data Management System via dial-up telephone lines or wireless modems.

These stations monitor both ambient and roadside air quality. Automatic analysers and equipment are deployed at the stations to measure the concentrations of major air pollutants such as Sulphur Dioxide (SO2), Oxides of Nitrogen (NO<sub>x</sub>), Carbon Monoxide (CO), Ozone (O<sub>3</sub>) and Particulate Matter (PM<sub>10</sub> and  $PM_{2.5}$ ).

Since 1 April 2014, NEA has moved to a unified air quality reporting system which incorporates PM<sub>2.5</sub> into the Pollutant Standards Index (PSI). PSI now includes Sulphur Dioxide (SO<sub>2</sub>), Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), Nitrogen Dioxide (NO2), Carbon Monoxide (CO) and Ozone (O<sub>3</sub>).

Air quality in 2015 was affected by severe transboundary smoke haze in September and October, resulting in more days being classified as "Unhealthy" or worse on the PSI. In 2015, the air quality was 'Good' and 'Moderate' 87.5 per cent of the time, and 'Unhealthy' or worse 12.5 per cent of the time.

An annual summary of Singapore's air quality is available in the "Environmental Protection Division Annual Report", published by the NEA.

# 2.1 AIR TEMPERATURE AND SUNSHINE

|                                   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 201 |
|-----------------------------------|------|------|------|------|------|------|-----|
| Air Temperature in Degree Celsius |      |      |      |      |      |      |     |
| Means                             |      |      |      |      |      |      |     |
| Daily Maximum                     | 31.7 | 31.9 | 31.2 | 31.2 | 31.3 | 31.6 | 31. |
| Daily Minimum                     | 25.0 | 24.9 | 24.7 | 25.0 | 25.0 | 25.3 | 25. |
| Absolute Extremes                 |      |      |      |      |      |      |     |
| Maximum                           | 35.0 | 35.5 | 35.3 | 33.7 | 35.2 | 34.5 | 34. |
| Minimum                           | 21.8 | 21.7 | 21.4 | 21.1 | 20.9 | 21.1 | 21. |
| Bright Sunshine                   |      |      |      |      |      |      |     |
| Daily Mean Hours                  | 5.9  | 5.7  | 5.6  | 5.5  | 5.4  | 6.0  | 6.  |

Source: National Environment Agency

Note: Data are from Singapore's designated climate station at Changi.

# 2.2 RELATIVE HUMIDITY AND RAINFALL

|                                 | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015  |
|---------------------------------|---------|---------|---------|---------|---------|---------|-------|
| Minimum Relative Humidity       | 42      | 43      | 41      | 48      | 36      | 37      | 3     |
| 24 Hours Mean Relative Humidity |         |         |         |         |         |         |       |
| (Per Cent)                      | 82.4    | 82.9    | 84.6    | 83.5    | 81.7    | 78.5    | 76    |
| Rainfall                        |         |         |         |         |         |         |       |
| Total (mm)                      | 1,920.9 | 2,075.1 | 2,524.2 | 2,159.9 | 2,748.4 | 1,538.4 | 1,266 |
| Maximum in a Day (mm)           | 86.6    | 121.1   | 216.2   | 92.3    | 139.8   | 64.4    | 63    |
| Number of Rainy Days            | 166     | 178     | 188     | 191     | 206     | 152     | 12    |

Source: National Environment Agency

Note: Data are from Singapore's designated climate station at Changi.

2.3 AIR POLLUTION LEVELS

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|------|------|------|------|------|------|------|
| Sulphur Dioxide (μg / m <sup>3</sup> )             |      |      |      |      |      |      |      |
| (Annual mean)                                      | 9    | 11   | 10   | 13   | 14   | 12   | 12   |
| (Maximum 24-hour mean)                             | 93   | 104  | 80   | 98   | 75   | 83   | 75   |
| Nitrogen Dioxide (μg / m <sup>3</sup> )            |      |      |      |      |      |      |      |
| (Annual mean)                                      | 22   | 23   | 25   | 25   | 25   | 24   | 22   |
| (Maximum 1-hour mean)                              | 147  | 153  | 189  | 154  | 132  | 121  | 99   |
| PM 10 $(\mu g/m^3)$                                |      |      |      |      |      |      |      |
| (Annual mean)                                      | 29   | 26   | 27   | 29   | 31   | 30   | 37   |
| (99th percentile 24-hour mean)                     | 59   | 76   | 55   | 57   | 215  | 75   | 186  |
| PM2.5 ( $\mu$ g / m <sup>3</sup> )                 |      |      |      |      |      |      |      |
| (Annual mean)                                      | 19   | 17   | 17   | 19   | 20   | 18   | 24   |
|  |      |      |      |      |      |      |      |
| (99th percentile 24-hour mean)                     | 44   | 56   | 41   | 42   | 176  | 51   | 145  |
| Carbon Monoxide (mg / m <sup>3</sup> )             |      |      |      |      |      |      |      |
| (Maximum 8-hour mean)                              | 1.9  | 2.4  | 2.0  | 1.9  | 5.5  | 1.8  | 3.3  |
| (Maximum 1-hour mean)                              | 3.9  | 2.8  | 2.6  | 2.4  | 7.5  | 2.7  | 3.5  |
| Ozone (µg / m <sup>3</sup> ) (Maximum 8-hour mean) | 105  | 139  | 123  | 122  | 139  | 135  | 152  |

Source: National Environment Agency

Notes: Singapore's Air Quality Targets by 2020

Singapore Sustainable Blueprint Target: Sulphur Dioxide  $\leq 15~\mu\text{g/m}^3$  (annual mean)

World Health Organisation (WHO) Interim Target-2: Sulphur Dioxide ≤ 50 µg/m³ (24-hour mean)

WHO Air Quality Guideline: Nitrogen Dioxide  $\leq$  40  $\mu$ g/m<sup>3</sup> (annual mean)

 $\leq 200 \,\mu\text{g/m}^3 \,(1\text{-hour mean})$ 

WHO Air Quality Guideline: PM 10 (Particulate Matter  $\leq$  10 microns )  $\leq$  20  $\mu$ g/m<sup>3</sup> (annual mean)

 $\leq$  50 µg/m<sup>3</sup> (99th Percentile 24-hour mean)

Singapore Sustainable Blueprint Target: PM 2.5 (Particulate Matter  $\leq$  2.5 microns )  $\leq$  12  $\mu$ g/m<sup>3</sup> (annual mean)

WHO Interim Target-3: PM 2.5 (Particulate Matter  $\leq$  2.5 microns )  $\leq$  37.5  $\mu$ g/m³ (99th Percentile 24-hour mean)

WHO Air Quality Guideline: Carbon Monoxide ≤ 10 mg/m³ (8-hour mean)

 $\leq$  30 mg/m<sup>3</sup> (1-hour mean)

WHO Air Quality Guideline: Ozone  $\leq 100~\mu\text{g/m}^3$  (Maximum 8-hour mean)

 $PM10 \ and \ PM2.5 \ levels \ in \ 2013 \ and \ 2015 \ were \ affected \ by \ transboundary \ smoke \ haze \ from \ land \ and \ forest \ fires.$ 

# 3



# ന്ന് Population

### **Population Census**

Singapore's first census was undertaken in April 1871. Regular censuses were undertaken at ten-year intervals up to 1931. The Second World War delayed the next census until 1947. In the pre-war censuses, Singapore was included as part of the Straits Settlements and later as part of Malaya. Separate censuses for Singapore were carried out since 1947. The first post-independence census was conducted in 1970. Subsequently, censuses were undertaken at ten-year intervals in 1980, 1990, 2000 and 2010.

In the 1990 and earlier censuses, the population comprised Singapore citizens and permanent residents who were present and enumerated in Singapore on Census Day. Singapore citizens and permanent residents who were away for short periods of time during the census, as well as non-residents staying or working in Singapore were also included.

With the change to the register-based approach in 2000, the de jure concept was adopted. Under the de jure concept of "usual residence", Singapore residents (comprising Singapore citizens and permanent residents) with local addresses were included in the total population count. The non-resident population, comprising foreigners who were working, studying or living in Singapore but not granted permanent residence, was also included in the total population count. The transient population such as tourists and shortterm visitors was excluded. For the 2010 census, Singapore residents who were away from Singapore for a continuous period of 12 months or longer were also excluded.

Singapore conducted her first middecade mini-census (General Household Survey) in 1995. Subsequent General Household Surveys were conducted in 2005 and 2015.

### **Mid-Year Population Estimates**

Singapore residents refer to Singapore citizens and permanent residents. The

total population comprises Singapore residents and non-residents.

### **Births and Deaths**

The Registration of Births and Deaths Act (Cap 267) specifies that a birth must be registered within 42 days of the date of birth. Births registered after 42 days from occurrence are classified as late registrations. A birth registration after one year from the date of birth can only be effected with the written authority of the Registrar-General of Births and Deaths. Under the same Act, a death must be registered within three days of its occurrence. Still-births, which are classified separately from births and deaths, must be registered within 14 days of their occurrence.

Registration facilities for births and deaths are available at the Registry of Births and Deaths (RBD) and at designated government hospitals. Deaths and still-births can also be registered at the nearest Police Divisional Headquarter, Neighbourhood Police Centre or Neighbourhood Police Post. The registration system is comprehensive and the records of vital statistics are virtually complete.

Measures of natality and mortality include the crude birth and crude death rates. From 1980 onwards, these are respectively defined as the number of live-births and deaths of Singapore residents, per thousand mid-year resident population.

# Marriages

Registration of marriages is compulsory in Singapore. Civil marriages are marriages registered under the Women's Charter, 1961. Notices of such marriages have to be lodged with the Registrar of Marriages regardless of the venue of solemnisation.

Registration of Muslim marriages in Singapore became compulsory from 1 July 1909 when the Mohammadan Marriage Ordinance, 1908 (Ordinance No.XXV of 1908) was enacted. This Ordinance was subsequently

repealed and replaced by the Administration of Muslim Law Act, 1966.

### **Divorces and Annulments**

Statistics on divorces and annulments under the Women's Charter are obtained from records maintained by the Family Justice Courts.

For divorces under the Administration of Muslim Law Act, statistics are obtained from the register of divorces kept by the Syariah Court. The records on revocation of divorces are obtained from the Registry of Muslim Marriages.

Time-dependent variables, such as the duration of marriage and age of divorcees, are based on the date when Interim Judgement was made final for civil divorces, and the date of registration for Muslim divorces.

### **Definitions**

Age-specific fertility rate: Refers to the number of live-births to females in a particular age group, per thousand females in that age group during the period.

Total fertility rate (TFR): Refers to the average number of live-births each female would have during her reproductive years if she were to experience the age-specific fertility rates prevailing during the period. It is derived by aggregating the age-specific fertility rates of females in each of the reproductive ages for a specific year.

Gross reproduction rate: Refers to the average number of daughters each female would have during her reproductive years if she were to experience the age-specific fertility rates prevailing during the period.

Net reproduction rate: Refers to the average number of daughters each female would have during her reproductive years if she were to experience the age-specific fertility and mortality rates prevailing during the period. It is a refinement of the gross reproduction rate,

and is also the measure of replacement of population.

Life expectancy (at birth): Refers to the average number of additional years a newborn baby might expect to live, if he or she were to experience the age-specific mortality rates of the reference period throughout his or her lifetime.

Age-specific marriage rate: Refers to the number of marriages registered within a specific age group during the year, out of every thousand unmarried population in the same age group.

Age-specific divorce rate: Refers to the number of divorces and annulments granted within a specific age group during the year, out of every thousand married population in the same age group.

General marriage rate: Refers to the number of marriages registered among persons aged 15-49 years during the year, out of every thousand unmarried population in the same age group.

General divorce rate: Refers to the number of divorces and annulments granted to married persons aged 20 years and over during the year, out of every thousand married population in the same age group.

# **Other References**

Vital statistics on births and deaths are compiled and published quarterly in the "Singapore Demographic Bulletin" produced by RBD. RBD also publishes the annual "Report on Registration of Births and Deaths", which provides the demographic and socioeconomic characteristics of parents and characteristics of births, detailed causes of death, together with statistical tables and charts.

# 3 POPULATION (cont'd)

Complete life tables and key trends in life expectancies for the Singapore resident population are available in the annual statistical report "Complete Life Tables for Singapore Resident Population" published by the Singapore Department of Statistics (DOS).

Annual data on marriages and divorces are available in the report "<u>Statistics on Marriages and Divorces</u>" published by DOS. This publication analyses annual marriage trends and the socio-economic characteristics of grooms and brides, as well as provides insights into the nature of divorces and the socio-economic characteristics of divorcees.

Demographic statistics are available in the annual report "<u>Population Trends</u>" published by DOS. The publication comprises five sections, namely, 'Population', 'Households and Housing', 'Family Formation and Dissolution', 'Fertility' and 'Mortality'. Statistical analyses of Singapore's changing population profiles are also included in the publication.

# 3.1 POPULATION AND GROWTH RATE

|               |                               |           | Singapore Resident      | s                                |               |
|---------------|-------------------------------|-----------|-------------------------|----------------------------------|---------------|
| Year          | Total Population <sup>1</sup> | Total     | Singapore Citizens      | Singapore Permanent<br>Residents | Non-Residents |
|               |                               |           | Number as at June       | Residents                        |               |
| 1990 (Census) | 3,047,132                     | 2,735,868 | 2,623,736               | 112,132                          | 311,264       |
| 2000 (Census) | 4,027,887                     | 3,273,363 | 2,985,886               | 287,477                          | 754,524       |
| 2009          | 4,987,573                     | 3,733,876 | 3,200,693               | 533,183                          | 1,253,697     |
| 2010 (Census) | 5,076,732                     | 3,771,721 | 3,230,719               | 541,002                          | 1,305,011     |
| 2011          | 5,183,688                     | 3,789,251 | 3,257,228               | 532,023                          | 1,394,437     |
| 2012          | 5,312,437                     | 3,818,205 | 3,285,140               | 533,065                          | 1,494,232     |
| 2013          | 5,399,162                     | 3,844,751 | 3,313,507               | 531,244                          | 1,554,411     |
| 2014          | 5,469,724                     | 3,870,739 | 3,343,030               | 527,709                          | 1,598,985     |
| 2015          | 5,535,002                     | 3,902,690 | 3,375,023               | 527,667                          | 1,632,312     |
|               |                               | Aver      | age Annual Growth 2 (Pe | r Cent)                          |               |
| 1990 (Census) | 2.33                          | 1.7 3     | 1.7 3                   | 2.33                             | 9.0           |
| 2000 (Census) | 2.8                           | 1.8       | 1.3                     | 9.9                              | 9.3           |
| 2009          | 3.1                           | 2.5       | 1.1                     | 11.5                             | 4.8           |
| 2010 (Census) | 1.8                           | 1.0       | 0.9                     | 1.5                              | 4.1           |
| 2011          | 2.1                           | 0.5       | 0.8                     | -1.7                             | 6.9           |
| 2012          | 2.5                           | 0.8       | 0.9                     | 0.2                              | 7.2           |
| 2013          | 1.6                           | 0.7       | 0.9                     | -0.3                             | 4.0           |
| 2014          | 1.3                           | 0.7       | 0.9                     | -0.7                             | 2.9           |
| 2015          | 1.2                           | 0.8       | 1.0                     | -                                | 2.1           |

Note: Data from 2003 onwards exclude residents who have been away from Singapore for a continuous period of 12 months or longer as at the reference period.

<sup>1</sup> Total population comprises Singapore residents and non-residents. Resident population comprises Singapore citizens and permanent residents. Non-resident population comprises foreigners who were working, studying or living in Singapore but not granted permanent residence, excluding tourists and short-term visitors.

<sup>2</sup> For 1990 and 2000, growth rate refers to the annualised change over the last ten years. From 2009 onwards, growth rate refers to the change over the previous year.

<sup>3</sup> The growth rate is computed using population estimates based on de facto concept (i.e. the person is present in the country when enumerated at the reference period).

3.2 VITAL RATES

| Year | Rate of<br>Natural<br>Increase | Crude<br>Birth<br>Rate | Crude<br>Death<br>Rate | Infant<br>Mortality<br>Rate | Total<br>Fertility<br>Rate | Gross Reproduction | Net Reproduction |
|------|--------------------------------|------------------------|------------------------|-----------------------------|----------------------------|--------------------|------------------|
|      | Per                            | 1,000 Popula           | tion                   | Per 1,000 Per Female        |                            |                    |                  |
| 1950 | 33.4                           | 45.4                   | 12.0                   | 82.2                        | na                         | na                 | na               |
| 1955 | 36.2                           | 44.3                   | 8.1                    | 49.5                        | na                         | na                 | na               |
| 1960 | 31.3                           | 37.5                   | 6.2                    | 34.9                        | 5.76                       | 2.78               | 2.54             |
| 1965 | 24.1                           | 29.5                   | 5.4                    | 26.3                        | 4.66                       | 2.27               | 2.08             |
| 1970 | 17.0                           | 22.1                   | 5.2                    | 20.5                        | 3.07                       | 1.49               | 1.42             |
| 1975 | 12.6                           | 17.7                   | 5.1                    | 13.9                        | 2.07                       | 1.00               | 0.97             |
| 1980 | 12.7                           | 17.6                   | 4.9                    | 8.0                         | 1.82                       | 0.88               | 0.86             |
| 1985 | 11.7                           | 16.6                   | 4.9                    | 7.6                         | 1.61                       | 0.78               | 0.76             |
| 1990 | 13.5                           | 18.2                   | 4.7                    | 6.6                         | 1.83                       | 0.88               | 0.87             |
| 1995 | 10.8                           | 15.6                   | 4.8                    | 3.8                         | 1.67                       | 0.80               | 0.80             |
| 2000 | 9.2                            | 13.7                   | 4.5                    | 2.5                         | 1.60                       | 0.77               | 0.76             |
| 2005 | 5.8                            | 10.2                   | 4.4                    | 2.1                         | 1.26                       | 0.61               | 0.61             |
| 2006 | 5.9                            | 10.3                   | 4.4                    | 2.6                         | 1.28                       | 0.62               | 0.61             |
| 2007 | 5.9                            | 10.3                   | 4.5                    | 2.1                         | 1.29                       | 0.62               | 0.62             |
| 2008 | 5.8                            | 10.2                   | 4.4                    | 2.1                         | 1.28                       | 0.62               | 0.62             |
| 2009 | 5.6                            | 9.9                    | 4.3                    | 2.2                         | 1.22                       | 0.59               | 0.59             |
| 2010 | 4.9                            | 9.3                    | 4.4                    | 2.0                         | 1.15                       | 0.56               | 0.55             |
| 2011 | 5.1                            | 9.5                    | 4.5                    | 2.0                         | 1.20                       | 0.58               | 0.58             |
| 2012 | 5.6                            | 10.1                   | 4.5                    | 1.8                         | 1.29                       | 0.62               | 0.62             |
| 2013 | 4.6                            | 9.3                    | 4.6                    | 2.0                         | 1.19                       | 0.57               | 0.57             |
| 2014 | 5.1                            | 9.8                    | 4.7                    | 1.8                         | 1.25                       | 0.61               | 0.60             |
| 2015 | 4.9                            | 9.7                    | 4.8                    | 1.7                         | 1.24                       | 0.60               | 0.60             |

Notes: Figures prior to 1980 refer to total population which comprises the resident and non-resident population. From 1980, figures refer to Singapore residents (i.e. citizens and permanent residents).

3.3 MID-YEAR ESTIMATES OF SINGAPORE RESIDENTS BY AGE GROUP AND SEX

|                    | 2000             | 2010      | 2011      | 2012      | 2012      | 2011      | Number    |
|--------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Age Group (Years)  | 2009             | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|                    |                  |           |           | Males     |           |           |           |
| Total              | 1,844,732        | 1,861,133 | 1,868,170 | 1,880,046 | 1,891,504 | 1,902,410 | 1,916,628 |
| 0 - 4              | 100,699          | 98,890    | 95,885    | 94,924    | 93,520    | 92,528    | 93,852    |
| 5 - 9              | 113,683          | 110,215   | 106,047   | 105,033   | 104,586   | 104,588   | 103,861   |
| 10 - 14            | 127,531          | 125,271   | 123,438   | 119,697   | 116,000   | 112,959   | 109,401   |
| 15 - 19            | 133,454          | 134,003   | 132,579   | 132,106   | 129,989   | 126,514   | 124,287   |
| 20 - 24            | 120,949          | 123,942   | 128,245   | 132,675   | 134,034   | 132,902   | 133,493   |
| 25 - 29            | 132,022          | 131,299   | 127,132   | 123,056   | 124,013   | 129,304   | 132,504   |
| 30 - 34            | 142,676          | 143,048   | 141,947   | 140,686   | 141,262   | 138,954   | 137,847   |
| 35 - 39            | 155,109          | 156,318   | 154,097   | 152,252   | 147,408   | 144,959   | 143,795   |
| 40 - 44            | 155,764          | 152,995   | 150,678   | 151,213   | 152,691   | 154,320   | 154,460   |
| 45 - 49            | 162,905          | 163,237   | 163,002   | 161,122   | 158,312   | 153,194   | 149,607   |
| 50 - 54            | 149,604          | 152,721   | 155,424   | 156,561   | 157,789   | 158,734   | 158,465   |
|                    |                  |           |           |           |           |           |           |
| 55 - 59            | 120,448          | 124,822   | 130,717   | 136,379   | 140,813   | 144,316   | 147,860   |
| 60 - 64            | 83,709           | 94,796    | 102,799   | 105,781   | 110,241   | 115,217   | 119,660   |
| 65 - 69            | 55,350           | 53,321    | 54,115    | 62,372    | 70,525    | 78,285    | 88,697    |
| 70 - 74            | 40,357           | 42,887    | 46,135    | 47,890    | 48,663    | 49,438    | 47,779    |
| 75 - 79            | 26,745           | 28,214    | 29,123    | 29,715    | 31,164    | 33,753    | 36,126    |
| 80 - 84            | 14,518           | 15,532    | 16,558    | 17,496    | 18,572    | 19,515    | 20,932    |
| 85 & Over          | 9,209            | 9,622     | 10,249    | 11,088    | 11,922    | 12,930    | 14,002    |
| 65 & OVEI          | 7,207            | 7,022     | 10,247    | 11,000    | 11,722    | 12,730    | 14,002    |
|                    |                  |           |           | Females   |           |           |           |
| Total              | 1,889,144        | 1,910,588 | 1,921,081 | 1,938,159 | 1,953,247 | 1,968,329 | 1,986,062 |
| 0 - 4              | 97,089           | 95,542    | 92,364    | 91,749    | 89,775    | 88,841    | 89,723    |
| 5 - 9              | 107,752          | 105,460   | 102,072   | 101,291   | 101,118   | 101,202   | 100,591   |
| 10 - 14            | 121,097          | 119,031   | 117,098   | 113,623   | 110,244   | 107,837   | 104,987   |
| 15 - 19            | 129,321          | 129,747   | 128,159   | 126,755   | 125,077   | 120,823   | 118,615   |
| 20 - 24            | 120,804          | 123,248   | 126,824   | 131,831   | 132,855   | 131,016   | 130,634   |
| 25 - 29            | 142,286          | 141,340   | 135,474   | 131,526   | 131,602   | 136,355   | 138,526   |
| 30 - 34            | 154,564          | 155,639   | 155,608   | 154,710   | 155,608   | 153,333   | 152,772   |
| 35 - 39            | 162,202          | 163,706   | 162,064   | 161,718   | 158,095   | 157,070   | 157,272   |
| 40 - 44            | 157,219          | 156 116   | 155.026   | 157,610   | 150 900   | 161,703   | 162 205   |
|                    |                  | 156,446   | 155,936   |           | 159,890   |           | 162,295   |
| 45 - 49            | 159,592          | 160,222   | 160,989   | 159,803   | 158,024   | 155,339   | 153,806   |
| 50 - 54            | 147,779          | 150,323   | 152,706   | 153,815   | 155,199   | 156,769   | 156,626   |
| 55 - 59            | 119,499          | 123,874   | 129,961   | 135,438   | 140,256   | 144,076   | 147,203   |
| 60 - 64            | 85,987           | 97,199    | 105,361   | 108,215   | 111,913   | 116,285   | 120,833   |
| 65 - 69            | 60,908           | 58,190    | 58,281    | 66,507    | 75,292    | 82,913    | 93,728    |
| 70 - 74            | 47,071           | 49,731    | 53,938    | 56,524    | 57,083    | 57,377    | 54,852    |
|                    | 24545            | 26.064    | 27 796    | 27.060    | 39,455    | 42,541    | 15 005    |
| 75 - 79            | 34,745           | 36,964    | 37,786    | 37,960    | 39,433    | 42,341    | 45,085    |
| 75 - 79<br>80 - 84 | 34,745<br>22,625 | 24,307    | 25,587    | 26,619    | 27,627    | 28,903    | 30,853    |

3.4 SINGAPORE RESIDENTS BY AGE GROUP, ETHNIC GROUP AND SEX, END JUNE 2015

|                    |           |         |         |         |         |         |         |         | Num     |
|--------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ethnic Group / Sex | Total     | 0 - 4   | 5 - 9   | 10 - 14 | 15 - 19 | 20 - 24 | 25 - 29 | 30 - 34 | 35 - 39 |
|                    |           |         |         |         |         |         |         |         |         |
| Total              | 3,902,690 | 183,575 | 204,452 | 214,388 | 242,902 | 264,127 | 271,030 | 290,619 | 301,0   |
| Males              | 1,916,628 | 93,852  | 103,861 | 109,401 | 124,287 | 133,493 | 132,504 | 137,847 | 143,7   |
| Females            | 1,986,062 | 89,723  | 100,591 | 104,987 | 118,615 | 130,634 | 138,526 | 152,772 | 157,    |
| Chinese            | 2,900,007 | 127,953 | 136,134 | 143,109 | 168,641 | 187,266 | 197,951 | 211,777 | 220,0   |
| Males              | 1,415,303 | 65,896  | 69,716  | 73,335  | 86,728  | 94,775  | 96,831  | 100,938 | 104,    |
| Females            | 1,484,704 | 62,057  | 66,418  | 69,774  | 81,913  | 92,491  | 101,120 | 110,839 | 116,    |
| Malays             | 520,923   | 31,691  | 32,359  | 36,764  | 43,584  | 48,590  | 44,466  | 37,710  | 29,     |
| Males              | 259,108   | 16,276  | 16,575  | 19,016  | 22,504  | 25,006  | 22,571  | 18,850  | 14,     |
| Females            | 261,815   | 15,415  | 15,784  | 17,748  | 21,080  | 23,584  | 21,895  | 18,860  | 15,     |
| Indians            | 354,952   | 17,434  | 26,269  | 25,175  | 22,689  | 22,501  | 22,662  | 30,273  | 35,     |
| Males              | 182,304   | 8,621   | 13,032  | 12,541  | 11,319  | 11,125  | 10,966  | 14,105  | 18,     |
| Females            | 172,648   | 8,813   | 13,237  | 12,634  | 11,370  | 11,376  | 11,696  | 16,168  | 16,     |
| Others             | 126,808   | 6,497   | 9,690   | 9,340   | 7,988   | 5,770   | 5,951   | 10,859  | 15      |
| Males              | 59,913    | 3,059   | 4,538   | 4,509   | 3,736   | 2,587   | 2,136   | 3,954   | 6       |
| Females            | 66,895    | 3,438   | 5,152   | 4,831   | 4,252   | 3,183   | 3,815   | 6,905   | 8,      |

(continued on the next page)

3.4 SINGAPORE RESIDENTS BY AGE GROUP, ETHNIC GROUP AND SEX, END JUNE 2015 (continued)

|                    |         |         |         |         |         |         |         |         |         | Num     |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ethnic Group / Sex | 40 - 44 | 45 - 49 | 50 - 54 | 55 - 59 | 60 - 64 | 65 - 69 | 70 - 74 | 75 - 79 | 80 - 84 | 85 & ov |
|                    |         |         |         |         |         |         |         |         |         |         |
| Total              | 316,755 | 303,413 | 315,091 | 295,063 | 240,493 | 182,425 | 102,631 | 81,211  | 51,785  | 41,     |
| Males              | 154,460 | 149,607 | 158,465 | 147,860 | 119,660 | 88,697  | 47,779  | 36,126  | 20,932  | 14,     |
| Females            | 162,295 | 153,806 | 156,626 | 147,203 | 120,833 | 93,728  | 54,852  | 45,085  | 30,853  | 27,     |
| Chinese            | 234,287 | 224,201 | 236,497 | 230,757 | 194,874 | 151,385 | 87,310  | 68,563  | 43,155  | 35,     |
| Males              | 111,298 | 108,315 | 118,039 | 114,879 | 97,035  | 73,661  | 40,737  | 30,617  | 17,255  | 11,     |
| Females            | 122,989 | 115,886 | 118,458 | 115,878 | 97,839  | 77,724  | 46,573  | 37,946  | 25,900  | 24,     |
| Malays             | 32,543  | 37,208  | 43,192  | 36,525  | 26,108  | 17,131  | 8,467   | 7,118   | 4,842   | 3.      |
| Males              | 15,801  | 18,047  | 21,406  | 18,189  | 12,584  | 8,046   | 3,721   | 3,126   | 1,906   | 1       |
| Females            | 16,742  | 19,161  | 21,786  | 18,336  | 13,524  | 9,085   | 4,746   | 3,992   | 2,936   | 1       |
| Indians            | 33,534  | 28,684  | 25,955  | 21,646  | 15,647  | 11,230  | 5,626   | 4,517   | 3,097   | 2       |
| Males              | 19,461  | 16,484  | 13,913  | 11,401  | 7,808   | 5,412   | 2,614   | 1,882   | 1,468   | 1       |
| Females            | 14,073  | 12,200  | 12,042  | 10,245  | 7,839   | 5,818   | 3,012   | 2,635   | 1,629   | 1       |
| Others             | 16,391  | 13,320  | 9,447   | 6,135   | 3,864   | 2,679   | 1,228   | 1,013   | 691     |         |
| Males              | 7,900   | 6,761   | 5,107   | 3,391   | 2,233   | 1,578   | 707     | 501     | 303     |         |
| Females            | 8,491   | 6,559   | 4,340   | 2,744   | 1,631   | 1,101   | 521     | 512     | 388     |         |

3.5 RESIDENT AGE-SPECIFIC FERTILITY RATES

|                   |      |      |      |      |      | Per Th | ousand Females |
|-------------------|------|------|------|------|------|--------|----------------|
| Age Group (Years) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014   | 2015           |
| 15 - 19           | 5.0  | 4.8  | 4.7  | 4.3  | 3.8  | 3.3    | 2.7            |
| 20 - 24           | 25.4 | 23.3 | 22.4 | 22.2 | 19.7 | 19.5   | 18.7           |
| 25 - 29           | 74.2 | 68.1 | 73.4 | 76.7 | 70.5 | 71.1   | 68.7           |
| 30 - 34           | 90.1 | 86.0 | 89.5 | 99.5 | 90.2 | 99.3   | 98.5           |
| 35 - 39           | 42.6 | 42.2 | 42.4 | 46.3 | 44.7 | 48.3   | 49.9           |
| 40 - 44           | 7.0  | 6.1  | 7.2  | 8.0  | 8.0  | 8.3    | 8.9            |
| 45 - 49           | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.3    | 0.4            |
|                   |      |      |      |      |      |        |                |

Note: Singapore resident population comprises Singapore citizens and permanent residents.

3.6 LIVE-BIRTHS BY ETHNIC GROUP AND SEX

|                    |        |        |        |        |        |        | Numb   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|
| Ethnic Group / Sex | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total              | 39,570 | 37,967 | 39,654 | 42,663 | 39,720 | 42,232 | 42,185 |
| Males              | 20,502 | 19,643 | 20,434 | 22,102 | 20,528 | 21,679 | 21,755 |
| Females            | 19,068 | 18,323 | 19,220 | 20,561 | 19,191 | 20,552 | 20,430 |
| Chinese            | 24,799 | 23,303 | 24,691 | 26,760 | 23,890 | 25,958 | 25,412 |
| Males              | 12,780 | 12,099 | 12,854 | 13,998 | 12,388 | 13,446 | 13,054 |
| Females            | 12,019 | 11,204 | 11,837 | 12,762 | 11,502 | 12,512 | 12,358 |
| Malays             | 6,053  | 5,711  | 5,719  | 5,908  | 6,067  | 6,468  | 6,961  |
| Males              | 3,152  | 2,961  | 2,880  | 3,047  | 3,130  | 3,265  | 3,608  |
| Females            | 2,901  | 2,749  | 2,839  | 2,861  | 2,937  | 3,202  | 3,353  |
| Indians            | 4,196  | 4,285  | 4,376  | 4,672  | 4,648  | 4,678  | 4,895  |
| Males              | 2,194  | 2,168  | 2,255  | 2,311  | 2,398  | 2,347  | 2,564  |
| Females            | 2,002  | 2,117  | 2,121  | 2,361  | 2,250  | 2,331  | 2,331  |
| Others             | 4,522  | 4,668  | 4,868  | 5,323  | 5,115  | 5,128  | 4,917  |
| Males              | 2,376  | 2,415  | 2,445  | 2,746  | 2,612  | 2,621  | 2,529  |
| Females            | 2,146  | 2,253  | 2,423  | 2,577  | 2,502  | 2,507  | 2,388  |

Source : Registry of Births and Deaths

Note: Figures for males and females may not add up to the total due to unknown sex

Data are based on date of occurrence.

3.7 LIVE-BIRTHS BY (a) BIRTH ORDER AND (b) PLACE OF OCCURRENCE

|                          |        |        |        |        |        |        | Number |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|
|                          | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                    | 39,570 | 37,967 | 39,654 | 42,663 | 39,720 | 42,232 | 42,185 |
| Birth Order <sup>1</sup> |        |        |        |        |        |        |        |
| 1st                      | 18,590 | 18,130 | 19,035 | 20,755 | 19,292 | 20,327 | 20,248 |
| 2nd                      | 13,844 | 13,404 | 14,120 | 15,082 | 13,924 | 15,262 | 14,857 |
| 3rd                      | 5,059  | 4,615  | 4,726  | 4,988  | 4,651  | 4,859  | 5,099  |
| 4th                      | 1,450  | 1,296  | 1,285  | 1,299  | 1,294  | 1,243  | 1,394  |
| 5th                      | 410    | 367    | 323    | 352    | 360    | 357    | 388    |
| 6th & over               | 217    | 155    | 164    | 187    | 199    | 184    | 199    |
| Place of Occurrence      |        |        |        |        |        |        |        |
| Public Sector Hospitals  | 16,224 | 15,312 | 15,872 | 16,403 | 15,646 | 17,066 | 17,730 |
| Private Sector Hospitals | 23,221 | 22,546 | 23,679 | 26,149 | 23,919 | 25,029 | 24,300 |
| Other Locations          | 125    | 109    | 103    | 111    | 155    | 137    | 155    |

Source : Registry of Births and Deaths Note : Data are based on date of occurrence.

1 Includes birth order not stated.

# 3.8 RESIDENT AGE-SEX SPECIFIC DEATH RATES

|                      |       |       |       |       |       | Per Thou | sand Residents |
|----------------------|-------|-------|-------|-------|-------|----------|----------------|
| Age Group (Years)    | 2009  | 2010  | 2011  | 2012  | 2013  | 2014     | 2015           |
|                      |       |       |       | Total |       |          |                |
| Total                | 4.3   | 4.4   | 4.5   | 4.5   | 4.6   | 4.7      | 4.8            |
| Under 1 <sup>1</sup> | 2.2   | 2.0   | 2.0   | 1.8   | 2.0   | 1.8      | 1.7            |
| 1 - 4                | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.1      | 0.1            |
| 5 - 9                | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | -        | -              |
| 10 - 14              | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | -        | 0.1            |
| 15 - 19              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2      | 0.2            |
| 20 - 24              | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3      | 0.2            |
| 25 - 29              | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.2      | 0.3            |
| 30 - 34              | 0.4   | 0.3   | 0.4   | 0.4   | 0.4   | 0.4      | 0.4            |
| 35 - 39              | 0.6   | 0.6   | 0.5   | 0.6   | 0.5   | 0.5      | 0.5            |
| 40 - 44              | 0.9   | 1.0   | 0.9   | 0.9   | 0.9   | 0.9      | 0.9            |
| 45 - 49              | 1.6   | 1.7   | 1.7   | 1.6   | 1.5   | 1.5      | 1.5            |
| 50 - 54              | 3.0   | 3.0   | 2.8   | 2.5   | 2.7   | 2.5      | 2.5            |
| 55 - 59              | 4.7   | 4.5   | 4.4   | 4.6   | 4.3   | 4.5      | 4.2            |
| 60 - 64              | 7.4   | 7.3   | 7.0   | 7.3   | 7.0   | 6.4      | 6.5            |
| 65 - 69              | 12.8  | 12.5  | 12.6  | 11.9  | 11.0  | 10.6     | 10.4           |
| 70 - 74              | 21.7  | 20.7  | 19.9  | 20.0  | 19.6  | 18.5     | 18.2           |
| 75 - 79              | 37.4  | 34.9  | 37.0  | 33.3  | 33.8  | 32.6     | 31.8           |
| 80 - 84              | 58.3  | 60.4  | 57.4  | 55.7  | 55.7  | 56.3     | 51.6           |
| 85 & Over            | 120.3 | 121.5 | 116.4 | 116.2 | 116.4 | 115.4    | 113.8          |

(continued on the next page)

<sup>1</sup> Infant mortality rate (deaths of resident infants under 1 year of age per thousand resident live-births)

# 3.8 RESIDENT AGE-SEX SPECIFIC DEATH RATES (Continued)

|                      |          |       |       |       |       | Per Thou | sand Residents |
|----------------------|----------|-------|-------|-------|-------|----------|----------------|
| Age Group (Years)    | 2009     | 2010  | 2011  | 2012  | 2013  | 2014     | 2015           |
|                      | <u> </u> | •     | •     | Males |       |          |                |
| Total                | 4.7      | 4.8   | 4.9   | 5.0   | 5.1   | 5.2      | 5.2            |
| Under 1 <sup>1</sup> | 2.6      | 1.9   | 2.3   | 2.0   | 1.8   | 1.9      | 2.2            |
| 1 - 4                | 0.2      | 0.2   | 0.2   | 0.2   | 0.1   | 0.1      | 0.2            |
| 5 - 9                | 0.1      | 0.1   | 0.1   | 0.1   | 0.1   | -        | 0.1            |
| 10 - 14              | 0.2      | 0.1   | 0.1   | 0.2   | 0.1   | -        | 0.1            |
| 15 - 19              | 0.3      | 0.2   | 0.2   | 0.2   | 0.3   | 0.3      | 0.2            |
| 20 - 24              | 0.5      | 0.4   | 0.5   | 0.5   | 0.4   | 0.4      | 0.3            |
| 25 - 29              | 0.5      | 0.4   | 0.4   | 0.4   | 0.3   | 0.3      | 0.4            |
| 30 - 34              | 0.6      | 0.4   | 0.5   | 0.4   | 0.6   | 0.5      | 0.5            |
| 35 - 39              | 0.8      | 0.8   | 0.7   | 0.6   | 0.6   | 0.7      | 0.7            |
| 40 - 44              | 1.2      | 1.3   | 1.0   | 1.2   | 1.2   | 1.3      | 1.1            |
| 45 - 49              | 2.0      | 2.2   | 2.2   | 1.9   | 2.0   | 1.7      | 1.9            |
| 50 - 54              | 3.9      | 3.9   | 3.6   | 3.1   | 3.4   | 3.0      | 3.1            |
| 55 - 59              | 6.0      | 5.7   | 5.9   | 5.8   | 5.7   | 5.8      | 5.4            |
| 60 - 64              | 9.9      | 9.4   | 8.9   | 9.7   | 8.8   | 8.4      | 8.5            |
| 65 - 69              | 16.3     | 16.6  | 16.4  | 15.2  | 14.5  | 13.8     | 13.9           |
| 70 - 74              | 28.6     | 27.1  | 26.0  | 26.5  | 26.0  | 24.4     | 23.9           |
| 75 - 79              | 46.9     | 45.2  | 47.2  | 42.3  | 43.3  | 41.0     | 41.0           |
| 80 - 84              | 73.4     | 76.4  | 71.3  | 69.9  | 68.2  | 70.6     | 63.7           |
| 85 & Over            | 135.6    | 140.0 | 130.8 | 132.3 | 131.0 | 128.5    | 124.8          |

(continued on the next page)

<sup>1</sup> Infant mortality rate (deaths of resident infants under 1 year of age per thousand resident live-births)

# 3.8 RESIDENT AGE-SEX SPECIFIC DEATH RATES (Continued)

|                      |       |       |       |         |       | Per Thous | sand Residents |
|----------------------|-------|-------|-------|---------|-------|-----------|----------------|
| Age Group (Years)    | 2009  | 2010  | 2011  | 2012    | 2013  | 2014      | 2015           |
|                      |       |       |       | Females |       |           |                |
| Total                | 3.8   | 3.9   | 4.0   | 4.1     | 4.2   | 4.3       | 4.3            |
| Under 1 <sup>1</sup> | 1.7   | 2.1   | 1.7   | 1.6     | 2.1   | 1.7       | 1.2            |
| 1 - 4                | 0.2   | 0.1   | 0.1   | 0.1     | 0.2   | 0.1       | 0.1            |
| 5 - 9                | -     | 0.1   | 0.1   | 0.1     | -     | -         | -              |
| 10 - 14              | 0.1   | 0.1   | -     | 0.1     | 0.1   | 0.1       | 0.1            |
| 15 - 19              | 0.2   | 0.1   | 0.2   | 0.2     | 0.2   | 0.2       | 0.2            |
| 20 - 24              | 0.2   | 0.2   | 0.2   | 0.2     | 0.2   | 0.1       | 0.2            |
| 25 - 29              | 0.2   | 0.2   | 0.2   | 0.2     | 0.2   | 0.1       | 0.2            |
| 30 - 34              | 0.3   | 0.2   | 0.3   | 0.4     | 0.3   | 0.2       | 0.3            |
| 35 - 39              | 0.4   | 0.5   | 0.4   | 0.5     | 0.4   | 0.3       | 0.4            |
| 40 - 44              | 0.7   | 0.7   | 0.8   | 0.7     | 0.7   | 0.7       | 0.6            |
| 45 - 49              | 1.3   | 1.2   | 1.3   | 1.3     | 1.1   | 1.2       | 1.1            |
| 50 - 54              | 2.2   | 1.9   | 2.1   | 2.0     | 2.0   | 1.9       | 1.9            |
| 55 - 59              | 3.3   | 3.3   | 2.9   | 3.3     | 3.0   | 3.2       | 3.1            |
| 60 - 64              | 5.0   | 5.3   | 5.2   | 5.1     | 5.1   | 4.4       | 4.5            |
| 65 - 69              | 9.7   | 8.8   | 9.0   | 8.7     | 7.8   | 7.5       | 7.1            |
| 70 - 74              | 15.8  | 15.1  | 14.7  | 14.5    | 14.2  | 13.5      | 13.2           |
| 75 - 79              | 30.0  | 27.1  | 29.0  | 26.3    | 26.3  | 25.9      | 24.4           |
| 80 - 84              | 48.5  | 50.2  | 48.4  | 46.4    | 47.2  | 46.6      | 43.4           |
| 85 & Over            | 112.7 | 112.5 | 109.4 | 108.3   | 109.1 | 108.8     | 108.2          |

<sup>1</sup> Infant mortality rate (deaths of resident infants under 1 year of age per thousand resident live-births)

# 3.9 DEATHS BY BROAD GROUP OF CAUSES

|  |        |        |        |        |        |        | Number |
|--|--------|--------|--------|--------|--------|--------|--------|
| Causes of Death                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                                      | 17,101 | 17,610 | 18,027 | 18,481 | 18,938 | 19,393 | 19,862 |
| Infective & Parasitic Diseases             | 279    | 269    | 244    | 233    | 211    | 217    | 194    |
| of which: Tuberculosis                     | 75     | 77     | 68     | 65     | 51     | 60     | 41     |
| Neoplasms                                  | 5,063  | 5,078  | 5,461  | 5,651  | 5,849  | 5,790  | 5,986  |
| of which: Malignant                        | 5,010  | 5,025  | 5,411  | 5,565  | 5,775  | 5,701  | 5,903  |
| Endocrine, Nutritional & Metabolic         |        |        |        |        |        |        |        |
| Diseases                                   | 378    | 272    | 356    | 279    | 253    | 296    | 270    |
| of which: Diabetes                         | 290    | 182    | 299    | 268    | 247    | 277    | 250    |
| Diseases of the Blood & Blood-Forming      |        |        |        |        |        |        |        |
| Organs                                     | 30     | 41     | 41     | 20     | 14     | 23     | 10     |
| Diseases of the Nervous System &           |        |        |        |        |        |        |        |
| Sense Organs                               | 68     | 92     | 117    | 166    | 137    | 144    | 210    |
| Diseases of the Circulatory System         | 5,611  | 5,807  | 5,720  | 5,747  | 5,765  | 5,987  | 6,101  |
| of which: Heart & Hypertensive Diseases    | 4,081  | 4,161  | 3,920  | 3,848  | 3,914  | 4,165  | 4,534  |
| Cerebrovascular Disease                    | 1,375  | 1,472  | 1,628  | 1,714  | 1,680  | 1,620  | 1,357  |
| Diseases of the Respiratory System         | 3,188  | 3,434  | 3,493  | 3,708  | 4,061  | 4,232  | 4,417  |
| of which: Pneumonia                        | 2,614  | 2,766  | 2,879  | 3,096  | 3,512  | 3,680  | 3,859  |
| Diseases of the Digestive System           | 351    | 436    | 426    | 414    | 418    | 482    | 477    |
| Diseases of the Genito-Urinary System      | 861    | 893    | 918    | 934    | 967    | 951    | 928    |
| Congenital Anomalies                       | 60     | 60     | 53     | 54     | 47     | 50     | 62     |
| of which: Congenital Anomalies of Heart    | 36     | 35     | 21     | 25     | 21     | 26     | 32     |
| Certain Causes of Perinatal Mortality      | 49     | 34     | 49     | 44     | 43     | 42     | 30     |
| Accidents, Poisonings & Violence of which: | 978    | 973    | 989    | 1,030  | 933    | 909    | 895    |
| Transport Accidents                        | 201    | 208    | 207    | 192    | 176    | 183    | 168    |
| Suicides                                   | 401    | 353    | 361    | 467    | 422    | 415    | 409    |
| Other Diseases & Causes                    | 185    | 221    | 160    | 201    | 240    | 270    | 282    |

Source : Registry of Births and Deaths

Note: Deaths prior to 2012 are classified according to the Ninth Revision of the International Classification of Diseases (ICD). From 2012 onwards, causes of death are adapted in accordance to the Tenth Revision of the ICD.

# 3.10 Age at first marriage and divorce

| 2009 | 2010                 | 2011                   | 2012   | 2013  | 2014   | 2015  |
|------|----------------------|------------------------|--|---|--|---|
|      |                      |                        |  |   |  |   |
| 29.8 | 30.0                 | 30.1                   | 30.1   | 30.2  | 30.2   | 30.3  |
| 27.5 | 27.7                 | 28.0                   | 28.0   | 28.1  | 28.2   | 28.2  |
|      |                      |                        |  |   |  |   |
| 40.5 | 41.0                 | 41.3                   | 41.6   | 42.4  | 42.6   | 42.9  |
| 36.9 | 37.4                 | 37.7                   | 38.0   | 38.2  | 38.4   | 38.8  |
| •    | 29.8<br>27.5<br>40.5 | 29.8 30.0<br>27.5 27.7 | 29.8 30.0 30.1<br>27.5 27.7 28.0<br>40.5 41.0 41.3 | 29.8 30.0 30.1 30.1<br>27.5 27.7 28.0 28.0<br>40.5 41.0 41.3 41.6 | 29.8 30.0 30.1 30.1 30.2<br>27.5 27.7 28.0 28.0 28.1 | 29.8 30.0 30.1 30.1 30.2 30.2<br>27.5 27.7 28.0 28.0 28.1 28.2<br>40.5 41.0 41.3 41.6 42.4 42.6 |

<sup>1</sup> Refers to the median age of grooms or brides who had not previously been married

# 3.11 RESIDENT AGE-SEX SPECIFIC MARRIAGE RATES

| Age Group (Years)                                   | 2009                                  | 2010  | 2011   | 2012   | 2013  | 2014  | 2015                              |
|---|---------------------------------------|---|--|--|---|---|-----------------------------------|
|   |                                       | М   | ales (per thous                              | sand unmarried                               | l resident male                             | es)   |                                   |
| 15 - 19   | 0.8                                   | 0.7   | 0.7  | 0.6  | 0.6   | 0.5   | 0.                                |
| 20 - 24   | 12.7                                  | 11.7  | 11.1   | 12.2   | 10.9  | 10.7  | 10.                               |
| 25 - 29   | 79.5                                  | 71.8  | 79.6   | 77.8   | 71.5  | 77.0  | 76.                               |
| 30 - 34   | 112.1                                 | 102.7                                       | 117.9  | 117.8  | 109.9                                       | 127.2   | 132                               |
| 30 - 34<br>35 - 39                                  | 92.0                                  | 77.9  | 89.2   | 96.5   | 86.2  | 89.1  | 90                                |
| 33 - 39<br>40 - 44                                  |                                       | 52.1  |  |  |   |   |                                   |
| 40 - 44<br>45 - 49                                  | 55.9                                  | 36.7  | 58.5<br>41.2                                 | 65.2   | 56.0  | 61.0  | 54                                |
| 45 - 49   | 40.6                                  | 36./  | 41.2   | 39.8   | 36.0  | 35.7  | 36                                |
| General Marriage Rate <sup>1</sup>                  | 43.4                                  | 39.3  | 43.5   | 43.8   | 40.5  | 44.4  | 44                                |
| (per thousand unmarried resident                    |                                       |   |  |  |   |   |                                   |
| males aged 15-49 years)                             |                                       |   |  |  |   |   |                                   |
| males aged 13-49 years)                             |                                       |   |  |  |   |   |                                   |
|   |                                       |   |  |  |   |   |                                   |
|   |                                       |   | 1 / 1  | 1 '  | 1 11 16                                     | 1 \   |                                   |
|   |                                       | Fem   | ales (per thous                              | sand unmarried                               | l resident fema                             | ales)   |                                   |
| 15 - 19   | 2.6                                   | Fem 2.8                                     | ales (per thous                              | sand unmarried                               | d resident fema                             | ales)   | 1                                 |
| 15 - 19<br>20 - 24                                  | 2.6<br>26.9                           |   |  |  |   |   |                                   |
|   |                                       | 2.8   | 2.4  | 2.3  | 2.2   | 1.7   | 20                                |
| 20 - 24<br>25 - 29                                  | 26.9                                  | 2.8<br>22.6                                 | 2.4<br>23.5                                  | 2.3<br>24.4                                  | 2.2<br>21.3                                 | 1.7<br>22.3                                   | 20<br>107                         |
| 20 - 24   | 26.9<br>108.5                         | 2.8<br>22.6<br>99.0                         | 2.4<br>23.5<br>108.0                         | 2.3<br>24.4<br>106.7                         | 2.2<br>21.3<br>97.4                         | 1.7<br>22.3<br>103.8                          | 20<br>107<br>106                  |
| 20 - 24<br>25 - 29<br>30 - 34                       | 26.9<br>108.5<br>88.2                 | 2.8<br>22.6<br>99.0<br>81.0                 | 2.4<br>23.5<br>108.0<br>96.0                 | 2.3<br>24.4<br>106.7<br>96.2                 | 2.2<br>21.3<br>97.4<br>89.2                 | 1.7<br>22.3<br>103.8<br>105.3<br>44.3         | 1<br>20<br>107<br>106<br>48<br>21 |
| 20 - 24<br>25 - 29<br>30 - 34<br>35 - 39            | 26.9<br>108.5<br>88.2<br>39.2         | 2.8<br>22.6<br>99.0<br>81.0<br>36.3         | 2.4<br>23.5<br>108.0<br>96.0<br>42.4         | 2.3<br>24.4<br>106.7<br>96.2<br>43.2         | 2.2<br>21.3<br>97.4<br>89.2<br>44.6         | 1.7<br>22.3<br>103.8<br>105.3                 | 20<br>107<br>106<br>48            |
| 20 - 24<br>25 - 29<br>30 - 34<br>35 - 39<br>40 - 44 | 26.9<br>108.5<br>88.2<br>39.2<br>17.3 | 2.8<br>22.6<br>99.0<br>81.0<br>36.3<br>16.2 | 2.4<br>23.5<br>108.0<br>96.0<br>42.4<br>20.7 | 2.3<br>24.4<br>106.7<br>96.2<br>43.2<br>21.0 | 2.2<br>21.3<br>97.4<br>89.2<br>44.6<br>19.4 | 1.7<br>22.3<br>103.8<br>105.3<br>44.3<br>19.5 | 20<br>107<br>106<br>48<br>21      |
| 20 - 24<br>25 - 29<br>30 - 34<br>35 - 39<br>40 - 44 | 26.9<br>108.5<br>88.2<br>39.2<br>17.3 | 2.8<br>22.6<br>99.0<br>81.0<br>36.3<br>16.2 | 2.4<br>23.5<br>108.0<br>96.0<br>42.4<br>20.7 | 2.3<br>24.4<br>106.7<br>96.2<br>43.2<br>21.0 | 2.2<br>21.3<br>97.4<br>89.2<br>44.6<br>19.4 | 1.7<br>22.3<br>103.8<br>105.3<br>44.3<br>19.5 | 20<br>107<br>106<br>48<br>21      |

Note: Data are based on resident grooms/brides and resident population (i.e. Singapore citizens and permanent residents).

<sup>2</sup> Exclude annulments.

<sup>1</sup> In view of the rising proportion of marriages among persons aged 45-49 years, the data series on general marriage rate was revised in 2014 to cover the age group 15-49 years.

3.12 GROOMS BY AGE GROUP

| Age Group (Years) | 2009   | 2010   | 2011       | 2012            | 2013      | 2014   | 2015  |
|-------------------|--------|--------|------------|-----------------|-----------|--------|-------|
|                   |        |        | W          | omen's Chart    | er        |        |       |
| Total             | 22,060 | 20,230 | 22,840     | 23,134          | 21,180    | 22,863 | 22,54 |
| Under 20          | 56     | 63     | 59         | 46              | 53        | 37     | 2     |
| 20 - 24           | 1,270  | 1,139  | 1,192      | 1,297           | 1,097     | 1,034  | 92    |
| 25 - 29           | 7,694  | 6,631  | 7,392      | 7,323           | 6,568     | 7,390  | 7,19  |
| 30 - 34           | 6,207  | 5,881  | 6,893      | 7,066           | 6,681     | 7,171  | 7,24  |
| 35 - 39           | 3,088  | 2,867  | 3,251      | 3,303           | 3,062     | 3,284  | 3,20  |
| 40 - 44           | 1,530  | 1,492  | 1,582      | 1,661           | 1,533     | 1,756  | 1,74  |
| 45 - 49           | 1,001  | 993    | 1,031      | 1,025           | 898       | 872    | 89    |
| 50 - 54           | 620    | 590    | 703        | 671             | 635       | 626    | 57    |
| 55 - 59           | 337    | 327    | 409        | 384             | 345       | 376    | 39    |
| 60 & Over         | 257    | 247    | 328        | 358             | 308       | 317    | 35    |
|                   |        |        | Administra | ation of Muslin | n Law Act |        |       |
| Total             | 4,021  | 4,133  | 4,418      | 4,802           | 5,074     | 5,544  | 5,77  |
| Under 20          | 50     | 36     | 42         | 38              | 28        | 33     | ۷     |
| 20 - 24           | 513    | 557    | 506        | 610             | 578       | 591    | 61    |
| 25 - 29           | 1,684  | 1,666  | 1,883      | 2,106           | 2,177     | 2,444  | 2,50  |
| 30 - 34           | 716    | 805    | 878        | 946             | 1,084     | 1,273  | 1,28  |
| 35 - 39           | 398    | 443    | 428        | 441             | 446       | 413    | 48    |
| 40 - 44           | 270    | 254    | 260        | 246             | 293       | 297    | 2     |
| 45 - 49           | 161    | 161    | 190        | 176             | 196       | 218    | 2     |
| 50 - 54           | 108    | 83     | 112        | 123             | 131       | 138    | 10    |
| 55 - 59           | 54     | 70     | 64         | 54              | 80        | 80     | 9     |
|                   |        |        | 55         | 62              | 61        | 57     | Ç     |

Source: Registry of Marriages

Registry of Muslim Marriages

Note: Data on marriages registered under the Women's Charter exclude re-registered marriages, i.e. marriages which were contracted overseas or under religious and customary rites and were subsequently registered in Singapore in the reference year

3.13 BRIDES BY AGE GROUP

| Age Group (Years) | 2009   | 2010   | 2011      | 2012           | 2013      | 2014   | 2015  |
|-------------------|--------|--------|-----------|----------------|-----------|--------|-------|
|                   |        |        | V         | Vomen's Chart  | er        |        |       |
| Total             | 22,060 | 20,230 | 22,840    | 23,134         | 21,180    | 22,863 | 22,54 |
| Under 20          | 336    | 292    | 259       | 222            | 206       | 152    | 13:   |
| 20 - 24           | 3,617  | 3,087  | 3,268     | 3,343          | 2,785     | 2,658  | 2,42  |
| 25 - 29           | 10,209 | 9,137  | 10,311    | 10,244         | 9,296     | 10,403 | 10,26 |
| 30 - 34           | 4,740  | 4,623  | 5,424     | 5,667          | 5,423     | 5,884  | 5,85  |
| 35 - 39           | 1,859  | 1,799  | 1,980     | 2,074          | 2,003     | 2,097  | 2,15  |
| 40 - 44           | 690    | 655    | 882       | 877            | 813       | 914    | 91    |
| 45 - 49           | 339    | 378    | 403       | 382            | 378       | 417    | 43    |
| 50 - 54           | 162    | 171    | 193       | 172            | 165       | 212    | 19    |
| 55 - 59           | 79     | 54     | 67        | 91             | 74        | 80     | 8     |
| 60 & Over         | 29     | 34     | 53        | 62             | 37        | 46     | 7     |
|                   |        |        | Administr | ation of Musli | m Law Act |        |       |
| Total             | 4,021  | 4,133  | 4,418     | 4,802          | 5,074     | 5,544  | 5,77  |
| Under 20          | 167    | 179    | 149       | 164            | 149       | 134    | 14    |
| 20 - 24           | 1,153  | 1,105  | 1,176     | 1,279          | 1,245     | 1,384  | 1,34  |
| 25 - 29           | 1,564  | 1,611  | 1,812     | 1,969          | 2,132     | 2,417  | 2,49  |
| 30 - 34           | 486    | 562    | 548       | 641            | 711       | 820    | 85    |
| 35 - 39           | 258    | 266    | 286       | 284            | 344       | 293    | 35    |
| 40 - 44           | 156    | 157    | 187       | 194            | 214       | 213    | 26    |
| 45 - 49           | 123    | 131    | 125       | 160            | 139       | 149    | 14    |
| 50 - 54           | 66     | 72     | 87        | 72             | 76        | 75     | 11    |
| 30 - 34           |        |        |           | 2.4            | 40        | 27     | _     |
| 55 - 59           | 31     | 33     | 32        | 24             | 40        | 37     | 3     |

Source: Registry of Marriages

Registry of Muslim Marriages

Note: Data on marriages registered under the Women's Charter exclude re-registered marriages, i.e. marriages which were contracted overseas or under religious and customary rites and were subsequently registered in Singapore in the reference year

# 3.14 MARRIAGES REGISTERED BY ETHNIC GROUP OF COUPLE

|                           |        |        |           |                |           |        | Number |
|---------------------------|--------|--------|-----------|----------------|-----------|--------|--------|
| Ethnic Group              | 2009   | 2010   | 2011      | 2012           | 2013      | 2014   | 2015   |
|                           |        |        | V         | Vomen's Chart  | er        |        |        |
| Total                     | 22,060 | 20,230 | 22,840    | 23,134         | 21,180    | 22,863 | 22,544 |
| Chinese                   | 16,374 | 14,535 | 16,499    | 16,387         | 14,948    | 16,750 | 16,237 |
| Indians                   | 840    | 799    | 879       | 950            | 960       | 978    | 940    |
| Others <sup>1</sup>       | 1,372  | 1,346  | 1,495     | 1,614          | 1,407     | 1,244  | 1,225  |
| Inter-ethnic <sup>2</sup> | 3,474  | 3,550  | 3,967     | 4,183          | 3,865     | 3,891  | 4,142  |
|                           |        |        | Administr | ation of Musli | m Law Act |        |        |
| Total                     | 4,021  | 4,133  | 4,418     | 4,802          | 5,074     | 5,544  | 5,778  |
| Malays                    | 2,394  | 2,381  | 2,635     | 2,803          | 3,001     | 3,221  | 3,377  |
| Indians                   | 182    | 174    | 178       | 189            | 217       | 198    | 216    |
| Others <sup>3</sup>       | 127    | 200    | 184       | 199            | 226       | 223    | 232    |
| Inter-ethnic <sup>4</sup> | 1,318  | 1,378  | 1,421     | 1,611          | 1,630     | 1,902  | 1,953  |

Source: Registry of Marriages

Registry of Muslim Marriages

Note: Data on marriages registered under the Women's Charter exclude marriages which were contracted overseas or under religious and customary rites and were subsequently registered in Singapore in the reference year.

1 Comprises couples of the same ethnicity from other ethnic groups besides Chinese and Indians, namely Malays,

Eurasians, Caucasians and other ethnicities as one single 'Others' group.

E.g. Eurasian-Eurasian, Caucasian-Caucasian, Others-Others

2 Refers to marriages where both the groom and bride are of different ethnicity.

E.g. Indian-Chinese, Eurasian-Caucasian, Chinese-Malay, Chinese-Others

3 Comprises Muslim couples of the same ethnicity from other ethnic groups besides Malays and Indians, namely Chinese, Eurasians, Caucasians and other ethnicities as one single 'Others' group.

E.g. Eurasian-Eurasian, Caucasian-Caucasian, Others-Others

4 Refers to marriages where both the groom and bride are of different ethnicity.

E.g. Malay-Indian, Malay-Chinese, Malay-Others

3.15 RESIDENT AGE-SEX SPECIFIC DIVORCE RATES

| Age Group (Years)   | 2009                | 2010                | 2011                | 2012                | 2013                | 2014                | 2015         |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|
|   |                     | N                   | Males (per thou     | ısand married       | resident males      | s)                  |              |
| 20 - 24   | 27.3                | 24.9                | 26.6                | 28.4                | 25.8                | 25.3                | 30.          |
| 25 - 29   | 17.4                | 16.3                | 20.3                | 21.7                | 21.7                | 20.2                | 17.          |
| 30 - 34   | 15.1                | 14.6                | 14.0                | 13.3                | 13.1                | 13.1                | 12           |
| 35 - 39   | 12.5                | 12.5                | 12.7                | 11.9                | 12.0                | 11.6                | 11           |
| 40 - 44   | 9.2                 | 9.6                 | 10.0                | 9.4                 | 9.8                 | 9.9                 | 10           |
| 45 - 49   | 7.2                 | 7.5                 | 7.7                 | 7.6                 | 8.5                 | 7.7                 | 8.           |
| 50 & Over   | 3.3                 | 3.3                 | 3.5                 | 3.3                 | 3.6                 | 3.5                 | 3.           |
| General Divorce Rate<br>(per thousand married resident<br>males aged 20 years and over) | 7.5                 | 7.5                 | 7.6                 | 7.1                 | 7.3                 | 7.0                 | 7.           |
|   |                     | Fei                 | nales (per thou     | usand married       | resident fema       | les)                |              |
| 20 - 24   | 22.5                | 24.4                | 27.8                | 29.1                | 26.7                | 23.5                | 26           |
| 20 2:   |                     |                     |                     |                     | 45.5                | 160                 |              |
| 25 - 29   | 15.0                | 15.0                | 17.8                | 15.8                | 17.5                | 16.0                | 15           |
|   | 15.0<br>13.2        | 15.0<br>12.8        | 17.8<br>12.0        | 15.8<br>12.0        | 17.5<br>12.4        | 16.0                | 15<br>11     |
| 25 - 29   |                     |                     |                     |                     |                     |                     | 11           |
| 25 - 29<br>30 - 34  | 13.2                | 12.8                | 12.0                | 12.0                | 12.4                | 11.7                | 11<br>9      |
| 25 - 29<br>30 - 34<br>35 - 39   | 13.2<br>10.7        | 12.8<br>10.7        | 12.0<br>11.0        | 12.0<br>10.0        | 12.4<br>10.3        | 11.7<br>10.1        | 11<br>9<br>8 |
| 25 - 29<br>30 - 34<br>35 - 39<br>40 - 44  | 13.2<br>10.7<br>7.2 | 12.8<br>10.7<br>7.9 | 12.0<br>11.0<br>8.5 | 12.0<br>10.0<br>8.2 | 12.4<br>10.3<br>8.0 | 11.7<br>10.1<br>8.3 |              |

Note: Data are based on divorces and annulments where the male/female spouses are residents (i.e. Singapore citizens and permanent residents).

3.16 DIVORCES AND ANNULMENTS BY AGE GROUP OF MALES

| Age Group (Years) | 2009  | 2010   | 2011           | 2012           | 2013          | 2014  | 2015  |
|-------------------|-------|--------|----------------|----------------|---------------|-------|-------|
| Age Gloup (Teals) | 2009  | 2010   |                |                |               | 2014  | 2013  |
|                   |       |        | Divorces un    | der the Women  | n's Charter   |       |       |
| Total             | 5,416 | 5,433  | 5,696          | 5,306          | 5,471         | 5,172 | 5,450 |
| Under 25          | 26    | 25     | 32             | 24             | 28            | 34    | 40    |
| 25 - 29           | 266   | 266    | 341            | 256            | 274           | 227   | 234   |
| 30 - 34           | 1,000 | 919    | 858            | 785            | 740           | 730   | 725   |
| 35 - 39           | 1,231 | 1,194  | 1,211          | 1,149          | 1,051         | 997   | 1,020 |
| 40 - 44           | 922   | 960    | 1,026          | 952            | 980           | 946   | 1,039 |
| 45 - 49           | 798   | 815    | 883            | 798            | 892           | 769   | 826   |
| 50 - 54           | 555   | 594    | 624            | 606            | 705           | 648   | 664   |
| 55 - 59           | 363   | 360    | 397            | 372            | 408           | 419   | 446   |
| 60 & Over         | 241   | 291    | 323            | 357            | 393           | 351   | 436   |
| Unknown           | 14    | 9      | 1              | 7              | 0             | 51    | 20    |
|                   |       | Divorc | es under the A | Administration | of Muslim Lav | w Act |       |
| Total             | 1,511 | 1,536  | 1,538          | 1,587          | 1,662         | 1,689 | 1,667 |
| Under 25          | 59    | 47     | 41             | 49             | 40            | 33    | 41    |
| 25 - 29           | 202   | 186    | 186            | 172            | 180           | 159   | 162   |
| 30 - 34           | 268   | 290    | 256            | 286            | 290           | 293   | 288   |
| 35 - 39           | 284   | 292    | 305            | 275            | 310           | 265   | 27    |
| 40 - 44           | 249   | 255    | 251            | 265            | 257           | 295   | 24    |
| 45 - 49           | 204   | 217    | 201            | 235            | 257           | 229   | 23    |
| 50 - 54           | 117   | 123    | 153            | 157            | 172           | 210   | 22    |
| 55 - 59           | 67    | 63     | 76             | 87             | 85            | 121   | 9     |
| 60 & Over         | 59    | 59     | 69             | 60             | 71            | 84    | 10    |
| Unknown           | 2     | 4      | 0              | 1              | 0             | 0     |       |
|                   |       |        | Annulments u   | inder the Wom  | en's Charter  |       |       |
| Total             | 353   | 369    | 370            | 344            | 392           | 446   | 403   |
| Under 25          | 10    | 8      | 10             | 18             | 21            | 14    | 1-    |
| 25 - 29           | 80    | 101    | 91             | 84             | 88            | 109   | 10:   |
| 30 - 34           | 122   | 111    | 126            | 99             | 111           | 132   | 11'   |
| 35 - 39           | 65    | 70     | 62             | 65             | 63            | 75    | 6     |
| 40 & Over         | 75    | 79     | 81             | 78             | 109           | 116   | 10    |
| Unknown           | 1     | 0      | 0              | 0              | 0             | 0     |       |

Source: Family Justice Courts

Syariah Court

Registry of Muslim Marriages

3.17 DIVORCES AND ANNULMENTS BY AGE GROUP OF FEMALES

| Age Group (Years) | 2009  | 2010  | 2011            | 2012           | 2013          | 2014  | 2015 |
|-------------------|-------|-------|-----------------|----------------|---------------|-------|------|
| Age Gloup (Tears) | 200)  | 2010  |                 | nder the Wome  |               | 2014  | 2013 |
|                   | -     |       | Divorces ur     | ider the wome  | en's Charter  |       |      |
| Total             | 5,416 | 5,433 | 5,696           | 5,306          | 5,471         | 5,172 | 5,45 |
| Under 25          | 106   | 114   | 112             | 126            | 106           | 97    | 10   |
| 25 - 29           | 686   | 654   | 744             | 574            | 584           | 537   | 54   |
| 30 - 34           | 1,307 | 1,230 | 1,182           | 1,164          | 1,189         | 1,090 | 1,16 |
| 35 - 39           | 1,241 | 1,201 | 1,280           | 1,166          | 1,135         | 1,127 | 1,10 |
| 40 - 44           | 795   | 844   | 934             | 908            | 938           | 894   | 1,01 |
| 45 - 49           | 580   | 640   | 658             | 565            | 647           | 589   | 62   |
| 50 - 54           | 368   | 375   | 397             | 401            | 450           | 391   | 44   |
| 55 - 59           | 198   | 205   | 209             | 215            | 260           | 239   | 20   |
| 60 & Over         | 123   | 158   | 179             | 179            | 161           | 165   | 23   |
| Unknown           | 12    | 12    | 1               | 8              | 1             | 43    | 1    |
|                   |       | Divor | ces under the A | Administration | of Muslim La  | w Act |      |
| Total             | 1,511 | 1,536 | 1,538           | 1,587          | 1,662         | 1,689 | 1,66 |
| Under 25          | 160   | 132   | 124             | 120            | 107           | 84    | Ģ    |
| 25 - 29           | 269   | 281   | 283             | 281            | 289           | 253   | 27   |
| 30 - 34           | 287   | 318   | 276             | 318            | 337           | 345   | 32   |
| 35 - 39           | 260   | 268   | 279             | 252            | 295           | 270   | 27   |
| 40 - 44           | 196   | 211   | 222             | 229            | 232           | 273   | 25   |
| 45 - 49           | 193   | 177   | 182             | 188            | 190           | 205   | 19   |
| 50 - 54           | 79    | 80    | 97              | 123            | 130           | 142   | 15   |
| 55 - 59           | 41    | 44    | 41              | 49             | 53            | 66    | (    |
| 60 & Over         | 24    | 24    | 34              | 26             | 29            | 51    | 4    |
| Unknown           | 2     | 1     | 0               | 1              | 0             | 0     |      |
|                   |       |       | Annulments      | under the Won  | nen's Charter |       |      |
| Total             | 353   | 369   | 370             | 344            | 392           | 446   | 40   |
| Under 25          | 28    | 51    | 59              | 49             | 49            | 59    | 2    |
| 25 - 29           | 147   | 169   | 162             | 143            | 175           | 170   | 16   |
| 30 - 34           | 108   | 81    | 91              | 97             | 110           | 133   | 1    |
| 35 - 39           | 50    | 47    | 37              | 33             | 36            | 50    | 2    |
| 40 & Over         | 19    | 21    | 21              | 22             | 22            | 34    | 2    |
| Unknown           | 1     | 0     | 0               | 0              | 0             | 0     |      |

Source : Family Justice Courts Syariah Court

Registry of Muslim Marriages

3.18 DIVORCES AND ANNULMENTS BY ETHNIC GROUP OF COUPLE

|                           |   |       | _          |               | _             |       | Number |  |  |  |
|---------------------------|---|-------|------------|---------------|---------------|-------|--------|--|--|--|
| Ethnic Group              | 2009  | 2010  | 2011       | 2012          | 2013          | 2014  | 2015   |  |  |  |
|                           |   |       | Divorces u | nder the Wome | en's Charter  |       |        |  |  |  |
| Total                     | 5,416   | 5,433 | 5,696      | 5,306         | 5,471         | 5,172 | 5,450  |  |  |  |
| Chinese                   | 4,493   | 4,446 | 4,595      | 4,240         | 4,331         | 4,018 | 4,121  |  |  |  |
| Indians                   | 361   | 366   | 408        | 336           | 373           | 352   | 387    |  |  |  |
| Others <sup>1</sup>       | 54  | 64    | 82         | 91            | 86            | 89    | 118    |  |  |  |
| Inter-ethnic <sup>2</sup> | 493   | 546   | 602        | 628           | 658           | 701   | 802    |  |  |  |
|                           | Divorces under the Administration of Muslim Law Act |       |            |               |               |       |        |  |  |  |
| Total                     | 1,511   | 1,536 | 1,538      | 1,587         | 1,662         | 1,689 | 1,667  |  |  |  |
| Malays                    | 1,077   | 1,080 | 1,108      | 1,209         | 1,211         | 1,254 | 1,177  |  |  |  |
| Indians                   | 54  | 55    | 73         | 95            | 74            | 70    | 77     |  |  |  |
| Others <sup>3</sup>       | 18  | 32    | 13         | 15            | 22            | 20    | 21     |  |  |  |
| Inter-ethnic <sup>4</sup> | 361   | 369   | 344        | 268           | 355           | 345   | 392    |  |  |  |
|                           |   |       | Annulments | under the Wor | nen's Charter |       |        |  |  |  |
| Total                     | 353   | 369   | 370        | 344           | 392           | 446   | 405    |  |  |  |
| Chinese                   | 265   | 276   | 272        | 236           | 226           | 266   | 259    |  |  |  |
| Indians                   | 31  | 39    | 33         | 28            | 37            | 40    | 38     |  |  |  |
| Others <sup>1</sup>       | 2   | 3     | 3          | 5             | 7             | 8     | 2      |  |  |  |
| Inter-ethnic <sup>2</sup> | 54  | 51    | 62         | 75            | 122           | 131   | 106    |  |  |  |

Source: Family Justice Courts

Syariah Court

Registry of Muslim Marriages

Note: Total includes divorces or annulments where the ethnic group of males or females was not reported.

<sup>1</sup> Comprises couples of the same ethnicity from other ethnic groups besides Chinese and Indians.

 $<sup>2\</sup>quad Refers \ to \ divorces \ or \ annulments \ where \ both \ the \ male \ and \ female \ are \ of \ different \ ethnicity.$ 

<sup>3</sup> Comprises couples of the same ethnicity from other ethnic groups besides Malays and Indians.

<sup>4</sup> Refers to divorces where both the male and female are of different ethnicity.



# 出 Households

### Households

A household refers to a group of two or more persons living together in the same house and sharing common food or other arrangements for essential living. It also includes a person living alone or a person living with others but having his own food arrangements. Although persons may be living in the same house, they may not be members of the same household.

Resident household: Refers to a household headed by a resident (i.e. Singapore citizen or permanent resident).

Resident employed household: Refers to a resident household with at least one working person.

### Household Income from Work

Household income from work: Refers to the sum of income received by working members of the household from employment and business. However, it does not include the income of maids. Household income from work includes one-twelfth of the annual bonus. Data on household income from work refers to household income from work before accounting for Government transfers and taxes, unless stated otherwise.

As the income data pertain to income from work, the coverage of households is based on resident employed households.

Household income from work per household member: Refers to the household income from work divided by the total number of members in the household. For example, if there is one person in a household of four who is working, his income is divided by four to derive the income per household member. This takes into account the different sizes of households in each group and enables analysis of changes in household income, adjusted for changes in household size over time.

### **Household Income Groups**

For data on household income by income groups, all resident employed households were ranked from lowest to highest by their monthly household income from work per household member, and were then divided into ten equal groups or deciles.

Not all households are consistently in the same decile group from one year to the next. For example, an employed household may move down from a higher decile in a particular year due to temporary unemployment of a household member, before moving up the deciles when the member resumes work in the subsequent year. In comparing the performance of any particular decile group over time, it is therefore relevant to note that they may not pertain to the same group of households.

# **Household Income Distribution**

Percentile ratios are one measure of the spread of incomes across the population. P90 refers to the income level at the 90<sup>th</sup> percentile. P10 refers to the income level at the 10<sup>th</sup> percentile.

The *Gini coefficient* is a summary measure of income inequality. It is equal to zero in the case of total income equality and to one in the case of total inequality. The more unequal the income distribution, the larger would be the Gini coefficient.

Internationally, there are differences in computation methods adopted by different countries, although the basic concept of Gini remains the same. One major difference is in the equivalence scale adopted. Equivalence scales take into account economies of scale within the household, and adjust for household size so that households of different sizes and compositions are comparable. There are different scales used by different countries.

# 4

### **HOUSEHOLDS** (cont'd)

The simplest method of adjusting for differences in household size is to divide household income by the number of members in the household, and present household income on a per household member basis.

For example, a household of four having income from work of \$4,000 would have \$1,000 on a per member basis.

There are more complex methods of adjusting for differences in household size. One such method is the *square root scale*, which is used by the Organisation of Economic Co-operation and Development (OECD) in its major reports on income inequality. The square root scale divides household income by the square root of household size.

For example, based on the square root scale, a household of four having income from work of \$4,000 would have an equivalised household income of \$2,000 (i.e. \$4,000 divided by the square root of 4).

Another method would be the *modified OECD scale*. The modified OECD scale assigns the first adult in the household a weight of 1 point, and each additional adult a weight of 0.5 points and each child a weight of 0.3 points. Equivalised household income is derived by dividing the total household income by the sum of the points allocated to the household members.

For example, a household comprising two adults and two children would have a sum total of 2.1 points. If the household has income from work of \$4,000, then the equivalised household income would be \$1,905 (i.e. \$4,000 divided by 2.1).

### **Government Transfers and Taxes**

The Government transfers and taxes included in different years are subject to scheme design and data availability. For example, data on workfare-related payment starts from 2006, when the scheme was first introduced in 2006 as workfare bonus and subsequently as the workfare income supplement scheme.

In addition, as more administrative data on transfers or taxes become available, the coverage for Government transfers or taxes would be expanded to include them.

The full list of Government transfers and taxes included for the relevant years is available in the annual paper on "Key Household Income Trends" published by the Singapore Department of Statistics (DOS).

### **Other References**

The annual report on "<u>Population Trends</u>" published by DOS also contains data on households and housing, among other demographic statistics. The publication comprises five sections, namely 'Population', 'Households and Housing', 'Family Formation and Dissolution', 'Fertility' and 'Mortality'. Statistical analyses of Singapore's changing population profiles are also included in the publication.

Data on household income from work are also available in the annual paper on "Key Household Income Trends" published by DOS. The paper highlights key trends in household income from work and presents the impact of Government transfers and taxes on household income.

# 4.1 NUMBER OF RESIDENT HOUSEHOLDS AND AVERAGE HOUSEHOLD SIZE

|                                  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Total ('000)                     | 1,119.6 | 1,145.9 | 1,146.2 | 1,152.0 | 1,174.5 | 1,200.0 | 1,225.3 |
| 1-Person Household               | 115.7   | 139.9   | 114.0   | 109.5   | 124.4   | 134.8   | 146.0   |
| 2-Person Household               | 219.4   | 215.0   | 227.9   | 230.9   | 234.1   | 252.2   | 259.2   |
| 3-Person Household               | 234.3   | 231.4   | 237.1   | 238.3   | 243.7   | 251.5   | 256.2   |
| 4-Person Household               | 271.3   | 263.9   | 279.6   | 281.1   | 290.9   | 280.1   | 282.2   |
| 5-Person Household               | 164.5   | 168.0   | 169.7   | 170.5   | 165.5   | 162.9   | 164.0   |
| 6-Person Household or Larger     | 114.4   | 127.8   | 117.9   | 121.8   | 116.0   | 118.4   | 117.6   |
| Average Household Size (Persons) | 3.49    | 3.50    | 3.51    | 3.53    | 3.47    | 3.43    | 3.39    |

Notes: Data for 2010 and 2015 are from the Census of Population 2010 and General Household Survey 2015 respectively.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys

# 4.2 RESIDENT HOUSEHOLDS BY TYPE OF DWELLING

|                                  |         |         |         |         |         |         | Thousand |
|----------------------------------|---------|---------|---------|---------|---------|---------|----------|
|                                  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
| Total                            | 1,119.6 | 1,145.9 | 1,146.2 | 1,152.0 | 1,174.5 | 1,200.0 | 1,225.3  |
| Total HDB Dwellings <sup>1</sup> | 935.9   | 943.7   | 948.4   | 939.5   | 961.8   | 965.2   | 981.1    |
| 1- and 2-Room Flats <sup>2</sup> | 49.7    | 52.3    | 52.2    | 54.0    | 59.1    | 64.0    | 68.8     |
| 3-Room Flats                     | 226.5   | 229.7   | 233.3   | 214.5   | 223.2   | 220.1   | 223.4    |
| 4-Room Flats                     | 358.8   | 365.4   | 367.5   | 375.4   | 382.4   | 386.0   | 392.3    |
| 5-Room and Executive Flats       | 297.4   | 293.3   | 291.9   | 293.3   | 294.3   | 292.8   | 295.8    |
| Condominiums & Other Apartments  | 117.8   | 132.0   | 126.9   | 139.9   | 143.7   | 161.8   | 170.8    |
| Landed Properties                | 61.2    | 64.9    | 66.3    | 69.0    | 65.0    | 69.4    | 69.2     |
| Others                           | 4.6     | 5.3     | 4.6     | 3.6     | 4.0     | 3.6     | 4.2      |
|                                  |         |         |         |         |         |         |          |

Notes: Data for 2010 and 2015 are from the Census of Population 2010 and General Household Survey 2015 respectively.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

<sup>1</sup> Includes non-privatised Housing and Urban Development Corporation (HUDC) flats.

<sup>2</sup> Includes HDB studio apartments.

# 4.3 AVERAGE HOUSEHOLD SIZE OF RESIDENT HOUSEHOLDS BY TYPE OF DWELLING

|                                  |      |      |      |      |      |      | Persons |
|----------------------------------|------|------|------|------|------|------|---------|
|                                  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015    |
| Total                            | 3.49 | 3.50 | 3.51 | 3.53 | 3.47 | 3.43 | 3.39    |
| Total HDB Dwellings <sup>1</sup> | 3.45 | 3.45 | 3.46 | 3.48 | 3.42 | 3.37 | 3.34    |
| 1- and 2-Room Flats <sup>2</sup> | 2.12 | 2.11 | 2.24 | 2.36 | 2.38 | 2.32 | 2.24    |
| 3-Room Flats                     | 2.77 | 2.78 | 2.77 | 2.79 | 2.74 | 2.70 | 2.69    |
| 4-Room Flats                     | 3.66 | 3.66 | 3.65 | 3.63 | 3.58 | 3.53 | 3.49    |
| 5-Room and Executive Flats       | 3.93 | 3.96 | 3.99 | 3.98 | 3.94 | 3.88 | 3.89    |
| Condominiums & Other Apartments  | 3.45 | 3.41 | 3.43 | 3.48 | 3.42 | 3.40 | 3.34    |
| Landed Properties                | 4.28 | 4.39 | 4.38 | 4.35 | 4.33 | 4.32 | 4.30    |
| Others                           | 2.98 | 2.65 | 3.21 | 2.99 | 3.38 | 3.02 | 2.92    |
|                                  |      |      |      |      |      |      |         |

Notes: Data for 2010 and 2015 are from the Census of Population 2010 and General Household Survey 2015 respectively.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

<sup>1</sup> Includes non-privatised Housing and Urban Development Corporation (HUDC) flats.

<sup>2</sup> Includes HDB studio apartments.

# 4.4 HOME OWNERSHIP RATES AMONG RESIDENT HOUSEHOLDS BY TYPE OF DWELLING

|                                  |      |      |      |      |      |      | Per Cent |
|----------------------------------|------|------|------|------|------|------|----------|
|                                  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total                            | 88.8 | 87.2 | 88.6 | 90.1 | 90.5 | 90.3 | 90.8     |
| Total HDB Dwellings <sup>1</sup> | 90.4 | 88.8 | 90.1 | 91.7 | 91.8 | 91.6 | 92.0     |
| 1- and 2-Room Flats <sup>2</sup> | 17.7 | 18.4 | 18.1 | 23.1 | 22.3 | 23.9 | 33.9     |
| 3-Room Flats                     | 91.2 | 90.0 | 91.2 | 93.3 | 94.1 | 94.4 | 94.8     |
| 4-Room Flats                     | 95.3 | 93.6 | 94.9 | 96.6 | 97.0 | 96.8 | 96.8     |
| 5-Room and Executive Flats       | 96.1 | 94.4 | 96.2 | 97.0 | 97.2 | 97.4 | 97.2     |
| Condominiums & Other Apartments  | 77.2 | 76.6 | 79.0 | 80.3 | 82.5 | 83.3 | 84.1     |
| Landed Properties                | 90.2 | 88.7 | 88.7 | 89.5 | 91.2 | 90.9 | 92.0     |
| Others                           | 51.7 | 46.8 | 44.2 | 65.1 | 47.7 | 47.1 | 54.9     |
|                                  |      |      |      |      |      |      |          |

Notes: Data for 2010 and 2015 are from the Census of Population 2010 and General Household Survey 2015 respectively.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

<sup>1</sup> Includes non-privatised Housing and Urban Development Corporation (HUDC) flats.

<sup>2</sup> Includes HDB studio apartments.

4.5 AVERAGE MONTHLY HOUSEHOLD INCOME FROM WORK
PER HOUSEHOLD MEMBER <sup>1</sup> AMONG RESIDENT EMPLOYED HOUSEHOLDS <sup>2</sup>
BY DECILES <sup>3</sup>

|                         |       |       |        |        |        |        | Dollars |
|-------------------------|-------|-------|--------|--------|--------|--------|---------|
| Deciles <sup>3</sup>    | 2009  | 2010  | 2011   | 2012   | 2013   | 2014   | 2015    |
| Total                   | 2,524 | 2,709 | 2,925  | 3,142  | 3,204  | 3,418  | 3,624   |
| $1^{st}$ - $10^{th}$    | 357   | 381   | 422    | 440    | 463    | 494    | 541     |
| $11^{th} \ - \ 20^{th}$ | 682   | 738   | 803    | 856    | 896    | 971    | 1,040   |
| $21^{st}$ - $30^{th}$   | 957   | 1,036 | 1,122  | 1,200  | 1,268  | 1,353  | 1,446   |
| $31^{st} - 40^{th}$     | 1,242 | 1,341 | 1,445  | 1,547  | 1,633  | 1,747  | 1,857   |
| $41^{st}$ - $50^{th}$   | 1,564 | 1,668 | 1,794  | 1,917  | 2,033  | 2,155  | 2,274   |
| $51^{st} \ - \ 60^{th}$ | 1,929 | 2,051 | 2,207  | 2,355  | 2,483  | 2,627  | 2,780   |
| $61^{st}$ - $70^{th}$   | 2,393 | 2,540 | 2,726  | 2,893  | 3,039  | 3,217  | 3,409   |
| $71^{st} - 80^{th}$     | 3,042 | 3,232 | 3,458  | 3,658  | 3,837  | 4,060  | 4,276   |
| $81^{st}$ - $90^{th}$   | 4,130 | 4,429 | 4,727  | 5,004  | 5,192  | 5,524  | 5,804   |
| $91^{st}$ - $100^{th}$  | 8,945 | 9,669 | 10,543 | 11,552 | 11,198 | 12,032 | 12,816  |

Notes: Data for 2010 are from the Census of Population 2010.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

Household income from work includes employer Central Provident Fund (CPF) contributions.

<sup>1</sup> Household income from work per household member refers to the household income from work divided by the total number of members in the household. For example, if there is one person in a household of four who is working, his income is divided by four to derive the income per household member.

<sup>2</sup> A resident employed household refers to a household headed by a Singapore citizen or permanent resident and with at least one working person.

<sup>3</sup> Based on the ranking of all resident employed households by their monthly household income from work per household member.

It is notable, for example, that some resident employed households in the lowest 10% owned a car (16.0%),
employed a maid (7.8%), lived in private property (6.5%) or were headed by persons aged 60 years and over (39.9%) in 2015.

It is also important to recognise that not all households are consistently in the same decile group from one year to the next.

For example, an employed household may move down from a higher decile in a particular year due to temporary unemployment of a household member, before moving up the deciles when the member resumes work in the subsequent year.

In comparing the performance of any particular decile group over time, it is therefore relevant to note that they may not pertain to the same group of households.

# **4.6** RATIO OF HOUSEHOLD INCOME FROM WORK PER HOUSEHOLD MEMBER <sup>1</sup> AT THE 90TH PERCENTILE (P90) TO 10TH PERCENTILE (P10) AMONG RESIDENT EMPLOYED HOUSEHOLDS <sup>2</sup>

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|------|------|------|------|------|------|------|
| P90/P10 Ratio of Household Income from<br>Work Per Household Member <sup>3</sup>   | 9.43 | 9.35 | 9.19 | 9.14 | 9.00 | 8.92 | 8.65 |
| P90/P10 Ratio of Household Income from<br>Work Per Household Member After<br>Accounting for Government Transfers<br>and Taxes <sup>4</sup> | 6.48 | 6.47 | 6.21 | 6.37 | 5.90 | 5.97 | 5.84 |

Notes: Data for 2010 are from the Census of Population 2010.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

Household income from work includes employer Central Provident Fund (CPF) contributions.

- 1 Household income from work per household member refers to the household income from work divided by the total number of members in the household. For example, if there is one person in a household of four who is working, his income is divided by four to derive the income per household member.
- 2 A resident employed household refers to a household headed by a Singapore citizen or permanent resident and with at least one working person.
- 3 Based on ranking of all resident employed households by their household income from work per household member.
- 4 Based on ranking of all resident employed households by their household income from work per household member after accounting for Government transfers and taxes.

Data on income after accounting for Government transfers and taxes for 2015 are preliminary.

# 4.7 GINI COEFFICIENT <sup>1</sup> AMONG RESIDENT EMPLOYED HOUSEHOLDS <sup>2</sup>

|  | 2009   | 2010     | 2011           | 2012           | 2013          | 2014  | 2015           |  |
|--|--|----------|----------------|----------------|---------------|-------|----------------|--|
|  |  | •        | Househo        | old Income fro | m Work        |       |                |  |
| Based on Per Household Member <sup>3</sup>   | 0.471  | 0.472    | 0.473          | 0.478          | 0.463         | 0.464 | 0.463          |  |
| Based on Modified OECD Scale <sup>4</sup>  | 0.449  | 0.448    | 0.452          | 0.457          | 0.442         | 0.444 | 0.440          |  |
| Based on Square Root Scale <sup>5</sup>  | 0.431  | 0.432    | 0.434          | 0.435          | 0.421         | 0.425 | 0.415          |  |
|  | Household Income from Work After Accounting for Government Transfers and Taxes |          |                |                |               |       |                |  |
|  |  | 711101 7 | Accounting for | Government     | Transfers and | Taxes |                |  |
| Based on Per Household Member <sup>3</sup>   | 0.422  | 0.425    | 0.423          | 0.432          | 0.409         | 0.411 | 0.410          |  |
| Based on Per Household Member <sup>3</sup> Based on Modified OECD Scale <sup>4</sup> | 0.422  |          |                |                |               |       | 0.410<br>0.387 |  |

Notes: Data for 2010 are from the Census of Population 2010.

Data for other years are based on the sample of households surveyed in the mid-year Comprehensive Labour Force Surveys.

Household income from work includes employer Central Provident Fund (CPF) contributions.

Data on income after accounting for Government transfers and taxes for 2015 are preliminary.

- 1 Internationally, there are differences in computation methods adopted by different countries, although the basic concept of Gini remains the same. One major difference is in the equivalence scale adopted. Equivalence scales take into account economies of scale within the household, and adjust for household size so that households of different sizes and compositions are comparable. There are different scales used by different countries.
- 2 A resident employed household refers to a household headed by a Singapore citizen or permanent resident and with at least one working person.
- 3 Household income from work per household member refers to the household income from work divided by the total number of members in the household. For example, if there is one person in a household of four who is working, his income is divided by four to derive the income per household member. The per household member scale is used by economies such as Hong Kong and Japan.
- 4 The modified Organisation of Economic Co-operation and Development (OECD) scale assigns the first adult in the household a weight of 1 point, and each additional adult a weight of 0.5 points and each child a weight of 0.3 points. Equivalised household income is derived by dividing the total household income by the sum of the points allocated to all the household members.
  - The modified OECD scale is used by Eurostat, the United Kingdom and Australia.
- 5 Based on the ranking of individuals by their household income on a 'per equivalised member basis' (i.e. household income is divided by square root of household size). This follows the approach adopted in the OECD 2008 report "Growing Unequal? Income Distribution and Poverty in OECD Countries".

In following this approach, individuals such as children and maids would also be ranked. It is also noted that some OECD countries publish their own Gini using a different equivalence scale, and not the square root scale.

## 5



# Labour and Productivity

#### Labour Force

Labour force data are based on the midyear Labour Force Surveys conducted by the Ministry of Manpower (MOM) every year except for 1990, 1995, 2000 and 2005 which are based on the Censuses of Population and the mid-decade General Household Surveys conducted by the Singapore Department of Statistics. The data refer to persons aged fifteen years and over. The reference period refers to the week preceding the date of interview.

#### **Definitions**

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, profit or family gains; 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 as persons employed, unless otherwise specified.

Unemployed Persons: Refer to persons aged fifteen years and over who are not working but are available for work and are actively looking for a job 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.

Persons In The Labour Force: Refer to persons aged fifteen years and over who are either employed or unemployed during the reference period.

Persons Outside The Labour Force: Refer to persons aged fifteen years and over who are neither employed nor unemployed during the reference period.

Age-Sex Specific Labour Force Participation Rate: Refers to the percentage of the labour force to the population in the specific sex and age group.

Unemployment Rate: Refers to the percentage of unemployed persons to the labour force.

Labour Productivity: Measures output per unit of labour input. Value-added (VA) is generally used as the measure of output, while labour input may be measured by number of employed persons or hours worked per employee.

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 commissions, tips, other allowances and onetwelfth 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.

#### **Hours Worked**

Statistics on weekly hours worked are compiled from surveys conducted by MOM. Since 2006, both private and public sector establishments are covered in the surveys. For the private sector, only establishments with at least 25 employees are included.

#### **Definitions**

Weekly Paid Hours: Refer 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.

#### Singapore Workforce Skills Qualifications (WSQ) System

The Singapore Workforce Skills Qualifications (WSQ) system was launched in October 2005. It is a national credentialing system that provides training and certifications for adult workers to obtain nationally

recognized and industry-relevant qualifications. WSQ emphasises flexible competency-based adult learning, open access to skills upgrading and clear career progression pathways for workers to upgrade their skills.

The WSQ is anchored on the development of skills and competencies linked to occupational structures, and was developed in close consultation with industries. Under the WSQ system, competency standards, assessment strategies and training curriculum incorporating adult learning principles are established for each key industry.

#### **Employment Assistance**

Singapore citizens and permanent residents may register with the Singapore Workforce Development Agency's (WDA's) Career Centres, or the Employment and Employability Institute (e2i), for employment and training assistance. Statistics on new registrants for employment and/or training assistance and job seekers placed into employment are compiled by WDA.

Additionally, trainees who undergo the WSQ courses at WDA's appointed Continuing Education and Training (CET) Centres may seek career advisory and placement assistance related to the area of training.

#### **Multifactor Productivity**

Multifactor productivity relates output to a set of combined inputs, usually labour and capital. A change in multifactor productivity reflects the change in output that cannot be accounted for by the change in combined inputs. Multifactor productivity therefore measures the effects of changes such as technological progress and changes in the organisation of production.

#### **Central Provident Fund**

The Central Provident Fund (CPF) was set up in 1955 to provide financial security to workers in their old age. Over the years, it has evolved into a comprehensive social security savings scheme. The overall scope and benefits of the CPF encompass: Retirement, Healthcare, Home Ownership, Family Protection and Asset Enhancement.

Both the employee and his employer contribute to the employee's savings in his CPF accounts. With effect from 1 January 2016, employees below age 55 pay 20% of their monthly wages into CPF and their employers pay another 17%, constituting a total of 37%. Contributions are lower for employees above age 55 and for those earning lower wages, i.e. below \$750 a month.

For those earning between \$750 and \$6,000, the CPF contribution rates are as follows:

| Employee's       |                 |                 |              |
|------------------|-----------------|-----------------|--------------|
| Age              | <u>Employer</u> | <b>Employee</b> | <u>Total</u> |
|                  | (Percent        | of Monthly V    | Vage)        |
| ≤55 years        | 17.0            | 20.0            | 37.0         |
| > 55 to 60 years | s 13.0          | 13.0            | 26.0         |
| > 60 to 65 years | s 9.0           | 7.5             | 16.5         |
| > 65 years       | 7.5             | 5.0             | 12.5         |

Each CPF member has three accounts – the Ordinary, Medisave and Special Accounts. When a member turns 55 years old, he will have a Retirement Account. CPF savings can be used under the various CPF schemes. Ordinary Account savings can be used for housing, approved investments, CPF insurance and education. Medisave Account savings can be used for hospitalisation and approved medical expenses, and to pay for premiums of approved medical insurance for members and their dependants. Special Account savings are for old age and investment in retirement-related financial products.

CPF monies are invested in Special Singapore Government Securities (SSGS) which are non-tradable bonds issued specifically to the CPF Board and are guaranteed by the Government. The savings in the Ordinary Account earn a market-related interest rate based on the 12-month fixed deposit and month-end savings rates of the major local banks. The interest rate is revised every three months, and as legislated in the CPF Act, is subject to a minimum of 2.5% per annum.

Savings in the Special and Medisave Accounts (SMA) earn either 4% or the 12month average yield of the 10-year Singapore Government Securities (10YSGS) plus 1%, whichever is higher. The interest rate on SMA is adjusted quarterly, based on interest rates on 10YSGS over the preceding 12-month period. Savings in the Retirement Account earn a fixed coupon equal to the 12-month average yield of the 10YSGS plus 1% at the point of issuance. The interest rate to be credited to the Retirement Account will be the weighted average interest of the entire portfolio of the SSGS, and is adjusted yearly in January. The Government will maintain a 4% floor rate for interest earned on all Special, Medisave and Retirement Accounts monies until 31 December 2016. Thereafter, the 2.5% floor rate will apply for all CPF accounts.

In addition, an extra 1% of interest will be paid on the first \$60,000 of a member's combined balances, with up to \$20,000 from the Ordinary Account. The extra interest from the Ordinary Account will be credited into the member's Special or Retirement Account (depending on his age) to improve his retirement savings. From 2016, members aged 55 and above will also earn an additional 1% extra interest on the first \$30,000 of their combined balances. This is paid over and above the current extra 1% interest that is earned on the first \$60,000 of their combined balances.

Members can withdraw their CPF savings when they reach 55 years of age, after setting aside the Full Retirement Sum or Basic Retirement Sum with sufficient property

charge/pledge in their Retirement Account. The retirement sum will provide members with a stream of income to meet their basic needs during retirement. The Basic Retirement Sum and Full Retirement Sum applicable to members who reach 55 years between 1 July 2015 and 31 December 2016 are \$80,500 and \$161,000 respectively.

Singapore has one of the highest life expectancies in the world. About half of Singaporeans who are aged 65 today are expected to live beyond 85, and one-third would live beyond 90. With increasing life expectancy, a growing proportion of retirees would outlive their CPF savings if they were on the Retirement Sum Scheme where payouts last for about 20 years.

A significant enhancement to the retirement adequacy system is the CPF Lifelong Income For The Elderly (LIFE) annuity scheme. It provides members with an income for life. Members will be placed on CPF LIFE if they are Singapore Citizens or Permanent Residents born in 1958 or after, and have at least \$60,000 in their Retirement Account when they reach 65 years old. CPF Members can also apply to be on CPF LIFE between the payout eligibility age and before they turn 80 years old.

#### **Labour Relations**

#### **Concepts and Definitions**

*Trade Union:* Refers to a group or association of employees or employers whose principal objective is to regulate relations between employees and employers for all or any of the following purposes:

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

#### 5 LABOUR AND PRODUCTIVITY (cont'd)

Trade Dispute: Refers to any dispute between and among employees and employers relating to employment, non-employment, terms of employment or conditions of work.

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 (IAC) 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.

#### **Sources of Data**

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

The LRWD 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 Collective Agreements and Industrial Arbitration Court Awards are obtained from the Industrial Arbitration Court (IAC).

The 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.

#### Other References

Similar data are presented in the "Singapore Yearbook of Manpower Statistics", published by the Manpower Research and Statistics Department of MOM.

Detailed statistics on the labour force are presented in the report "<u>Labour Force in Singapore</u>", published by MOM.

#### 5.1 LABOUR FORCE

|  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|--|---------|---------|---------|---------|---------|---------|---------|
| Labour Force ('000)                          |         |         |         |         |         |         |         |
| Total  | 3,030.0 | 3,135.9 | 3,237.1 | 3,361.8 | 3,443.7 | 3,530.8 | 3,610.6 |
| Residents                                    | 1,985.7 | 2,047.3 | 2,080.1 | 2,119.6 | 2,138.8 | 2,185.2 | 2,232.3 |
| Employed ('000)                              |         |         |         |         |         |         |         |
| Total  | 2,905.9 | 3,047.2 | 3,149.7 | 3,274.7 | 3,352.9 | 3,440.2 | 3,516.0 |
| Residents                                    | 1,869.4 | 1,962.9 | 1,998.9 | 2,040.6 | 2,056.1 | 2,103.5 | 2,147.8 |
| Unemployed ('000)                            |         |         |         |         |         |         |         |
| Total  | 124.1   | 88.8    | 87.4    | 87.1    | 90.7    | 90.7    | 94.6    |
| Residents                                    | 116.3   | 84.4    | 81.2    | 79.0    | 82.6    | 81.8    | 84.5    |
| Unemployment Rate (Seasonally Adjusted) (%)  |         |         |         |         |         |         |         |
| Total  | 3.2     | 2.2     | 2.0     | 1.9     | 2.0     | 1.9     | 1.9     |
| Residents                                    | 4.5     | 3.1     | 2.9     | 2.8     | 2.9     | 2.8     | 2.8     |
| Resident Labour Force Participation Rate (%) | 65.4    | 66.2    | 66.1    | 66.6    | 66.7    | 67.0    | 68.3    |
| Male   | 76.3    | 76.5    | 75.6    | 76.0    | 75.8    | 75.9    | 76.7    |
| Female                                       | 55.2    | 56.5    | 57.0    | 57.7    | 58.1    | 58.6    | 60.4    |

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

Notes: Data are for mid-year.

Total Population comprises residents and non-residents. Residents comprise Singapore citizens and permanent residents.

#### 5.2 AGE-SPECIFIC RESIDENT LABOUR FORCE PARTICIPATION RATES

|                   |      |      |      |      |      |      | Per Cent |
|-------------------|------|------|------|------|------|------|----------|
| Age Group (Years) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total             | 65.4 | 66.2 | 66.1 | 66.6 | 66.7 | 67.0 | 68.3     |
| 15 - 19           | 11.8 | 15.4 | 12.3 | 12.4 | 11.8 | 12.3 | 15.8     |
| 20 - 24           | 63.5 | 65.8 | 62.8 | 63.6 | 61.7 | 61.8 | 65.3     |
| 25 - 29           | 89.3 | 89.4 | 89.2 | 88.3 | 88.5 | 89.0 | 90.3     |
| 30 - 34           | 88.3 | 89.0 | 88.6 | 89.8 | 90.1 | 89.9 | 90.2     |
| 35 - 39           | 85.8 | 86.2 | 87.3 | 88.0 | 88.0 | 88.8 | 89.1     |
| 40 - 44           | 84.4 | 84.4 | 84.9 | 85.4 | 85.7 | 87.1 | 87.6     |
| 45 - 49           | 82.1 | 82.4 | 83.7 | 84.4 | 84.5 | 84.7 | 85.9     |
| 50 - 54           | 78.1 | 78.6 | 79.7 | 79.5 | 80.0 | 81.8 | 82.4     |
| 55 - 59           | 68.4 | 68.3 | 70.2 | 72.4 | 73.2 | 74.3 | 75.5     |
| 60 - 64           | 50.6 | 51.0 | 54.7 | 58.1 | 59.7 | 61.2 | 62.4     |
| 65 - 69           | 29.9 | 30.9 | 36.2 | 38.6 | 40.2 | 41.2 | 42.2     |
| 70 - 74           | 16.8 | 18.7 | 20.4 | 21.9 | 24.2 | 25.7 | 24.9     |
| 75 & Over         | 5.7  | 5.4  | 6.4  | 6.7  | 7.6  | 8.4  | 8.8      |

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

Notes: Data are for mid-year.

Residents comprise Singapore citizens and permanent residents.

5.3 AGE-SPECIFIC RESIDENT MALE LABOUR FORCE PARTICIPATION RATES

|                   |      |      |      |      |      |      | Per Cent |
|-------------------|------|------|------|------|------|------|----------|
| Age Group (Years) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total             | 76.3 | 76.5 | 75.6 | 76.0 | 75.8 | 75.9 | 76.7     |
| 15 - 19           | 13.0 | 17.5 | 14.6 | 13.8 | 13.2 | 14.9 | 18.3     |
| 20 - 24           | 65.2 | 66.2 | 63.2 | 64.5 | 63.2 | 63.6 | 64.4     |
| 25 - 29           | 93.3 | 93.3 | 91.8 | 89.9 | 89.0 | 89.4 | 90.9     |
| 30 - 34           | 97.7 | 97.7 | 97.4 | 97.2 | 97.2 | 97.5 | 97.4     |
| 35 - 39           | 97.8 | 98.0 | 97.7 | 98.2 | 97.5 | 97.2 | 97.5     |
| 40 - 44           | 97.8 | 96.8 | 97.1 | 97.1 | 97.1 | 96.8 | 97.1     |
| 45 - 49           | 96.4 | 96.1 | 96.0 | 95.6 | 96.1 | 96.4 | 96.9     |
| 50 - 54           | 93.5 | 92.6 | 93.5 | 93.8 | 94.0 | 93.8 | 94.2     |
| 55 - 59           | 86.8 | 85.0 | 85.7 | 88.5 | 87.6 | 87.5 | 88.2     |
| 60 - 64           | 69.5 | 67.5 | 71.1 | 74.6 | 75.0 | 77.0 | 77.2     |
| 65 - 69           | 43.6 | 43.7 | 49.1 | 52.6 | 53.4 | 54.1 | 54.5     |
| 70 - 74           | 25.2 | 27.3 | 31.1 | 32.1 | 35.8 | 37.3 | 34.5     |
| 75 & Over         | 10.6 | 9.8  | 11.1 | 11.5 | 12.5 | 13.6 | 13.8     |

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

Notes: Data are for mid-year.

Residents comprise Singapore citizens and permanent residents.

5.4 AGE-SPECIFIC RESIDENT FEMALE LABOUR FORCE PARTICIPATION RATES

| Age Group (Years) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Per 2015 |
|-------------------|------|------|------|------|------|------|----------|
| Age Gloup (Teals) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2013     |
| Total             | 55.2 | 56.5 | 57.0 | 57.7 | 58.1 | 58.6 | 60.4     |
| 15 - 19           | 10.4 | 13.1 | 9.8  | 10.9 | 10.2 | 9.6  | 13.1     |
| 20 - 24           | 61.8 | 65.3 | 62.5 | 62.6 | 59.9 | 59.8 | 66.3     |
| 25 - 29           | 85.5 | 85.7 | 86.7 | 86.8 | 88.0 | 88.6 | 89.7     |
| 30 - 34           | 79.9 | 81.3 | 81.0 | 83.3 | 83.7 | 83.3 | 83.9     |
| 35 - 39           | 75.5 | 75.2 | 77.6 | 78.9 | 79.4 | 80.9 | 81.      |
| 40 - 44           | 71.3 | 72.7 | 73.9 | 74.8 | 75.4 | 78.1 | 78.      |
| 45 - 49           | 67.9 | 68.9 | 71.5 | 73.4 | 73.1 | 73.7 | 75.      |
| 50 - 54           | 63.0 | 64.9 | 66.1 | 65.6 | 66.5 | 70.4 | 70.      |
| 55 - 59           | 49.5 | 51.7 | 55.1 | 56.2 | 59.1 | 61.4 | 62.      |
| 60 - 64           | 33.0 | 35.4 | 38.4 | 41.7 | 44.2 | 45.5 | 47.      |
| 65 - 69           | 17.7 | 19.1 | 23.9 | 26.3 | 27.9 | 29.5 | 31.      |
| 70 - 74           | 9.3  | 11.3 | 11.3 | 13.4 | 14.1 | 15.6 | 16.      |
| 75 & Over         | 2.4  | 2.7  | 3.3  | 3.4  | 4.2  | 4.7  | 5.       |

 $Source: Comprehensive\ Labour\ Force\ Survey,\ Manpower\ Research\ \&\ Statistics\ Department,\ Ministry\ of\ Manpower\ Manpo$ 

Notes: Data are for mid-year.

Residents comprise Singapore citizens and permanent residents.

#### 5.5 EMPLOYED RESIDENTS AGED 15 YEARS AND OVER BY OCCUPATION

|  |         |         |         |         |         |         | Thousand |
|--|---------|---------|---------|---------|---------|---------|----------|
| Occupation                                 | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
| Total                                      | 1,869.4 | 1,962.9 | 1,998.9 | 2,040.6 | 2,056.1 | 2,103.5 | 2,147.8  |
| Legislators, Senior Officials & Managers   | 305.3   | 335.2   | 355.9   | 346.3   | 349.6   | 342.3   | 345.3    |
| Professionals                              | 337.4   | 382.5   | 343.7   | 367.3   | 366.9   | 373.5   | 392.9    |
| Associate Professionals and Technicians    | 317.4   | 310.4   | 351.1   | 352.8   | 373.6   | 408.9   | 428.8    |
| Clerical Support Workers                   | 234.7   | 240.5   | 245.2   | 262.2   | 268.0   | 265.3   | 264.5    |
| Service and Sales Workers                  | 223.1   | 239.4   | 240.5   | 257.7   | 249.4   | 248.3   | 255.9    |
| Craftsmen and Related Trades Workers       | 88.8    | 86.5    | 89.5    | 90.6    | 82.2    | 82.2    | 83.9     |
| Plant and Machine Operators and Assemblers | 158.3   | 154.2   | 157.7   | 149.8   | 147.7   | 146.4   | 146.2    |
| Cleaners, Labourers and Related Workers    | 141.0   | 145.5   | 145.7   | 145.3   | 150.2   | 166.0   | 160.3    |
| Others <sup>1</sup>                        | 63.5    | 68.7    | 69.6    | 68.6    | 68.7    | 70.8    | 70.0     |

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

Notes: Data are for mid-year.

Residents comprise Singapore citizens and permanent residents.

Data are classified based on Singapore Standard Occupation Classification (SSOC) 2015.

 $<sup>1\</sup> Includes\ Agricultural\ \&\ Fishery\ Workers\ and\ Workers\ Not\ Classifiable\ by\ Occupation.$ 

#### 5.6 EMPLOYED RESIDENTS AGED 15 YEARS AND OVER BY INDUSTRY

|  |         |         |         |         |         |         | Thousand |
|--|---------|---------|---------|---------|---------|---------|----------|
|  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
| Total                                      | 1,869.4 | 1,962.9 | 1,998.9 | 2,040.6 | 2,056.1 | 2,103.5 | 2,147.8  |
| Manufacturing                              | 293.6   | 291.4   | 292.4   | 288.2   | 280.0   | 249.3   | 238.7    |
| Construction                               | 113.8   | 104.0   | 99.7    | 104.5   | 101.9   | 98.2    | 110.4    |
| Services                                   | 1,441.1 | 1,529.9 | 1,583.3 | 1,621.4 | 1,647.5 | 1,731.2 | 1,775.4  |
| Wholesale & Retail Trade                   | 272.4   | 281.7   | 300.5   | 306.3   | 302.2   | 346.3   | 364.1    |
| Transportation and Storage                 | 179.9   | 191.3   | 192.0   | 189.5   | 192.6   | 188.9   | 187.6    |
| Accommodation and Food Services Activities | 124.9   | 128.9   | 135.2   | 129.3   | 135.1   | 137.1   | 139.1    |
| Information & Communications               | 94.3    | 99.9    | 85.4    | 85.8    | 92.1    | 87.8    | 83.5     |
| Financial and Insurance Activities         | 121.9   | 126.0   | 145.5   | 150.6   | 147.8   | 165.6   | 167.3    |
| Business Services <sup>1</sup>             | 243.4   | 253.5   | 271.6   | 289.7   | 291.6   | 311.3   | 333.4    |
| Community, Social &                        |         |         |         |         |         |         |          |
| Personal Services                          | 404.4   | 448.6   | 453.1   | 470.1   | 486.1   | 494.3   | 500.5    |
| Others <sup>2</sup>                        | 20.9    | 37.6    | 23.5    | 26.5    | 26.8    | 24.8    | 23.3     |

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

Notes: Data are for mid-year.

Residents comprise Singapore citizens and permanent residents.

Data across the various years may not be strictly comparable due to revisions in the industrial classification.

Data prior to 2010 are classified according to the Singapore Standard Industrial Classification (SSIC) 2005.

Data from 2010 onwards are classified according to the SSIC 2010.

<sup>1</sup> Includes Real Estate Activities, Professional, Scientific & Technical Activities, Administrative & Support Service Activities.

<sup>2</sup> Includes Agriculture, Fishing, Quarrying, Utilities and Sewage & Waste Management.

GOVERNMENT EMPLOYEES IN THE PUBLIC SERVICE (End of Period)

|                                |         |         |         |         |         |         | Number  |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
|                                | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Total                          | 124,191 | 127,279 | 131,228 | 136,027 | 138,720 | 140,865 | 143,183 |
| Ministries and Organs of State | 74,201  | 75,836  | 77,540  | 80,210  | 81,508  | 82,291  | 83,713  |
| Statutory Boards               | 49,990  | 51,443  | 53,688  | 55,817  | 57,212  | 58,574  | 59,470  |

Source: Public Service Division, Prime Minister's Office

Note: Data exclude Daily-Rated Employees.

GOVERNMENT EMPLOYEES IN THE CIVIL SERVICE 1
BY DIVISIONAL STATUS AND SEX
(End of Period)

|                   |            |         |                |        |        |        | Number |
|-------------------|------------|---------|----------------|--------|--------|--------|--------|
| Divisional Status | 2009       | 2010    | 2011           | 2012   | 2013   | 2014   | 2015   |
|                   | T. 1. 20.1 | ## 00 c | <b>55.5</b> 10 | 00.210 | 04.500 | 02 201 | 02.712 |
| Total             | 74,201     | 75,836  | 77,540         | 80,210 | 81,508 | 82,291 | 83,713 |
| Males             | 32,427     | 33,034  | 33,461         | 34,584 | 35,162 | 35,659 | 36,653 |
| Females           | 41,774     | 42,802  | 44,079         | 45,626 | 46,346 | 46,632 | 47,060 |
| Division I        | 38,839     | 40,160  | 41,957         | 44,720 | 46,656 | 48,747 | 55,020 |
| Males             | 14,595     | 14,964  | 15,534         | 16,432 | 17,072 | 17,790 | 19,492 |
| Females           | 24,244     | 25,196  | 26,423         | 28,288 | 29,584 | 30,957 | 35,528 |
| Division II       | 20,828     | 25,168  | 26,034         | 26,189 | 25,951 | 25,166 | 20,747 |
| Males             | 9,278      | 12,590  | 13,147         | 13,586 | 13,850 | 14,000 | 13,444 |
| Females           | 11,550     | 12,578  | 12,887         | 12,603 | 12,101 | 11,166 | 7,303  |
| Division III      | 10,755     | 6,762   | 5,888          | 5,683  | 5,307  | 4,888  | 5,520  |
| Males             | 6,431      | 3,381   | 2,728          | 2,559  | 2,256  | 1,966  | 2,847  |
| Females           | 4,324      | 3,381   | 3,160          | 3,124  | 3,051  | 2,922  | 2,673  |
| Division IV       | 3,779      | 3,746   | 3,661          | 3,618  | 3,594  | 3,490  | 2,426  |
| Males             | 2,123      | 2,099   | 2,052          | 2,007  | 1,984  | 1,903  | 870    |
| Females           | 1,656      | 1,647   | 1,609          | 1,611  | 1,610  | 1,587  | 1,556  |

Source : Public Service Division, Prime Minister's Office

Note: Data exclude Daily-Rated Employees.

<sup>1</sup> Refers to officers in the Ministries and Organs of State. Statutory Board officers are not included.

5.9 CENTRAL PROVIDENT FUND MEMBERS<sup>1</sup> BY AGE GROUP (End of Period)

|                   |         |         |         |         |         |         | Thousand |
|-------------------|---------|---------|---------|---------|---------|---------|----------|
| Age Group (Years) | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
|                   |         |         |         |         |         |         |          |
| Total             | 3,291.3 | 3,343.3 | 3,376.3 | 3,418.6 | 3,507.6 | 3,593.3 | 3,685.9  |
| Up to 20          | 101.3   | 106.0   | 110.4   | 112.8   | 117.6   | 123.1   | 126.2    |
| > 20 - 25         | 214.8   | 220.5   | 229.4   | 236.6   | 234.4   | 241.0   | 248.0    |
| > 25 - 30         | 271.4   | 267.8   | 257.6   | 252.6   | 260.9   | 266.5   | 273.9    |
| > 30 - 35         | 303.4   | 305.1   | 301.8   | 303.7   | 302.6   | 299.8   | 298.8    |
| > 35 - 40         | 340.0   | 335.6   | 333.9   | 326.8   | 320.3   | 318.5   | 320.6    |
| > 40 - 45         | 372.5   | 359.4   | 349.6   | 346.6   | 346.7   | 347.0   | 342.6    |
| > 45 - 50         | 428.2   | 425.7   | 419.6   | 407.3   | 392.0   | 373.5   | 360.4    |
| > 50 - 55         | 369.5   | 379.3   | 384.9   | 390.5   | 396.9   | 399.8   | 398.1    |
| Over 55           | 864.8   | 919.0   | 965.2   | 1,018.1 | 1,074.3 | 1,127.3 | 1,183.3  |
| Not specified     | 25.4    | 24.8    | 24.1    | 23.7    | 62.2    | 96.7    | 133.9    |

Source: Central Provident Fund (CPF) Board

5.10 ACTIVE CENTRAL PROVIDENT FUND MEMBERS<sup>1</sup> BY AGE GROUP (End of Period)

|                   |         |         |         |         |         |         | Thousand |
|-------------------|---------|---------|---------|---------|---------|---------|----------|
| Age Group (Years) | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
| Total             | 1,644.6 | 1,700.4 | 1,735.4 | 1,788.8 | 1,854.3 | 1,951.0 | 1,959.3  |
| Up to 20          | 38.9    | 43.9    | 42.5    | 45.7    | 49.3    | 56.8    | 49.7     |
| > 20 - 25         | 109.7   | 115.5   | 118.6   | 122.4   | 122.1   | 129.4   | 120.1    |
| > 25 - 30         | 211.7   | 209.3   | 202.2   | 199.8   | 208.2   | 217.6   | 221.0    |
| > 30 - 35         | 227.5   | 231.1   | 229.4   | 232.2   | 233.9   | 235.7   | 233.5    |
| > 35 - 40         | 229.3   | 232.0   | 234.3   | 233.2   | 232.4   | 236.6   | 237.5    |
| > 40 - 45         | 208.0   | 210.6   | 214.0   | 220.9   | 228.7   | 237.4   | 236.7    |
| > 45 - 50         | 201.8   | 206.9   | 210.4   | 212.6   | 214.6   | 217.2   | 215.4    |
| > 50 - 55         | 174.2   | 182.7   | 188.1   | 194.4   | 201.1   | 209.9   | 210.6    |
| > 55 - 60         | 122.3   | 132.0   | 142.6   | 153.9   | 165.3   | 178.3   | 182.9    |
| Over 60           | 121.3   | 136.2   | 153.3   | 173.5   | 198.6   | 232.1   | 251.8    |
| Not specified     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0      |
|                   |         |         |         |         |         |         |          |

Source: Central Provident Fund Board

<sup>1</sup> Refer to persons (including self-employed) who have CPF balances in any of their CPF accounts

<sup>1</sup> Refer to persons who have at least one contribution paid for them for the current or any of the preceding three months.

Data exclude self-employed persons who are not employees concurrently

5.11 ACTIVE CENTRAL PROVIDENT FUND MEMBERS¹ BY INDUSTRY (End of Period)

|  |         |         |         |         |         |         | Thousand |
|--|---------|---------|---------|---------|---------|---------|----------|
| Industry   | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015     |
|  |         |         |         |         |         |         |          |
| Total  | 1,644.6 | 1,700.4 | 1,735.4 | 1,788.8 | 1,854.3 | 1,951.0 | 1,959.3  |
| Manufacturing  | 261.8   | 256.7   | 254.5   | 254.6   | 253.1   | 252.7   | 246.8    |
| Utilities  | 12.8    | 11.3    | 11.7    | 11.8    | 12.5    | 12.4    | 12.4     |
| Construction   | 93.1    | 100.4   | 102.1   | 105.4   | 110.2   | 113.3   | 113.2    |
| Commerce   | 374.7   | 356.9   | 366.0   | 382.8   | 402.9   | 430.9   | 427.4    |
| Transport & Communications   | 170.6   | 173.4   | 175.8   | 181.2   | 188.2   | 197.4   | 199.3    |
| Financial & Business Services  | 401.7   | 458.5   | 472.5   | 485.9   | 506.5   | 543.3   | 549.5    |
| Other Service Activities   | 326.8   | 340.1   | 349.5   | 363.4   | 377.2   | 397.2   | 407.2    |
| Agriculture & Fishing, Quarrying<br>Activities Not Adequately<br>Defined | 3.2     | 3.1     | 3.4     | 3.7     | 3.7     | 3.9     | 3.6      |

Source : Central Provident Fund Board

Note: Data prior to 2010 are classified according to the Singapore Standard Industrial Classification, SSIC 2005.

Data from 2010 are classified according to the SSIC 2010.

<sup>1</sup> Refer to persons who have at least one contribution paid for them for the current or any of the preceding three months.

Data exclude self-employed persons who are not employees concurrently.

#### 5.12 EMPLOYMENT SERVICES

|                              |        |        |        |        |        |        | Number |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                              | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|                              |        |        |        |        |        |        |        |
| New Registrants <sup>1</sup> | 53,369 | 33,160 | 39,383 | 40,898 | 35,940 | 37,740 | 34,888 |
| Males                        | 27,711 | 16,987 | 20,873 | 21,676 | 18,384 | 17,780 | 18,676 |
| Females                      | 25,658 | 16,173 | 18,510 | 19,222 | 17,556 | 19,960 | 16,212 |
| Placements <sup>2</sup>      | 24,112 | 17,732 | 14,223 | 19,580 | 16,934 | 15,645 | 14,530 |
| Males                        | 12,750 | 9,450  | 7,487  | 10,913 | 9,601  | 8,559  | 8,181  |
| Females                      | 11,362 | 8,282  | 6,736  | 8,667  | 7,333  | 7,086  | 6,349  |

Source: Singapore Workforce Development Agency (WDA)

Notes: Data are based on date of data entry.

WDA was established in September 2003 to help Singaporeans and Permanent Residents stay competitive and employable in the job market. WDA's training and career services are delivered through its Career Centres and the Employment and Employability Institute (e2i)

Data refer to employment services provided by WDA's Career Centres and e2i.

Official data on the job placement rate are available at:

 $\underline{http://www.singaporebudget.gov.sg/data/budget\_2015/download/43\%20MOM\%202015.pdf}$ 

This includes those who found their own jobs after receiving services from WDA Career Centres and e2i.

<sup>1</sup> Refers to the number of people who registered for employment and/or training assistance at WDA Career Centres and e2i.

<sup>2</sup> Refers to the number of people who were placed into employment by WDA Career Centres and e2i.

5.13 CHANGES IN VALUE ADDED PER WORKER BY INDUSTRY

|  |      |      |      |      |      |      | Per Cent |
|--|------|------|------|------|------|------|----------|
| Industry                                   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total <sup>1</sup>                         | -3.3 | 11.6 | 2.3  | -0.3 | 0.5  | -0.5 | -0.1     |
| Total (excluding Construction) 1           | -2.9 | 11.9 | 2.2  | 0.0  | 1.2  | -0.3 | -0.2     |
| Goods Producing Industries <sup>2</sup>    | -1.7 | 25.0 | 5.7  | -2.1 | -2.3 | 0.2  | -3.1     |
| Manufacturing                              | 1.5  | 32.2 | 7.9  | -1.2 | 0.3  | 2.5  | -2.7     |
| Construction                               | 8.1  | 4.0  | 2.0  | 2.7  | -3.0 | -1.8 | 0.5      |
| Services Producing Industries <sup>2</sup> | -4.2 | 6.7  | 1.9  | 0.6  | 2.6  | -0.6 | 0.2      |
| Wholesale & Retail Trade                   | -6.0 | 12.9 | 3.1  | 0.3  | 4.2  | -1.2 | 5.2      |
| Transportation & Storage                   | -9.8 | 4.6  | 1.4  | 1.4  | -0.6 | -0.7 | -2.3     |
| Accommodation & Food Services              | -5.8 | 9.4  | 4.6  | -1.4 | -2.6 | -2.4 | -2.8     |
| Information & Communications               | 0.7  | 1.4  | -2.3 | 4.2  | 2.5  | 1.8  | -1.5     |
| Finance & Insurance                        | -2.0 | 6.4  | 1.3  | 1.4  | 10.8 | 4.9  | 1.8      |
| Business Services                          | -0.8 | 3.0  | 1.9  | 0.2  | -0.1 | -4.1 | -2.9     |
| Other Services Industries                  | 0.3  | 7.3  | 0.4  | -0.8 | -1.1 | -1.3 | -1.9     |

Source: Singapore Department of Statistics

Manpower Research & Statistics Department, Ministry of Manpower

5.14 MULTIFACTOR PRODUCTIVITY: CONTRIBUTIONS TO GROWTH IN REAL GDP <sup>1</sup>

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|------|------|------|------|------|------|------|
| Percentage Change in Real GDP                      | -0.6 | 14.2 | 6.0  | 3.6  | 4.6  | 3.2  | 2.0  |
| Percentage Contribution to Growth in Real GDP of : |      |      |      |      |      |      |      |
| Capital Input                                      | 2.9  | 3.0  | 3.0  | 3.2  | 3.1  | 2.6  | 2.2  |
| Labour Input                                       | 1.2  | 1.4  | 1.5  | 1.7  | 1.8  | 1.7  | 1.0  |
| Multifactor Productivity<br>Growth                 | -4.7 | 9.7  | 1.5  | -1.2 | -0.3 | -1.0 | -1.2 |

<sup>1</sup> All growth rates are expressed in log terms.

<sup>1</sup> Based on Gross Domestic Product at 2010 Market Prices.

<sup>2</sup> Based on Gross Value Added at 2010 Basic Prices.

## 5.15 GROSS MONTHLY INCOME FROM WORK (INCLUDING EMPLOYER CPF) OF FULL-TIME EMPLOYED RESIDENTS

|                                      |       |       |       |       |       |       | Dollars |
|--------------------------------------|-------|-------|-------|-------|-------|-------|---------|
|                                      | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015    |
| Median (50 <sup>th</sup> Percentile) | 2,927 | 3,000 | 3,249 | 3,480 | 3,705 | 3,770 | 3,949   |
| 20 <sup>th</sup> Percentile          | 1,500 | 1,600 | 1,733 | 1,740 | 1,885 | 1,972 | 2,012   |

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

Notes: Data are for mid-year. As the income data are captured from a sample survey, the income changes for the 20th percentile nearer the end of the income spectrum tend to be more volatile over shorter (e.g. year-on-year) than longer periods (e.g. 5 or 10 years). 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. Data exclude full-time National Servicemen.

Residents refer to Singapore citizens and permanent residents.

Full-time employment refers to employment where the normal hours of work is 35 hours or more in a week.

5.16 AVERAGE WEEKLY PAID HOURS WORKED PER EMPLOYEE BY INDUSTRY

|      |  |  |   |   |   | Hours   |
|------|--|--|---|---|---|---|
| 2009 | 2010   | 2011   | 2012  | 2013  | 2014  | 2015  |
| 46.0 | 46.2   | 46.2   | 46.2  | 46.2  | 46.0  | 45.6  |
| 49.3 | 50.5   | 50.2   | 50.2  | 50.1  | 49.7  | 49.3  |
| 52.2 | 52.4   | 52.8   | 53.0  | 53.2  | 52.9  | 52.1  |
| 43.7 | 43.8   | 43.7   | 43.6  | 43.2  | 43.1  | 43.0  |
| 45.3 | 45.7   | 46.2   | 46.1  | 45.7  | 45.8  | 45.7  |
| 41.2 | 41.2   | 41.6   | 42.1  | 43.0  | 42.0  | 41.5  |
| 41.6 | 41.7   | 41.5   | 41.5  | 41.7  | 41.5  | 41.5  |
| 41.9 | 41.4   | 41.2   | 41.2  | 41.2  | 41.1  | 41.1  |
| 44.2 | 44.7   | 44.6   | 44.5  | 44.6  | 44.5  | 44.8  |
| 43.3 | 43.0   | 43.1   | 43.6  | 43.6  | 43.1  | 42.9  |
| 47.9 | 48.7   | 48.5   | 48.5  | 47.5  | 47.3  | 46.4  |
| 41.8 | 42.0   | 42.1   | 42.1  | 42.1  | 42.0  | 42.1  |
| 46.4 | 46.3   | 45.8   | 45.7  | 45.7  | 45.6  | 45.6  |
|      | 46.0<br>49.3<br>52.2<br>43.7<br>45.3<br>41.2<br>41.6<br>41.9<br>44.2<br>43.3<br>47.9<br>41.8 | 46.0 46.2  49.3 50.5  52.2 52.4  43.7 43.8  45.3 45.7  41.2 41.2  41.6 41.7  41.9 41.4  44.2 44.7  43.3 43.0  47.9 48.7  41.8 42.0 | 46.0     46.2     46.2       49.3     50.5     50.2       52.2     52.4     52.8       43.7     43.8     43.7       45.3     45.7     46.2       41.2     41.2     41.6       41.6     41.7     41.5       41.9     41.4     41.2       44.2     44.7     44.6       43.3     43.0     43.1       47.9     48.7     48.5       41.8     42.0     42.1 | 46.0       46.2       46.2       46.2         49.3       50.5       50.2       50.2         52.2       52.4       52.8       53.0         43.7       43.8       43.7       43.6         45.3       45.7       46.2       46.1         41.2       41.2       41.6       42.1         41.6       41.7       41.5       41.5         41.9       41.4       41.2       41.2         44.2       44.7       44.6       44.5         43.3       43.0       43.1       43.6         47.9       48.7       48.5       48.5         41.8       42.0       42.1       42.1 | 46.0       46.2       46.2       46.2       46.2         49.3       50.5       50.2       50.2       50.1         52.2       52.4       52.8       53.0       53.2         43.7       43.8       43.7       43.6       43.2         45.3       45.7       46.2       46.1       45.7         41.2       41.2       41.6       42.1       43.0         41.6       41.7       41.5       41.5       41.7         41.9       41.4       41.2       41.2       41.2         44.2       44.7       44.6       44.5       44.6         43.3       43.0       43.1       43.6       43.6         47.9       48.7       48.5       48.5       47.5         41.8       42.0       42.1       42.1       42.1 | 46.0       46.2       46.2       46.2       46.2       46.0         49.3       50.5       50.2       50.2       50.1       49.7         52.2       52.4       52.8       53.0       53.2       52.9         43.7       43.8       43.7       43.6       43.2       43.1         45.3       45.7       46.2       46.1       45.7       45.8         41.2       41.2       41.6       42.1       43.0       42.0         41.6       41.7       41.5       41.5       41.7       41.5         41.9       41.4       41.2       41.2       41.2       41.1         44.2       44.7       44.6       44.5       44.6       44.5         43.3       43.0       43.1       43.6       43.6       43.1         47.9       48.7       48.5       48.5       47.5       47.3         41.8       42.0       42.1       42.1       42.1       42.0 |

Source : Labour Market Survey, Manpower Research & Statistics Department, Ministry of Manpower

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

Data are based on Singapore Standard Industrial Classification 2010.

<sup>1</sup> Includes Agriculture, Fishing, Quarrying, Utilities and Sewage & Waste Management.

5.17 AVERAGE MONTHLY RECRUITMENT RATE BY INDUSTRY AND OCCUPATIONAL GROUP

|                                       |      |      |      |      |      |      | Per Cent |
|---------------------------------------|------|------|------|------|------|------|----------|
|                                       | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total                                 | 2.2  | 2.8  | 2.7  | 2.8  | 2.7  | 2.6  | 2.4      |
| Industry                              |      |      |      |      |      |      |          |
| Manufacturing                         | 1.5  | 2.0  | 2.0  | 1.9  | 1.9  | 1.8  | 1.6      |
| Construction                          | 2.5  | 2.5  | 2.8  | 3.4  | 3.3  | 2.6  | 2.5      |
| Services                              | 2.5  | 3.2  | 3.0  | 2.9  | 2.8  | 2.8  | 2.6      |
| Wholesale & Retail Trade              | 2.7  | 3.6  | 3.2  | 3.4  | 3.5  | 3.1  | 2.7      |
| Transportation & Storage              | 1.4  | 2.3  | 2.4  | 2.3  | 2.3  | 2.1  | 2.0      |
| Accommodation & Food Services         | 3.8  | 4.7  | 4.9  | 4.6  | 4.6  | 4.7  | 4.5      |
| Information & Communications          | 2.0  | 3.2  | 3.0  | 2.8  | 2.7  | 3.0  | 2.6      |
| Financial & Insurance Services        | 1.6  | 2.7  | 2.4  | 1.9  | 2.1  | 2.2  | 2.0      |
| Real Estate Services                  | 3.6  | 3.9  | 4.1  | 4.1  | 3.6  | 3.8  | 3.5      |
| Professional Services                 | 2.3  | 2.7  | 2.8  | 2.9  | 2.5  | 2.3  | 2.2      |
| Administrative & Support Services     | 4.3  | 4.8  | 4.9  | 4.6  | 4.8  | 5.2  | 4.7      |
| Community, Social & Personal          |      |      |      |      |      |      |          |
| Services                              | 2.0  | 2.3  | 1.9  | 1.8  | 1.6  | 1.6  | 1.6      |
| Others <sup>1</sup>                   | 2.3  | 2.0  | 2.1  | 2.4  | 2.2  | 2.1  | 1.6      |
| Occupational Group                    |      |      |      |      |      |      |          |
| Professionals, Managers, Executives & |      |      |      |      |      |      |          |
| Technicians                           | 1.6  | 2.2  | 2.1  | 1.9  | 1.9  | 1.9  | 1.8      |
| Clerical, Sales & Service Workers     | 3.1  | 4.0  | 3.8  | 3.7  | 3.8  | 3.8  | 3.5      |
| Production & Transport Operators,     |      |      |      |      |      |      |          |
| Cleaners & Labourers                  | 2.3  | 2.7  | 2.8  | 3.1  | 3.1  | 2.9  | 2.6      |

Source : Labour Market Survey, Manpower Research & Statistics Department, Ministry of Manpower

Note: Data pertain to private sector establishments with at least 25 employees, and include the public sector.

Data are classified according to the Singapore Standard Industrial Classification 2010.

 $<sup>1\</sup>quad Includes\ Agriculture,\ Fishing,\ Quarrying,\ Utilities\ and\ Sewerage\ \&\ Waste\ Management.$ 

5.18 AVERAGE MONTHLY RESIGNATION RATE BY INDUSTRY AND OCCUPATIONAL GROUP

|                                       |      |      |      |      |      |      | Per Cent |
|---------------------------------------|------|------|------|------|------|------|----------|
|                                       | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| Total                                 | 1.8  | 2.0  | 2.0  | 2.1  | 2.0  | 2.0  | 1.9      |
| Industry                              |      |      |      |      |      |      |          |
| Manufacturing                         | 1.5  | 1.5  | 1.6  | 1.6  | 1.5  | 1.5  | 1.5      |
| Construction                          | 1.6  | 1.8  | 1.7  | 1.8  | 2.0  | 1.9  | 1.8      |
| Services                              | 1.9  | 2.3  | 2.2  | 2.3  | 2.2  | 2.2  | 2.0      |
| Wholesale & Retail Trade              | 2.4  | 2.9  | 2.6  | 2.9  | 2.9  | 2.6  | 2.2      |
| Transportation & Storage              | 1.3  | 1.6  | 1.6  | 1.6  | 1.7  | 1.7  | 1.5      |
| Accommodation & Food Services         | 3.8  | 4.1  | 4.2  | 4.3  | 4.1  | 4.3  | 4.0      |
| Information & Communications          | 1.6  | 2.1  | 1.9  | 2.0  | 2.0  | 1.8  | 1.8      |
| Financial & Insurance Services        | 1.1  | 1.6  | 1.5  | 1.2  | 1.4  | 1.4  | 1.3      |
| Real Estate Services                  | 2.9  | 3.3  | 3.2  | 3.3  | 3.0  | 3.4  | 3.1      |
| Professional Services                 | 1.6  | 1.9  | 1.8  | 1.8  | 1.8  | 1.8  | 1.8      |
| Administrative & Support Services     | 3.3  | 4.1  | 3.9  | 4.1  | 3.8  | 4.0  | 3.4      |
| Community, Social & Personal          |      |      |      |      |      |      |          |
| Services                              | 1.0  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1      |
| Others <sup>1</sup>                   | 2.0  | 1.6  | 1.7  | 1.7  | 1.5  | 1.5  | 1.4      |
| Occupational Group                    |      |      |      |      |      |      |          |
| Professionals, Managers, Executives & |      |      |      |      |      |      |          |
| Technicians                           | 1.1  | 1.4  | 1.4  | 1.3  | 1.3  | 1.3  | 1.3      |
| Clerical, Sales & Service Workers     | 2.7  | 3.1  | 3.0  | 3.1  | 3.1  | 3.1  | 2.8      |
| Production & Transport Operators,     |      |      |      |      |      |      |          |
| Cleaners & Labourers                  | 1.9  | 2.1  | 2.1  | 2.2  | 2.2  | 2.3  | 2.1      |
|                                       |      |      |      |      |      |      |          |

Source : Labour Market Survey, Manpower Research & Statistics Department, Ministry of Manpower Note : Data pertain to private sector establishments with at least 25 employees, and include the public sector.

Oct. Bata pertain to private sector establishments with at least 25 employees, and metade the public sector

Data are classified according to the Singapore Standard Industrial Classification 2010.

<sup>1</sup> Includes Agriculture, Fishing, Quarrying, Utilities and Sewerage & Waste Management.

5.19 SINGAPORE WORKFORCE SKILLS QUALIFICATIONS (WSQ) TRAINEES BY AGE, HIGHEST QUALIFICATION ATTAINED, AND SEX

|   |         |         |         |         | Number  |
|---|---------|---------|---------|---------|---------|
|   | 2011    | 2012    | 2013    | 2014    | 2015    |
| Гotal                                       | 192,249 | 198,322 | 231,009 | 267,423 | 267,851 |
| Age Group                                   |         |         |         |         |         |
| Below 20                                    | 10,860  | 11,575  | 13,641  | 14,221  | 18,186  |
| 20 - 29                                     | 37,056  | 40,260  | 45,947  | 52,170  | 55,239  |
| 30 - 39                                     | 44,643  | 46,722  | 52,223  | 56,622  | 56,124  |
| 40 - 49                                     | 44,489  | 43,950  | 50,793  | 56,065  | 53,543  |
| 50 - 59                                     | 38,461  | 37,916  | 45,233  | 54,096  | 50,145  |
| 60 - 69                                     | 13,560  | 14,812  | 18,990  | 27,614  | 27,712  |
| 70 & Over                                   | 3,180   | 3,087   | 4,182   | 6,635   | 6,902   |
| Highest Qualification Attained <sup>1</sup> |         |         |         |         |         |
| Below Primary                               | 5,695   | 5,531   | 8,863   | 12,074  | 16,191  |
| Primary                                     | 28,343  | 28,516  | 26,391  | 33,538  | 25,143  |
| Lower Secondary                             | 27,824  | 22,120  | 26,606  | 30,313  | 28,015  |
| Secondary                                   | 54,012  | 55,977  | 60,134  | 64,020  | 60,722  |
| Post-Secondary                              | 12,663  | 17,318  | 20,601  | 21,856  | 25,346  |
| Professional and WSQ Diploma                | 8,624   | 9,620   | 10,744  | 14,030  | 12,370  |
| Polytechnic Diploma                         | 17,224  | 19,790  | 24,144  | 26,612  | 31,126  |
| Degree and Above                            | 23,926  | 27,144  | 34,032  | 45,011  | 48,409  |
| Others / Not Reported                       | 13,938  | 12,306  | 19,494  | 19,969  | 20,529  |
| Sex   |         |         |         |         |         |
| Female                                      | 98,582  | 101,438 | 109,391 | 120,818 | 122,375 |
| Male  | 90,364  | 95,154  | 119,170 | 144,166 | 143,254 |
| Not Reported                                | 3,303   | 1,730   | 2,448   | 2,439   | 2,222   |

Source: Singapore Workforce Development Agency (WDA)

Notes: The Singapore Workforce Skills Qualifications (WSQ) is a national credentialing system based on national standards developed by WDA in collaboration with industries. It provides training and certification for adult workers to obtain nationally recognised and industry-relevant qualifications. WSQ emphasises flexible competency-based adult learning, open access to skills upgrading and clear career progression pathways for workers to upgrade their skills

Data are based on calendar year and pertain to local WSQ trainees who have attained at least one WSQ

Statement of Attainment.

<sup>1</sup> Data are classified according to the Singapore Standard Educational Classification 2010.

5.20 SINGAPORE WORKFORCE SKILLS QUALIFICATIONS (WSQ) TRAINEES BY LEVEL OF WSQ STATEMENT OF ATTAINMENT

|                                      |         |         |         |         | Number  |
|--------------------------------------|---------|---------|---------|---------|---------|
|                                      | 2011    | 2012    | 2013    | 2014    | 2015    |
| Number of WSQ trainees               | 192,249 | 198,322 | 231,009 | 267,423 | 267,851 |
| Level of WSQ Statement of Attainment |         |         |         |         |         |
| Certificate                          | 147,901 | 155,148 | 164,867 | 188,700 | 190,861 |
| Higher Certificate                   | 11,678  | 7,294   | 11,146  | 10,728  | 13,515  |
| Advanced Certificate                 | 48,433  | 31,628  | 45,699  | 55,944  | 51,517  |
| Diploma                              | 23,363  | 19,771  | 32,873  | 36,117  | 36,428  |
| Specialist Diploma                   | 5,417   | 5,760   | 7,604   | 8,790   | 8,435   |
| Graduate Certificate                 | 1,029   | 751     | 784     | 756     | 492     |
| Graduate Diploma                     | 390     | 393     | 550     | 738     | 848     |

Source: Singapore Workforce Development Agency (WDA)

Notes: 1. Data pertain to local WSQ trainees who have attained at least one WSQ Statement of Attainment.

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.

<sup>2.</sup> Data for each certification level are based on unique headcounts.

<sup>3.</sup> Data are based on calendar year.

5.21 TRADE UNIONS AND MEMBERSHIP (End of Period)

|                |         |         |         |         |         |         | Number  |
|----------------|---------|---------|---------|---------|---------|---------|---------|
| Industry       | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Employee Class | •       | •       | -       | -       |         |         |         |
| Unions         | 65      | 65      | 65      | 66      | 64      | 65      | 64      |
| Members        | 526,089 | 549,878 | 588,014 | 613,418 | 655,126 | 686,676 | 718,723 |
| Employer Class |         |         |         |         |         |         |         |
| Unions         | 3       | 3       | 3       | 3       | 3       | 3       | 3       |
| Members        | 2,571   | 2,529   | 2,306   | 2,288   | 3,074   | 3,312   | 3,365   |

Source: Ministry of Manpower

5.22 LABOUR RELATIONS

|                                       |      |      |      |      |      |      | Number |
|---------------------------------------|------|------|------|------|------|------|--------|
|                                       | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015   |
| Trade Disputes                        | 166  | 121  | 159  | 164  | 136  | 106  | 119    |
| Wage Increase and                     |      |      |      |      |      |      |        |
| Conditions of Service                 | 72   | 57   | 76   | 92   | 83   | 66   | 72     |
| Retrenchment Benefits                 | 34   | 12   | 15   | 11   | 18   | 15   | 18     |
| Bonus or Gratuity                     | 13   | 13   | 17   | 19   | 10   | 5    | 11     |
| Other Industrial Matters <sup>1</sup> | 47   | 39   | 51   | 42   | 25   | 20   | 18     |
| Cases Referred to IAC <sup>2,3</sup>  | 16   | 15   | 19   | 7    | 4    | 8    | 0      |
| IAC Awards <sup>3</sup>               | 12   | 11   | 11   | 4    | 2    | 1    | 0      |
| Industrial Stoppages <sup>4</sup>     | 0    | 0    | 0    | 1    | 0    | 0    | 0      |
|                                       |      |      |      |      |      |      |        |

Source : Ministry of Manpower (MOM)

<sup>1</sup> Examples include sales, commission and shift allowances.

<sup>2</sup> IAC refers to the Industrial Arbitration Court.

<sup>3</sup> From 2012 onwards, "Cases referred to IAC" and "IAC Awards" pertain only to disputes and exclude those for variation of collective agreement jointly filed by the union and employer.

<sup>4</sup> Refers to cases reported to and handled by the Labour Relations & Workplaces Division of MOM. Data include both strikes and lockouts.

## 6



## National Accounts

#### **National Income Estimates**

The output, expenditure and income approaches are adopted for compiling the national income aggregates of Singapore. The concepts, definitions and methodology given in the United Nations' publication "System of National Accounts, 2008" are closely followed.

#### **Definitions**

Gross National Income (GNI): Refers to the sum of gross factor incomes (incomes arising from the involvement in production processes or ownership of assets that may be needed for production) receivable by resident units.

Gross Domestic Product (GDP): Refers to the aggregate value of the goods and services produced in the economic territory of Singapore.

Output-based GDP: Refers to the sum of gross value added generated by economic activities in the domestic economy.

Expenditure on GDP: Refers to the sum of private consumption expenditure of households, including non-profit institutions serving households, government consumption expenditure, gross capital formation and net exports.

Income Components of GDP: Refer to the sum of incomes generated from the domestic production of goods and services, which include compensation of employees, gross operating surplus and taxes less subsidies on production and on imports.

Valuation of GDP Estimates: GDP estimates are valued at market prices, that is, the prices actually paid by the purchaser.

GDP at Constant Prices: In order to compare the real value of output/expenditure over time, it is necessary to remove the effect of

price changes. This is achieved by selecting the price structure of 2010 as the base according to which the goods and services in other years are revalued. The resulting aggregates after adjustment for price changes are known as constant-price estimates.

GDP Deflators: They provide a broad measure of the change in the overall level of prices of the goods and services that make up GDP between the base year 2010 and any other period. The deflators are derived as the ratio of the current price value of a component of GDP to its corresponding constant price value, with the base year index set at 100.

With the availability of more comprehensive and up-to-date information, the estimates have been revised, especially for the last two years.

#### **Other References**

The "Singapore System of National Accounts, 1995", published by the Singapore Department of Statistics, contains the detailed methodology used to compile Singapore's national accounts. Information on the adoption of basic price is available in the information paper "Rebasing of the Singapore System of National Accounts to Reference Year 1995".

Information on the capitalisation of software expenditure can be found in the information paper "Rebasing of Singapore's National Accounts to Reference Year 2000". The revised methodology for the measurement and allocation of implicit charges for financial services and other methodological and classification changes are described in the information paper "Rebasing of Singapore's National Accounts to Reference Year 2005".

The implementation of capitalisation of research and development expenditure in the national accounts is elaborated in the

#### 6 NATIONAL ACCOUNTS (cont'd)

information paper "<u>Rebasing of Singapore's</u> <u>National Accounts to Reference Year 2010</u>".

Analyses on Singapore's national income may be found in the "Economic Survey of Singapore", published by the Ministry of Trade and Industry.

6.1 OUTPUT, SAVING AND INVESTMENT (At Current Market Prices)

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Gross National Income (GNI)  |           |           |           |           |           |           |                 |
| GNI  | 266,889.0 | 320,526.6 | 338,633.7 | 350,004.1 | 364,342.2 | 368,995.7 | 383,483.5       |
| Gross Domestic Product   | 279,858.0 | 322,361.1 | 346,172.7 | 361,498.7 | 375,751.0 | 388,169.3 | 402,457.9       |
| Net Income from Abroad   | -12,969.0 | -1,834.5  | -7,539.0  | -11,494.6 | -11,408.8 | -19,173.6 | -18,974.4       |
| Generation of Gross<br>National Saving   |           |           |           |           |           |           |                 |
| Gross National Saving  | 124,928.0 | 166,595.3 | 172,539.4 | 173,055.1 | 181,189.2 | 180,088.9 | 185,439.1       |
| Gross Domestic Saving  | 143,273.9 | 175,004.6 | 187,582.8 | 193,084.3 | 200,760.5 | 207,178.7 | 213,958.6       |
| Gross Domestic Product  Less: Private & Government  Consumption                    | 279,858.0 | 322,361.1 | 346,172.7 | 361,498.7 | 375,751.0 | 388,169.3 | 402,457.9       |
| Expenditure  | 133,674.9 | 147,356.5 | 157,380.4 | 165,462.0 | 175,751.9 | 180,570.7 | 189,431.3       |
| Statistical Discrepancy  | -2,909.2  | 0.0       | -1,209.5  | -2,952.4  | 761.4     | -419.9    | 932.0           |
| Net Income from Abroad   | -12,969.0 | -1,834.5  | -7,539.0  | -11,494.6 | -11,408.8 | -19,173.6 | -18,974.4       |
| Net Current Transfers from Abroad  | -5,376.9  | -6,574.8  | -7,504.4  | -8,534.6  | -8,162.5  | -7,916.2  | -9,545.1        |
| Finance of Gross<br>Capital Formation  |           |           |           |           |           |           |                 |
| Gross Capital Formation  | 77,424.4  | 89,841.2  | 93,555.8  | 107,638.7 | 113,905.7 | 112,281.8 | 105,806.6       |
| Gross National Saving  | 124,928.0 | 166,595.3 | 172,539.4 | 173,055.1 | 181,189.2 | 180,088.9 | 185,439.1       |
| Net Borrowing from/Lending (-)<br>to Abroad & Net Capital<br>Transfers from Abroad | -47,503.6 | -76,754.1 | -78,983.6 | -65,416.4 | -67,283.5 | -67,807.1 | -79,632.5       |

#### 6.2 GROSS DOMESTIC PRODUCT BY INDUSTRY

|                                     |                       |           |              |              |           | N         | Million Dollars |  |  |  |
|-------------------------------------|-----------------------|-----------|--------------|--------------|-----------|-----------|-----------------|--|--|--|
| Industry                            | 2009                  | 2010      | 2011         | 2012         | 2013      | 2014      | 2015            |  |  |  |
|                                     |                       |           | At Current M | arket Prices |           |           |                 |  |  |  |
| GDP at Current Market Prices        | 279,858.0             | 322,361.1 | 346,172.7    | 361,498.7    | 375,751.0 | 388,169.3 | 402,457.9       |  |  |  |
| Goods Producing Industries          | 74,219.6              | 84,230.3  | 85,945.2     | 89,970.3     | 88,593.6  | 93,474.7  | 100,045.0       |  |  |  |
| Manufacturing                       | 55,038.6              | 65,039.8  | 65,901.1     | 68,072.3     | 65,543.6  | 68,958.4  | 74,961.1        |  |  |  |
| Construction                        | 14,997.4              | 14,221.2  | 14,778.0     | 16,412.7     | 17,617.6  | 18,966.5  | 19,534.4        |  |  |  |
| Utilities                           | 4,069.0               | 4,850.9   | 5,145.5      | 5,364.9      | 5,290.1   | 5,403.4   | 5,407.1         |  |  |  |
| Other Goods Industries <sup>1</sup> | 114.6                 | 118.4     | 120.6        | 120.4        | 142.3     | 146.4     | 142.4           |  |  |  |
| Services Producing Industries       | 181,345.1             | 208,683.4 | 226,543.9    | 235,486.6    | 248,783.8 | 256,605.9 | 261,953.8       |  |  |  |
| Wholesale & Retail Trade            | 50,432.3              | 58,449.2  | 66,599.4     | 64,688.5     | 64,572.2  | 61,547.1  | 59,046.8        |  |  |  |
| Transportation & Storage            | 21,529.9              | 25,422.8  | 22,258.2     | 23,692.7     | 24,695.8  | 26,969.7  | 27,923.5        |  |  |  |
| Accommodation & Food Services       | 4,920.3               | 5,921.2   | 6,985.8      | 7,455.1      | 7,693.2   | 8,048.4   | 8,126.2         |  |  |  |
| Information & Communications        | 10,453.3              | 11,072.5  | 12,296.3     | 13,390.8     | 14,461.9  | 15,345.7  | 16,011.6        |  |  |  |
| Finance & Insurance                 | 30,732.3              | 33,154.2  | 34,934.8     | 37,401.0     | 40,960.1  | 44,624.6  | 47,768.7        |  |  |  |
| Business Services                   | 36,269.0              | 42,119.3  | 47,604.8     | 51,332.3     | 56,086.4  | 57,719.2  | 58,696.1        |  |  |  |
| Other Services Industries           | 27,008.0              | 32,544.2  | 35,864.6     | 37,526.2     | 40,314.2  | 42,351.2  | 44,380.9        |  |  |  |
| Ownership of Dwellings              | 10,351.7              | 11,514.3  | 13,797.2     | 14,992.0     | 16,308.8  | 16,519.9  | 16,405.5        |  |  |  |
| Gross Value Added at Basic Prices   | 265,916.4             | 304,428.0 | 326,286.3    | 340,448.9    | 353,686.2 | 366,600.5 | 378,404.3       |  |  |  |
| Add: Taxes on Products              | 13,941.6              | 17,933.1  | 19,886.4     | 21,049.8     | 22,064.8  | 21,568.8  | 24,053.6        |  |  |  |
|                                     | At 2010 Market Prices |           |              |              |           |           |                 |  |  |  |
|                                     |                       |           |              |              |           |           |                 |  |  |  |
| GDP at 2010 Market Prices           | 279,729.3             | 322,361.1 | 342,371.8    | 354,937.3    | 371,531.5 | 383,643.6 | 391,348.5       |  |  |  |
| Goods Producing Industries          | 67,266.6              | 84,230.3  | 90,096.5     | 92,127.2     | 94,399.5  | 97,050.6  | 93,746.7        |  |  |  |
| Manufacturing                       | 50,156.0              | 65,039.8  | 70,118.3     | 70,342.3     | 71,517.4  | 73,436.8  | 69,627.2        |  |  |  |
| Construction                        | 13,233.2              | 14,221.2  | 14,914.5     | 16,618.9     | 17,578.1  | 18,193.6  | 18,640.3        |  |  |  |
| Utilities                           | 4,492.1               | 4,850.9   | 4,942.8      | 5,040.8      | 5,160.7   | 5,274.2   | 5,338.4         |  |  |  |
| Other Goods Industries <sup>1</sup> | 115.6                 | 118.4     | 120.9        | 125.2        | 143.3     | 146.0     | 140.8           |  |  |  |
| Services Producing Industries       | 186,787.4             | 208,683.4 | 223,134.2    | 232,876.3    | 248,008.4 | 257,060.6 | 265,869.6       |  |  |  |
| Wholesale & Retail Trade            | 50,430.0              | 58,449.2  | 62,453.0     | 64,425.6     | 68,662.4  | 70,135.7  | 74,445.4        |  |  |  |
| Transportation & Storage            | 23,983.6              | 25,422.8  | 26,717.5     | 28,046.6     | 29,160.0  | 29,922.0  | 29,907.1        |  |  |  |
| Accommodation & Food Services       | 5,170.2               | 5,921.2   | 6,556.1      | 6,712.7      | 6,859.3   | 6,975.8   | 6,986.5         |  |  |  |
| Information & Communications        | 10,261.9              | 11,072.5  | 12,006.3     | 12,920.0     | 13,956.3  | 14,932.1  | 15,557.0        |  |  |  |
| Finance & Insurance                 | 29,513.5              | 33,154.2  | 36,092.3     | 38,187.9     | 43,551.8  | 47,536.5  | 50,072.7        |  |  |  |
| Business Services                   | 38,647.9              | 42,119.3  | 45,310.9     | 47,675.0     | 50,224.2  | 51,019.8  | 51,763.0        |  |  |  |
| Other Services Industries           | 28,594.0              | 32,544.2  | 33,998.1     | 34,908.5     | 35,594.4  | 36,538.7  | 37,137.9        |  |  |  |
| Ownership of Dwellings              | 11,373.4              | 11,514.3  | 11,618.5     | 11,928.5     | 12,229.9  | 12,680.6  | 13,317.8        |  |  |  |
| Gross Value Added at Basic Prices   | 263,174.5             | 304,428.0 | 324,849.2    | 336,932.0    | 354,637.8 | 366,791.8 | 372,934.1       |  |  |  |
| Add: Taxes on Products              | 17,064.8              | 17,933.1  | 17,522.6     | 18,005.3     | 16,893.7  | 16,851.8  | 18,414.4        |  |  |  |
|                                     |                       |           |              |              |           |           |                 |  |  |  |

Note: The industries are classified according to the Singapore Standard Industrial Classification 2010.

As the constant price series are chain-linked at the base year, they are not additive prior to the base year. Thus, prior to 2010, the aggregates at 2010 prices may not be equal to the sum of their components.

<sup>1</sup> Comprise Agriculture, Fishing and Quarrying.

**6.3** EXPENDITURE ON GROSS DOMESTIC PRODUCT

|   | 2009                               | 2010                               | 2011                               | 2012                               | 2013                                | 2014                                | Million Dolla                       |  |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|
|   | 2009                               | 2010                               | 2011                               |                                    |                                     | 2014                                | 2015                                |  |
|   |                                    |                                    | At C                               | urrent Market                      | Prices                              |                                     |                                     |  |
| Total   | 279,858.0                          | 322,361.1                          | 346,172.7                          | 361,498.7                          | 375,751.0                           | 388,169.3                           | 402,457.9                           |  |
| Private Consumption Expenditure   | 104,883.8                          | 114,518.5                          | 124,296.2                          | 132,722.0                          | 138,397.4                           | 142,302.3                           | 147,579.9                           |  |
| Government Consumption<br>Expenditure   | 28,791.1                           | 32,838.0                           | 33,084.2                           | 32,740.0                           | 37,354.5                            | 38,268.4                            | 41,851.4                            |  |
| Gross Fixed Capital Formation   | 81,917.2                           | 84,224.8                           | 88,501.6                           | 96,747.1                           | 104,922.1                           | 103,049.5                           | 102,670.6                           |  |
| Changes in Inventories  | -4,492.8                           | 5,616.4                            | 5,054.2                            | 10,891.6                           | 8,983.6                             | 9,232.3                             | 3,136.0                             |  |
| Net Exports of Goods & Services Exports of Goods & Services Less: Imports of Goods            | 65,849.5<br>536,992.0              | 85,163.4<br>642,333.5              | 94,027.0<br>695,572.7              | 85,445.6<br>706,318.1              | 86,854.8<br>722,768.6               | 94,896.9<br>745,712.7               | 108,152.0<br>710,318.1              |  |
| & Services  | 471,142.5                          | 557,170.1                          | 601,545.7                          | 620,872.5                          | 635,913.8                           | 650,815.8                           | 602,166.1                           |  |
| Statistical Discrepancy   | 2,909.2                            | 0.0                                | 1,209.5                            | 2,952.4                            | -761.4                              | 419.9                               | -932.0                              |  |
|   | At 2010 Market Prices              |                                    |                                    |                                    |                                     |                                     |                                     |  |
| Total   | 279,729.3                          | 322,361.1                          | 342,371.8                          | 354,937.3                          | 371,531.5                           | 383,643.6                           | 391,348.5                           |  |
| Private Consumption Expenditure   | 108,143.9                          | 114,518.5                          | 119,394.8                          | 123,621.4                          | 127,434.9                           | 130,180.2                           | 136,055.1                           |  |
| Government Consumption Expenditure  | 29,654.3                           | 32,838.0                           | 31,824.0                           | 31,208.9                           | 34,662.8                            | 34,618.5                            | 36,890.0                            |  |
| Gross Fixed Capital Formation   | 78,111.5                           | 84,224.8                           | 88,618.4                           | 95,931.6                           | 101,416.0                           | 98,777.3                            | 97,756.1                            |  |
| Changes in Inventories  | -5,869.1                           | 5,616.4                            | 4,785.3                            | 10,455.2                           | 8,872.8                             | 9,271.8                             | 3,584.5                             |  |
| Net Exports of Goods & Services Exports of Goods & Services Less: Imports of Goods & Services | 67,595.6<br>547,113.0<br>479,517.4 | 85,163.4<br>642,333.5<br>557,170.1 | 98,784.6<br>678,474.0<br>579,689.4 | 93,630.3<br>690,844.4<br>597,214.1 | 100,430.5<br>724,226.5<br>623,796.0 | 106,952.5<br>755,193.3<br>648,240.8 | 111,823.9<br>773,838.8<br>662,014.9 |  |
| Statistical Discrepancy   | 3,229.9                            | 0.0                                | -1,035.3                           | 89.9                               | -1,285.5                            | 3,843.3                             | 5,238.9                             |  |

Note: As the constant price series are chain-linked at the base year, they are not additive prior to the base year. Thus, prior to 2010, the aggregates at 2010 prices may not be equal to the sum of their components.

**6.4** PRIVATE CONSUMPTION EXPENDITURE

|  | 2000                  | 2010      | 2011      | 2012          | 2012      |           | Iillion Dollar |  |  |
|--|-----------------------|-----------|-----------|---------------|-----------|-----------|----------------|--|--|
|  | 2009                  | 2010      | 2011      | 2012          | 2013      | 2014      | 2015           |  |  |
|  | ·                     |           | At Cur    | rent Market P | rices     |           |                |  |  |
| Total  | 104,883.8             | 114,518.5 | 124,296.2 | 132,722.0     | 138,397.4 | 142,302.3 | 147,579.9      |  |  |
| Food & Non-Alcoholic Beverages                                       | 8,190.8               | 8,404.4   | 8,954.3   | 9,561.5       | 9,982.8   | 10,071.8  | 10,090.6       |  |  |
| Alcoholic Beverages & Tobacco  | 2,253.8               | 2,462.1   | 2,591.6   | 2,729.5       | 2,784.6   | 3,003.3   | 3,072.2        |  |  |
| Clothing & Footwear  | 2,927.9               | 3,212.7   | 3,468.7   | 3,646.5       | 3,743.1   | 3,696.2   | 3,644.         |  |  |
| Housing & Utilities  | 17,992.9              | 19,219.5  | 22,021.6  | 24,564.0      | 26,034.7  | 27,012.7  | 27,143.9       |  |  |
| Furnishings, Household Equipment &                                   |                       |           |           |               |           |           |                |  |  |
| Routine Household Maintenance  | 6,281.5               | 6,778.2   | 7,198.4   | 7,588.7       | 7,522.4   | 7,465.1   | 7,449.         |  |  |
| Health   | 7,234.9               | 7,796.1   | 8,379.7   | 9,215.4       | 9,939.5   | 10,426.3  | 10,728.        |  |  |
| Transport  | 14,585.0              | 15,587.2  | 16,117.0  | 16,834.5      | 15,939.5  | 16,714.7  | 19,866.        |  |  |
| Communication  | 2,898.1               | 3,062.8   | 3,232.6   | 3,423.1       | 3,277.4   | 3,302.1   | 3,321          |  |  |
| Recreation & Culture   | 9,344.3               | 15,466.4  | 18,074.2  | 17,681.8      | 17,834.7  | 17,951.2  | 17,163.        |  |  |
| Education  | 3,918.1               | 4,201.4   | 4,523.7   | 4,977.1       | 5,429.0   | 5,854.0   | 6,290          |  |  |
| Food Serving Services  | 7,050.4               | 7,767.2   | 8,523.1   | 9,243.9       | 9,636.5   | 9,986.4   | 9,791.9        |  |  |
| Accommodation Services   | 1,942.3               | 2,662.8   | 3,395.9   | 3,540.6       | 3,521.7   | 3,658.1   | 3,779.0        |  |  |
| Miscellaneous Goods & Services                                       | 15,860.5              | 17,337.7  | 19,243.3  | 20,608.2      | 22,839.0  | 23,290.9  | 24,566.        |  |  |
| Add: Residents' Expenditure Abroad  Less: Non-residents' Expenditure | 17,942.6              | 20,020.8  | 21,261.5  | 22,736.4      | 24,096.3  | 24,263.3  | 23,845.        |  |  |
| Locally  | 13,539.3              | 19,460.8  | 22,689.4  | 23,629.2      | 24,183.8  | 24,393.8  | 23,173         |  |  |
|  | At 2010 Market Prices |           |           |               |           |           |                |  |  |
| Total  | 108,143.9             | 114,518.5 | 119,394.8 | 123,621.4     | 127,434.9 | 130,180.2 | 136,055.       |  |  |
| Food & Non-Alcoholic Beverages                                       | 8,398.6               | 8,404.4   | 8,678.5   | 9,059.7       | 9,266.0   | 9,135.3   | 9,041.6        |  |  |
| Alcoholic Beverages & Tobacco  | 2,262.3               | 2,462.1   | 2,566.2   | 2,681.0       | 2,725.3   | 2,790.0   | 2,823.         |  |  |
| Clothing & Footwear  | 2,940.3               | 3,212.7   | 3,471.5   | 3,591.1       | 3,675.2   | 3,646.6   | 3,604.         |  |  |
| Housing & Utilities  | 18,847.8              | 19,219.5  | 19,536.5  | 19,995.0      | 20,425.2  | 20,992.8  | 21,928.0       |  |  |
| Furnishings, Household Equipment &                                   |                       |           |           |               |           |           |                |  |  |
| Routine Household Maintenance  | 6,371.4               | 6,778.2   | 6,921.3   | 7,062.3       | 6,958.7   | 6,873.7   | 6,923.         |  |  |
| Health   | 7,430.2               | 7,796.1   | 8,160.1   | 8,538.5       | 8,876.1   | 9,097.6   | 9,348.         |  |  |
| Transport  | 15,999.4              | 15,587.2  | 14,758.0  | 14,660.6      | 13,735.0  | 14,450.0  | 17,353.        |  |  |
| Communication  | 2,696.7               | 3,062.8   | 3,359.8   | 3,587.9       | 3,522.0   | 3,579.7   | 3,596.9        |  |  |
| Recreation & Culture   | 10,012.1              | 15,466.4  | 17,604.1  | 16,917.0      | 16,817.4  | 16,729.9  | 16,027.9       |  |  |
| Education  | 4,063.2               | 4,201.4   | 4,373.7   | 4,644.1       | 4,865.9   | 5,117.7   | 5,270.         |  |  |
| Food Serving Services  | 7,176.3               | 7,767.2   | 8,294.1   | 8,779.4       | 8,972.0   | 9,022.8   | 8,686.         |  |  |
| Accommodation Services   | 2,190.9               | 2,662.8   | 3,075.6   | 3,024.4       | 3,047.4   | 3,076.2   | 3,217.         |  |  |
| Miscellaneous Goods & Services                                       | 15,958.5              | 17,337.7  | 19,043.7  | 20,141.4      | 22,677.9  | 23,455.3  | 24,471.4       |  |  |
| Add: Residents' Expenditure Abroad  Less: Non-residents' Expenditure | 18,759.4              | 20,020.8  | 21,231.4  | 22,721.0      | 23,994.0  | 24,105.1  | 24,584.0       |  |  |
| Locally  | 14,108.0              | 19,460.8  | 21,679.7  | 21,782.0      | 22,123.2  | 21,892.5  | 20,823.6       |  |  |

Note: As the constant price series are chain-linked at the base year, they are not additive prior to the base year. Thus, prior to 2010, the aggregates at 2010 prices may not be equal to the sum of their components.

6.5 GROSS FIXED CAPITAL FORMATION (At Current Market Prices)

| (At Current Marke              | et Prices) |          |          |          |           |           | Million Dollars |
|--------------------------------|------------|----------|----------|----------|-----------|-----------|-----------------|
|                                | 2009       | 2010     | 2011     | 2012     | 2013      | 2014      | 2015            |
|                                |            |          |          | Total    |           |           |                 |
| Total                          | 81,917.2   | 84,224.8 | 88,501.6 | 96,747.1 | 104,922.1 | 103,049.5 | 102,670.6       |
| Construction & Works           | 44,689.3   | 43,522.2 | 45,914.5 | 50,667.5 | 55,936.3  | 56,345.1  | 55,623.3        |
| Residential Buildings          | 16,729.8   | 20,796.8 | 21,686.1 | 24,746.8 | 28,672.7  | 28,148.3  | 26,841.3        |
| Non-residential Buildings      | 20,835.1   | 15,646.2 | 16,905.7 | 18,404.7 | 19,782.6  | 19,537.2  | 19,080.1        |
| Other Construction & Works     | 7,124.4    | 7,079.2  | 7,322.7  | 7,516.0  | 7,481.0   | 8,659.6   | 9,701.9         |
| Transport Equipment            | 8,075.5    | 7,253.6  | 7,513.7  | 9,096.3  | 7,114.9   | 6,603.0   | 7,614.8         |
| Machinery & Equipment          | 17,882.3   | 21,188.5 | 21,550.7 | 22,253.4 | 21,271.1  | 20,663.0  | 20,709.2        |
| Intellectual Property Products | 11,270.1   | 12,260.5 | 13,522.7 | 14,729.9 | 20,599.8  | 19,438.4  | 18,723.3        |
|                                |            |          |          | D 11'    |           |           |                 |
|                                |            |          |          | Public   |           |           |                 |
| Total                          | 13,498.2   | 14,013.0 | 15,139.2 | 16,552.2 | 16,741.2  | 19,239.4  | 20,163.6        |
| Construction & Works           | 11,077.6   | 11,743.1 | 12,744.0 | 13,646.4 | 14,102.8  | 16,318.3  | 16,983.1        |
| Residential Buildings          | 2,939.6    | 3,487.2  | 3,467.5  | 4,118.3  | 4,857.5   | 5,477.2   | 5,482.9         |
| Non-residential Buildings      | 2,426.5    | 2,500.9  | 3,430.9  | 3,552.2  | 3,515.1   | 4,342.4   | 4,315.8         |
| Other Construction & Works     | 5,711.5    | 5,755.0  | 5,845.6  | 5,975.9  | 5,730.2   | 6,498.7   | 7,184.4         |
| Transport Equipment            | 227.3      | 48.3     | 44.5     | 101.1    | 65.0      | 263.8     | 213.4           |
| Machinery & Equipment          | 655.8      | 651.5    | 770.5    | 942.7    | 681.6     | 669.9     | 888.7           |
| Intellectual Property Products | 1,537.5    | 1,570.1  | 1,580.2  | 1,862.0  | 1,891.8   | 1,987.4   | 2,078.4         |
|                                |            |          |          | Private  |           |           |                 |
|                                |            |          |          |          |           |           |                 |
| Total                          | 68,419.0   | 70,211.8 | 73,362.4 | 80,194.9 | 88,180.9  | 83,810.1  | 82,507.0        |
| Construction & Works           | 33,611.7   | 31,779.1 | 33,170.5 | 37,021.1 | 41,833.5  | 40,026.8  | 38,640.2        |
| Residential Buildings          | 13,790.2   | 17,309.6 | 18,218.6 | 20,628.5 | 23,815.2  | 22,671.1  | 21,358.4        |
| Non-residential Buildings      | 18,408.6   | 13,145.3 | 13,474.8 | 14,852.5 | 16,267.5  | 15,194.8  | 14,764.3        |
| Other Construction & Works     | 1,412.9    | 1,324.2  | 1,477.1  | 1,540.1  | 1,750.8   | 2,160.9   | 2,517.5         |
| Transport Equipment            | 7,848.2    | 7,205.3  | 7,469.2  | 8,995.2  | 7,049.9   | 6,339.2   | 7,401.4         |
| Machinery & Equipment          | 17,226.5   | 20,537.0 | 20,780.2 | 21,310.7 | 20,589.5  | 19,993.1  | 19,820.5        |
| Intellectual Property Products | 9,732.6    | 10,690.4 | 11,942.5 | 12,867.9 | 18,708.0  | 17,451.0  | 16,644.9        |

(continued on the next page)

6.5 GROSS FIXED CAPITAL FORMATION (continued)
(At 2010 Market Prices)

|                                |          |          |          |          |           | 1        | Million Dollar |
|--------------------------------|----------|----------|----------|----------|-----------|----------|----------------|
|                                | 2009     | 2010     | 2011     | 2012     | 2013      | 2014     | 2015           |
|                                |          |          |          | Total    |           |          |                |
| Total                          | 78,111.5 | 84,224.8 | 88,618.4 | 95,931.6 | 101,416.0 | 98,777.3 | 97,756.1       |
| Construction & Works           | 42,041.6 | 43,522.2 | 45,330.9 | 49,145.1 | 52,134.9  | 51,839.3 | 51,309.5       |
| Residential Buildings          | 16,381.9 | 20,796.8 | 21,228.0 | 23,711.9 | 26,085.9  | 25,801.4 | 24,840.8       |
| Non-residential Buildings      | 19,019.2 | 15,646.2 | 16,749.8 | 17,898.0 | 18,754.3  | 17,854.2 | 17,355.9       |
| Other Construction & Works     | 6,416.2  | 7,079.2  | 7,353.1  | 7,535.2  | 7,294.7   | 8,183.7  | 9,112.8        |
| Transport Equipment            | 7,801.6  | 7,253.6  | 7,653.4  | 9,134.4  | 7,023.9   | 6,361.5  | 7,140.6        |
| Machinery & Equipment          | 17,201.1 | 21,188.5 | 22,519.3 | 23,512.6 | 23,181.2  | 22,865.4 | 22,469.7       |
| Intellectual Property Products | 11,800.4 | 12,260.5 | 13,114.8 | 14,139.5 | 19,076.0  | 17,711.1 | 16,836.3       |
|                                |          |          |          | Public   |           |          |                |
|                                |          |          |          | 1 done   |           |          |                |
| Total                          | 12,374.5 | 14,013.0 | 15,424.8 | 17,114.1 | 17,176.3  | 18,957.3 | 19,687.1       |
| Construction & Works           | 9,799.8  | 11,743.1 | 13,057.3 | 14,251.3 | 14,627.5  | 16,171.5 | 16,690.6       |
| Residential Buildings          | 2,609.3  | 3,487.2  | 3,674.8  | 4,590.4  | 5,359.6   | 5,784.3  | 5,755.6        |
| Non-residential Buildings      | 2,133.6  | 2,500.9  | 3,470.3  | 3,601.6  | 3,524.1   | 4,160.9  | 4,102.1        |
| Other Construction & Works     | 5,034.0  | 5,755.0  | 5,912.2  | 6,059.3  | 5,743.8   | 6,226.3  | 6,832.9        |
| Transport Equipment            | 235.9    | 48.3     | 43.6     | 104.4    | 67.2      | 281.3    | 224.8          |
| Machinery & Equipment          | 635.9    | 651.5    | 795.4    | 971.4    | 725.9     | 696.9    | 907.2          |
| Intellectual Property Products | 1,622.9  | 1,570.1  | 1,528.5  | 1,787.0  | 1,755.7   | 1,807.6  | 1,864.5        |
|                                |          |          |          | Private  |           |          |                |
| Total                          | CF       | 70.211.0 | 72 102 6 | 70.017.5 | 04 220 7  | 70.020.0 | 70.060.0       |
| Total                          | 65,695.5 | 70,211.8 | 73,193.6 | 78,817.5 | 84,239.7  | 79,820.0 | 78,069.0       |
| Construction & Works           | 32,339.9 | 31,779.1 | 32,273.6 | 34,893.8 | 37,507.4  | 35,667.8 | 34,618.9       |
| Residential Buildings          | 13,777.7 | 17,309.6 | 17,553.2 | 19,121.5 | 20,726.3  | 20,017.1 | 19,085.2       |
| Non-residential Buildings      | 16,932.6 | 13,145.3 | 13,279.5 | 14,296.4 | 15,230.2  | 13,693.3 | 13,253.8       |
| Other Construction & Works     | 1,392.0  | 1,324.2  | 1,440.9  | 1,475.9  | 1,550.9   | 1,957.4  | 2,279.9        |
| Transport Equipment            | 7,566.1  | 7,205.3  | 7,609.8  | 9,030.0  | 6,956.7   | 6,080.2  | 6,915.8        |
| Machinery & Equipment          | 16,551.9 | 20,537.0 | 21,723.9 | 22,541.2 | 22,455.3  | 22,168.5 | 21,562.5       |
| Intellectual Property Products | 10,177.8 | 10,690.4 | 11,586.3 | 12,352.5 | 17,320.3  | 15,903.5 | 14,971.8       |

Note: As the constant price series are chain-linked at the base year, they are not additive prior to the base year. Thus, prior to 2010, the aggregates at 2010 prices may not be equal to the sum of their components.

**6.6** GROSS DOMESTIC PRODUCT DEFLATORS BY INDUSTRY (2010 = 100)

| Industry                            | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| GDP at Market Prices                | 100.0 | 100.0 | 101.1 | 101.8 | 101.1 | 101.2 | 102.8 |
| Goods Producing Industries          | 110.3 | 100.0 | 95.4  | 97.7  | 93.8  | 96.3  | 106.7 |
| Manufacturing                       | 109.7 | 100.0 | 94.0  | 96.8  | 91.6  | 93.9  | 107.7 |
| Construction                        | 113.3 | 100.0 | 99.1  | 98.8  | 100.2 | 104.2 | 104.8 |
| Utilities                           | 90.6  | 100.0 | 104.1 | 106.4 | 102.5 | 102.4 | 101.3 |
| Other Goods Industries <sup>1</sup> | 99.1  | 100.0 | 99.8  | 96.2  | 99.3  | 100.3 | 101.1 |
| Services Producing Industries       | 97.1  | 100.0 | 101.5 | 101.1 | 100.3 | 99.8  | 98.5  |
| Wholesale & Retail Trade            | 100.0 | 100.0 | 106.6 | 100.4 | 94.0  | 87.8  | 79.3  |
| Transportation & Storage            | 89.8  | 100.0 | 83.3  | 84.5  | 84.7  | 90.1  | 93.4  |
| Accommodation & Food Services       | 95.2  | 100.0 | 106.6 | 111.1 | 112.2 | 115.4 | 116.3 |
| Information & Communications        | 101.9 | 100.0 | 102.4 | 103.6 | 103.6 | 102.8 | 102.9 |
| Finance & Insurance                 | 104.1 | 100.0 | 96.8  | 97.9  | 94.0  | 93.9  | 95.4  |
| Business Services                   | 93.8  | 100.0 | 105.1 | 107.7 | 111.7 | 113.1 | 113.4 |
| Other Services Industries           | 94.5  | 100.0 | 105.5 | 107.5 | 113.3 | 115.9 | 119.5 |
| Ownership of Dwellings              | 91.0  | 100.0 | 118.8 | 125.7 | 133.4 | 130.3 | 123.2 |
| Gross Value Added at Basic Prices   | 101.0 | 100.0 | 100.4 | 101.0 | 99.7  | 99.9  | 101.5 |
| Add: Taxes on Products              | 81.7  | 100.0 | 113.5 | 116.9 | 130.6 | 128.0 | 130.6 |

**6.7 DEFLATORS OF EXPENDITURE ON GROSS DOMESTIC PRODUCT** (2010 = 100)

|                                       | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Total                                 | 100.0 | 100.0 | 101.1 | 101.8 | 101.1 | 101.2 | 102.8 |
| Private Consumption Expenditure       | 97.0  | 100.0 | 104.1 | 107.4 | 108.6 | 109.3 | 108.5 |
| Government Consumption<br>Expenditure | 97.1  | 100.0 | 104.0 | 104.9 | 107.8 | 110.5 | 113.4 |
| Gross Fixed Capital Formation         | 104.9 | 100.0 | 99.9  | 100.9 | 103.5 | 104.3 | 105.0 |
| Exports of Goods & Services           | 98.2  | 100.0 | 102.5 | 102.2 | 99.8  | 98.7  | 91.8  |
| Imports of Goods & Services           | 98.3  | 100.0 | 103.8 | 104.0 | 101.9 | 100.4 | 91.0  |

<sup>1</sup> Comprises Agriculture, Fishing and Quarrying.

6.8 INCOME COMPONENTS OF GROSS DOMESTIC PRODUCT (At Current Prices)

|   |           |           |           |           |           | I         | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| GDP at Current Market Prices                    | 279,858.0 | 322,361.1 | 346,172.7 | 361,498.7 | 375,751.0 | 388,169.3 | 402,457.9       |
| Compensation of Employees                       | 115,638.4 | 126,072.6 | 136,036.4 | 144,716.2 | 154,902.8 | 165,588.8 | 174,542.7       |
| Gross Operating Surplus                         | 147,742.1 | 173,898.6 | 184,261.2 | 188,412.1 | 190,656.0 | 191,216.3 | 197,934.2       |
| Taxes Less Subsidies on Production<br>& Imports | 14,653.0  | 22,389.9  | 26,526.7  | 28,095.8  | 29,600.3  | 29,444.9  | 30,778.3        |
| Other Taxes Less Subsidies on Production        | 711.4     | 4,456.8   | 6,640.3   | 7,046.0   | 7,535.5   | 7,876.1   | 6,724.7         |
| Taxes on Products                               | 13,941.6  | 17,933.1  | 19,886.4  | 21,049.8  | 22,064.8  | 21,568.8  | 24,053.6        |
| Statistical Discrepancy                         | 1,824.5   | 0.0       | -651.6    | 274.6     | 591.9     | 1,919.3   | -797.3          |

### 6.9 GROSS OPERATING SURPLUS BY INDUSTRY (At Current Prices)

|                                     | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                     | 2007      | 2010      | 2011      | 2012      | 2012      | 2011      |           |
| 'otal                               | 147,742.1 | 173,898.6 | 184,261.2 | 188,412.1 | 190,656.0 | 191,216.3 | 197,934.2 |
| Manufacturing                       | 35,659.4  | 44,190.2  | 44,074.4  | 45,081.8  | 41,223.7  | 43,579.2  | 50,117.0  |
| Construction                        | 7,232.2   | 5,700.4   | 5,423.1   | 5,342.3   | 5,059.8   | 4,883.5   | 4,388.1   |
| Utilities                           | 3,099.0   | 3,608.5   | 3,972.8   | 4,045.5   | 3,808.1   | 3,867.8   | 3,770.1   |
| Other Goods Industries <sup>1</sup> | 51.5      | 49.1      | 48.7      | 56.8      | 64.7      | 66.6      | 67.8      |
| Wholesale & Retail Trade            | 31,932.2  | 38,281.8  | 44,968.5  | 42,094.7  | 40,706.9  | 36,321.8  | 35,165.7  |
| Transportation & Storage            | 12,951.9  | 16,312.3  | 12,462.7  | 13,122.9  | 13,542.0  | 14,834.8  | 15,790.8  |
| Accommodation & Food Services       | 2,083.4   | 2,533.8   | 3,182.9   | 3,294.3   | 3,233.9   | 3,417.6   | 3,328.0   |
| Information & Communications        | 4,774.8   | 4,662.7   | 5,412.4   | 5,797.2   | 6,396.7   | 6,545.1   | 6,589.1   |
| Finance & Insurance                 | 15,900.0  | 16,527.7  | 16,403.3  | 17,499.6  | 21,242.7  | 22,140.5  | 23,646.2  |
| Business Services                   | 18,590.3  | 23,194.6  | 26,396.9  | 29,123.8  | 31,272.1  | 31,120.9  | 30,915.8  |
| Other Services Industries           | 5,632.2   | 7,971.9   | 8,821.9   | 8,723.0   | 8,666.7   | 8,896.8   | 8,783.8   |
| Ownership of Dwellings              | 9,835.2   | 10,865.6  | 13,093.6  | 14,230.2  | 15,438.7  | 15,541.7  | 15,371.8  |

 $<sup>1\</sup>quad Comprises\ Agriculture,\ Fishing\ and\ Quarrying.$ 

6.10 COMPENSATION OF EMPLOYEES BY INDUSTRY
(At Current Prices)

| Million D                           |           |           |           |           |           |           |           |  |  |  |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|
|                                     | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |  |  |  |
| Total                               | 115,638.4 | 126,072.6 | 136,036.4 | 144,716.2 | 154,902.8 | 165,588.8 | 174,542.7 |  |  |  |
| Manufacturing                       | 19,365.5  | 20,585.5  | 21,510.9  | 22,124.6  | 23,220.4  | 24,407.4  | 24,751.6  |  |  |  |
| Construction                        | 7,084.6   | 7,827.0   | 8,484.7   | 9,476.7   | 10,559.6  | 11,551.8  | 12,362.2  |  |  |  |
| Utilities                           | 921.0     | 999.9     | 1,036.4   | 1,128.0   | 1,259.1   | 1,392.8   | 1,494.6   |  |  |  |
| Other Goods Industries <sup>1</sup> | 58.9      | 60.2      | 61.1      | 63.3      | 62.1      | 64.7      | 67.6      |  |  |  |
| Wholesale & Retail Trade            | 18,707.8  | 19,536.2  | 21,075.7  | 22,021.9  | 22,971.9  | 24,012.5  | 24,919.4  |  |  |  |
| Transportation & Storage            | 8,273.7   | 8,697.7   | 9,230.6   | 9,961.9   | 10,570.9  | 11,396.8  | 12,231.4  |  |  |  |
| Accommodation & Food Services       | 2,795.7   | 3,231.0   | 3,620.3   | 3,933.2   | 4,174.0   | 4,389.2   | 4,587.7   |  |  |  |
| Information & Communications        | 5,583.7   | 6,215.2   | 6,825.0   | 7,549.8   | 7,983.1   | 8,660.2   | 9,321.8   |  |  |  |
| Finance & Insurance                 | 14,544.6  | 16,487.4  | 18,177.1  | 19,465.6  | 20,601.8  | 22,774.6  | 24,218.9  |  |  |  |
| Business Services                   | 17,051.7  | 18,366.8  | 19,646.2  | 21,171.1  | 23,107.8  | 24,469.9  | 25,817.4  |  |  |  |
| Other Services Industries           | 21,251.2  | 24,065.7  | 26,368.4  | 27,820.1  | 30,392.1  | 32,468.9  | 34,770.1  |  |  |  |

<sup>1</sup> Comprises Agriculture, Fishing and Quarrying.

6.11 OTHER TAXES LESS SUBSIDIES ON PRODUCTION BY INDUSTRY (At Current Prices)

|                                     | 2009   | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |  |  |  |
|-------------------------------------|--------|---------|---------|---------|---------|---------|---------|--|--|--|
| Total                               | 711.4  | 4,456.8 | 6,640.3 | 7,046.0 | 7,535.5 | 7,876.1 | 6,724.7 |  |  |  |
| Manufacturing                       | -90.0  | 582.2   | 979.6   | 929.2   | 1,014.0 | 1,083.9 | 932.0   |  |  |  |
| Construction                        | 274.8  | 490.5   | 657.2   | 1,038.5 | 1,492.3 | 1,844.8 | 1,981.3 |  |  |  |
| Utilities                           | 109.5  | 170.7   | 217.1   | 172.4   | 202.4   | 209.5   | 205.6   |  |  |  |
| Other Goods Industries <sup>1</sup> | 6.0    | 9.1     | 11.3    | 11.8    | 12.9    | 13.6    | 12.4    |  |  |  |
| Wholesale & Retail Trade            | -363.6 | 267.9   | 475.2   | 444.6   | 346.0   | 300.3   | 69.9    |  |  |  |
| Transportation & Storage            | 146.9  | 493.7   | 668.8   | 622.3   | 548.4   | 503.9   | 359.1   |  |  |  |
| Accommodation & Food Services       | 5.0    | 156.8   | 265.9   | 318.8   | 310.6   | 281.8   | 219.7   |  |  |  |
| Information & Communications        | -50.7  | 121.3   | 176.7   | 192.0   | 155.9   | 159.8   | 110.6   |  |  |  |
| Finance & Insurance                 | -287.1 | 38.0    | 131.9   | 137.1   | 89.5    | 71.4    | -53.5   |  |  |  |
| Business Services                   | 280.4  | 844.7   | 1,516.5 | 1,501.1 | 1,669.1 | 1,646.7 | 1,394.6 |  |  |  |
| Other Services Industries           | 163.7  | 633.2   | 836.5   | 916.4   | 824.3   | 782.2   | 459.3   |  |  |  |
| Ownership of Dwellings              | 516.5  | 648.7   | 703.6   | 761.8   | 870.1   | 978.2   | 1,033.7 |  |  |  |

<sup>1</sup> Comprises Agriculture, Fishing and Quarrying.



## International Accounts

#### **Balance of Payments**

The balance of payments summarises all economic transactions between residents of an economy and non-residents (i.e. the rest of the world). It comprises international trade in goods and services, primary and secondary income flows, as well as capital and financial flows. It is very useful for assessing the external performance of an economy and for formulating policies associated with it.

The transactions recorded in the balance of payments fall into the following three broad categories:

- a) The current account which consists of transactions relating to Singapore's current national income and expenditure. These include exports and imports of goods and services, primary income receipts and payments, as well as net current transfers (secondary income).
- b) The capital and financial account which covers transactions affecting the foreign financial assets and liabilities of Singapore. Hence it records transactions that affect the national income in future periods.
- c) Reserve assets which show the changes in Singapore's foreign reserves holdings. They consist of Singapore's official holdings of monetary gold and foreign exchange assets, as well as Singapore's special drawing rights and reserve position in the International Monetary Fund.

Singapore's balance of payments estimates are compiled in accordance with the principles and recommendations set out in the International Monetary Fund's Balance of Payments and International Investment Position Manual. The structure and classification of Singapore's balance of

payments accounts follow the sixth edition of the manual.

Studies to improve the balance of payments estimates are continual and the estimates are revised as and when appropriate.

#### **Sources of Data**

The balance of payments estimates are compiled mainly from trade and shipping statistics, regular surveys of companies and administrative records of government departments and statutory authorities.

#### **Definitions**

Goods Balance: Refers to the difference between total exports and total imports of goods on a 'f.o.b' (free on board) basis.

Services Balance: Refers to the difference between total exports and total imports of services.

Primary Income Balance: Refers to the difference between primary income receivable by Singapore residents from abroad and primary income payable to non-residents from Singapore.

Secondary Income Balance: Refers to the difference between current transfers received by Singapore residents from abroad and current transfers received by non-residents from Singapore.

Current Account Balance: Refers to the balance of transactions in goods, services, primary income and secondary income. It shows the net change in financial assets arising from Singapore's real transactions.

Capital and Financial Account Balance: Refers to the balance of transactions in the capital and financial account. It reflects the net changes in Singapore's foreign financial assets and liabilities.

Overall Balance: Refers to the overall balance of the current, capital and financial accounts. It is the balance of all of Singapore's transactions with non-residents and is financed by official reserves.

#### **International Investment Position**

The International Investment Position (IIP) is a statistical statement that shows, at a point in time, the value and composition of financial assets and liabilities of residents of an economy with non-residents. The net IIP, which is the difference between an economy's external financial assets with its liabilities, plus the value of non-financial assets, equals to the net worth of the economy.

The IIP is related to the financial account of the balance of payments. While the financial account shows net acquisition and disposal of financial assets and liabilities during a period, the IIP records the stock of financial assets and liabilities at a specific point in time. Due to the above relationship, both the IIP and financial account of the balance of payments use the functional categories as the highest level of classification. These functional categories are direct investment, portfolio investment, financial derivatives, other investment, and reserve assets.

Singapore's IIP estimates are compiled based on the principles recommended in the International Monetary Fund's Balance of Payments and International Investment Position Manual, Sixth edition.

#### **External Debt**

Gross external debt, at any given time, is defined as the outstanding amount of current (and not contingent) debt liabilities owed to non-residents by residents of an economy. The external debt position can also be understood as a subset of the IIP, where it is

equivalent to total external liabilities of the latter less equity and investment fund shares and financial derivatives.

The compilation of Singapore's external debt statistics is consistent with the recommendations set out in the International Monetary Fund's External Debt Statistics Guide (2013).

#### **Other References**

Major changes and improvements to the balance of payments, including changes in conceptual treatment, classifications, enhanced coverage, as well as methodological improvements to the current account and capital and financial account, are described in the occasional paper "Implementation of IMF Balance of Payments and International Investment Position Manual, Sixth Edition" and the information paper "Singapore's International Accounts: Methodological Updates and Recent Developments".

Analyses on Singapore's balance of payments may be found in the "<u>Economic Survey of Singapore</u>", published by the Ministry of Trade and Industry.

7.1 BALANCE OF PAYMENTS

|   |                   |                   | ****              |                   |                   | ****             | Million Dollars   |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|
|   | 2009              | 2010              | 2011              | 2012              | 2013              | 2014             | 2015              |
| A Current Account Balance                               | 47,503.6          | 76,754.1          | 78,983.6          | 65,416.4          | 67,283.5          | 67,807.1         | 79,632.5          |
| Goods Balance   | 69,205.5          | 85,682.2          | 93,131.5          | 87,931.2          | 94,653.4          | 100,891.1        | 113,456.7         |
| Exports of Goods  | 417,971.9         | 504,848.8         | 545,991.9         | 546,654.2         | 547,265.5         | 554,704.5        | 518,377.8         |
| Imports of Goods  | 348,766.4         | 419,166.6         | 452,860.4         | 458,723.0         | 452,612.1         | 453,813.4        | 404,921.1         |
| Services Balance  | -3,356.0          | -518.8            | 895.5             | -2,485.6          | -7,798.6          | -5,994.2         | -5,304.7          |
| Exports of Services                                     | 119,020.1         | 137,484.7         | 149,580.8         | 159,663.9         | 175,503.1         | 191,008.2        | 191,940.3         |
| Maintenance & Repair                                    |                   |                   |                   |                   |                   |                  |                   |
| Services  | 9,128.1           | 8,648.4           | 9,343.9           | 9,113.8           | 10,860.1          | 10,029.8         | 9,407.4           |
| Transport   | 43,551.7          | 52,775.1          | 53,601.5          | 55,851.4          | 56,759.9          | 65,155.3         | 64,965.5          |
| Freight   | 33,269.6          | 41,430.6          | 41,528.4          | 43,156.1          | 45,959.9          | 52,092.0         | 52,104.8          |
| Others  | 10,282.1          | 11,344.5          | 12,073.1          | 12,695.3          | 10,800.0          | 13,063.3         | 12,860.7          |
| Travel  | 13,417.7          | 19,331.2          | 22,551.8          | 23,488.4          | 24,036.6          | 24,243.4         | 23,019.2          |
| Insurance   | 3,832.6           | 4,821.8           | 4,860.2           | 4,537.4           | 5,219.4           | 5,966.0          | 6,330.8           |
| Government Goods &                                      | 241.2             | 250.0             | 246.6             | 261.2             | 277.5             | 201.4            | 270.0             |
| Services  | 341.3             | 350.8             | 346.6             | 361.2             | 377.5             | 381.4            | 378.9             |
| Construction  | 1,544.6           | 1,406.5           | 1,941.0           | 2,006.6           | 2,219.9           | 1,550.0          | 1,588.0           |
| Financial   | 15,614.2          | 16,653.2          | 19,128.0          | 20,722.5          | 22,871.6          | 25,787.2         | 27,856.1          |
| Telecommunications, Computer & Information              | 3,804.1           | 4,831.2           | 4,891.5           | 5,272.0           | 6,091.3           | 6,203.5          | 6,639.4           |
| Charges for the Use of                                  |                   |                   |                   |                   |                   | . =              |                   |
| Intellectual Property                                   | 1,225.2           | 1,330.3           | 2,090.0           | 2,320.5           | 3,985.5           | 4,788.1          | 4,539.7           |
| Personal, Cultural & Recreational                       | 645.1             | 689.2             | 651.5             | 667.8             | 698.7             | 722.6            | 734.4             |
| Other Business Services                                 | 25,915.5          | 26,647.0          | 30,174.8          | 35,322.3          | 42,382.6          | 46,180.9         | 46,480.9          |
| Accounting  | 372.3             | 355.9             | 402.3             | 407.3             | 400.3             | 331.1            | 336.0             |
| Advertising And Market Research                         | 1,006.3           | 1,073.8           | 1,642.1           | 2,681.4           | 4,629.6           | 7,751.6          | ,                 |
| Architectural   | 273.8             | 270.0             | 302.0             | 354.1             | 312.5             | 388.5            | 394.2             |
| Business Management                                     | 12,742.1          | 13,538.1          | 14,829.9          | 16,663.6          | 19,690.0          | 19,846.0         | 20,133.1          |
| Engineering And Technical                               | 3,423.2           | 2,424.3           | 3,416.6           | 4,212.8           | 5,094.3           | 6,116.9          | 5,799.7           |
| Legal   | 433.5             | 528.3             | 558.1             | 600.1             | 643.4             | 676.8            | 686.7             |
| Research And Development                                | 591.4             | 612.8             | 635.6             | 719.4             | 1,109.1           | 868.3            | 823.2             |
| Trade-Related   | 3,659.5           | 3,970.0           | 4,808.3           | 5,489.9           | 5,757.0           | 4,701.1          | 4,990.1           |
| Others  | 3,413.4           | 3,873.8           | 3,579.9           | 4,193.7           | 4,746.4           | 5,500.6          | 5,453.6           |
| Imports of Services Maintenance & Repair                | 122,376.1         | 138,003.5         | 148,685.3         | 162,149.5         | 183,301.7         | 197,002.4        | 197,245.0         |
| Services  | 991.0             | 874.1             | 872.3             | 837.0             | 845.2             | 903.3            | 875.0             |
| Transport   | 36,055.1          | 40,595.1          | 41,994.9          | 44,823.9          | 47,899.5          | 57,973.1         | 60,647.1          |
| Freight   | 21,608.3          | 23,787.4          | 26,450.5          | 26,570.4          | 28,766.2          | 36,761.9         | 40,489.3          |
| Others  | 14,446.8          | 16,807.7          | 15,544.4          | 18,253.5          | 19,133.3          | 21,211.2         | 20,157.8          |
| Travel  | 22,840.9          | 25,497.3          | 27,048.4          | 28,926.3          | 30,664.9          | 30,865.4         | 30,323.2          |
| Insurance   | 4,075.5           | 5,510.2           | 5,699.9           | 5,992.8           | 6,256.1           | 5,667.5          | 6,170.3           |
| Government Goods &                                      | 220.0             | 261.2             | 260.0             | 256.0             | 207.0             | 205.1            | 27.5              |
| Services  | 320.0             | 261.3             | 260.8             | 256.8             | 287.0             | 295.1            | 275.9             |
| Construction  | 618.2             | 702.0             | 944.0             | 944.0             | 953.1             | 628.2<br>5,460.7 | 643.6             |
| Financial Telecommunications.                           | 2,978.7           | 3,493.8           | 3,915.1           | 4,062.4           | 4,525.6           | 3,400.7          | 6,141.8           |
| Computer & Information                                  | 3,476.2           | 4,823.6           | 6,028.1           | 6,824.9           | 8,664.4           | 10,396.6         | 10,909.7          |
| Charges for the Use of                                  | 10.220.0          | 22 647 6          | 24 505 1          | 27 102 2          | 27 644 2          | 25,063.6         | 22 762 5          |
| Intellectual Property Personal, Cultural & Recreational | 19,239.0<br>670.1 | 22,647.6<br>643.6 | 24,595.1<br>616.7 | 27,102.2<br>595.2 | 27,644.2<br>568.6 | 632.1            | 23,763.5<br>642.4 |
| Other Business Services                                 | 31,111.4          |                   |                   |                   |                   |                  |                   |
|   | 239.2             | 32,954.9          | 36,710.0          | 41,784.0          | 54,993.1          | 59,116.8         |                   |
| Accounting Advertising And Market Research              |                   | 205.4             | 222.2             | 271.1             | 260.3             | 292.3<br>2,908.5 | 296.6<br>2,950.9  |
| Architectural   | 2,106.0<br>51.0   | 2,139.5<br>64.0   | 2,214.8<br>62.5   | 2,448.0<br>84.6   | 2,722.1<br>78.8   | 56.8             | 2,930.9           |
| Business Management                                     | 9,767.5           | 10,347.4          | 12,908.6          | 13,849.4          | 15,580.7          | 17,008.0         | 17,254.2          |
| Engineering And Technical                               | 2,273.5           | 1,749.7           | 2,001.4           | 2,307.6           | 2,617.7           | 3,220.9          | 3,053.9           |
| Legal   | 398.3             | 284.5             | 234.7             | 664.0             | 264.9             | 299.5            | 303.8             |
| Research And Development                                | 3,771.4           | 3,921.2           | 4,528.2           | 4,550.3           | 11,410.8          | 9,662.2          | 6,951.9           |
| Trade-Related   | 6,247.3           | 6,851.5           | 7,964.1           | 9,424.8           | 11,107.0          | 11,661.8         | 12,319.8          |
| Others  | 6,257.2           | 7,391.7           | 6,573.5           | 8,184.2           | 10,950.8          | 14,006.8         | 13,663.8          |
| Primary Income Balance                                  | -12,969.0         | -1,834.5          | -7,539.0          | -11,494.6         | -11,408.8         | -19,173.6        |                   |
| Primary Income Receipts                                 | 73,018.0          | 85,383.3          | 82,607.7          | 80,654.8          | 83,696.0          | 80,241.6         |                   |
| Primary Income Payments                                 | 85,987.0          | 87,217.8          | 90,146.7          | 92,149.4          | 95,104.8          | 99,415.2         | 99,866.2          |
| Secondary Income Balance                                | -5,376.9          | -6,574.8          | -7,504.4          | -8,534.6          | -8,162.5          | -7,916.2         |                   |
| General Government (Net)                                | 1,112.8           | 925.6             | 991.1             | 1,168.0           | 1,024.8           | 939.0            | 1,131.4           |
|   | ,                 |                   | -8,495.5          | -9,702.6          | -9,187.3          | -8,855.2         |                   |

(continued on the next page)

7.1 BALANCE OF PAYMENTS (continued)

|                             |            |           |                      |           |           | M         | illion Dollars         |
|-----------------------------|------------|-----------|----------------------|-----------|-----------|-----------|------------------------|
|                             | 2009       | 2010      | 2011                 | 2012      | 2013      | 2014      | 2015                   |
| B Capital and Financial     |            |           |                      |           |           |           |                        |
| Account Balance 1           | 34,123.9   | 24,004.3  | 58,050.1             | 28,869.6  | 46,706.6  | 58,576.9  | 77,052.4               |
| Financial Account (Net)     | 34,123.9   | 24,004.3  | 58,050.1             | 28,869.6  | 46,706.6  | 58,576.9  | 77,052.4               |
| Direct Investment           | 11,953.8   | -26,818.4 | -21,218.5            | -48,499.1 | -33,128.1 | -37,206.0 | -40,938.8              |
| Assets                      | 46,602.1   | 48,278.0  | 39,568.8             | 22,919.8  | 49,541.4  | 49,581.3  | 48,785.9               |
| Liabilities                 | 34,648.3   | 75,096.4  | 60,787.3             | 71,418.9  | 82,669.5  | 86,787.3  | 89,724.7               |
| Portfolio Investment        | 39,492.4   | 40,134.8  | 16,170.0             | 97,740.0  | 78,177.9  | 67,612.7  | 75,314.9               |
| Assets                      | 41,213.2   | 51,049.6  | 8,200.9              | 104,138.7 | 76,393.2  | 71,641.9  | 65,872.5               |
| Deposit-Taking              |            | ,         |                      |           |           |           | ,                      |
| Corporations, except        |            |           |                      |           |           |           |                        |
| the Central Bank            | 49,387.2   | 9,272.9   | -13,746.7            | 38,125.7  | 21,612.9  | 21,227.4  | 2,114.9                |
| Official                    | 13,928.1   | 13,910.9  | 12,735.8             | 13,929.9  | 15,413.5  | 20,108.5  | 25,023.9               |
| Others                      | -22,102.1  | 27,865.8  | 9,211.8              | 52,083.1  | 39,366.8  | 30,306.0  | 38,733.7               |
| Liabilities                 | 1,720.8    | 10,914.8  | -7,969.1             | 6,398.7   | -1,784.7  | 4,029.2   | -9,442.4               |
| Deposit-Taking              | 1,720.0    | 10,714.0  | 7,707.1              | 0,370.7   | 1,704.7   | 7,027.2   | 7,772.7                |
| Corporations, except        |            |           |                      |           |           |           |                        |
| the Central Bank            | -1,595.1   | -883.4    | -2,872.1             | -4,814.6  | 6,704.6   | 11,447.5  | -5,542.6               |
| Others                      | 3,315.9    | 11,798.2  | -2,872.1<br>-5,097.0 | 11,213.3  | -8,489.3  | -7,418.3  | -3,899.8               |
| Financial Derivatives       |            | *         |                      |           |           |           |                        |
|                             | 20,520.3   | -4,903.6  | 21,480.7             | -21,753.6 | -16,572.0 | -15,158.7 | -27,324.9<br>-23,646.9 |
| Assets                      | -28,001.7  | 6,238.5   | 44,140.6             | -50,331.7 | -13,378.1 | -8,136.6  | *                      |
| Liabilities                 | -48,522.0  | 11,142.1  | 22,659.9             | -28,578.1 | 3,193.9   | 7,022.1   | 3,678.0                |
| Other Investment            | -37,842.6  | 15,591.5  | 41,617.9             | 1,382.3   | 18,228.8  | 43,328.9  | 70,001.2               |
| Assets                      | -98,488.3  | 95,297.8  | 97,653.7             | 25,602.2  | 135,207.3 | 103,914.4 | 64,167.6               |
| Deposit-Taking              |            |           |                      |           |           |           |                        |
| Corporations, except        |            |           |                      |           |           |           |                        |
| the Central Bank            | -148,152.0 | 12,191.9  | 73,478.3             | -16,433.3 | 80,782.3  | 50,392.5  | 21,584.8               |
| Official                    | 22,422.0   | 19,522.1  | 33,872.6             | 19,290.5  | 37,030.3  | 22,029.4  | 14,679.3               |
| Others                      | 27,241.7   | 63,583.8  | -9,697.2             | 22,745.0  | 17,394.7  | 31,492.5  | 27,903.5               |
| Liabilities                 | -60,645.7  | 79,706.3  | 56,035.8             | 24,219.9  | 116,978.5 | 60,585.5  | -5,833.6               |
| Deposit-Taking              |            |           |                      |           |           |           |                        |
| Corporations, except        |            |           |                      |           |           |           |                        |
| the Central Bank            | -87,614.2  | 34,742.9  | 59,486.2             | 7,198.4   | 100,775.6 | 44,294.1  | -4,443.1               |
| Others                      | 26,968.5   | 44,963.4  | -3,450.4             | 17,021.5  | 16,202.9  | 16,291.4  | -1,390.5               |
| C Net Errors and Omissions  | 3,076.5    | 4,730.7   | 554.2                | -3,940.9  | 2,154.0   | -612.4    | -1,079.4               |
| D Overall Balance (A-B+C)   | 16,456.2   | 57,480.5  | 21,487.7             | 32,605.9  | 22,730.9  | 8,617.8   | 1,500.7                |
| E Reserves Assets           | 16,456.2   | 57,480.5  | 21,487.7             | 32,605.9  | 22,730.9  | 8,617.8   | 1,500.7                |
| Special Drawing Rights      | 1,661.2    | -235.4    | -237.1               | -91.8     | 56.6      | -19.8     | 39.8                   |
| Reserve Position in the IMF | 119.7      | 45.5      | 484.6                | 35.1      | 181.0     | -212.6    | -231.6                 |
| Foreign Exchanges Assets    | 14,675.3   | 57,670.4  | 21,240.2             | 32,662.6  | 22,493.3  | 8,850.2   | 1,692.5                |
| Poteign Exchanges Assets    | 14,073.3   | 37,070.4  | 41,440.2             | 32,002.0  | 44,473.3  | 0,030.2   | 1,072.3                |

Note: Decrease in assets and liabilities, and net inflows in net balances, are indicated by a minus (-) sign.

<sup>1</sup> The capital account is consolidated under the financial account.

7.2 SINGAPORE INTERNATIONAL INVESTMENT POSITION (End of Period)

|                                       |             |             |             |             |             |             | Million Dollars |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| Region/Country                        | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015            |
| Net International Investment Position | 623,431.2   | 659,570.5   | 693,360.1   | 717,080.3   | 765,516.1   | 763,198.3   | 844,053.5       |
| External Assets                       | 2,709,613.1 | 3,000,995.2 | 3,183,851.9 | 3,352,252.9 | 3,694,863.2 | 3,951,741.2 | 4,150,370.8     |
| Direct Investment                     | 534,945.7   | 600,141.2   | 649,896.7   | 693,952.7   | 775,402.6   | 827,912.6   | 884,053.8       |
| Equity And Investment                 |             |             |             |             |             |             |                 |
| Fund Shares                           | 354,734.3   | 412,898.1   | 436,706.0   | 485,786.7   | 535,685.0   | 603,721.3   | 638,660.9       |
| Debt Instruments                      | 180,211.4   | 187,243.1   | 213,190.7   | 208,166.0   | 239,717.6   | 224,191.3   | 245,392.9       |
| Portfolio Investment                  | 652,963.4   | 758,254.8   | 794,263.8   | 983,742.5   | 1,157,158.3 | 1,274,431.1 | 1,359,660.6     |
| Equity And Investment                 |             |             |             |             |             |             |                 |
| Fund Shares                           | 292,762.1   | 381,178.3   | 399,312.5   | 523,838.3   | 595,279.8   | 641,884.7   | 685,132.7       |
| Debt Securities                       | 360,201.3   | 377,076.5   | 394,951.3   | 459,904.2   | 561,878.5   | 632,546.4   | 674,527.9       |
| Financial Derivatives                 | 120,288.8   | 138,316.7   | 184,796.1   | 113,455.3   | 111,153.1   | 141,059.1   | 161,150.6       |
| Other Investment                      | 1,137,459.8 | 1,215,328.4 | 1,246,492.1 | 1,244,358.2 | 1,306,420.0 | 1,367,900.3 | 1,394,515.0     |
| Trade Credits And Advances            | 127,976.7   | 169,376.0   | 171,943.3   | 171,221.9   | 174,366.1   | 170,443.9   | 160,709.5       |
| Loans                                 | 238,398.1   | 263,134.4   | 270,971.8   | 291,171.3   | 342,867.9   | 398,376.6   | 415,158.4       |
| Currency And Deposits                 | 642,107.3   | 628,333.0   | 652,684.4   | 652,338.0   | 680,068.3   | 667,617.1   | 672,952.9       |
| Insurance Technical Reserves          | 8,844.7     | 12,465.0    | 8,687.1     | 8,750.2     | 8,322.5     | 9,247.1     | 9,895.0         |
| Other Accounts Receivable             | 120,133.0   | 142,020.0   | 142,205.5   | 120,876.8   | 100,795.2   | 122,215.6   | 135,799.2       |
| Reserve Assets <sup>1</sup>           | 263,955.4   | 288,954.1   | 308,403.2   | 316,744.2   | 344,729.2   | 340,438.1   | 350,990.8       |
| External Liabilities                  | 2,086,181.9 | 2,341,424.7 | 2,490,491.8 | 2,635,172.6 | 2,929,347.1 | 3,188,542.9 | 3,306,317.3     |
| Direct Investment                     | 710,371.1   | 814,677.9   | 887,546.3   | 1,003,380.2 | 1,119,973.6 | 1,271,976.7 | 1,383,375.0     |
| Equity And Investment                 | , 10,0,111  | 011,07715   | 007,010.0   | 1,000,000.2 | 1,112,570.0 | 1,271,270.7 | 1,000,070.0     |
| Fund Shares                           | 588,137.6   | 676,275.4   | 718,684.7   | 834,015.2   | 932,807.9   | 1,059,202.4 | 1,170,021.8     |
| Debt Instruments                      | 122,233.5   | 138,402.5   | 168,861.6   | 169,365.0   | 187,165.7   | 212,774.3   | 213,353.2       |
| Portfolio Investment                  | 159,082.7   | 204,855.7   | 166,233.1   | 201,967.2   | 247,425.7   | 272,676.0   | 242,048.6       |
| Equity And Investment                 | 139,062.7   | 204,633.7   | 100,233.1   | 201,907.2   | 247,423.7   | 272,070.0   | 242,046.0       |
| Fund Shares                           | 141,883.9   | 182,951.5   | 146,038.3   | 174,685.7   | 206,901.3   | 226,177.4   | 199,459.6       |
| Debt Securities                       | 141,883.9   | 21.904.2    | 20.194.8    | 27.281.5    | 40.524.4    | 46.498.6    | 42.589.0        |
| Financial Derivatives                 | 91,223.7    | 118,640.8   | 130,081.1   | 104,527.4   | 105,815.8   | 131,747.2   | 158,607.4       |
| Other Investment                      | 1,125,504.4 | 1,203,250.3 | 1,306,631.3 | 1,325,297.8 | 1,456,132.0 | 1,512,143.0 | 1,522,286.3     |
| Trade Credits And Advances            | 111,225.9   | 143,400.7   | 145,918.9   | 148,106.8   | 151,307.6   | 141,857.9   | 140,007.6       |
| Loans                                 | 57,811.9    | 58,114.2    | 81,532.0    | 93,936.5    | 111,663.2   | 126,469.0   | 136,554.0       |
| Currency And Deposits                 | 876,951.2   | 915,697.0   | 978,831.8   | 95,930.3    | 1,099,725.5 | 1,138,402.6 | 1,120,945.0     |
| Insurance Technical Reserves          | 5,685.7     | 9,241.8     | 16,136.7    | 13,510.9    |             | 13,320.8    | 13,563.2        |
|                                       |             | *           | *           | ,           | 12,499.1    |             |                 |
| Special Drawing Rights Allocation     | 1,674.1     | 1,478.0     | 1,486.1     | 1,399.4     | 1,446.8     | 1,428.8     | 1,458.1         |
| Other Accounts Payable                | 72,155.6    | 75,318.6    | 82,725.8    | 77,036.1    | 79,489.8    | 90,663.9    | 109,758.4       |

<sup>1</sup> Assets held by the Monetary Authority of Singapore.

7.3 EXTERNAL DEBT (End of Period)

|  |             |             |             |             |             |             | Million Dollar |
|--|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Region/Country   | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015           |
| Gross External Debt  | 1,264,785.3 | 1,368,546.5 | 1,495,688.1 | 1,521,944.4 | 1,683,821.9 | 1,771,415.9 | 1,778,228.4    |
| Direct Investment: Intercompany Loans  Debt Liabilities Of DIE   1 | 122,552.8   | 138,732.3   | 168,861.7   | 169,364.9   | 187,165.7   | 212,774.4   | 213,353.2      |
| To Direct Investors Debt Liabilities Of Direct                     | 68,176.4    | 81,738.6    | 101,377.2   | 101,771.5   | 100,473.8   | 114,031.6   | 119,022.9      |
| Investors To DIE <sup>1</sup> Debt Liabilities Between             | 9,473.6     | 9,548.6     | 16,114.1    | 18,001.4    | 29,933.8    | 32,316.5    | 33,321.7       |
| Fellow Enterprises   | 44,902.8    | 47,445.1    | 51,370.4    | 49,592.0    | 56,758.1    | 66,426.3    | 61,008.6       |
| Other Liabilities  | 1,142,232.5 | 1,229,814.2 | 1,326,826.4 | 1,352,579.5 | 1,496,656.2 | 1,558,641.5 | 1,564,875.2    |
| General Government   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Central Bank   | 1,674.1     | 1,478.0     | 1,486.1     | 1,399.4     | 1,446.8     | 1,428.8     | 1,458.1        |
| Short-term   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Loans  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Debt Securities  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Currency And Deposits <sup>2</sup>                                 |             |             |             |             |             |             |                |
| Others   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Long-term  | 1.674.1     | 1,478.0     | 1,486.1     | 1,399.4     | 1,446.8     | 1,428.8     | 1,458.1        |
| Special Drawing Rights (Allocations)                               | 1,674.1     | 1,478.0     | 1,486.1     | 1,399.4     | 1,446.8     | 1,428.8     | 1,458.1        |
| Loans  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Debt Securities  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Others   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Deposit-taking Corporations  | 950,935.7   | 992,097.1   | 1,061,772.8 | 1,070,379.4 | 1,188,696.9 | 1,242,419.2 | 1,237,891.3    |
| Short-term   | 882,978.0   | 921,625.2   | 984,450.8   | 998,801.0   | 1,113,891.9 | 1,155,802.2 | 1,133,154.2    |
| Loans  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Debt Securities  | 1,631.1     | 2,026.4     | 1,881.0     | 3,591.3     | 10,238.5    | 13,474.6    | 7,442.5        |
| Currency And Deposits  | 876,537.1   | 915,231.4   | 978,247.6   | 990,715.3   | 1,099,077.2 | 1,137,540.4 | 1,120,142.1    |
| Others   | 4,809.8     | 4,367.4     | 4,322.2     | 4,494.4     | 4,576.2     | 4,787.2     | 5,569.6        |
| Long-term  | 67,957.7    | 70,471.9    | 77,322.0    | 71,578.4    | 74,805.0    | 86,617.0    | 104,737.1      |
| Loans  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Debt Securities  | 1,490.4     | 725.2       | 748.4       | 1,020.0     | 2,178.3     | 2,232.7     | 2,314.8        |
| Others   | 66,467.3    | 69,746.7    | 76,573.6    | 70,558.4    | 72,626.7    | 84,384.3    | 102,422.3      |
| Other Sector   | 189,622.7   | 236,239.1   | 263,567.5   | 280,800.7   | 306,512.5   | 314,793.5   | 325,525.8      |
| Short-term   | 149,865.8   | 189,821.1   | 191,068.4   | 203,220.2   | 220,159.7   | 221,061.3   | 225,656.9      |
| Trade Credits And Advances   | 111,225.9   | 148,118.7   | 145,918.9   | 148,106.8   | 151,307.6   | 141,857.9   | 140,007.6      |
| Loans  | 37,248.5    | 36,876.9    | 43,040.3    | 52,834.7    | 65,887.8    | 76,292.4    | 82,635.4       |
| Debt Securities  | 582.9       | 3,296.5     | 902.2       | 846.7       | 1,052.6     | 975.7       | 1,024.8        |
| Others   | 808.5       | 1,529.0     | 1,207.0     | 1,432.0     | 1,911.7     | 1,935.3     | 1,989.1        |
| Long-term  | 39,756.9    | 46,418.0    | 72,499.1    | 77,580.5    | 86,352.8    | 93,732.2    | 99,868.9       |
| Loans  | 20,332.0    | 21,077.3    | 38,491.8    | 41,101.9    | 45,775.4    | 50,176.7    | 53,918.6       |
| Debt Securities  | 13,494.3    | 15,856.1    | 16,663.3    | 21,823.6    | 27,054.9    | 29,815.5    | 31,806.8       |
| Others   | 5,930.6     | 9,484.6     | 17,344.0    | 14,655.0    | 13,522.5    | 13,740.0    | 14,143.5       |

Note: With the implementation of the recommendations of the 6th Edition of the Balance of Payments and International Investment Manual (BPM6), Singapore's gross external debt is now reported on a BPM6 format. The accompanying revision in the treatment of Asian Currency Units (ACUs) as resident units (which previously were treated as non-resident units) means that the coverage of Singapore's external assets and liabilities has been expanded to include those of the ACUs, resulting in increases in both Singapore's external assets and liabilities. While the expansion of coverage has resulted in higher gross external debt (or liabilities), it has resulted also in higher external assets. Singapore remains a net creditor, as the resulting increase in external assets is more than the increase in liabilities. More information may be found in the Occasional Paper on "Implementation of IMF Balance of Payments and International Investment Position Manual, Sixth Edition in Singapore's Balance of Payments".

<sup>1</sup> Refers to direct investment enterprise.

<sup>2</sup> Data are not released due to relatively insignificant value and/or in order to safeguard confidentiality of information provided by individual establishments.



#### **Direct Investment**

Data on foreign direct investment in Singapore are compiled from the Survey of Foreign Equity Investment and the Survey of Foreign Debt and Financial Derivative Transactions.

Data on Singapore's overseas direct investment are obtained from the Survey of Singapore's Investment Abroad. The coverage of the survey is extended to financial institutions (i.e. banks, finance and insurance companies) from 1994.

#### **Definitions**

Foreign Direct Investment (FDI): Refers to a category of investment that reflects the objective of establishing a lasting interest by an enterprise (direct investor) resident in one economy in an enterprise (direct investment enterprise) resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. The direct or indirect ownership of 10 per cent or more of the voting power of an enterprise resident in one economy by an investor resident in another economy is evidence of such a relationship.

FDI comprises foreign direct equity investment (FDEI) and the net inter-company debt between direct investors and direct investment enterprises.

Foreign Direct Equity Investment (FDEI): Refers to equity capital in direct investment enterprises attributable to foreign direct investors.

Equity capital covers all components of shareholders' funds (proportionate to the percentage of shares held), including equity, contributed surplus, reinvested earnings, revaluations, as well as any reserve accounts.

For branches of non-resident banks, their net fixed assets are used as a proxy of equity capital. For branches of other non-resident entities, the net amount owed by branches to their non-resident head office is used.

Reinvested Earnings: Refer to earnings on equity accruing to direct investors less distributed earnings, proportionate to the percentage ownership of the equity owned by the direct investor(s).

Net Inter-Company Debt: Refers to the net outstanding debt owed by foreign direct investment enterprises to the foreign direct investors. The debt could be in the form of loans or debt securities.

#### **Investment Commitments**

Investment commitments refer to investment projects in terms of fixed assets which companies commit to invest in Singapore. Projects are only recorded as commitments if the company has made a firm undertaking to implement the project.

#### **Other References**

Detailed data on investment are available in the reports "Foreign Direct Investment in Singapore" and "Singapore's Direct Investment Abroad".

8.1 STOCK OF FOREIGN DIRECT INVESTMENT IN SINGAPORE BY INDUSTRY (End of Period)

|                                       |           |           |                  |           |           |            | Million Dollars |
|---------------------------------------|-----------|-----------|------------------|-----------|-----------|------------|-----------------|
| Industry                              | 2008      | 2009      | 2010             | 2011      | 2012      | 2013       | 2014            |
| D 1                                   | 510 505 2 | 574 702 6 | <b>605</b> 700 4 | CEE 201 E | 761 607 1 | 0.60 140 0 | 1 004 505 7     |
| Γotal                                 | 510,585.2 | 574,703.6 | 625,780.4        | 677,391.7 | 761,637.1 | 868,149.2  | 1,024,585.7     |
| Manufacturing                         | 105,322.8 | 124,834.8 | 133,590.7        | 142,141.0 | 127,558.7 | 153,397.0  | 147,561.7       |
| Construction                          | 1,915.8   | 2,754.4   | 1,468.3          | 2,613.8   | 2,385.0   | 3,312.3    | 5,261.9         |
| Wholesale & Retail Trade              | 92,951.7  | 99,198.9  | 108,721.5        | 118,087.7 | 130,843.1 | 149,297.0  | 176,576.7       |
| Accommodation & Food                  |           |           |                  |           |           |            |                 |
| Service Activities                    | 3,355.6   | 3,486.7   | 3,811.8          | 4,311.7   | 4,785.3   | 3,744.3    | 5,018.7         |
| Transport & Storage                   | 36,328.9  | 36,661.3  | 36,793.8         | 34,005.4  | 38,424.9  | 33,176.2   | 37,449.0        |
| Information & Communications          | 5,131.7   | 5,901.0   | 6,418.4          | 5,818.8   | 8,885.7   | 9,243.9    | 12,864.0        |
| Financial & Insurance Services        | 210,126.8 | 239,127.2 | 270,176.8        | 293,628.9 | 366,237.8 | 417,522.7  | 515,562.2       |
| Real Estate Activities                | 14,697.8  | 17,307.9  | 20,083.1         | 24,666.8  | 27,557.7  | 32,548.7   | 35,521.2        |
| Professional, Scientific & Technical, |           |           |                  |           |           |            |                 |
| Administrative & Support Services     | 35,594.8  | 37,667.6  | 35,173.7         | 40,578.7  | 42,691.8  | 55,463.5   | 74,671.3        |
| Others                                | 5,159.3   | 7,763.9   | 9,542.4          | 11,538.9  | 12,267.2  | 10,443.6   | 14,098.9        |

 $Note: The\ industries\ are\ classified\ according\ to\ Singapore\ Standard\ Industrial\ Classification\ 2015.$ 

8.2 STOCK OF SINGAPORE'S DIRECT INVESTMENT ABROAD BY INDUSTRY (End of Period)

|                                       |           |           |           |           |           |           | Million Dollars |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Industry                              | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014            |
| Fotal .                               | 311,517.8 | 370,248.7 | 425,673.8 | 446,999.2 | 493,024.7 | 536,317.2 | 619,997.2       |
| Manufacturing                         | 70,454.9  | 78,797.7  | 89,179.9  | 90,658.5  | 96,836.1  | 104,450.2 | 112,864.3       |
| Construction                          | 1,150.3   | 1,381.6   | 1,298.6   | 1,293.8   | 1,513.0   | 1,707.3   | 1,668.2         |
| Wholesale & Retail Trade              | 16,865.5  | 23,072.8  | 25,745.8  | 30,491.5  | 39,214.4  | 46,699.0  | 50,976.5        |
| Accommodation & Food                  |           |           |           |           |           |           |                 |
| Service Activities                    | 2,885.5   | 3,731.2   | 3,776.2   | 4,380.4   | 4,784.9   | 4,697.8   | 4,694.6         |
| Transport & Storage                   | 10,589.7  | 9,709.2   | 10,382.3  | 10,695.9  | 12,551.0  | 14,603.9  | 17,131.3        |
| Information & Communications          | 14,088.9  | 16,564.8  | 18,165.8  | 20,920.6  | 22,263.7  | 22,235.0  | 25,530.5        |
| Financial & Insurance Services        | 154,852.3 | 185,451.1 | 206,720.3 | 210,934.4 | 231,062.9 | 254,676.0 | 315,980.4       |
| Real Estate Activities                | 22,880.3  | 27,085.0  | 35,334.7  | 39,216.4  | 40,148.7  | 41,639.0  | 44,133.3        |
| Professional, Scientific & Technical, |           |           |           |           |           |           |                 |
| Administrative & Support Services     | 4,750.2   | 5,527.5   | 7,653.4   | 8,318.8   | 9,558.2   | 11,137.7  | 11,717.9        |
| Others                                | 13,000.3  | 18,927.9  | 27,416.8  | 30,088.9  | 35,091.9  | 34,471.2  | 35,300.2        |

Note: The industries are classified according to Singapore Standard Industrial Classification 2015.

8.3 STOCK OF FOREIGN DIRECT INVESTMENT IN SINGAPORE BY REGION/COUNTRY (End of Period)

|                                     |           |           |           |           |           |           | Million Dollars |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Region/Country                      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014            |
| Total                               | 510,585.2 | 574,703.6 | 625,780.4 | 677,391.7 | 761,637.1 | 868,149.2 | 1,024,585.7     |
| Asia                                | 120,240.3 | 145,894.9 | 152,854.0 | 163,440.5 | 186,079.7 | 211,547.2 | 267,352.3       |
| Brunei Darussalam                   | 297.0     | 317.9     | 292.5     | 336.2     | 367.6     | 389.5     | 341.2           |
| Cambodia                            | 1.5       | 0.9       | 6.9       | 22.8      | 22.6      | 23.1      | 28.9            |
| China                               | 4,423.7   | 9,725.7   | 14,028.7  | 13,612.1  | 14,669.7  | 16,089.0  | 16,229.3        |
| Hong Kong                           | 11,939.1  | 18,145.8  | 19,066.1  | 23,468.1  | 29,053.2  | 34,764.9  | 43,392.9        |
| India                               | 16,861.4  | 21,954.8  | 24,515.8  | 23,204.5  | 23,487.6  | 23,846.4  | 22,673.2        |
| Indonesia                           | 2,962.4   | 3,894.0   | 1,482.8   | 819.4     | 2,461.9   | 2,209.8   | 2,479.2         |
| Israel                              | 5,060.8   | 4,992.5   | 4,710.9   | 4,747.4   | 4,534.1   | 4,667.7   | 4,501.0         |
| Japan                               | 50,446.1  | 50,515.4  | 53,577.4  | 53,722.1  | 58,702.8  | 72,195.6  | 109,341.0       |
| Korea, Republic of                  | 3,250.5   | 2,906.3   | 3,062.1   | 4,143.5   | 3,306.4   | 4,681.9   | 7,492.5         |
| Lao People's Democratic Republic    | 1.6       | 5.7       | 2.5       | 3.8       | 3.7       | 4.1       | 1.7             |
| Malaysia                            | 12,585.3  | 15,864.9  | 14,437.6  | 19,867.9  | 27,684.6  | 27,152.0  | 29,187.2        |
| Myanmar                             | 94.7      | 18.9      | 45.0      | 19.4      | 4.0       | 26.8      | 43.7            |
| Philippines                         | 1,101.0   | 1,080.3   | 1,353.1   | 2,018.6   | 1,974.6   | 2,788.0   | 3,239.1         |
| Taiwan                              | 6,553.2   | 6,169.4   | 5,772.1   | 7,195.4   | 7,265.7   | 8,455.7   | 12,433.3        |
| Thailand                            | 1,814.3   | 2,076.0   | 5,357.9   | 4,165.0   | 3,808.4   | 4,171.6   | 4,516.1         |
|                                     | 28.9      |           |           | *         |           | 107.8     | 165.3           |
| Vietnam                             | 28.9      | 28.2      | 59.6      | 60.6      | 24.2      | 107.8     | 103.3           |
| Europe                              | 203,850.7 | 221,807.3 | 230,861.9 | 257,368.8 | 265,358.9 | 301,131.6 | 319,637.9       |
| Denmark                             | 3,101.5   | 3,905.0   | 8,241.7   | 8,973.9   | 10,027.5  | 10,605.8  | 10,106.9        |
| France                              | 9,507.2   | 8,103.7   | 8,064.9   | 10,609.2  | 12,574.3  | 13,057.8  | 15,713.7        |
| Germany                             | 11,227.0  | 11,136.4  | 13,947.0  | 14,215.9  | 14,673.3  | 15,917.0  | 18,015.8        |
| Ireland                             | 3,286.1   | 3,092.1   | 5,055.2   | 7,131.5   | 7,897.9   | 7,321.9   | 10,128.6        |
| Luxembourg                          | 8,054.1   | 18,142.3  | 19,968.3  | 23,797.5  | 21,256.5  | 24,109.6  | 37,603.1        |
| Netherlands                         | 61,001.4  | 61,511.7  | 60,546.5  | 69,372.9  | 75,371.3  | 84,422.1  | 69,492.7        |
| Norway                              | 21,267.0  | 23,134.0  | 22,075.9  | 21,632.5  | 20,489.4  | 21,327.9  | 21,931.6        |
| Switzerland                         | 23,504.9  | 26,851.5  | 27,166.3  | 28,566.7  | 32,427.0  | 40,036.9  | 43,614.8        |
| United Kingdom                      | 47,569.0  | 49,499.4  | 48,947.3  | 55,654.0  | 48,865.3  | 59,132.6  | 62,192.7        |
| North America                       | 55,780.2  | 61,850.8  | 70,499.5  | 79,095.2  | 110,269.8 | 124,986.5 | 161,679.0       |
| United States                       | 52,758.1  | 58,968.8  | 67,082.0  | 74,648.5  | 105,098.9 | 118,033.6 | 153,048.5       |
| Canada                              | 3,022.1   | 2,882.1   | 3,417.5   | 4,446.7   | 5,170.8   | 6,952.9   | 8,630.5         |
| Oceania                             | 8,235.1   | 9,523.2   | 11,446.6  | 13,761.2  | 15,436.2  | 17,036.4  | 23,389.1        |
| Australia                           | 4,572.7   | 6,004.3   | 7,145.5   | 9,197.5   | 9,922.4   | 10,163.5  | 15,164.1        |
| New Zealand                         | 1,902.6   | 2,109.6   | 2,503.4   | 3,081.5   | 3,472.6   | 4,065.1   | 3,433.1         |
| South and Central America           |           |           |           |           |           |           |                 |
| and the Caribbean                   | 109,156.4 | 122,052.1 | 144,716.5 | 149,245.0 | 166,915.1 | 193,469.0 | 227,902.0       |
| Africa                              | 12,325.2  | 12,754.2  | 15,396.4  | 14,338.1  | 17,122.3  | 19,614.9  | 21,524.5        |
| ASEAN <sup>1</sup>                  | 18,886.6  | 23,286.8  | 23,037.9  | 27,313.7  | 36,351.6  | 36,872.8  | 40,002.4        |
|                                     | ,         |           |           |           |           |           |                 |
| European Union (EU 28) <sup>2</sup> | 153,400.4 | 166,582.8 | 175,696.4 | 198,874.3 | 202,829.2 | 226,939.5 | 239,594.0       |

<sup>1</sup> ASEAN includes Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines,

<sup>2</sup> The European Union (EU 28) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

8.4 STOCK OF SINGAPORE'S DIRECT INVESTMENT ABROAD BY REGION/COUNTRY (End of Period)

| D : / C t                           | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | Million Doll 2014 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------|
| Region/Country                      | 2008      | 2009      | 2010      | 2011      | 2012      | 2015      | 2014              |
| Total                               | 311,517.8 | 370,248.7 | 425,673.8 | 446,999.2 | 493,024.7 | 536,317.2 | 619,997.          |
| Asia                                | 175,240.3 | 201,275.4 | 225,701.8 | 257,202.5 | 274,759.8 | 290,082.1 | 320,942.0         |
| Brunei Darussalam                   | 160.0     | 202.0     | 177.7     | 149.5     | 207.6     | 227.6     | 243.              |
| Cambodia                            | 268.3     | 271.9     | 271.5     | 216.5     | 225.7     | 242.1     | 253.              |
| China                               | 54,472.1  | 62,241.2  | 72,430.8  | 85,218.1  | 92,047.0  | 101,673.7 | 110,087.          |
| Hong Kong                           | 20,054.4  | 23,425.2  | 25,008.0  | 39,097.9  | 39,796.5  | 42,644.8  | 50,230.           |
| India                               | 6,740.9   | 9,545.2   | 10,630.8  | 11,242.1  | 12,909.4  | 15,219.9  | 19,432.           |
| Indonesia                           | 22,327.1  | 28,161.8  | 31,343.1  | 34,848.2  | 39,923.3  | 40,499.8  | 46,349.           |
| Japan                               | 8,040.4   | 9,388.8   | 13,567.7  | 13,258.7  | 8,719.0   | 7,272.9   | 6,680.            |
| Korea, Republic of                  | 2,530.8   | 2,786.0   | 3,221.4   | 2,773.8   | 2,886.9   | 3,420.9   | 3,763.            |
| Lao People's Democratic Republic    | 212.3     | 226.3     | 222.7     | 225.2     | 226.3     | 163.9     | 262.              |
| Malaysia                            | 24,577.7  | 26,792.3  | 31,470.4  | 33,116.9  | 36,486.3  | 36,699.1  | 39,435.           |
| Myanmar                             | 201.4     | 196.0     | 183.4     | 174.3     | 291.8     | 332.2     | 1,931.            |
| Philippines                         | 4,291.7   | 4,978.4   | 5,235.8   | 5,393.1   | 5,330.4   | 5,226.7   | 5,343.            |
| Taiwan                              | 5,941.9   | 5,999.2   | 5,840.2   | 5,986.4   | 7,260.5   | 7,514.6   | 6,926.            |
| Thailand                            | 19,205.9  | 20,433.2  | 19,981.4  | 19,810.6  | 19,669.0  | 18,990.2  | 19,236.           |
| Vietnam                             | 2,837.0   | 3,131.3   | 2,731.4   | 3,053.3   | 3,708.7   | 4,225.1   | 4,790.            |
| Europe                              | 37,218.6  | 51,087.4  | 63,107.3  | 61,846.1  | 79,009.0  | 92,811.7  | 98,676.           |
| Germany                             | 593.3     | 998.1     | 1,715.6   | 1,652.8   | 1,576.9   | 1,369.2   | 1,475             |
| Luxembourg                          | 208.7     | 242.9     | 877.7     | 1,607.3   | 12,172.6  | 15,988.7  | 25,452.           |
| Netherlands                         | 4,317.4   | 4,972.4   | 7,501.9   | 7,537.9   | 7,647.9   | 10,166.0  | 12,266            |
| Norway                              | 1,734.2   | 1,961.4   | 2,125.5   | 2,057.1   | 2,811.9   | 3,155.5   | 3,253.            |
| Switzerland                         | 4,752.6   | 4,738.3   | 4,433.3   | 3,435.5   | 3,661.4   | 4,431.1   | 4,325.            |
| United Kingdom                      | 19,925.0  | 32,492.4  | 39,502.4  | 37,254.8  | 42,980.3  | 48,561.0  | 41,597            |
| North America                       | 11,988.0  | 14,264.7  | 14,680.9  | 8,163.4   | 9,713.9   | 10,281.9  | 14,463            |
| United States                       | 11,735.7  | 13,134.5  | 14,154.8  | 7,371.9   | 8,318.8   | 9,721.2   | 12,269            |
| Canada                              | 252.3     | 1,130.2   | 526.1     | 791.4     | 1,395.1   | 560.7     | 2,194             |
| Oceania                             | 21,174.4  | 26,370.9  | 36,916.5  | 40,038.8  | 44,187.1  | 47,695.5  | 47,590            |
| Australia                           | 18,121.6  | 23,106.6  | 33,322.6  | 36,106.5  | 40,471.2  | 43,348.4  | 42,901            |
| New Zealand                         | 924.0     | 1,119.4   | 1,265.5   | 1,565.6   | 1,710.4   | 2,137.1   | 2,247             |
| South and Central America           |           |           |           |           |           |           |                   |
| and the Caribbean                   | 52,779.1  | 58,800.6  | 59,372.2  | 59,032.7  | 63,644.2  | 73,641.7  | 116,245           |
| Africa                              | 13,117.4  | 18,449.8  | 25,895.0  | 20,715.8  | 21,710.6  | 21,804.2  | 22,079            |
| ASEAN <sup>1</sup>                  | 74,081.6  | 84,393.3  | 91,617.4  | 96,987.6  | 106,069.0 | 106,606.6 | 117,846.          |
| European Union (EU 28) <sup>2</sup> | 30,186.1  | 43,718.6  | 54,949.6  | 54,437.1  | 70,247.4  | 83,011.5  | 88,806            |

<sup>1</sup> ASEAN includes Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Thailand and Vietnam.

<sup>2</sup> The European Union (EU 28) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

8.5 INVESTMENT COMMITMENTS IN MANUFACTURING¹ AND SERVICES BY INDUSTRY

(Fixed Asset Investments) Million Dollars

|          |   |   |  | (Fixed As   | set mivestments)  | Million Dollars  |
|----------|---|---|--|---|---|--|
| 2009     | 2010  | 2011  | 2012   | 2013  | 2014  | 2015   |
| 11,753.9 | 12,854.2  | 13,734.3  | 16,007.8   | 12,135.2  | 11,840.2  | 11,494.9   |
| 10,092.1 | 10,033.6  | 11,274.3  | 14,299.4   | 7,956.8   | 6,762.4   | 8,299.7  |
|          |   |   |  |   |   |  |
| 2,810.7  | 1,595.9   | 2,523.9   | 6,491.6  | 2,508.5   | 2,635.8   | 3,560.7  |
|          |   |   | 196.7  | 640.2   | 721.6   | 471.7  |
| 35.4     |   |   |  |   |   |  |
| 93.9     | 224.0   |   |  | 91.6  |   |  |
| 737.2    | 646.4   | 647.2   | 432.3  | 518.2   | 345.7   | 7.7  |
| 4,901.2  | 5,725.2   | 7,424.9   | 6,313.5  | 3,294.0   | 1,746.2   | 3,266.1  |
| 164.1    | 1,127.5   | 307.6   | 310.4  | 591.8   | 703.6   | 484.9  |
| 1,349.6  | 714.6   | 370.7   | 554.9  | 312.5   | 609.5   | 508.6  |
| 1,661.8  | 2,820.6   | 2,460.0   | 1,708.4  | 4,178.4   | 5,077.8   | 3,195.2  |
|          | 11,753.9 10,092.1 2,810.7 35.4 93.9 737.2 4,901.2 164.1 1,349.6 | 11,753.9 12,854.2 10,092.1 10,033.6 2,810.7 1,595.9 35.4 93.9 224.0 737.2 646.4 4,901.2 5,725.2 164.1 1,127.5 1,349.6 714.6 | 11,753.9       12,854.2       13,734.3         10,092.1       10,033.6       11,274.3              2,810.7       1,595.9       2,523.9              35.4           93.9       224.0          737.2       646.4       647.2         4,901.2       5,725.2       7,424.9         164.1       1,127.5       307.6         1,349.6       714.6       370.7 | 11,753.9       12,854.2       13,734.3       16,007.8         10,092.1       10,033.6       11,274.3       14,299.4               2,810.7       1,595.9       2,523.9       6,491.6            196.7         35.4            93.9       224.0           737.2       646.4       647.2       432.3         4,901.2       5,725.2       7,424.9       6,313.5         164.1       1,127.5       307.6       310.4         1,349.6       714.6       370.7       554.9 | 2009         2010         2011         2012         2013           11,753.9         12,854.2         13,734.3         16,007.8         12,135.2           10,092.1         10,033.6         11,274.3         14,299.4         7,956.8                  2,810.7         1,595.9         2,523.9         6,491.6         2,508.5              196.7         640.2           35.4                93.9         224.0           91.6           737.2         646.4         647.2         432.3         518.2           4,901.2         5,725.2         7,424.9         6,313.5         3,294.0           164.1         1,127.5         307.6         310.4         591.8           1,349.6         714.6         370.7         554.9         312.5 | 11,753.9       12,854.2       13,734.3       16,007.8       12,135.2       11,840.2         10,092.1       10,033.6       11,274.3       14,299.4       7,956.8       6,762.4                  2,810.7       1,595.9       2,523.9       6,491.6       2,508.5       2,635.8            196.7       640.2       721.6         35.4              93.9       224.0         91.6          737.2       646.4       647.2       432.3       518.2       345.7         4,901.2       5,725.2       7,424.9       6,313.5       3,294.0       1,746.2         164.1       1,127.5       307.6       310.4       591.8       703.6         1,349.6       714.6       370.7       554.9       312.5       609.5 |

Source: Economic Development Board

Note: The industries are classified according to the Singapore Standard Industrial Classification 2010.

8.6 INVESTMENT COMMITMENTS IN MANUFACTURING¹ AND SERVICES BY COUNTRY OF ORIGIN

(Fixed Asset Investments) Million Dollars

|                       | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|
| Total                 | 11,753.9 | 12,854.2 | 13,734.3 | 16,007.8 | 12,135.2 | 11,840.2 | 11,494.9 |
| Local                 | 3,368.3  | 2,069.6  | 1,875.4  | 1,837.5  | 3,144.6  | 1,942.2  | 1,058.6  |
| Foreign               | 8,385.6  | 10,784.6 | 11,858.9 | 14,170.3 | 8,990.6  | 9,898.0  | 10,436.3 |
| United States         | 4,191.0  | 3,311.5  | 5,047.4  | 5,654.5  | 3,725.4  | 1,838.4  | 6,969.3  |
| Europe                | 2,466.8  | 4,819.0  | 2,131.9  | 3,134.3  | 3,281.2  | 3,117.8  | 1,510.1  |
| Japan                 | 1,032.3  | 1,175.7  | 995.0    | 967.8    | 670.4    | 317.2    | 422.9    |
| Asia Pacific & Others | 695.6    | 1,478.4  | 3,684.6  | 4,413.7  | 1,313.6  | 4,624.6  | 1,534.0  |
|                       |          |          |          |          |          |          |          |

Source: Economic Development Board

<sup>1</sup> Includes servicing, engineering and R&D.

<sup>1</sup> Includes servicing, engineering and R&D.



## Resonand Research Development

#### 9 RESEARCH AND DEVELOPMENT

Data on research and development (R&D) in Singapore are collected through the National Survey of R&D, conducted annually by the Agency for Science, Technology and Research (A\*STAR). The scope of the survey covers R&D activities in the private, higher education, government and public research institutes sectors.

To facilitate international comparability, data from the survey are collected and presented based on guidelines provided in the Organisation for Economic Co-operation and Development (OECD) Proposed Standard Practice for Surveys on Research and Experimental Development, "Frascati Manual" (Sixth Edition).

#### **Definitions**

#### R&D Manpower

Researchers: Refer to professionals who are engaged in the conception or creation of new knowledge, products, processes, methods and systems, or management of the projects concerned. Managers and administrators engaged in the planning and management of the scientific and technical aspects of a researcher's work also fall into this category. Researchers are further subclassified into:

- (a) Research scientists and engineers (RSEs)
- (b) Full-time postgraduate research students (FPGRS)
- (c) Non-degree researchers

Technicians: Refer to persons whose main tasks require more technical knowledge and experience in one or more fields of science and technology. They participate in R&D by performing scientific and technical tasks that involve the application of concepts and operational methods, normally under the supervision of researchers.

Other supporting staff: Includes skilled and unskilled craftsmen, secretarial and clerical staff participating in R&D projects or directly associated with such projects.

#### **R&D** Expenditure

R&D expenditure includes capital expenditure (acquisition of fixed tangible assets involved in R&D activities, excluding depreciation provisions), R&D manpower costs, and other R&D-related operating expenditures. Data for R&D expenditure in each year are expressed in nominal terms and are not adjusted for inflation.

#### **Patents**

Data on patents resulting from R&D activities carried out in Singapore that are published in the National Survey of R&D are as reported by survey respondents. Only one patent is awarded to an invention, irrespective of the number of countries to which the patent is being applied or awarded.

9.1 ORGANISATIONS PERFORMING R&D BY SECTOR

|                            |      |      |      |      |      |      | Numbe |
|----------------------------|------|------|------|------|------|------|-------|
| Sector                     | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014  |
| Total                      | 947  | 912  | 859  | 864  | 758  | 873  | 950   |
| Private                    | 888  | 854  | 799  | 804  | 699  | 812  | 882   |
| Higher Education           | 10   | 11   | 11   | 11   | 12   | 13   | 12    |
| Government                 | 30   | 27   | 29   | 29   | 28   | 29   | 31    |
| Public Research Institutes | 19   | 20   | 20   | 20   | 19   | 19   | 25    |

Source : Agency for Science, Technology and Research

9.2 R&D MANPOWER BY OCCUPATION AND SEX

|                    |        |        |        |        |        |        | Numbe  |
|--------------------|--------|--------|--------|--------|--------|--------|--------|
| Occupation         | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
| Total              | 40,504 | 41,388 | 43,164 | 44,855 | 45,001 | 47,275 | 47,902 |
| Male               | 27,351 | 27,862 | 28,796 | 29,942 | 29,977 | 31,608 | 31,875 |
| Female             | 13,153 | 13,526 | 14,368 | 14,913 | 15,024 | 15,667 | 16,027 |
| Researchers        |        |        |        |        |        |        |        |
| RSE 1              | 25,745 | 26,608 | 28,296 | 29,482 | 30,109 | 31,943 | 32,835 |
| Male               | 19,048 | 19,546 | 20,531 | 21,345 | 21,647 | 22,865 | 23,319 |
| Female             | 6,697  | 7,062  | 7,765  | 8,137  | 8,462  | 9,078  | 9,516  |
| FPGRS <sup>2</sup> | 4,605  | 5,295  | 5,760  | 5,990  | 5,924  | 6,012  | 5,800  |
| Male               | 2,936  | 3,362  | 3,618  | 3,752  | 3,710  | 3,852  | 3,703  |
| Female             | 1,669  | 1,933  | 2,142  | 2,238  | 2,214  | 2,160  | 2,097  |
| Non-Degree         | 3,015  | 2,484  | 2,505  | 2,541  | 2,399  | 2,430  | 2,095  |
| Male               | 2,035  | 1,681  | 1,700  | 1,813  | 1,709  | 1,712  | 1,456  |
| Female             | 980    | 803    | 805    | 728    | 690    | 718    | 639    |
| Technicians        | 3,742  | 3,563  | 3,101  | 3,089  | 3,022  | 3,115  | 3,083  |
| Male               | 2,289  | 2,136  | 1,867  | 1,872  | 1,807  | 1,900  | 1,921  |
| Female             | 1,453  | 1,427  | 1,234  | 1,217  | 1,215  | 1,215  | 1,162  |
| Supporting Staff   | 3,397  | 3,438  | 3,502  | 3,753  | 3,547  | 3,775  | 4,089  |
| Male               | 1,043  | 1,137  | 1,080  | 1,160  | 1,104  | 1,279  | 1,476  |
| Female             | 2,354  | 2,301  | 2,422  | 2,593  | 2,443  | 2,496  | 2,613  |

Source : Agency for Science, Technology and Research

<sup>1</sup> Refers to Research scientists and engineers.

Data exclude postgraduate students.

<sup>2</sup> Refers to Full-time postgraduate research students.

#### 9.3 R&D EXPENDITURE BY AREA OF RESEARCH, 2014

|   |         |                   |                               |                      | Million Dollars                  |
|---|---------|-------------------|-------------------------------|----------------------|----------------------------------|
| Area of Research                            | Total   | Private<br>Sector | Higher<br>Education<br>Sector | Government<br>Sector | Public<br>Research<br>Institutes |
| Total                                       | 8,526.5 | 5,215.7           | 1,349.3                       | 972.1                | 989.4                            |
| Agricultural & Food Sciences                | 262.4   | 226.5             | 13.0                          | 18.6                 | 4.3                              |
| Engineering & Technology                    | 5,052.1 | 3,629.1           | 472.7                         | 482.0                | 468.3                            |
| Biomedical & Related Sciences               | 1,578.1 | 523.6             | 366.1                         | 254.1                | 434.3                            |
| Natural Sciences (excl Biological Sciences) | 1,103.2 | 613.9             | 307.9                         | 102.3                | 79.2                             |
| Energy                                      | 122.4   | 19.3              | 103.1                         | 0.0                  | 0.0                              |
| Others                                      | 408.3   | 203.2             | 86.6                          | 115.2                | 3.3                              |

Source : Agency for Science, Technology and Research

#### 9.4 R&D EXPENDITURE BY TYPE OF COSTS, 2014

|   |         |                   |                               |                      | Million Dollars                  |
|---|---------|-------------------|-------------------------------|----------------------|----------------------------------|
| Type of Costs                           | Total   | Private<br>Sector | Higher<br>Education<br>Sector | Government<br>Sector | Public<br>Research<br>Institutes |
| Total                                   | 8,526.5 | 5,215.7           | 1,349.3                       | 972.1                | 989.4                            |
| Capital Costs                           | 1,256.7 | 902.6             | 171.3                         | 57.2                 | 125.6                            |
| Land, Buildings & Other Structures      | 274.8   | 231.8             | 1.7                           | 27.2                 | 14.1                             |
| Vehicles, Plants, Machinery & Equipment | 981.9   | 670.8             | 169.6                         | 30.0                 | 111.5                            |
| Manpower Costs                          | 3,805.3 | 2,124.9           | 799.6                         | 395.0                | 485.9                            |
| Researchers                             | 3,360.9 | 1,914.6           | 722.7                         | 304.5                | 419.1                            |
| RSE 1                                   | 3,073.1 | 1,791.2           | 565.0                         | 300.3                | 416.5                            |
| FPGRS <sup>2</sup>                      | 154.8   | 0.0               | 154.8                         | 0.0                  | 0.0                              |
| Non-Degree                              | 133.0   | 123.4             | 2.9                           | 4.1                  | 2.5                              |
| Technicians                             | 152.4   | 75.7              | 16.9                          | 33.2                 | 26.5                             |
| Others                                  | 292.1   | 134.5             | 59.9                          | 57.3                 | 40.3                             |
| Other Operating Costs                   | 3,464.4 | 2,188.2           | 378.4                         | 519.9                | 377.9                            |

Source : Agency for Science, Technology and Research

<sup>1</sup> Refers to Research scientists and engineers.

<sup>2</sup> Refers to Full-time postgraduate research students.

9.5 R&D EXPENDITURE BY SECTOR

|                            |         |         |         |         |         |         | Million Dollars |
|----------------------------|---------|---------|---------|---------|---------|---------|-----------------|
| Sector                     | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014            |
| Total                      | 7,128.1 | 6,042.8 | 6,489.0 | 7,448.5 | 7,244.7 | 7,565.8 | 8,526.5         |
| Private                    | 5,120.0 | 3,724.5 | 3,947.6 | 4,628.2 | 4,415.2 | 4,496.1 | 5,215.7         |
| Higher Education           | 709.8   | 854.3   | 968.1   | 1,086.4 | 1,192.7 | 1,311.3 | 1,349.3         |
| Government                 | 544.5   | 683.1   | 672.3   | 758.3   | 725.0   | 857.6   | 972.1           |
| Public Research Institutes | 753.8   | 780.9   | 901.0   | 975.6   | 911.9   | 900.9   | 989.4           |

Source : Agency for Science, Technology and Research

#### 9.6 R&D expenditure by major industry in the private sector

|               |         |         |         |         |         |         | Million Dollars |
|---------------|---------|---------|---------|---------|---------|---------|-----------------|
|               | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014            |
| Total         | 5,120.0 | 3,724.5 | 3,947.6 | 4,628.2 | 4,415.2 | 4,496.1 | 5,215.7         |
| Manufacturing | 3,749.4 | 2,316.3 | 2,406.7 | 2,198.5 | 2,658.7 | 2,588.7 | 2,797.8         |
| Services      | 1,356.7 | 1,406.1 | 1,525.7 | 2,415.0 | 1,745.7 | 1,892.8 | 2,396.0         |
| Others        | 13.8    | 2.1     | 15.2    | 14.7    | 10.9    | 14.6    | 21.8            |
|               |         |         |         |         |         |         |                 |

Source : Agency for Science, Technology and Research

9.7 R&D OUTPUT

|                 |       |       |       |       |       |       | Number |
|-----------------|-------|-------|-------|-------|-------|-------|--------|
|                 | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014   |
|                 |       |       |       |       |       |       |        |
| Patents Owned 1 | 5,455 | 6,067 | 5,450 | 4,763 | 5,129 | 5,275 | 6,579  |
| Public Sector   | 1,011 | 1,519 | 998   | 1,208 | 1,251 | 1,295 | 1,356  |
| Private Sector  | 4,444 | 4,548 | 4,452 | 3,555 | 3,878 | 3,980 | 5,223  |
| Patents Applied | 1,581 | 1,569 | 1,762 | 1,913 | 1,722 | 2,144 | 1,965  |
| Public Sector   | 354   | 445   | 499   | 608   | 698   | 821   | 834    |
| Private Sector  | 1,227 | 1,124 | 1,263 | 1,305 | 1,024 | 1,323 | 1,131  |
| Patents Awarded | 730   | 747   | 653   | 855   | 820   | 934   | 911    |
| Public Sector   | 144   | 176   | 131   | 176   | 155   | 217   | 204    |
| Private Sector  | 586   | 571   | 522   | 679   | 665   | 717   | 707    |

Source : Agency for Science, Technology and Research

1 As at end of period.

## 10



## The Corporate Sector

Data on the corporate sector cover companies incorporated or registered in Singapore, including branches of foreign companies. Partnerships and sole proprietorships are not included because of the difficulty in obtaining financial statements for such business enterprises. Data are extracted from financial accounts which companies file with the Accounting and Corporate Regulatory Authority (ACRA) or other government agencies.

#### **Definitions**

Total Equity: Defined as the shareholders' interest in the enterprise after deducting all its liabilities from its assets. Total equity comprises mainly share capital, retained earnings and other reserves. For Singapore branches of foreign-incorporated enterprises, head office accounts (i.e. the net amount owed by Singapore branches to the foreign head offices) are used as proxies for their equity.

Equity Ratio: Defined as the ratio of total equity to total assets. The ratio measures the dependence of companies on external funding, i.e. funding which is not from its shareholders or its overseas headquarters (for the local branch of a foreign enterprise). The lower the ratio, the higher is the company's dependence on external funding.

Current Ratio: Defined as the ratio of current assets to current liabilities. This ratio measures the liquidity of companies, i.e. their ability to meet current debt payments when due. A ratio of 1 indicates that the company has exactly balanced its current liabilities with current assets. The lower the ratio is below 1, the higher is the risk of the company running into a liquidity problem. A ratio above 1 indicates excess liquidity in the company.

Rate of Return on Total Assets (ROA): Defined as the ratio of pre-tax profit before deducting interest payments in the year to the average of total assets at the beginning and at the end of the year. This ratio measures the efficiency of companies in using their available resources.

Rate of Return on Total Equity (ROE): Defined as the ratio of pre-tax net profit in the year to the average of total equity at the beginning and at the end of the year. This ratio measures companies' profitability, i.e. the rate of return that companies have earned on the capital provided by shareholders, after accounting for payments to all other capital providers.

#### **Other References**

The report "<u>Singapore's Corporate Sector</u>", published by the Singapore Department of Statistics, contains analysis of the data and detailed tables showing the aggregated balance sheets and profit and loss accounts.

10.1 TOTAL EQUITY BY INDUSTRY (End of Period)

|   |         |         |         |         |         | В       | illion Dollars |
|---|---------|---------|---------|---------|---------|---------|----------------|
| Industry                                | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014           |
| Total                                   | 1,265.2 | 1,299.6 | 1,366.4 | 1,340.4 | 1,541.0 | 1,845.1 | 2,222.4        |
| Financial & Insurance                   | 762.7   | 744.6   | 777.8   | 729.7   | 884.3   | 1,114.0 | 1,358.4        |
| Non-Financial & Insurance               | 502.5   | 555.0   | 588.6   | 610.7   | 656.7   | 731.1   | 864.0          |
| Manufacturing                           | 127.4   | 142.8   | 148.2   | 158.4   | 146.5   | 168.1   | 165.6          |
| Construction                            | 8.1     | 9.9     | 8.6     | 8.9     | 9.3     | 10.7    | 12.2           |
| Wholesale & Retail Trade                | 107.2   | 114.0   | 129.9   | 134.6   | 158.4   | 167.2   | 224.6          |
| Accommodation & Food Services           | 7.1     | 8.2     | 8.2     | 8.2     | 10.1    | 10.6    | 12.5           |
| Transport & Storage                     | 71.1    | 74.9    | 75.6    | 69.6    | 75.5    | 87.3    | 88.3           |
| Information & Communications            | 25.3    | 23.8    | 24.8    | 19.5    | 27.2    | 32.9    | 39.7           |
| Real Estate                             | 94.7    | 107.6   | 116.4   | 124.2   | 135.4   | 146.0   | 177.8          |
| Business Services Excluding Real Estate | 41.0    | 48.2    | 50.8    | 57.7    | 63.9    | 73.6    | 103.3          |
| Others                                  | 20.6    | 25.5    | 26.0    | 29.6    | 30.3    | 34.6    | 40.0           |

10.2 TOTAL ASSETS BY INDUSTRY (End of Period)

|   |         |         |         |         |         | В       | illion Dollars |
|---|---------|---------|---------|---------|---------|---------|----------------|
| Industry                                | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014           |
| Total                                   | 4,156.9 | 4,269.2 | 4,644.2 | 4,888.2 | 5,305.6 | 5,993.6 | 6,723.7        |
| Financial & Insurance                   | 2,917.6 | 2,925.3 | 3,173.2 | 3,331.3 | 3,635.6 | 4,135.6 | 4,656.9        |
| Non-Financial & Insurance               | 1,239.3 | 1,343.9 | 1,471.0 | 1,556.9 | 1,670.0 | 1,858.0 | 2,066.8        |
| Manufacturing                           | 260.9   | 277.4   | 292.4   | 299.7   | 286.3   | 305.9   | 306.6          |
| Construction                            | 32.5    | 33.7    | 32.6    | 33.0    | 34.1    | 36.1    | 34.6           |
| Wholesale & Retail Trade                | 342.7   | 366.0   | 434.4   | 472.2   | 548.1   | 632.5   | 668.7          |
| Accommodation & Food Services           | 16.2    | 15.5    | 17.3    | 18.7    | 20.2    | 21.5    | 25.4           |
| Transport & Storage                     | 151.9   | 163.4   | 169.4   | 172.6   | 182.8   | 201.9   | 242.1          |
| Information & Communications            | 53.8    | 56.2    | 65.3    | 62.1    | 68.8    | 74.4    | 86.2           |
| Real Estate                             | 241.7   | 254.3   | 264.9   | 275.0   | 293.0   | 314.1   | 385.3          |
| Business Services Excluding Real Estate | 90.8    | 109.0   | 118.0   | 136.7   | 137.1   | 168.2   | 213.7          |
| Others                                  | 48.8    | 68.4    | 76.7    | 86.9    | 99.6    | 103.3   | 104.2          |

10.3 RETURNS ON EQUITY BY INDUSTRY (End of Period)

|   |      |      |      |      |      |      | Per Cent |
|---|------|------|------|------|------|------|----------|
| Industry                                | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014     |
| Total                                   | 12.4 | 12.1 | 14.3 | 13.3 | 14.5 | 11.8 | 11.8     |
| Financial & Insurance                   | 8.6  | 8.1  | 9.5  | 9.3  | 11.0 | 9.0  | 9.0      |
| Non-Financial & Insurance               | 17.5 | 17.8 | 20.5 | 18.4 | 18.9 | 15.9 | 16.2     |
| Manufacturing                           | 18.6 | 24.8 | 23.1 | 20.6 | 25.0 | 19.8 | 24.6     |
| Construction                            | 17.5 | 36.9 | 36.5 | 35.3 | 25.3 | 16.0 | 12.2     |
| Wholesale & Retail Trade                | 24.3 | 21.7 | 24.4 | 23.2 | 22.7 | 20.5 | 17.3     |
| Accommodation & Food Services           | 13.6 | 13.4 | 12.5 | 16.9 | 11.6 | 11.0 | 16.1     |
| Transport & Storage                     | 18.8 | 8.4  | 5.0  | 4.4  | 5.0  | 5.8  | 6.4      |
| Information & Communications            | 14.8 | 15.9 | 42.7 | 32.9 | 47.6 | 17.4 | 18.1     |
| Real Estate                             | 8.6  | 7.2  | 20.0 | 17.6 | 15.2 | 15.1 | 12.3     |
| Business Services Excluding Real Estate | 22.4 | 16.3 | 17.2 | 12.2 | 9.7  | 9.8  | 14.8     |
| Others                                  | 9.0  | 33.2 | 18.1 | 18.5 | 15.4 | 14.9 | 15.4     |

10.4 RETURNS ON ASSETS BY INDUSTRY (End of Period)

| 2008 | 2009  | 2010   | 2011   | 2012  | 2013   | 2014   |
|------|---|--|--|---|--|--|
| 5 1  |   |  |  | 12  | 2013   | 2014   |
| 3.1  | 4.4   | 4.8  | 4.3  | 4.6   | 4.0  | 4.3  |
| 4.0  | 2.8   | 3.0  | 2.7  | 3.1   | 2.8  | 3.0  |
| 7.8  | 7.9   | 8.8  | 7.8  | 7.9   | 6.8  | 7.1  |
| 9.9  | 12.9  | 12.1   | 11.0   | 13.3  | 10.8   | 13.6   |
| 5.2  | 10.4  | 10.6   | 9.8  | 7.2   | 4.9  | 4.3  |
| 7.9  | 7.3   | 7.8  | 7.2  | 7.0   | 6.2  | 5.9  |
| 7.5  | 7.2   | 6.8  | 8.3  | 6.0   | 5.9  | 8.5  |
| 9.4  | 4.6   | 2.9  | 2.4  | 2.6   | 3.2  | 3.2  |
| 7.4  | 7.4   | 17.5   | 12.1   | 17.7  | 7.9  | 8.7  |
| 4.5  | 3.7   | 9.3  | 8.5  | 7.6   | 7.7  | 6.3  |
| 9.6  | 7.8   | 8.0  | 5.6  | 4.7   | 4.9  | 7.5  |
| 4.6  | 14.1  | 7.4  | 7.0  | 6.0   | 5.5  | 6.4  |
|      | 5.2<br>7.9<br>7.5<br>9.4<br>7.4<br>4.5<br>9.6 | 5.2     10.4       7.9     7.3       7.5     7.2       9.4     4.6       7.4     7.4       4.5     3.7       9.6     7.8 | 5.2     10.4     10.6       7.9     7.3     7.8       7.5     7.2     6.8       9.4     4.6     2.9       7.4     7.4     17.5       4.5     3.7     9.3       9.6     7.8     8.0 | 5.2     10.4     10.6     9.8       7.9     7.3     7.8     7.2       7.5     7.2     6.8     8.3       9.4     4.6     2.9     2.4       7.4     7.4     17.5     12.1       4.5     3.7     9.3     8.5       9.6     7.8     8.0     5.6 | 5.2     10.4     10.6     9.8     7.2       7.9     7.3     7.8     7.2     7.0       7.5     7.2     6.8     8.3     6.0       9.4     4.6     2.9     2.4     2.6       7.4     7.4     17.5     12.1     17.7       4.5     3.7     9.3     8.5     7.6       9.6     7.8     8.0     5.6     4.7 | 5.2     10.4     10.6     9.8     7.2     4.9       7.9     7.3     7.8     7.2     7.0     6.2       7.5     7.2     6.8     8.3     6.0     5.9       9.4     4.6     2.9     2.4     2.6     3.2       7.4     7.4     17.5     12.1     17.7     7.9       4.5     3.7     9.3     8.5     7.6     7.7       9.6     7.8     8.0     5.6     4.7     4.9 |

10.5 EQUITY RATIOS OF COMPANIES BY INDUSTRY (End of Period)

| Industry                                | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|------|------|------|
| Total                                   | 0.30 | 0.30 | 0.29 | 0.27 | 0.29 | 0.31 | 0.33 |
| Financial & Insurance                   | 0.26 | 0.25 | 0.25 | 0.22 | 0.24 | 0.27 | 0.29 |
| Non-Financial & Insurance               | 0.41 | 0.41 | 0.40 | 0.39 | 0.39 | 0.39 | 0.42 |
| Manufacturing                           | 0.49 | 0.51 | 0.51 | 0.53 | 0.51 | 0.55 | 0.54 |
| Construction                            | 0.25 | 0.29 | 0.26 | 0.27 | 0.27 | 0.30 | 0.35 |
| Wholesale & Retail Trade                | 0.31 | 0.31 | 0.30 | 0.29 | 0.29 | 0.26 | 0.34 |
| Accommodation & Food Services           | 0.44 | 0.53 | 0.47 | 0.44 | 0.50 | 0.49 | 0.49 |
| Transport & Storage                     | 0.47 | 0.46 | 0.45 | 0.40 | 0.41 | 0.43 | 0.36 |
| Information & Communications            | 0.47 | 0.42 | 0.38 | 0.31 | 0.40 | 0.44 | 0.46 |
| Real Estate                             | 0.39 | 0.42 | 0.44 | 0.45 | 0.46 | 0.46 | 0.46 |
| Business Services Excluding Real Estate | 0.45 | 0.44 | 0.43 | 0.42 | 0.47 | 0.44 | 0.48 |
| Others                                  | 0.42 | 0.37 | 0.34 | 0.34 | 0.30 | 0.33 | 0.38 |

10.6 CURRENT RATIOS OF COMPANIES BY INDUSTRY (End of Period)

| Industry                                | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|------|------|------|
| Total                                   | 1.10 | 1.06 | 1.09 | 1.04 | 1.06 | 1.06 | 1.15 |
| Financial & Insurance                   | 1.06 | 0.98 | 1.01 | 0.97 | 0.98 | 0.99 | 1.10 |
| Non-Financial & Insurance               | 1.24 | 1.29 | 1.31 | 1.27 | 1.29 | 1.28 | 1.29 |
| Manufacturing                           | 1.55 | 1.70 | 1.75 | 1.68 | 1.66 | 1.85 | 1.69 |
| Construction                            | 1.09 | 1.22 | 1.15 | 1.15 | 1.18 | 1.21 | 1.33 |
| Wholesale & Retail Trade                | 1.28 | 1.27 | 1.26 | 1.23 | 1.25 | 1.22 | 1.27 |
| Accommodation & Food Services           | 1.06 | 1.15 | 0.94 | 0.65 | 0.86 | 0.95 | 1.00 |
| Transport & Storage                     | 1.04 | 1.05 | 1.08 | 0.99 | 1.05 | 1.07 | 0.88 |
| Information & Communications            | 1.21 | 1.12 | 1.03 | 1.02 | 0.96 | 1.06 | 1.07 |
| Real Estate                             | 0.78 | 1.07 | 1.21 | 1.36 | 1.69 | 1.51 | 1.63 |
| Business Services Excluding Real Estate | 1.26 | 1.21 | 1.26 | 1.20 | 1.17 | 1.14 | 1.20 |
| Others                                  | 1.37 | 1.29 | 1.33 | 1.16 | 0.88 | 0.98 | 1.10 |

## 11



### Formation and Cessation of **Formation and Business Entities**

#### 11 formation and cessation of business entities

#### **Coverage and Sources of Data**

Data on business entities are primarily sourced from the registration records of the Accounting and Corporate Regulatory Authority (ACRA). Business entities refer to companies, sole proprietorships & partnerships, limited liability partnerships, limited partnerships and public accounting firms.

#### **Definitions**

Formation: Refers to business entities incorporated or registered with ACRA.

Cessation: Refers to business entities which have ceased operation. Cessation statuses include ceased, struck off, amalgamated, cancelled and dissolved.

#### 11.1 formation of business entities by type

|                                |        |        |        |        |        |        | Number |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                          | 53,227 | 53,721 | 55,776 | 56,748 | 60,203 | 77,379 | 64,906 |
| Companies Sole-proprietorships | 24,386 | 27,642 | 29,987 | 31,741 | 34,976 | 38,484 | 34,243 |
| & Partnerships                 | 26,776 | 23,837 | 23,409 | 22,727 | 22,835 | 35,675 | 28,480 |
| Limited Liability Partnerships | 2,028  | 2,156  | 2,321  | 2,211  | 2,312  | 3,104  | 2,100  |
| Limited Partnerships           | 25     | 64     | 38     | 52     | 58     | 98     | 66     |
| Public Accounting Firms        | 12     | 22     | 21     | 17     | 22     | 18     | 17     |

Source : Accounting and Corporate Regulatory Authority (ACRA) Note: Data are compiled by the Singapore Department of Statistics.

#### 11.2 cessation of business entities by type

|                                   |        |        |        |        |        |        | Number |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                             | 45,861 | 39,331 | 42,009 | 40,803 | 40,016 | 40,922 | 48,994 |
| Companies<br>Sole-proprietorships | 21,659 | 14,356 | 18,052 | 17,325 | 16,372 | 17,621 | 21,385 |
| & Partnerships                    | 23,341 | 24,183 | 22,946 | 22,414 | 22,579 | 22,093 | 26,111 |
| Limited Liability Partnerships    | 733    | 779    | 957    | 1,014  | 1,011  | 1,150  | 1,426  |
| Limited Partnerships              | 0      | 7      | 30     | 33     | 34     | 40     | 53     |
| Public Accounting Firms           | 128    | 6      | 24     | 17     | 20     | 18     | 19     |

Source : Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics.

ACRA-initiated exercises were carried out to strike off dormant companies in Dec 2015. This led to unusually high company cessation numbers in Dec 2015.

11.3 formation of business entities by industry

|                                     |        |        |        |        |        |        | Number |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                               | 53,227 | 53,721 | 55,776 | 56,748 | 60,203 | 77,379 | 64,906 |
| Manufacturing                       | 2,405  | 2,433  | 2,383  | 2,214  | 2,389  | 2,666  | 2,267  |
| Construction                        | 3,203  | 3,456  | 3,387  | 3,305  | 3,438  | 3,603  | 3,226  |
| Wholesale & Retail Trade            | 15,562 | 15,227 | 15,892 | 16,238 | 17,045 | 24,905 | 16,243 |
| Transportation & Storage            | 2,182  | 2,109  | 2,268  | 2,280  | 2,486  | 3,381  | 8,687  |
| Accommodation &                     |        |        |        |        |        |        |        |
| Food Service Activities             | 3,118  | 3,062  | 2,993  | 3,035  | 2,999  | 3,458  | 3,122  |
| Information & Communications        | 3,141  | 3,500  | 3,837  | 4,097  | 4,968  | 7,095  | 5,353  |
| Financial & Insurance Activities    | 3,513  | 4,808  | 5,224  | 5,331  | 5,309  | 4,923  | 4,780  |
| Real Estate Activities              | 867    | 1,037  | 1,050  | 1,019  | 934    | 665    | 631    |
| Professional, Scientific &          |        |        |        |        |        |        |        |
| Technical Activities                | 9,106  | 8,267  | 8,669  | 9,007  | 9,902  | 12,442 | 9,789  |
| Administrative & Support            |        |        |        |        |        |        |        |
| Service Activities                  | 2,893  | 3,029  | 3,229  | 3,154  | 3,274  | 4,399  | 3,291  |
| Education, Health & Social Services | 2,890  | 3,015  | 3,102  | 3,318  | 3,716  | 4,564  | 3,665  |
| Arts, Entertainment, Recreation     |        |        |        |        |        |        |        |
| & Other Service Activities          | 4,040  | 3,453  | 3,325  | 3,377  | 3,406  | 4,870  | 3,489  |
| Others                              | 307    | 325    | 417    | 373    | 337    | 408    | 363    |

Source: Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics. Business entities include companies, sole-proprietorships, partnerships, limited liability partnerships, limited partnerships and public accounting firms.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

11.4 CESSATION OF BUSINESS ENTITIES BY INDUSTRY

|                                     |        |        |        |        |        |        | Number |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|                                     |        |        |        |        |        |        |        |
| Total                               | 45,861 | 39,331 | 42,009 | 40,803 | 40,016 | 40,922 | 48,994 |
| Manufacturing                       | 2,745  | 2,066  | 2,033  | 1,893  | 1,779  | 1,717  | 2,010  |
| Construction                        | 3,316  | 2,342  | 2,496  | 2,337  | 2,307  | 2,327  | 2,476  |
| Wholesale & Retail Trade            | 16,139 | 12,897 | 13,716 | 13,233 | 12,895 | 13,101 | 16,431 |
| Transportation & Storage            | 2,146  | 1,731  | 1,793  | 1,706  | 1,804  | 1,728  | 2,162  |
| Accommodation &                     |        |        |        |        |        |        |        |
| Food Service Activities             | 2,393  | 2,252  | 2,614  | 2,409  | 2,299  | 2,256  | 2,445  |
| Information & Communications        | 2,519  | 2,322  | 2,578  | 2,603  | 2,492  | 2,867  | 3,651  |
| Financial & Insurance Activities    | 2,410  | 2,172  | 2,436  | 2,573  | 2,557  | 2,709  | 2,996  |
| Real Estate Activities              | 953    | 883    | 1,010  | 784    | 682    | 765    | 757    |
| Professional, Scientific &          |        |        |        |        |        |        |        |
| Technical Activities                | 5,444  | 5,262  | 5,613  | 5,606  | 5,586  | 5,858  | 7,231  |
| Administrative & Support            |        |        |        |        |        |        |        |
| Service Activities                  | 2,542  | 2,361  | 2,542  | 2,439  | 2,414  | 2,355  | 2,842  |
| Education, Health & Social Services | 1,675  | 1,693  | 1,837  | 1,901  | 2,005  | 2,113  | 2,465  |
| Arts, Entertainment, Recreation     |        |        |        |        |        |        |        |
| & Other Service Activities          | 3,293  | 3,138  | 3,128  | 3,108  | 2,965  | 2,898  | 3,269  |
| Others                              | 286    | 212    | 213    | 211    | 231    | 228    | 259    |

Source: Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics. Business entities include companies, sole-proprietorships, partnerships, limited liability partnerships, limited partnerships and public accounting firms.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

ACRA-initiated exercises were carried out to strike off dormant companies in Dec 2015.

This led to unusually high company cessation numbers in Dec 2015.

11.5 FORMATION OF COMPANIES BY INDUSTRY

|                                     |        |        |        |        |         |        | Numbe  |
|-------------------------------------|--------|--------|--------|--------|---------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013    | 2014   | 2015   |
| T 1                                 | 24.206 | 27.642 | 20.007 | 21.741 | 24.07.6 | 20.404 | 24.242 |
| Total                               | 24,386 | 27,642 | 29,987 | 31,741 | 34,976  | 38,484 | 34,243 |
| Manufacturing                       | 1,204  | 1,288  | 1,323  | 1,297  | 1,432   | 1,449  | 1,401  |
| Construction                        | 1,501  | 1,732  | 1,792  | 1,879  | 2,069   | 2,205  | 2,041  |
| Wholesale & Retail Trade            | 6,718  | 7,156  | 7,789  | 8,283  | 8,918   | 10,302 | 8,668  |
| Transportation & Storage            | 1,076  | 1,118  | 1,147  | 1,187  | 1,400   | 1,433  | 1,306  |
| Accommodation &                     |        |        |        |        |         |        |        |
| Food Service Activities             | 1,342  | 1,353  | 1,427  | 1,572  | 1,604   | 1,717  | 1,663  |
| Information & Communications        | 1,537  | 1,943  | 2,250  | 2,529  | 3,153   | 4,086  | 3,614  |
| Financial & Insurance Activities    | 3,016  | 4,234  | 4,671  | 4,883  | 4,869   | 4,484  | 4,447  |
| Real Estate Activities              | 498    | 780    | 828    | 808    | 741     | 497    | 466    |
| Professional, Scientific &          |        |        |        |        |         |        |        |
| Technical Activities                | 3,921  | 4,266  | 4,673  | 5,067  | 6,025   | 6,686  | 5,712  |
| Administrative & Support            |        |        |        |        |         |        |        |
| Service Activities                  | 1,117  | 1,350  | 1,539  | 1,559  | 1,758   | 1,906  | 1,717  |
| Education, Health & Social Services | 1,155  | 1,328  | 1,374  | 1,514  | 1,719   | 2,062  | 1,808  |
| Arts, Entertainment, Recreation     |        |        |        |        |         |        |        |
| & Other Service Activities          | 1,124  | 866    | 864    | 901    | 1,053   | 1,396  | 1,168  |
| Others                              | 177    | 228    | 310    | 262    | 235     | 261    | 232    |

Source : Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

11.6 CESSATION OF COMPANIES BY INDUSTRY

|                                     |        |        |        |        |        |        | Number |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|                                     |        |        |        |        |        |        |        |
| Гotal                               | 21,659 | 14,356 | 18,052 | 17,325 | 16,372 | 17,621 | 21,385 |
| Manufacturing                       | 1,472  | 797    | 955    | 822    | 746    | 751    | 929    |
| Construction                        | 1,688  | 707    | 1,006  | 812    | 787    | 854    | 969    |
| Wholesale & Retail Trade            | 7,908  | 4,681  | 5,916  | 5,434  | 5,006  | 5,259  | 6,453  |
| Transportation & Storage            | 1,121  | 678    | 779    | 756    | 732    | 710    | 799    |
| Accommodation &                     |        |        |        |        |        |        |        |
| Food Service Activities             | 791    | 597    | 873    | 817    | 798    | 861    | 1,053  |
| Information & Communications        | 1,285  | 950    | 1,274  | 1,335  | 1,150  | 1,345  | 1,845  |
| Financial & Insurance Activities    | 2,155  | 1,838  | 2,044  | 2,155  | 2,189  | 2,370  | 2,637  |
| Real Estate Activities              | 676    | 526    | 526    | 469    | 441    | 517    | 530    |
| Professional, Scientific &          |        |        |        |        |        |        |        |
| Technical Activities                | 2,270  | 1,788  | 2,412  | 2,373  | 2,352  | 2,535  | 3,280  |
| Administrative & Support            |        |        |        |        |        |        |        |
| Service Activities                  | 972    | 713    | 925    | 941    | 830    | 898    | 1,117  |
| Education, Health & Social Services | 457    | 409    | 510    | 572    | 570    | 658    | 826    |
| Arts, Entertainment, Recreation     |        |        |        |        |        |        |        |
| & Other Service Activities          | 747    | 588    | 710    | 728    | 634    | 735    | 777    |
| Others                              | 117    | 84     | 122    | 111    | 137    | 128    | 170    |

Source : Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

ACRA-initiated exercises were carried out to strike off dormant companies in Dec 2015.

This led to unusually high company cessation numbers in Dec 2015.

11.7 formation of sole-proprietorships & partnerships by industry

|                                     |        |        |        |        |        |        | Number |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| T 1                                 | 26.776 | 22.027 | 22.400 | 22.727 | 22.025 | 25.675 | 20.400 |
| Гotal                               | 26,776 | 23,837 | 23,409 | 22,727 | 22,835 | 35,675 | 28,480 |
| Manufacturing                       | 1,144  | 1,090  | 997    | 856    | 896    | 1,133  | 808    |
| Construction                        | 1,654  | 1,665  | 1,520  | 1,358  | 1,306  | 1,344  | 1,127  |
| Wholesale & Retail Trade            | 8,273  | 7,481  | 7,438  | 7,287  | 7,446  | 13,640 | 7,018  |
| Transportation & Storage            | 1,058  | 960    | 1,077  | 1,045  | 1,032  | 1,853  | 7,305  |
| Accommodation &                     |        |        |        |        |        |        |        |
| Food Service Activities             | 1,648  | 1,573  | 1,412  | 1,329  | 1,253  | 1,582  | 1,331  |
| Information & Communications        | 1,404  | 1,325  | 1,325  | 1,338  | 1,560  | 2,696  | 1,525  |
| Financial & Insurance Activities    | 424    | 459    | 441    | 353    | 304    | 332    | 261    |
| Real Estate Activities              | 333    | 216    | 192    | 156    | 146    | 131    | 111    |
| Professional, Scientific &          |        |        |        |        |        |        |        |
| Technical Activities                | 4,747  | 3,527  | 3,555  | 3,528  | 3,455  | 5,181  | 3,650  |
| Administrative & Support            |        |        |        |        |        |        |        |
| Service Activities                  | 1,647  | 1,519  | 1,540  | 1,442  | 1,362  | 2,215  | 1,421  |
| Education, Health & Social Services | 1,567  | 1,494  | 1,517  | 1,610  | 1,768  | 2,174  | 1,641  |
| Arts, Entertainment, Recreation     |        |        |        |        |        |        |        |
| & Other Service Activities          | 2,753  | 2,443  | 2,302  | 2,323  | 2,212  | 3,256  | 2,159  |
| Others                              | 124    | 85     | 93     | 102    | 95     | 138    | 123    |

 $Source: Accounting \ and \ Corporate \ Regulatory \ Authority \ (ACRA)$ 

Note: Data are compiled by the Singapore Department of Statistics.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

 $11.8 \quad \text{cessation of sole-proprietorships \& partnerships by industry}$ 

|                                     |        |        |        |        |        |        | Number |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Industry                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                               | 22 241 | 24 192 | 22.046 | 22 414 | 22.570 | 22 002 | 26 111 |
|                                     | 23,341 | 24,183 | 22,946 | 22,414 | 22,579 | 22,093 | 26,111 |
| Manufacturing                       | 1,258  | 1,242  | 1,052  | 1,042  | 1,009  | 942    | 1,039  |
| Construction                        | 1,607  | 1,618  | 1,462  | 1,499  | 1,475  | 1,453  | 1,474  |
| Wholesale & Retail Trade            | 7,997  | 7,987  | 7,501  | 7,458  | 7,576  | 7,507  | 9,521  |
| Transportation & Storage            | 1,009  | 1,034  | 989    | 930    | 1,053  | 1,000  | 1,326  |
| Accommodation &                     |        |        |        |        |        |        |        |
| Food Service Activities             | 1,545  | 1,596  | 1,662  | 1,504  | 1,419  | 1,308  | 1,299  |
| Information & Communications        | 1,169  | 1,293  | 1,219  | 1,166  | 1,220  | 1,377  | 1,647  |
| Financial & Insurance Activities    | 238    | 299    | 363    | 378    | 338    | 283    | 300    |
| Real Estate Activities              | 269    | 348    | 471    | 307    | 228    | 229    | 207    |
| Professional, Scientific &          |        |        |        |        |        |        |        |
| Technical Activities                | 2,944  | 3,330  | 3,014  | 3,062  | 3,054  | 3,116  | 3,687  |
| Administrative & Support            |        |        |        |        |        |        |        |
| Service Activities                  | 1,496  | 1,595  | 1,547  | 1,413  | 1,517  | 1,365  | 1,620  |
| Education, Health & Social Services | 1,158  | 1,218  | 1,239  | 1,253  | 1,344  | 1,340  | 1,521  |
| Arts, Entertainment, Recreation     |        |        |        |        |        |        |        |
| & Other Service Activities          | 2,490  | 2,500  | 2,342  | 2,311  | 2,255  | 2,078  | 2,385  |
| Others                              | 161    | 123    | 85     | 91     | 91     | 95     | 85     |

Source: Accounting and Corporate Regulatory Authority (ACRA)

Note: Data are compiled by the Singapore Department of Statistics.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

## 12



# Agriculture, Animal Production and Fisheries

#### General

The agricultural sector of Singapore is engaged mainly in the production of eggs, fish and vegetables for local consumption, as well as orchids and ornamental fish for export. About one per cent of Singapore's land area is used for agricultural purposes.

#### Horticulture

The main crops cultivated in Singapore are vegetables and orchids. The vegetable and food crop production in local farms are mainly leafy vegetables and bean sprouts. With more than 90% of the leafy vegetables derived from soil cultivation, intensive and modern farming methods are adopted to maximise vegetable production and to ensure production of high quality leafy vegetables.

A number of farms and nurseries grow orchids, ornamental and foliage plants (which include potted plants, foliages, ornamental plants, aquatic plants and tissue-cultured plantlets) for export and domestic sale. Singapore is a major exporter of quality cut orchids.

#### **Fisheries**

Local fish production comprises mainly aquaculture produces from fish farms with small quantities from local capture fisheries. Singapore also imports, exports and tranships fish caught by foreign vessels.

The Jurong Fishery Port (JFP) is a major fish landing and distribution point in Singapore. JFP handled about 47,100 tonnes of fish in 2015, the bulk of which comprised fresh fish landed by foreign vessels as well as those imported by air and road. The Senoko Fishery Port (SFP) began its operations in September 1997. A homebase for local fishing vessels, the port handled locally-produced and imported fish totaling about 6,100 tonnes of fish in 2015. There are 139 seafood processing establishments licensed to manufacture fishery products in Singapore. Four processing establishments and one cold store are approved to export seafood products to the EU countries.

There are 117 floating fish farms covering 102.5 hectares of coastal waters, culturing various fish species like milk fish, mullet, snappers, trevally, groupers and seabass for the live fish market and supermarkets.

12.1 LOCAL PRODUCTION

|   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 201   |
|---|--------|--------|--------|--------|--------|--------|-------|
| Seafood <sup>1</sup> (tonnes)                   | 5,688  | 5,232  | 5,599  | 5,547  | 6,775  | 6,379  | 7,69  |
| Fish  | 4,357  | 4,919  | 5,094  | 5,127  | 5,864  | 5,639  | 6,53  |
| Other Seafood (crustaceans                      |        |        |        |        |        |        |       |
| and molluscus)                                  | 1,331  | 312    | 505    | 420    | 911    | 740    | 1,15  |
| Local Landings of Seafood (tonnes)              | 2,122  | 1,733  | 1,618  | 1,970  | 1,644  | 1,434  | 1,26  |
| Vegetables (tonnes)                             | 19,584 | 19,491 | 20,355 | 21,405 | 21,785 | 22,720 | 23,03 |
| Leafy Vegetables                                | 9,719  | 9,347  | 9,436  | 10,227 | 10,308 | 10,848 | 11,42 |
| Other Vegetables                                | 9,865  | 10,144 | 10,919 | 11,178 | 11,476 | 11,872 | 11,61 |
| Hen Eggs (million pieces)                       | 333    | 340    | 384    | 402    | 438    | 433    | 42    |
| Aquarium Fish (million pieces)                  | 121    | 112    | 110    | 106    | 114    | 109    | 7     |
| Orchids (million Stalks)                        | 10     | 10     | 11     | 10     | 9      | 10     |       |
| Ornamental Plants <sup>2</sup> (million Plants) | 40     | 40     | 41     | 38     | 41     | 48     | 1     |

Source : Agri-Food & Veterinary Authority

12.2 LIVESTOCK SLAUGHTERED

|          |        |        |        |        |        |        | Thousand |
|----------|--------|--------|--------|--------|--------|--------|----------|
|          | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015     |
| Poultry  | 48,922 | 50,976 | 52,156 | 51,995 | 53,048 | 52,216 | 53,610   |
| Chickens | 43,075 | 44,659 | 46,196 | 46,099 | 47,036 | 46,132 | 48,008   |
| Ducks    | 5,847  | 6,317  | 5,960  | 5,896  | 6,012  | 6,084  | 5,601    |
| Pigs     | 282    | 289    | 312    | 324    | 330    | 336    | 334      |

Source : Agri-Food & Veterinary Authority

<sup>1</sup> Includes local landings, coastal and land-based farm production.

<sup>2</sup> Includes potted plants, foliages, ornamental plants, aquatic plants and tissue-cultured plantlets.

#### 12.3 SEAFOOD SUPPLY AND WHOLESALE

|                                |         |         |         |         |         |         | Tonnes  |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
|                                | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Seafood Supply                 |         |         |         |         |         |         |         |
| Local Production <sup>1</sup>  | 5,688   | 5,232   | 5,599   | 5,547   | 6,775   | 6,379   | 7,695   |
| Imports <sup>2</sup>           | 134,756 | 134,546 | 132,937 | 128,147 | 126,567 | 123,107 | 124,369 |
| Exports <sup>2</sup>           | 39,083  | 40,215  | 32,311  | 29,649  | 26,334  | 17,237  | 23,064  |
| Seafood Wholesale <sup>3</sup> | 65,332  | 58,888  | 62,635  | 61,405  | 59,094  | 54,000  | 49,431  |

Source: Seafood Supply (Local Production) and Seafood Wholesale - Agri-Food & Veterinary Authority

Seafood Supply (Imports and Exports) - International Enterprise Singapore

Note: Seafood refers to fish, crustaceans and molluscs.

Data on imports and exports of seafood are based on Standard International Trade Classification Revision 4.1

- 1 Includes seafood from local landings, coastal and land-based farm production.
- 2 Excludes dried, salted and fish in brine.
- 3 Includes fresh, frozen seafood and 'Low-value fish'.

## 



## Manufacturing

#### **Census of Manufacturing Activities**

A census of manufacturing establishments is conducted annually by the Research and Statistics Unit of the Economic Development Board (EDB). The results provide comprehensive data for the study of the structure and trends of the manufacturing sector.

The activities covered in the census include manufacturing and industrial servicing. They are classified according to the Singapore Standard Industrial Classification 2015.

The census is conducted by mail inquiry and via the internet, using two standard questionnaires. The reference period is the calendar year, except for those establishments whose financial years do not coincide with the calendar year.

#### **Definitions**

Establishment: Defined as a manufacturing unit engaged in one manufacturing activity and generally operating at one location.

Workers: Refer to all persons engaged in the industrial activity of the establishment, that is, all employees, the self-employed and their relatives. Data generally refer to employment as at 30 June, except where establishments commence operation after June.

Remuneration: Refers to the amount expended for the whole year. For employees, total remuneration comprises salaries (including bonuses), contributions to the Central Provident Fund and pensions paid by employers, and other benefits provided. For working proprietors, it refers to the amount withdrawn for their personal use. For unpaid family workers, it refers to allowances.

Manufacturing Output: Refers to the total value of all commodities produced (including by-products) and industrial services rendered during the year.

Total Output: Refers to the total value of goods and services derived from a production process and ancillary activities such as management or marketing. As such, it includes manufacturing output and other operating income.

Materials Used: Cover raw or basic materials, chemicals and packing materials consumed in the production. They refer to the actual consumption during the year.

Value Added: Refers to total output less materials, utilities, fuel, transportation charges, work given out and other operating costs.

*Net Operating Surplus:* Obtained by deducting remuneration, depreciation of fixed assets and indirect taxes from value-added.

Sales and Direct Exports: Refer to local sales or exports to other countries of goods manufactured. Resale of goods not manufactured by the establishments is excluded.

Gross Value of Fixed Assets: Refers to the accumulated cost of acquiring the fixed assets.

Net Value of Fixed Assets: Refers to the gross value net of accumulated depreciation.

#### **Index of Industrial Production**

The index of industrial production covers all manufacturing activities classified under Section C of the Singapore Standard Industrial Classification 2015. The indices published are at the 2-digit industry division and total manufacturing level.

The base year for the index of industrial production is 2015. The value-added

weighting pattern is obtained from the 2014 Census of Manufacturing Activities data. The weighting pattern reflects the relative importance of the industry divisions and changing structure within the manufacturing sector. The Laspeyres' formula is used for the compilation of the index.

#### **Indices of Business and Labour Costs**

The Unit Business Cost Index (UBCI) is compiled by the Singapore Department of Statistics. It measures the relative business cost of producing one unit of real manufacturing output with respect to the base year. The main components of business cost are labour cost, services cost, as well as non-labour production taxes<sup>1</sup>. The UBCI is compiled based on the benchmark on business cost from the Census of Manufacturing Activities (CMA) and extrapolated using data from the Monthly Survey of Manufacturing Activities (MMA).

Unit Labour Cost (ULC) is defined as the average cost of labour per unit of real output. Total labour cost consists of Compensation of Employees received by the employees, labour income of the self-employed, other labour-related costs (for example, Foreign Worker Levy and net training costs) incurred by the employers and wage subsidies (for example, Wage Credit Scheme and Jobs Credit Scheme) that are provided to the employers. Wage subsidies reduce labour costs to employers, and are netted off from total labour cost.

#### Other References

More detailed statistics on the manufacturing sector are available from the "Report on the Census of Manufacturing Activities", published annually by the Research and Statistics Unit of EDB.

The concept and methodology underlying the compilation of the ULC index can be found in the information paper on "Quarterly Unit Labour Cost Index by Industry".

The information paper on "Methodological Review on the Unit Business Cost Index for the Manufacturing Industry (Base Year 2010 = 100)" provides details on the concept, methodology and data sources underlying the compilation of the UBCI.

<sup>&</sup>lt;sup>1</sup> 'Government Rates and Fees' has been renamed as 'Non-Labour Production Taxes'.

13.1 PRINCIPAL MANUFACTURING STATISTICS

|                       | Unit | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|-----------------------|------|---------|---------|---------|---------|---------|---------|---------|
| Establishments        | No   | 9,296   | 9,090   | 9,008   | 9,577   | 9,303   | 9,106   | na      |
| Workers               | No   | 417,569 | 414,176 | 418,324 | 424,622 | 424,505 | 416,406 | 400,173 |
| Materials             | \$m  | 124,673 | 151,927 | 169,380 | 168,685 | 163,561 | 167,343 | 141,273 |
| Remuneration          | \$m  | 16,950  | 17,987  | 18,965  | 19,694  | 20,722  | 21,806  | 21,592  |
| Other Operating Cost  | \$m  | 52,956  | 62,251  | 65,163  | 70,676  | 76,021  | 75,551  | na      |
| Manufacturing Output  | \$m  | 218,567 | 261,364 | 281,703 | 288,279 | 285,431 | 291,424 | 267,856 |
| Total Output          | \$m  | 227,708 | 274,403 | 295,529 | 301,551 | 299,624 | 306,642 | 282,979 |
| Value Added           | \$m  | 50,080  | 60,225  | 60,986  | 62,189  | 60,042  | 63,748  | 70,417  |
| Net Operating Surplus | \$m  | 25,996  | 34,979  | 34,758  | 34,475  | 31,486  | 33,800  | na      |
| Direct Exports        | \$m  | 151,418 | 179,108 | 190,093 | 192,261 | 189,935 | 189,639 | 182,231 |
| Net Fixed Assets      | \$m  | 47,242  | 51,760  | 57,773  | 58,930  | 64,107  | 68,257  | na      |
| Gross Fixed Assets    | \$m  | 120,826 | 128,971 | 132,025 | 140,440 | 150,830 | 160,660 | na      |

Source: Economic Development Board

Notes: Data include all manufacturing establishments. Year 2015 data are preliminary estimates.

13.2 SELECTED AVERAGES AND RATIOS IN THE MANUFACTURING SECTOR

|                      | Unit   | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|
| Remuneration         |        |       |       |       |       |       |       |       |
| Per Worker           | \$'000 | 40.6  | 43.4  | 45.3  | 46.4  | 48.8  | 52.4  | 54.0  |
| Manufacturing Output |        |       |       |       |       |       |       |       |
| Per Worker           | \$'000 | 523.4 | 631.0 | 673.4 | 678.9 | 672.4 | 699.9 | 669.4 |
| Value Added          |        |       |       |       |       |       |       |       |
| Per Worker           | \$'000 | 119.9 | 145.4 | 145.8 | 146.5 | 141.4 | 153.1 | 176.0 |
| Net Fixed Assets     |        |       |       |       |       |       |       |       |
| Per Worker           | \$'000 | 113.1 | 125.0 | 138.1 | 138.8 | 151.0 | 163.9 | na    |
| Remuneration to      |        |       |       |       |       |       |       |       |
| Total Output         | %      | 7.4   | 6.6   | 6.4   | 6.5   | 6.9   | 7.1   | 7.6   |
| Remuneration to      |        |       |       |       |       |       |       |       |
| Value Added          | %      | 33.8  | 29.9  | 31.1  | 31.7  | 34.5  | 34.2  | 30.7  |
| Value Added to       |        |       |       |       |       |       |       |       |
| Total Output         | %      | 22.0  | 21.9  | 20.6  | 20.6  | 20.0  | 20.8  | 24.9  |
| Direct Exports to    |        |       |       |       |       |       |       |       |
| Manufacturing Output | %      | 69.3  | 68.5  | 67.5  | 66.7  | 66.5  | 65.1  | 68.0  |
| Direct Exports to    |        |       |       |       |       |       |       |       |
| Total Sales          | %      | 68.1  | 68.3  | 67.1  | 67.0  | 66.4  | 65.0  | 68.0  |

Source: Economic Development Board

Notes: Data include all manufacturing establishments. Year 2015 data are preliminary estimates.

13.3 MANUFACTURING ESTABLISHMENTS BY INDUSTRY

|          |                                |       |       |       |       |       |       | Number |
|----------|--------------------------------|-------|-------|-------|-------|-------|-------|--------|
| Code     | Industry                       | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014   |
| 10/11/12 | Food, Beverages & Tobacco      | 786   | 851   | 838   | 819   | 864   | 848   | 865    |
| 13       | Textiles                       | 101   | 105   | 94    | 93    | 99    | 99    | 90     |
| 14       | Wearing Apparel                | 505   | 502   | 461   | 446   | 446   | 412   | 384    |
| 15       | Leather Products               | 37    | 31    | 25    | 25    | 27    | 23    | 20     |
| 16       | Wood & Wood Products           | 119   | 121   | 116   | 111   | 145   | 147   | 143    |
| 17       | Paper & Paper Products         | 105   | 112   | 109   | 100   | 105   | 101   | 99     |
| 18       | Printing & Reproduction of     |       |       |       |       |       |       |        |
|          | Recorded Media                 | 866   | 860   | 836   | 815   | 952   | 927   | 911    |
| 19       | Refined Petroleum Products     | 16    | 14    | 14    | 14    | 14    | 14    | 16     |
| 20       | Chemicals & Chemical           |       |       |       |       |       |       |        |
|          | Products                       | 265   | 279   | 272   | 278   | 298   | 284   | 273    |
| 21       | Pharmaceuticals & Biological   |       |       |       |       |       |       |        |
|          | Products                       | 45    | 44    | 43    | 44    | 50    | 49    | 50     |
| 22       | Rubber & Plastic Products      | 339   | 358   | 344   | 341   | 327   | 305   | 298    |
| 23       | Non-metallic Mineral Products  | 139   | 145   | 143   | 146   | 145   | 141   | 134    |
| 24       | Basic Metals                   | 33    | 30    | 30    | 30    | 34    | 33    | 36     |
| 25       | Fabricated Metal Products      | 1,212 | 1,267 | 1,271 | 1,273 | 1,357 | 1,323 | 1,291  |
| 26       | Computer, Electronic &         |       |       |       |       |       |       |        |
|          | Optical Products               | 297   | 307   | 296   | 290   | 326   | 327   | 317    |
| 27       | Electrical Equipment           | 219   | 250   | 247   | 248   | 258   | 261   | 247    |
| 28       | Machinery & Equipment          | 1,623 | 1,806 | 1,736 | 1,699 | 1,768 | 1,724 | 1,684  |
| 29       | Motor Vehicles, Trailers &     |       |       |       |       |       |       |        |
|          | Semi-Trailers                  | 56    | 74    | 77    | 73    | 75    | 70    | 65     |
| 30       | Other Transport Equipment      | 866   | 1,022 | 1,022 | 1,006 | 1,112 | 1,073 | 1,058  |
| 31       | Furniture                      | 548   | 615   | 620   | 653   | 655   | 638   | 624    |
| 32       | Other Manufacturing Industries | 463   | 503   | 496   | 504   | 520   | 504   | 501    |
|          | Total Manufacturing            | 8,640 | 9,296 | 9,090 | 9,008 | 9,577 | 9,303 | 9,106  |

Source: Economic Development Board

Notes: Data include all manufacturing establisments

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.4 MANUFACTURING OUTPUT IN MANUFACTURING BY INDUSTRY

| -        |                                |           |           |           | _         |           | N         | Million Dollars |
|----------|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Code     | Industry                       | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| 10/11/12 | Food, Beverages & Tobacco      | 7,067.4   | 7,907.8   | 9,087.9   | 9,327.9   | 9,268.7   | 9,607.4   | 9,839.0         |
| 13       | Textiles                       | 87.5      | 52.5      | 62.9      | 56.9      | 59.0      | 47.8      | 47.6            |
| 14       | Wearing Apparel                | 648.0     | 584.7     | 592.9     | 539.1     | 443.1     | 313.5     | 200.7           |
| 15       | Leather Products               | 87.1      | 98.7      | 136.0     | 152.7     | 164.4     | 157.0     | 154.1           |
| 16       | Wood & Wood Products           | 243.7     | 217.5     | 217.6     | 295.5     | 305.0     | 317.2     | 303.8           |
| 17       | Paper & Paper Products         | 986.4     | 1,095.8   | 1,052.7   | 1,013.4   | 1,060.3   | 1,074.5   | 1,031.8         |
| 18       | Printing & Reproduction of     |           |           |           |           |           |           |                 |
|          | Recorded Media                 | 2,542.0   | 2,583.3   | 2,569.7   | 2,395.2   | 2,276.4   | 2,295.8   | 2,211.7         |
| 19       | Refined Petroleum Products     | 35,025.0  | 41,951.6  | 55,625.4  | 56,882.4  | 50,505.6  | 45,549.2  | 32,364.2        |
| 20       | Chemicals & Chemical           |           |           |           |           |           |           |                 |
|          | Products                       | 26,355.0  | 36,388.8  | 40,569.4  | 39,633.5  | 47,422.5  | 53,176.2  | 45,408.9        |
| 21       | Pharmaceuticals & Biological   |           |           |           |           |           |           |                 |
|          | Products                       | 16,633.4  | 17,369.6  | 20,729.1  | 23,288.1  | 16,066.1  | 15,821.1  | 16,745.4        |
| 22       | Rubber & Plastic Products      | 1,966.6   | 2,154.7   | 1,991.8   | 1,901.1   | 1,847.2   | 1,825.9   | 1,737.0         |
| 23       | Non-metallic Mineral Products  | 1,833.0   | 1,770.2   | 2,032.1   | 2,355.3   | 2,485.4   | 2,045.7   | 2,000.6         |
| 24       | Basic Metals                   | 1,010.8   | 1,141.3   | 1,310.0   | 1,230.8   | 1,025.6   | 1,372.3   | 1,268.7         |
| 25       | Fabricated Metal Products      | 8,800.4   | 9,087.8   | 9,150.8   | 9,511.6   | 9,325.8   | 9,357.5   | 8,284.2         |
| 26       | Computer, Electronic &         |           |           |           |           |           |           |                 |
|          | Optical Products               | 74,713.3  | 95,886.2  | 89,542.0  | 86,922.5  | 88,991.3  | 84,381.2  | 88,221.3        |
| 27       | Electrical Equipment           | 2,462.5   | 2,295.0   | 2,313.0   | 2,438.3   | 2,436.0   | 2,600.9   | 2,593.4         |
| 28       | Machinery & Equipment          | 18,345.4  | 20,518.3  | 23,562.4  | 26,446.3  | 26,847.7  | 30,920.6  | 27,153.7        |
| 29       | Motor Vehicles, Trailers &     |           |           |           |           |           |           |                 |
|          | Semi-Trailers                  | 559.1     | 705.5     | 753.9     | 786.8     | 996.1     | 1,053.6   | 1,175.8         |
| 30       | Other Transport Equipment      | 14,820.9  | 14,287.2  | 14,515.6  | 16,206.7  | 16,548.1  | 16,484.2  | 15,280.8        |
| 31       | Furniture                      | 754.6     | 847.4     | 838.8     | 885.5     | 960.7     | 897.5     | 789.0           |
| 32       | Other Manufacturing Industries | 3,624.8   | 4,420.2   | 5,049.3   | 6,009.7   | 6,396.4   | 12,124.3  | 11,044.6        |
|          | <b>Total Manufacturing</b>     | 218,566.9 | 261,364.3 | 281,703.3 | 288,279.2 | 285,431.3 | 291,423.6 | 267,856.5       |

Notes: Data include all manufacturing establishments.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.5 TOTAL OUTPUT IN MANUFACTURING BY INDUSTRY

|          |   |           |           |           |           |           | N         | Million Dollars |
|----------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Code     | Industry  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| 10/11/12 | Food, Beverages & Tobacco                         | 7,735.7   | 8,472.3   | 9,626.8   | 9,817.9   | 9,811.0   | 10,352.0  | 10,585.5        |
| 13       | Textiles  | 91.6      | 54.1      | 65.9      | 59.4      | 61.6      | 50.4      | 50.1            |
| 14       | Wearing Apparel                                   | 677.2     | 613.6     | 629.7     | 573.9     | 478.1     | 353.7     | 243.0           |
| 15       | Leather Products                                  | 89.7      | 99.7      | 137.6     | 157.9     | 171.1     | 159.2     | 156.0           |
| 16       | Wood & Wood Products                              | 268.7     | 245.3     | 248.3     | 339.1     | 349.4     | 367.4     | 352.2           |
| 17<br>18 | Paper & Paper Products Printing & Reproduction of | 1,018.0   | 1,129.0   | 1,085.2   | 1,041.5   | 1,103.8   | 1,143.1   | 1,094.8         |
| 10       | Recorded Media                                    | 2,623.0   | 2,676.4   | 2,677.4   | 2,467.4   | 2,352.4   | 2,376.6   | 2,307.7         |
| 19       | Refined Petroleum Products                        | 35,388.5  | 42,325.9  | 55,968.7  | 57,229.4  | 51,027.0  | 46,359.5  | 32,911.1        |
| 20       | Chemicals & Chemical                              | 33,300.3  | 72,323.7  | 33,700.7  | 31,227.4  | 31,027.0  | 40,557.5  | 32,711.1        |
| 20       | Products  | 27,781.3  | 38,230.6  | 42,723.8  | 41,121.1  | 50,019.7  | 55,340.4  | 47,597.3        |
| 21       | Pharmaceuticals & Biological                      | 27,701.3  | 30,230.0  | 42,723.0  | 71,121.1  | 30,017.7  | 33,340.4  | 47,577.5        |
| 21       | Products  | 17,078.7  | 18,061.1  | 21,618.9  | 25,121.1  | 16,920.2  | 16,891.3  | 17,749.0        |
| 22       | Rubber & Plastic Products                         | 2,134.9   | 2,360.4   | 2,189.0   | 2,061.8   | 2,020.2   | 2,011.2   | 1,917.2         |
| 23       | Non-metallic Mineral Products                     | 2,027.6   | 1,880.5   | 2,138.7   | 2,500.9   | 2,630.6   | 2,168.2   | 2,114.0         |
| 24       | Basic Metals                                      | 1,027.9   | 1,158.8   | 1,329.8   | 1,255.2   | 1,044.9   | 1,387.4   | 1,284.3         |
| 25       | Fabricated Metal Products                         | 9,041.8   | 9,332.4   | 9,468.1   | 9,822.9   | 9,639.6   | 9,653.7   | 8,576.6         |
| 26       | Computer, Electronic &                            |           |           |           |           |           |           |                 |
|          | Optical Products                                  | 77,978.3  | 101,827.6 | 95,066.6  | 91,861.8  | 93,938.2  | 89,463.6  | 93,075.5        |
| 27       | Electrical Equipment                              | 2,712.3   | 2,524.4   | 2,515.5   | 2,661.5   | 2,666.4   | 2,768.5   | 2,750.6         |
| 28       | Machinery & Equipment                             | 19,000.2  | 21,710.8  | 25,553.5  | 28,403.5  | 28,987.1  | 33,905.2  | 30,673.7        |
| 29       | Motor Vehicles, Trailers &                        |           |           |           |           |           |           |                 |
|          | Semi-Trailers                                     | 578.3     | 723.1     | 780.8     | 808.6     | 1,021.7   | 1,089.2   | 1,210.6         |
| 30       | Other Transport Equipment                         | 15,698.4  | 15,333.7  | 15,495.7  | 17,135.8  | 17,557.3  | 17,554.6  | 16,308.5        |
| 31       | Furniture   | 1,037.8   | 1,116.1   | 1,092.2   | 1,010.6   | 1,300.5   | 968.9     | 852.0           |
| 32       | Other Manufacturing Industries                    | 3,718.3   | 4,527.5   | 5,117.0   | 6,099.4   | 6,522.9   | 12,277.8  | 11,169.1        |
|          | Total Manufacturing                               | 227,708.2 | 274,403.3 | 295,529.0 | 301,550.7 | 299,623.8 | 306,641.8 | 282,978.9       |

Notes: Data include all manufacturing establishments.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.6 VALUE ADDED OF MANUFACTURING ESTABLISHMENTS BY INDUSTRY

|          |   |          |          |          |          |          |          | Million Dollars |
|----------|---|----------|----------|----------|----------|----------|----------|-----------------|
| Code     | Industry  | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015            |
| 10/11/12 | Food, Beverages & Tobacco                         | 2,110.9  | 2,326.3  | 2,657.4  | 2,946.0  | 2,877.5  | 3,413.6  | 3,721.2         |
| 13       | Textiles  | 21.0     | 18.0     | 19.4     | 21.6     | 21.4     | 17.7     | 17.7            |
| 14       | Wearing Apparel                                   | 125.5    | 114.2    | 126.7    | 124.7    | 109.8    | 93.3     | 86.9            |
| 15       | Leather Products                                  | 25.5     | 32.0     | 46.6     | 57.0     | 70.3     | 64.1     | 61.9            |
| 16       | Wood & Wood Products                              | 76.7     | 81.0     | 84.5     | 120.9    | 123.5    | 132.8    | 130.1           |
| 17<br>18 | Paper & Paper Products Printing & Reproduction of | 249.2    | 268.3    | 239.4    | 219.2    | 242.0    | 251.7    | 245.5           |
| 10       | Recorded Media                                    | 1,233.8  | 1,339.6  | 1,346.2  | 1,236.2  | 1,196.2  | 1,207.0  | 1,187.9         |
| 19       | Refined Petroleum Products                        | 1,116.1  | 1,271.5  | 285.1    | 725.9    | 57.1     | 32.6     | 1,948.5         |
| 20       | Chemicals & Chemical                              | 1,110.1  | 1,2/1.5  | 265.1    | 123.9    | 37.1     | 32.0     | 1,540.5         |
| 20       | Products  | 3,504.3  | 4,732.0  | 5,011.9  | 3,298.7  | 5,200.6  | 5,620.5  | 8,288.1         |
| 21       | Pharmaceuticals & Biological                      | 3,304.3  | 4,732.0  | 3,011.9  | 3,270.7  | 3,200.0  | 3,020.3  | 0,200.1         |
| 21       | Products  | 9,071.3  | 8,460.4  | 11,694.4 | 14,235.5 | 9,031.9  | 9,506.2  | 10,508.7        |
| 22       | Rubber & Plastic Products                         | 727.8    | 803.3    | 721.3    | 688.7    | 701.4    | 720.4    | 732.6           |
| 23       | Non-metallic Mineral Products                     | 483.9    | 475.1    | 550.6    | 584.3    | 539.2    | 434.1    | 424.7           |
| 24       | Basic Metals                                      | 168.8    | 164.6    | 179.4    | 214.9    | 157.7    | 126.9    | 94.4            |
| 25       | Fabricated Metal Products                         | 2,355.7  | 2,621.5  | 2,773.1  | 2,763.3  | 2,799.3  | 2,776.0  | 2,719.2         |
| 26       | Computer, Electronic &                            |          |          |          |          |          |          |                 |
|          | Optical Products                                  | 15,123.1 | 22,507.8 | 19,247.6 | 18,909.8 | 19,394.5 | 20,001.3 | 21,011.4        |
| 27       | Electrical Equipment                              | 653.9    | 633.3    | 612.1    | 756.1    | 826.5    | 806.5    | 840.3           |
| 28       | Machinery & Equipment                             | 5,241.0  | 6,098.3  | 7,057.5  | 6,688.9  | 7,296.5  | 8,623.1  | 8,142.7         |
| 29       | Motor Vehicles, Trailers &                        |          |          |          |          |          |          |                 |
|          | Semi-Trailers                                     | 185.6    | 187.0    | 231.7    | 206.9    | 347.3    | 356.0    | 440.9           |
| 30       | Other Transport Equipment                         | 5,817.8  | 5,914.9  | 5,823.0  | 5,929.1  | 6,268.8  | 6,386.3  | 5,928.4         |
| 31       | Furniture   | 335.9    | 368.3    | 377.7    | 347.4    | 476.1    | 343.5    | 330.8           |
| 32       | Other Manufacturing Industries                    | 1,451.7  | 1,808.1  | 1,900.6  | 2,113.9  | 2,304.6  | 2,834.1  | 3,555.0         |
|          | Total Manufacturing                               | 50,079.5 | 60,225.4 | 60,986.1 | 62,189.1 | 60,041.8 | 63,747.6 | 70,417.0        |

Notes: Data include all manufacturing establishments.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.7 WORKERS IN MANUFACTURING BY INDUSTRY

|          |                                |         |         |         |         |         |         | Number  |
|----------|--------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Code     | Industry                       | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| 10/11/12 | Food, Beverages & Tobacco      | 27,079  | 26,781  | 27,868  | 28,950  | 29,350  | 30,105  | 29,692  |
| 13       | Textiles                       | 808     | 492     | 616     | 719     | 717     | 722     | 716     |
| 14       | Wearing Apparel                | 3,373   | 2,959   | 3,616   | 3,188   | 2,950   | 2,203   | 1,679   |
| 15       | Leather Products               | 534     | 555     | 573     | 663     | 673     | 625     | 636     |
| 16       | Wood & Wood Products           | 1,886   | 1,987   | 2,003   | 2,523   | 2,718   | 2,769   | 2,670   |
| 17       | Paper & Paper Products         | 3,979   | 4,001   | 3,860   | 3,670   | 3,587   | 3,638   | 3,437   |
| 18       | Printing & Reproduction of     |         |         |         |         |         |         |         |
|          | Recorded Media                 | 17,775  | 17,232  | 16,618  | 15,821  | 15,440  | 15,740  | 15,297  |
| 19       | Refined Petroleum Products     | 3,421   | 3,645   | 3,681   | 3,754   | 4,073   | 4,302   | 4,250   |
| 20       | Chemicals & Chemical           |         |         |         |         |         |         |         |
|          | Products                       | 16,518  | 16,320  | 17,511  | 17,510  | 18,607  | 18,536  | 18,345  |
| 21       | Pharmaceuticals & Biological   |         |         |         |         |         |         |         |
|          | Products                       | 3,992   | 4,425   | 4,757   | 5,142   | 5,339   | 6,096   | 6,269   |
| 22       | Rubber & Plastic Products      | 13,879  | 13,973  | 12,986  | 12,350  | 11,751  | 11,249  | 10,665  |
| 23       | Non-metallic Mineral Products  | 6,336   | 6,159   | 6,653   | 6,870   | 6,835   | 5,247   | 5,168   |
| 24       | Basic Metals                   | 2,388   | 2,475   | 2,525   | 2,631   | 2,642   | 2,618   | 2,585   |
| 25       | Fabricated Metal Products      | 40,411  | 41,376  | 41,519  | 43,847  | 42,998  | 41,871  | 40,276  |
| 26       | Computer, Electronic &         |         |         |         |         |         |         |         |
|          | Optical Products               | 87,925  | 92,295  | 92,710  | 91,398  | 87,062  | 82,494  | 82,402  |
| 27       | Electrical Equipment           | 8,251   | 7,709   | 7,634   | 7,771   | 8,008   | 7,935   | 7,857   |
| 28       | Machinery & Equipment          | 63,981  | 63,823  | 65,634  | 69,160  | 73,457  | 73,059  | 69,958  |
| 29       | Motor Vehicles, Trailers &     |         |         |         |         |         |         |         |
|          | Semi-Trailers                  | 2,943   | 2,714   | 2,791   | 2,799   | 2,786   | 2,876   | 2,922   |
| 30       | Other Transport Equipment      | 91,672  | 83,822  | 81,562  | 82,281  | 80,055  | 78,803  | 69,665  |
| 31       | Furniture                      | 8,413   | 8,574   | 9,213   | 9,579   | 10,524  | 8,926   | 8,787   |
| 32       | Other Manufacturing Industries | 12,005  | 12,859  | 13,994  | 13,996  | 14,933  | 16,592  | 16,897  |
|          | Total Manufacturing            | 417,569 | 414,176 | 418,324 | 424,622 | 424,505 | 416,406 | 400,173 |

Notes: Data include all manufacturing establishments.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.8 REMUNERATION IN MANUFACTURING BY INDUSTRY

|          |                                |          |          |          |          |          |          | Million Dollars |
|----------|--------------------------------|----------|----------|----------|----------|----------|----------|-----------------|
| Code     | Industry                       | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015            |
| 10/11/12 | Food, Beverages & Tobacco      | 868.4    | 890.7    | 956.1    | 993.1    | 1,066.2  | 1,146.0  | 1,156.6         |
| 13       | Textiles                       | 17.9     | 12.3     | 13.3     | 16.6     | 15.9     | 19.9     | 19.8            |
| 14       | Wearing Apparel                | 82.7     | 67.5     | 80.0     | 72.0     | 69.4     | 58.1     | 47.3            |
| 15       | Leather Products               | 15.4     | 16.7     | 21.4     | 25.4     | 29.7     | 27.8     | 29.1            |
| 16       | Wood & Wood Products           | 50.8     | 49.6     | 52.2     | 75.9     | 79.7     | 81.5     | 79.1            |
| 17       | Paper & Paper Products         | 147.4    | 156.8    | 156.2    | 155.6    | 159.0    | 167.1    | 164.3           |
| 18       | Printing & Reproduction of     |          |          |          |          |          |          |                 |
|          | Recorded Media                 | 727.7    | 782.2    | 765.4    | 713.8    | 677.6    | 747.4    | 735.7           |
| 19       | Refined Petroleum Products     | 426.2    | 511.9    | 576.3    | 579.6    | 580.8    | 800.3    | 735.9           |
| 20       | Chemicals & Chemical           |          |          |          |          |          |          |                 |
|          | Products                       | 1,270.8  | 1,352.8  | 1,451.0  | 1,454.2  | 1,682.0  | 1,763.1  | 1,795.5         |
| 21       | Pharmaceuticals & Biological   |          |          |          |          |          |          |                 |
|          | Products                       | 360.7    | 410.0    | 453.2    | 492.0    | 528.7    | 621.4    | 643.6           |
| 22       | Rubber & Plastic Products      | 454.3    | 491.3    | 462.0    | 438.8    | 446.1    | 441.6    | 426.8           |
| 23       | Non-metallic Mineral Products  | 190.3    | 200.0    | 226.6    | 236.5    | 245.4    | 195.4    | 208.9           |
| 24       | Basic Metals                   | 103.3    | 102.3    | 106.1    | 111.4    | 109.9    | 120.3    | 121.3           |
| 25       | Fabricated Metal Products      | 1,361.0  | 1,458.9  | 1,498.1  | 1,564.4  | 1,625.9  | 1,640.7  | 1,581.6         |
| 26       | Computer, Electronic &         |          |          |          |          |          |          |                 |
|          | Optical Products               | 4,250.4  | 4,581.2  | 4,822.4  | 4,925.6  | 5,065.6  | 5,140.7  | 5,308.0         |
| 27       | Electrical Equipment           | 379.3    | 355.1    | 355.8    | 379.0    | 400.9    | 414.3    | 428.7           |
| 28       | Machinery & Equipment          | 2,618.0  | 2,840.8  | 3,105.9  | 3,341.5  | 3,628.0  | 3,986.5  | 3,803.2         |
| 29       | Motor Vehicles, Trailers &     |          |          |          |          |          |          |                 |
|          | Semi-Trailers                  | 133.9    | 132.1    | 138.4    | 138.4    | 138.5    | 143.0    | 147.1           |
| 30       | Other Transport Equipment      | 2,857.7  | 2,863.1  | 2,952.8  | 3,159.9  | 3,236.7  | 3,266.4  | 3,091.7         |
| 31       | Furniture                      | 203.0    | 229.9    | 238.8    | 247.2    | 306.2    | 252.2    | 233.7           |
| 32       | Other Manufacturing Industries | 430.9    | 481.8    | 533.4    | 573.2    | 629.3    | 772.5    | 834.3           |
|          | Total Manufacturing            | 16,949.8 | 17,987.1 | 18,965.5 | 19,694.2 | 20,721.7 | 21,805.9 | 21,592.1        |

Notes: Data include all manufacturing establishments.

The industries are classified according to the Singapore Standard Industrial Classification 2015.

13.9 INDEX OF INDUSTRIAL PRODUCTION (2015 = 100)

| Code     | Industry                       | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|----------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 10/11/12 | Food, Beverages & Tobacco      | 85.6  | 91.3  | 94.7  | 97.9  | 97.9  | 99.4  | 100.0 |
| 13       | Textiles                       | 200.1 | 167.4 | 137.1 | 140.1 | 119.5 | 102.7 | 100.0 |
| 14       | Wearing Apparel                | 905.7 | 529.2 | 429.3 | 395.4 | 334.1 | 212.6 | 100.0 |
| 15       | Leather Products               | 88.3  | 90.9  | 111.1 | 109.5 | 122.0 | 106.5 | 100.0 |
| 16       | Wood & Wood Products           | 97.3  | 99.7  | 95.9  | 93.3  | 103.0 | 107.2 | 100.0 |
| 17       | Paper & Paper Products         | 96.5  | 107.3 | 101.1 | 98.5  | 104.4 | 104.5 | 100.0 |
| 8        | Printing & Reproduction of     |       |       |       |       |       |       |       |
|          | Recorded Media                 | 133.2 | 136.7 | 132.1 | 122.8 | 113.8 | 106.0 | 100.0 |
| 9        | Refined Petroleum Products     | 103.8 | 103.0 | 107.7 | 107.1 | 100.7 | 92.2  | 100.0 |
| 20       | Chemicals & Chemical           |       |       |       |       |       |       |       |
|          | Products                       | 68.1  | 82.8  | 84.9  | 85.3  | 88.4  | 96.7  | 100.0 |
| 21       | Pharmaceuticals & Biological   |       |       |       |       |       |       |       |
|          | Products                       | 46.5  | 71.2  | 94.6  | 103.8 | 101.4 | 109.4 | 100.0 |
| 22       | Rubber & Plastic Products      | 119.1 | 132.1 | 117.7 | 113.5 | 109.5 | 109.2 | 100.0 |
| 23       | Non-metallic Mineral Products  | 101.4 | 102.1 | 110.4 | 108.8 | 107.4 | 90.8  | 100.0 |
| 24       | Basic Metals                   | 93.5  | 103.2 | 101.0 | 91.5  | 77.2  | 99.3  | 100.0 |
| 25       | Fabricated Metal Products      | 92.8  | 105.8 | 102.1 | 107.3 | 107.5 | 107.8 | 100.0 |
| 26       | Computer, Electronic &         |       |       |       |       |       |       |       |
|          | Optical Products               | 94.7  | 126.3 | 111.2 | 100.7 | 105.0 | 105.6 | 100.0 |
| 27       | Electrical Equipment           | 70.0  | 100.1 | 80.6  | 80.1  | 87.4  | 97.9  | 100.0 |
| 28       | Machinery & Equipment          | 54.6  | 74.8  | 95.3  | 107.3 | 109.1 | 118.2 | 100.0 |
| 29       | Motor Vehicles, Trailers &     |       |       |       |       |       |       |       |
|          | Semi-Trailers                  | 43.8  | 60.6  | 70.5  | 69.2  | 85.0  | 91.1  | 100.0 |
| 30       | Other Transport Equipment      | 99.2  | 97.1  | 103.4 | 109.9 | 111.1 | 106.7 | 100.0 |
| 31       | Furniture                      | 127.4 | 140.3 | 123.5 | 131.0 | 127.9 | 113.5 | 100.0 |
| 32       | Other Manufacturing Industries | 56.7  | 62.7  | 68.2  | 73.0  | 79.5  | 84.8  | 100.0 |
|          | Total Manufacturing            | 72.0  | 93.4  | 100.6 | 101.0 | 102.7 | 105.4 | 100.0 |

Note: The industries are classified according to the Singapore Standard Industrial Classification 2015.

|                                     | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|------|
| Unit Labour Cost Index of           |       |       |       |       |       |       |      |
| Overall Economy                     | 103.9 | 100.0 | 101.6 | 104.6 | 106.1 | 109.5 | 112. |
| Goods Producing Industries          | 113.7 | 100.0 | 99.7  | 104.1 | 109.9 | 114.6 | 122. |
| Manufacturing                       | 118.3 | 100.0 | 97.9  | 100.7 | 104.1 | 106.5 | 113. |
| Construction                        | 96.4  | 100.0 | 104.8 | 108.0 | 116.8 | 125.5 | 131. |
| Utilities                           | 97.3  | 100.0 | 102.2 | 109.1 | 118.9 | 128.5 | 135. |
| Other Goods Industries <sup>1</sup> | 97.4  | 100.0 | 101.6 | 103.3 | 90.3  | 92.7  | 98   |
| Services Producing Industries       | 100.0 | 100.0 | 101.9 | 104.3 | 104.1 | 107.1 | 108  |
| Wholesale & Retail Trade            | 107.8 | 100.0 | 101.6 | 102.7 | 100.2 | 102.7 | 99   |
| Transportation & Storage            | 98.8  | 100.0 | 102.7 | 106.1 | 107.7 | 112.1 | 118  |
| Accommodation & Food Services       | 97.0  | 100.0 | 101.8 | 108.1 | 112.2 | 116.3 | 121  |
| Information & Communications        | 94.2  | 100.0 | 101.7 | 104.4 | 101.7 | 103.2 | 105  |
| Finance & Insurance                 | 96.3  | 100.0 | 101.2 | 101.9 | 94.2  | 94.7  | 95   |
| Business Services                   | 98.6  | 100.0 | 99.7  | 103.0 | 105.6 | 109.7 | 112  |
| Other Services Industries           | 100.8 | 100.0 | 104.8 | 107.7 | 114.2 | 118.5 | 123  |

<sup>1</sup> Comprises agriculture, fishing and quarrying.

|  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|--|-------|-------|-------|-------|-------|-------|-------|
| Unit Business Cost Index of Manufacturing        | 105.2 | 100.0 | 102.6 | 107.5 | 114.1 | 111.7 | 113.3 |
| Unit Labour Cost                                 | 118.3 | 100.0 | 97.9  | 100.7 | 104.1 | 106.5 | 113.2 |
| Unit Services Cost                               | 98.0  | 100.0 | 104.0 | 109.8 | 117.6 | 113.5 | 113.3 |
| Unit Non-Labour<br>Production Taxes <sup>1</sup> | 91.6  | 100.0 | 160.6 | 120.9 | 125.1 | 123.0 | 135.2 |

<sup>1</sup> Government Rates and Fees has been renamed as Unit Non-Labour Production Taxes.

### 14



# Construction and Real Estate

### **Construction and Real Estate**

Building construction refers to the erection of new buildings and additions or alterations to existing buildings, but excludes the erection of temporary structures, illegal building works or minor works which do not require planning approval. Data on new buildings given planning and building plan approval, notices of commencement and Occupation Permits Temporary (TOPs)/ Certificates of Statutory Completion (CSC) are compiled from the administrative records of the Urban Redevelopment Authority (URA) and the Building and Construction Authority (BCA). Statistics on contracts awarded and progress payments certified are collected through surveys conducted by BCA.

### **Definitions**

Provisional Permission: Refers to the conditional approval granted by the Minister for National Development or the Competent Authority to develop any land subject to conditions in accordance with the development rules in force.

Written Permission: Refers to the approval granted by the Minister for National Development or the Competent Authority to develop any land subject to conditions in accordance with the development rules in force.

Building Plan Approval: Refers to the approval granted by the Commissioner of Building Control in respect of building plans and specifications submitted in accordance with the prescribed building regulations in force.

Building Commencement: Construction of a building project is deemed to have commenced when a permit to commence building works in respect of that building is issued by the Commissioner of Building Control.

Building Completion: A building project is deemed completed when the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) in respect of that building is issued by the Commissioner of Building Control. Completed properties are referred to as the existing stock.

Gross Floor Area: Refers to the covered floor space (whether within or outside a building and whether or not enclosed) measured between party walls, including thickness of external walls and any open area used for commercial or industrial purposes.

Nett Floor Area: Refers to all covered floor space available on an exclusive basis to occupiers in a building excluding common areas viz: staircases, lifts, common passageways and corridors.

Contracts Awarded: Refer to the full contract awarded to the main contractor by the developer or owner even though part or all of the works may be further sub-contracted to other contractors.

Progress Payments Certified: Refer to the value of all construction works done and certified for progress payment. Where construction works are carried out by the developer or owner himself and the architect does not certify progress payments, the expenses incurred on the construction work are taken to be the progress payments certified.

### **Other References**

Details on construction and real estate statistics relating to industrial properties can be found in "Property Market Information: Industrial Properties" on the <u>Real Estate Information System</u> (REALIS) "Quarterly Market Report: Industrial Properties" published by JTC Corporation (JTC) on the JTC Corporate website.

### Housing

The Housing and Development Board (HDB) was established on 1 February 1960 as the public housing authority of Singapore. HDB's mission is to provide affordable homes of quality and value, create vibrant and sustainable towns, and promote the building of active and cohesive communities. HDB also develops and maintains other facilities, namely, commercial and industrial properties, and car parks. To help build sustainable communities, HDB plans towns with a comprehensive range of facilities to meet residents' needs. These include recreational and community facilities such as neighbourhood parks and children's playgrounds in its housing estates.

In 2015, 26,108 flats were completed, bringing the total number of flats built since HDB's inception to 1,103,211.

The Home Ownership for the People Scheme, introduced in 1964, enables citizens to acquire homes through the purchase of HDB flats. In 2015, 23,445 flats were sold under this scheme. Currently, about 79 per cent of the resident population live in Home Ownership flats.

Eligible flat buyers can apply for HDB concessionary housing loans to purchase new or resale flats. Since January 2007, flat buyers who require an HDB loan have to obtain an HDB Loan Eligibility (HLE) letter before they commit to a flat purchase. The income ceiling for taking a HDB concessionary housing loan for purchase of a new or resale flat was increased from \$10,000 to \$12,000 in August 2015.

In October 1994, HDB implemented the CPF Housing Grant Scheme to strengthen family ties by giving a housing grant to firsttimer citizen families to buy a resale flat that is in the same town or estate or within two kilometres of their parents' or married child's flat. A two-tier grant system was subsequently implemented in August 1995. The higher-tier grant is applicable to firsttimer families who buy resale flats to live together with or near their parents or married child, while the lower-tier grant is applicable to first-timer families who buy any resale flat. The lower-tier grant was extended to the purchase of Executive Condominiums in August 1995 while the scheme was extended to single citizens in June 1998 to help them buy resale flats. The Proximity Housing Grant (PHG) was introduced in August 2015, and the higher-tier grant was discontinued. The PHG is more inclusive as it is available to eligible citizen families who buy a resale flat that is in the same town or estate, or within two kilometres of their parents' or married child's home regardless of their subsidy enjoyment history, household income and ownership of private residential property. Grant recipients and their parents or married child must live with or in close proximity to each other for at least 5 years. Eligible singles can also enjoy the PHG if they buy a resale flat with their parents.

The 2-room Flexi Scheme 1 was implemented in November 2015 to better cater to the diverse housing needs of families, singles and elderly. It merged and replaced the previous 2-room flat and Studio Apartment (SA) schemes. The new 2-room Flexi Scheme offers flexibility to accommodate different buyers and allow choice of lease and fittings. The monthly income ceiling must not exceed \$6,000 for those applying 2-room Flexi flats on 99-year lease, and \$12,000 for elderly buying 2-room Flexi flats on short lease (i.e. lease terms of between 15 and 45 years).

To provide additional affordable housing options for more citizen households, the monthly income ceiling for purchase of subsidised flats (i.e. 3-room flats in mature estates, 3-room flats in selected projects<sup>2</sup> in

<sup>&</sup>lt;sup>1</sup> More information on the 2-room Flexi Scheme is available at http://www.hdb.gov.sg/cs/infoweb/residential/buying-aflat/new/2room-flexi-flats

The monthly income ceiling for 3-room flats in majority of the projects in non-mature estates must not exceed \$6,000.

non-mature estates, 4-room and bigger flats, and resale flats with CPF Housing Grant) was increased from \$10,000 to \$12,000 in August 2015.

The monthly income ceiling to purchase new Executive Condominiums was also increased from \$12,000 to \$14,000 and eligible first-timer households can qualify for a CPF Housing Grant of up to \$30,000.

Single citizens also received more help to buy resale flats. For singles buying a resale flat of up to 5-room size under the Single Singapore Citizen (SSC) Scheme with a CPF Housing Grant and a HDB concessionary housing loan, the monthly income ceiling was increased from \$5,000 to \$6,000. For single citizens buying a resale flat under the Joint Singles Scheme (JSS), and for single citizens buying a resale flat with their parents, the monthly income ceiling was increased from \$10,000 to \$12,000. To give singles more options, first-timer single citizens aged 35 and above could also purchase a new 2-room BTO flat in non-mature estates from July 2013<sup>3</sup>. The income ceiling was raised from \$5,000 to \$6,000 starting from the November 2015 sales exercise.

HDB has offered a number of schemes to help low-income families own HDB flats. These include the Sale of Flats to Sitting Tenants and Rent & Purchase Schemes.

Additional assistance is provided to lower-income households buying their first flats via the Additional CPF Housing Grant (AHG) Scheme implemented in March 2006. The scheme was enhanced in August 2007 and February 2009 to provide greater assistance to lower-middle income families. Currently, under the scheme, eligible first-timer

households earning not more than \$5,000 a month and buying a new or resale flat will be given an AHG ranging from \$5,000 to \$40,000 on top of the existing housing subsidy. Eligible first-timer singles earning not more than \$2,500 a month and buying a new 2-room flat from HDB or resale flat will be given an AHG ranging from \$2,500 to \$20,000.

In March 2011, a new Special CPF Housing Grant (SHG) was also introduced for eligible first-timer households earning not more than \$2,250 a month to help them buy their first flat. This SHG is over and above the regular housing subsidy and the AHG. The grant amount ranged from \$5,000 to \$20,000 and was for the purchase of a 2-room or 3room standard flat in the non-mature estates from the HDB. The SHG was enhanced in July 2012 and August 2013. For the enhancement in August 2013, HDB raised the income ceiling for SHG from \$2,250 to \$6,500 and extended the SHG to first-timer households buying up to 4-room flats (standard or premium) in non-mature estates. Singles buying new 2-room flats in non-mature estates from HDB and earning not more than \$3,250 a month can also qualify for SHG of up to \$10,000.

To further help the lower- and middleincome households afford their first home. more enhancements to the SHG were announced in August 2015. Specifically, HDB:

- (i) Raised the income ceiling for SHG from \$6,500 to \$8,500 (for families) and \$3,250 to \$4,250 (for singles); and
- (ii) Doubled the maximum SHG amount from \$20,000 to \$40,000 (for families) and \$10,000 to \$20,000 (for singles).

<sup>&</sup>lt;sup>3</sup> The 2-room flat scheme was replaced by the 2-room Flexi Scheme, which was implemented with effect from November 2015. With that, HDB has been offering 2-room Flexi flats for sale from the November 2015 sales exercises, in place of the 2room flats.

In tandem with the enhancements to the SHG, two new features were introduced:

i) Requirement for a minimum co-payment of 5% of selling price of flat (payable using buyer's own CPF/cash savings) if the total grant amount (AHG and SHG) received is more than 95% of selling price<sup>4</sup> of flat.

ii) Refund of housing grants in excess of \$60,000 (for families) and \$30,000 (for singles) <sup>5</sup> to grant recipient's CPF Special Account (SA)/Retirement Account (RA) and Medisave Account (MA) in equal portions, upon disposal of flat.

In August 2013, a new Step-Up CPF Housing Grant of \$15,000 was introduced to help families in subsidised 2-room flats in the non-mature estates to upgrade to 3-room standard flats in the non-mature estates (after they have served the Minimum Occupation Period).

To qualify for the AHG, SHG and Step-Up CPF Housing Grant, at least one of the applicants must have worked for 12 continuous months before the flat application, and remain employed at the point of flat application. This condition helps to ascertain that the applicants are employable and have the means to service the housing loan, as a home purchase is a long-term financial commitment.

To bridge the gap between the standards of the older estates and newer towns, the Estate Renewal Strategy was introduced in September 1995. It includes initiatives like the Main Upgrading Programme (MUP), Interim Upgrading Programme (IUP) Plus, Lift Upgrading Programme (LUP), Selective En bloc Redevelopment Scheme (SERS), Home

Improvement Programme (HIP) and Neighbourhood Renewal Programme (NRP).

The LUP was launched in March 2001 to provide HDB residents with more convenient access to their homes by having lifts that stop at every floor. As at the end of 2015, all feasible blocks had been selected for the programme, bringing LUP to more than 5,000 blocks and benefitting more than 500,000 families.

Inaugurated in 1995, the Selective En bloc Redevelopment Scheme (SERS) is part of the government's Estate Renewal Strategy to enhance the living environment of older HDB estates. Under the scheme, selected old blocks of sold flats are redeveloped en bloc to optimise land use. Residents involved are given an opportunity to move to new flats with fresh 99-year leases and a better living environment served by modern facilities. With the rehousing of the residents en bloc, SERS enables residents to preserve the family and community ties built over the years. The injection of new developments helps to rejuvenate the old estates as well as revitalise the demographic and economic profiles of the residents as younger residents move into these estates. As at the end of 2015, more than 39,000 sold flats in 79 sites had been selected for SERS.

In 2007, the HIP and NRP were introduced together with the launch of the "Remaking Our Heartland" (ROH) Initiative, to replace the MUP and IUP Plus. Both programmes seek to engage residents more by offering greater flexibility in the provision of upgrading items, as well as greater resident consultation in the types of improvement within and outside their flats.

The HIP helps lessees address common maintenance problems in ageing flats in a systematic and comprehensive manner. If lessees have already made certain basic improvements themselves, they have the flexibility of opting and paying only for the

<sup>&</sup>lt;sup>4</sup> Selling price refers to the published price on the flat list.

<sup>&</sup>lt;sup>5</sup> The \$60,000/\$30,000 limit is computed based on the AHG, SHG and PHG disbursed from 24 Aug 2015, for the purchase of the same or different flats.

items they want. The Government subsidises a major portion of the cost for the optional improvements. Essential improvements such as repairs to spalling concrete are also be carried out to enhance public health and safety. Citizen households do not have to pay for these improvements, which are fully funded by the Government.

From 1 July 2012, all HIP projects include additional optional items under the Enhancement for Active Seniors (EASE) programme to enhance the safety and comfort of seniors living in HDB flats. Under EASE, slip-resistant treatment to bathroom or toilet floor tiles, grab bars within the flat and ramps to negotiate level differences in the flat are offered. Residents may choose combination of the EASE improvements and pay only for the chosen improvements.

As at the end of 2015, 216 projects had been announced for HIP, of which 138 projects had been polled. Among the polled projects, construction for 60 projects had been completed, and was about to commence or was in progress for the remaining 78 projects.

The NRP focuses on precinct- and block-level improvements. As two or more precincts are involved in each NRP project, improvements can be carried out more comprehensively, with better coordination and integration of facilities that are complementary across neighbouring precincts.

This means that there is less duplication of facilities to meet the different needs of the residents. The NRP, whose key characteristic is a greater say for residents, is fully funded by the Government. It engages residents by involving them in the decisionmaking process on matters affecting their immediate neighbourhood. Residents are invited to participate actively by giving feedback and deciding collectively on the facilities for their neighbourhood at public forums such as Town Hall meetings.

From 2015, the scope of NRP was expanded to include additional works such as repainting and other repair works. To support the expansion in scope, the NRP budget was increased from \$3,400 to \$4,700 per flat. The age criterion for NRP was also extended to include blocks built up to 1995 (from 1989).

As at the end of 2015, 118 projects had been announced for NRP. Public consultation had been carried out for 90 projects, of which 87 had gone through the Consensus Gathering Exercise. In addition, construction works for 29 projects were completed.

To ensure continual rejuvenation and vibrancy of the HDB heartlands, the Remaking Our Heartland (ROH) initiative was developed as a new comprehensive blueprint to renew and further develop these towns and estates. Punggol, Yishun and Dawson were selected as the pilot ROH towns/estate and the plans were announced in 2007. Residents are now able to see or enjoy many of these plans which have been implemented.

In 2011, Hougang, East Coast, and Jurong Lake areas were announced as the next 3 towns to be rejuvenated under ROH 2 as they have good potential for a comprehensive makeover. The plans and proposals for these towns and areas under ROH 1 and 2 are at various stages of implementation.

In 2013, HDB launched the broad development plans for three new housing areas - Bidadari, Tampines North, and Punggol Matilda. The plans for these three areas have capitalised on their individual distinctive character to bring about a unique identity and living experience. They will build on each area's history, distinctive local flavour and features.

The implementation of these new urban design concepts will add to the vibrancy of the Singapore housing landscape, and characterise the next generation of public housing.

### $14 \quad \text{construction and real estate } (\textit{cont'd})$

Following the announcement of the broad master plans for Bidadari and Tampines North in 2013, and for the next phase of development for Punggol in 2012, HDB unveiled detailed plans in 2014 for the first housing projects in Bidadari and Tampines North, as well as for Punggol Northshore.

In 2015, Toa Payoh, Woodlands and Pasir Ris were announced to be the next few towns to be transformed under the ROH 3 programme. The plans include the rejuvenation of Toa Payoh Town Centre, creating more recreational spaces on the Woodlands waterfront along the Straits of Johor (Woodlands) and injecting new developments at the Pasir Ris Town Centre

HDB has released some key plans in 2016, such as a transformed Woodlands Waterfront with interesting landscaping and a town plaza within Woodlands Central which will offer a sizable space for various large scale activities, including those for the community.

For Pasir Ris, a mixed-use development integrated with a new bus interchange will be introduced in the town centre, and the existing parks and neighbourhood centres in the town will also be rejuventated In Toa Payoh, the pedestrian mall in Toa Payoh Town Centre will be revamped with more greenery, rest areas and covered shopping streets at selected stretches for residents to enjoy. Dedicated cycling paths throughout Toa Payoh town will also be introduced to improve connectivity.

Between 1989 and 2015, HDB sold 244 land parcels (308 hectares) for private residential development and 45 land parcels (48.6 hectares) for commercial development. A total of 65 Executive Condominium sites (132 hectares) were sold during this period.

14.1 AVAILABLE AND VACANT PRIVATE RESIDENTIAL PROPERTIES (End of Period)

| 2013 20    | 014 2015             |
|------------|----------------------|
|            |                      |
|            |                      |
| 39,370 308 | ,814 327,448         |
| 8,003 24   | ,062 26,517          |
|            |                      |
| 0,638 10   | ,675 10,738          |
| 371        | 395 398              |
|            |                      |
| 21,538 21  | ,733 21,914          |
| 736        | 704 800              |
|            |                      |
| 88,873 39  | ,132 39,340          |
| 1,332      | ,307 1,355           |
|            |                      |
| 73,950 80  | 0,263 84,997         |
| 5,561 8    | 8,771 8,163          |
|            |                      |
| 44,371 157 | 7,011 170,459        |
| 10,003 12  | 2,885 15,801         |
| 5<br>44    | 5,561 8<br>5,371 157 |

Source : Urban Redevelopment Authority

Note: Data exclude hostels, HDB flats, tenement houses, parsonages and Executive Condominiums.

14.2 SUPPLY OF PRIVATE RESIDENTIAL PROPERTIES IN THE PIPELINE BY DEVELOPMENT STATUS (End of Period)

|                        |        |        |        |        |        | N      | umber of Uni |
|------------------------|--------|--------|--------|--------|--------|--------|--------------|
|                        | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015         |
| Landed Properties      |        |        |        |        |        |        |              |
| Total                  | 4,186  | 3,963  | 3,807  | 3,860  | 3,477  | 2,909  | 2,292        |
| Under Construction     | 1,492  | 1,752  | 1,949  | 2,316  | 1,922  | 1,832  | 1,480        |
| Planned                | ,      | ,      | ,      | •      | ,      | ŕ      |              |
| Written Permission     | 2,424  | 1,680  | 1,310  | 1,105  | 1,044  | 992    | 728          |
| Provisional Permission | 139    | 322    | 479    | 278    | 332    | 77     | 57           |
| Others <sup>1</sup>    | 131    | 209    | 69     | 161    | 179    | 8      | 27           |
| Non-Landed Properties  |        |        |        |        |        |        |              |
| Total                  | 62,240 | 75,514 | 85,724 | 92,370 | 86,541 | 72,279 | 57,867       |
| Under Construction     | 32,268 | 39,575 | 47,602 | 58,226 | 65,843 | 57,464 | 47,000       |
| Planned                |        |        |        |        |        |        |              |
| Written Permission     | 17,100 | 14,998 | 15,097 | 13,755 | 9,070  | 6,047  | 2,930        |
| Provisional Permission | 7,053  | 7,372  | 10,652 | 10,795 | 5,491  | 2,548  | 3,443        |
| Others <sup>1</sup>    | 5,819  | 13,569 | 12,373 | 9,594  | 6,137  | 6,220  | 4,494        |

Source : Urban Redevelopment Authority

Note: Data exclude hostels, HDB flats, tenement houses, parsonages and Executive Condominiums.

14.3 APPROVAL, CONSTRUCTION COMMENCEMENT AND COMPLETION OF PRIVATE RESIDENTIAL PROPERTIES

|                        |        |        |        |        |        | N      | umber of Units |
|------------------------|--------|--------|--------|--------|--------|--------|----------------|
|                        | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015           |
| Provisional Permission | 5,166  | 14,939 | 25,201 | 23,642 | 13,897 | 5,668  | 6,262          |
| Written Permission     | 9,807  | 14,502 | 20,551 | 18,441 | 18,034 | 8,454  | 5,438          |
| Building Plan Approval | 10,506 | 16,892 | 21,100 | 19,702 | 19,593 | 9,275  | 7,073          |
| Building Commencement  | 8,603  | 17,864 | 20,736 | 21,395 | 20,357 | 11,571 | 8,082          |
| Building Completion    | 10,488 | 10,399 | 12,469 | 10,329 | 13,150 | 19,941 | 18,971         |

Source : Urban Redevelopment Authority

 $Note: Data\ exclude\ hostels, HDB\ flats, tenement\ houses, parsonages\ and\ Executive\ Condominiums.$ 

<sup>1</sup> Refers to planned land sales by the government and developments submitted for approval.

14.4 AVAILABLE AND VACANT EXECUTIVE CONDOMINIUMS AND SUPPLY OF EXECUTIVE CONDOMINIUMS IN THE PIPELINE BY DEVELOPMENT STATUS

(End of Period)

|                              | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                              |        |        |        |        |        |        |        |
| Executive Condominiums       |        |        |        |        |        |        |        |
| Available                    | 10,430 | 10,430 | 10,430 | 10,430 | 11,683 | 15,040 | 18,336 |
| Vacant                       | 59     | 52     | 83     | 42     | 1,107  | 1,734  | 1,540  |
| Supply by Development Status |        |        |        |        |        |        |        |
| Total                        | 905    | 6,005  | 10,073 | 15,966 | 18,985 | 17,948 | 15,79  |
| Under Construction           | 0      | 1,659  | 4,262  | 8,036  | 11,775 | 13,065 | 14,12  |
| Planned                      |        |        |        |        |        |        |        |
| Written Permission           | 0      | 540    | 1,796  | 1,747  | 0      | 0      |        |
| Provisional Permission       | 0      | 336    | 0      | 418    | 2,265  | 1,155  |        |
| Others 1                     | 905    | 3,470  | 4,015  | 5,765  | 4,945  | 3,728  | 1,66   |

Source: Urban Redevelopment Authority

<sup>1</sup> Refers to planned land sales by the government and development submitted for approval.

44.5 AVAILABLE AND VACANT COMMERCIAL AND INDUSTRIAL PROPERTIES (End of Period)

|                 |        |               |        |                |        | Thous  | sand sq m net |  |  |  |  |
|-----------------|--------|---------------|--------|----------------|--------|--------|---------------|--|--|--|--|
|                 | 2009   | 2010          | 2011   | 2012           | 2013   | 2014   | 2015          |  |  |  |  |
|                 |        |               | ]      | Private Sector |        |        |               |  |  |  |  |
| Office Space    |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 5,630  | 5,816         | 6,008  | 6,014          | 6,190  | 6,283  | 6,276         |  |  |  |  |
| Vacant          | 747    | 771           | 753    | 619            | 666    | 704    | 634           |  |  |  |  |
| Retail Space    |        |               |        |                |        |        |               |  |  |  |  |
| Available       | na     | na            | 4,014  | 4,061          | 4,182  | 4,348  | 4,409         |  |  |  |  |
| Vacant          | na     | na            | 229    | 239            | 209    | 283    | 358           |  |  |  |  |
| Factory Space   |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 24,631 | 25,308        | 26,209 | 27,004         | 28,080 | 29,258 | 30,357        |  |  |  |  |
| Vacant          | 2,304  | 2,097         | 1,984  | 2,069          | 2,425  | 2,905  | 3,093         |  |  |  |  |
| Warehouse Space |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 6,827  | 6,912         | 7,069  | 7,328          | 7,643  | 8,317  | 8,789         |  |  |  |  |
| Vacant          | 690    | 594           | 406    | 520            | 706    | 682    | 756           |  |  |  |  |
|                 |        | Public Sector |        |                |        |        |               |  |  |  |  |
| Office Space    |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 1,247  | 1,240         | 1,223  | 1,256          | 1,251  | 1,270  | 1,283         |  |  |  |  |
| Vacant          | 83     | 85            | 64     | 63             | 67     | 69     | 83            |  |  |  |  |
| Retail Space    |        |               |        |                |        |        |               |  |  |  |  |
| Available       | na     | na            | 1,523  | 1,518          | 1,516  | 1,566  | 1,562         |  |  |  |  |
| Vacant          | na     | na            | 45     | 39             | 45     | 61     | 73            |  |  |  |  |
| Factory Space   |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 5,357  | 5,349         | 5,050  | 5,052          | 5,068  | 5,173  | 5,216         |  |  |  |  |
| Vacant          | 127    | 112           | 140    | 154            | 197    | 322    | 331           |  |  |  |  |
| Warehouse Space |        |               |        |                |        |        |               |  |  |  |  |
| Available       | 46     | 46            | 47     | 47             | 93     | 95     | 97            |  |  |  |  |
| Vacant          | 0      | 1             | 0      | 0              | 2      | 4      | 9             |  |  |  |  |

Source: Urban Redevelopment Authority

JTC Corporation (With effect from 2013, for data pertaining to Factory and Warehouse Space)

14.6 SUPPLY OF COMMERCIAL AND INDUSTRIAL PROPERTIES IN THE PIPELINE BY DEVELOPMENT STATUS

(Private and Public Sectors) (End of Period)

|                        |       |       |       |       |       | Thousa | and sq m gros |
|------------------------|-------|-------|-------|-------|-------|--------|---------------|
|                        | 2009  | 2010  | 2011  | 2012  | 2013  | 2014   | 2015          |
| Office Space           |       |       |       |       |       |        |               |
| Total                  | 1,078 | 1,280 | 1,114 | 1,276 | 1,123 | 1,056  | 1,049         |
| Under Construction     | 857   | 653   | 581   | 970   | 800   | 814    | 71            |
| Planned                |       |       |       |       |       |        |               |
| Written Permission     | 83    | 121   | 282   | 149   | 171   | 54     | 12            |
| Provisional Permission | 123   | 288   | 39    | 41    | 32    | 40     | 15            |
| Others <sup>1</sup>    | 15    | 218   | 212   | 116   | 120   | 148    | 5             |
| Retail Space           |       |       |       |       |       |        |               |
| Total                  | na    | na    | 817   | 980   | 1,002 | 852    | 83            |
| Under Construction     | na    | na    | 523   | 707   | 660   | 510    | 61            |
| Planned                |       |       |       |       |       |        |               |
| Written Permission     | na    | na    | 158   | 113   | 95    | 191    | 5             |
| Provisional Permission | na    | na    | 46    | 75    | 198   | 84     | 14            |
| Others <sup>1</sup>    | na    | na    | 90    | 85    | 49    | 67     | 2             |
| Factory Space          |       |       |       |       |       |        |               |
| Total                  | 2,827 | 3,439 | 4,274 | 5,147 | 5,153 | 4,630  | 4,24          |
| Under Construction     | 2,040 | 2,052 | 2,688 | 3,400 | 3,264 | 3,074  | 3,05          |
| Planned                |       |       |       |       |       |        |               |
| Written Permission     | 277   | 388   | 441   | 424   | 531   | 462    | 33            |
| Provisional Permission | 172   | 233   | 397   | 460   | 684   | 453    | 64            |
| Others <sup>1</sup>    | 338   | 766   | 748   | 863   | 674   | 641    | 21            |
| Warehouse Space        |       |       |       |       |       |        |               |
| Total                  | 507   | 685   | 1,050 | 1,320 | 1,589 | 1,377  | 1,58          |
| Under Construction     | 375   | 540   | 616   | 1,147 | 1,169 | 1,162  | 1,33          |
| Planned                |       |       |       |       |       |        |               |
| Written Permission     | 48    | 91    | 30    | 30    | 34    | 20     | 5             |
| Provisional Permission | 84    | 54    | 404   | 12    | 371   | 195    | 18            |
| Others <sup>1</sup>    | 0     | 0     | 0     | 131   | 15    | 0      |               |

Source: Urban Redevelopment Authority

JTC Corporation (With effect from 2013, for data pertaining to Factory and Warehouse Space)

<sup>1</sup> Refers to planned public developments and land sales by the government and developments submitted for approval.

14.7 APPROVAL, CONSTRUCTION COMMENCEMENT AND COMPLETION OF COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

( Private and Public Sectors)

|                        |       |      |       |       |       | Thous | and sq m gros |
|------------------------|-------|------|-------|-------|-------|-------|---------------|
|                        | 2009  | 2010 | 2011  | 2012  | 2013  | 2014  | 2015          |
| Office Space           |       |      |       |       |       |       |               |
| Provisional Permission | 81    | 275  | 209   | 447   | 124   | 111   | 192           |
| Written Permission     | 252   | 97   | 367   | 130   | 475   | 123   | 91            |
| Building Plan Approval | 201   | 23   | 177   | 372   | 473   | 88    | 176           |
| Building Commencement  | 3     | 68   | 254   | 578   | 80    | 186   | 11            |
| Building Completion    | 215   | 271  | 305   | 218   | 228   | 225   | 93            |
| Retail Space           |       |      |       |       |       |       |               |
| Provisional Permission | na    | na   | 334   | 192   | 296   | 121   | 180           |
| Written Permission     | na    | na   | 152   | 269   | 201   | 260   | 123           |
| Building Plan Approval | na    | na   | 154   | 198   | 280   | 171   | 142           |
| Building Commencement  | na    | na   | 285   | 237   | 155   | 126   | 225           |
| Building Completion    | na    | na   | 105   | 92    | 186   | 238   | 130           |
| Factory Space          |       |      |       |       |       |       |               |
| Provisional Permission | 280   | 646  | 1,425 | 1,320 | 1,512 | 1,194 | 972           |
| Written Permission     | 903   | 851  | 1,558 | 1,214 | 1,643 | 1,621 | 1,238         |
| Building Plan Approval | 1,013 | 590  | 1,319 | 1,291 | 1,585 | 1,458 | 1,115         |
| Building Commencement  | 549   | 790  | 1,477 | 1,640 | 1,373 | 1,541 | 1,081         |
| Building Completion    | 1,412 | 844  | 797   | 1,080 | 1,401 | 1,588 | 1,371         |
| Warehouse Space        |       |      |       |       |       |       |               |
| Provisional Permission | 78    | 350  | 576   | 431   | 616   | 567   | 631           |
| Written Permission     | 202   | 417  | 359   | 585   | 685   | 738   | 555           |
| Building Plan Approval | 195   | 151  | 353   | 642   | 679   | 527   | 814           |
| Building Commencement  | 124   | 381  | 447   | 812   | 347   | 774   | 686           |
| Building Completion    | 268   | 105  | 296   | 317   | 439   | 828   | 545           |

Source: Urban Redevelopment Authority

JTC Corporation (With effect from 2013, for data pertaining to Factory and Warehouse Space)

14.8 CONTRACTS AWARDED BY SECTOR AND DEVELOPMENT TYPE

| Davalanment Type        | 2009   | 2010   | 2011   | 2012           | 2013   | 2014   | illion Dollar |
|-------------------------|--------|--------|--------|----------------|--------|--------|---------------|
| Development Type        | 2009   | 2010   | 2011   |                | 2013   | 2014   | 2015          |
|                         |        |        |        | All Sectors    |        |        |               |
| Total                   | 22,518 | 27,565 | 35,488 | 30,761         | 35,804 | 38,757 | 27,034        |
| Building Work           | 13,499 | 24,541 | 28,747 | 25,951         | 28,863 | 28,854 | 21,560        |
| Residential             | 6,734  | 11,487 | 15,298 | 11,846         | 15,963 | 11,290 | 7,770         |
| Commercial              | 1,650  | 3,237  | 4,210  | 2,990          | 3,728  | 3,823  | 2,183         |
| Industrial              | 2,040  | 4,790  | 6,221  | 6,418          | 5,490  | 6,628  | 5,778         |
| Instituitional & Others | 3,075  | 5,028  | 3,018  | 4,697          | 3,682  | 7,113  | 5,828         |
| Civil Engineering Work  | 9,019  | 3,023  | 6,741  | 4,810          | 6,941  | 9,903  | 5,474         |
|                         |        |        | F      | Private Sector |        |        |               |
| Total                   | 8,622  | 19,018 | 20,208 | 21,237         | 20,915 | 19,537 | 13,781        |
| Building Work           | 7,831  | 18,184 | 19,600 | 18,549         | 19,488 | 18,101 | 12,119        |
| Residential             | 3,925  | 8,680  | 9,066  | 8,512          | 9,585  | 6,471  | 3,959         |
| Commercial              | 1,577  | 3,059  | 4,159  | 2,888          | 3,663  | 3,703  | 1,886         |
| Industrial              | 1,831  | 3,717  | 5,738  | 6,111          | 5,178  | 6,037  | 4,53          |
| Instituitional & Others | 498    | 2,727  | 638    | 1,039          | 1,062  | 1,890  | 1,74          |
| Civil Engineering Work  | 792    | 834    | 608    | 2,688          | 1,427  | 1,436  | 1,662         |
|                         |        |        | I      | Public Sector  |        |        |               |
| Total                   | 13,896 | 8,546  | 15,280 | 9,525          | 14,888 | 19,220 | 13,253        |
| Building Work           | 5,668  | 6,357  | 9,146  | 7,402          | 9,374  | 10,753 | 9,44          |
| Residential             | 2,809  | 2,807  | 6,232  | 3,334          | 6,378  | 4,819  | 3,81          |
| Commercial              | 73     | 178    | 51     | 102            | 64     | 120    | 298           |
| Industrial              | 209    | 1,073  | 483    | 308            | 312    | 591    | 1,24          |
| Instituitional & Others | 2,577  | 2,300  | 2,380  | 3,659          | 2,620  | 5,223  | 4,08          |
| Civil Engineering Work  | 8,228  | 2,189  | 6,133  | 2,123          | 5,514  | 8,466  | 3,812         |

Source : Building and Construction Authority

Note: Data exclude reclamation works.

14.9 PROGRESS PAYMENTS CERTIFIED BY SECTOR AND DEVELOPMENT TYPE

| Development Type        | 2009   | 2010   | 2011   | 2012          | 2013   | 2014   | 2015   |
|-------------------------|--------|--------|--------|---------------|--------|--------|--------|
|                         |        |        |        | All Sectors   |        |        |        |
|                         |        |        |        |               |        |        |        |
| Total                   | 30,894 | 27,428 | 28,861 | 31,639        | 33,682 | 35,892 | 36,402 |
| Building Work           | 24,796 | 21,413 | 22,784 | 25,447        | 27,799 | 28,812 | 28,381 |
| Residential             | 8,119  | 9,518  | 9,772  | 10,943        | 12,791 | 13,811 | 13,607 |
| Commercial              | 6,044  | 4,524  | 3,608  | 3,294         | 3,221  | 3,047  | 3,278  |
| Industrial              | 7,765  | 4,571  | 5,669  | 7,414         | 7,807  | 7,060  | 6,783  |
| Instituitional & Others | 2,869  | 2,800  | 3,735  | 3,797         | 3,980  | 4,894  | 4,712  |
| Civil Engineering Work  | 6,097  | 6,015  | 6,078  | 6,192         | 5,883  | 7,080  | 8,021  |
|                         |        |        | Pı     | rivate Sector |        |        |        |
| Total                   | 20,751 | 16,452 | 17,209 | 19,323        | 21,127 | 21,160 | 20,788 |
| Building Work           | 19,758 | 15,692 | 16,489 | 18,430        | 20,097 | 19,689 | 19,083 |
| Residential             | 5,389  | 6,264  | 6,610  | 7,178         | 8,309  | 8,671  | 8,285  |
| Commercial              | 5,911  | 4,451  | 3,478  | 3,212         | 3,145  | 2,964  | 3,160  |
| Industrial              | 7,645  | 4,097  | 4,930  | 6,749         | 7,293  | 6,612  | 6,216  |
| Instituitional & Others | 813    | 880    | 1,471  | 1,290         | 1,350  | 1,443  | 1,423  |
| Civil Engineering Work  | 993    | 760    | 720    | 893           | 1,030  | 1,471  | 1,70   |
|                         |        |        | P      | ublic Sector  |        |        |        |
| Total                   | 10,143 | 10,976 | 11,653 | 12,316        | 12,555 | 14,732 | 15,615 |
|                         |        | 10,570 |        |               |        | 17,732 | 13,010 |
| Building Work           | 5,038  | 5,721  | 6,295  | 7,018         | 7,701  | 9,123  | 9,298  |
| Residential             | 2,729  | 3,254  | 3,161  | 3,765         | 4,482  | 5,140  | 5,323  |
| Commercial              | 133    | 73     | 130    | 82            | 76     | 84     | 119    |
| Industrial              | 120    | 474    | 740    | 664           | 513    | 449    | 56     |
| Instituitional & Others | 2,056  | 1,919  | 2,264  | 2,507         | 2,630  | 3,451  | 3,29   |
| Civil Engineering Work  | 5,104  | 5,255  | 5,358  | 5,298         | 4,854  | 5,609  | 6,310  |

Source : Building and Construction Authority

14.10 PROPERTIES UNDER THE MANAGEMENT OF HOUSING AND DEVELOPMENT BOARD

(End of Period)

|         |  |  |  |   |  | Number  |
|---------|--|--|--|---|--|---|
| 2009    | 2010   | 2011   | 2012   | 2013  | 2014   | 2015  |
| 888,143 | 898,532  | 914,102  | 922,493  | 933,278   | 959,960  | 984,908   |
| 20,041  | 21,973   | 24,207   | 25,186   | 25,384  | 25,450   | 26,247  |
| 29,680  | 30,739   | 32,319   | 33,744   | 35,562  | 37,105   | 38,882  |
| 220,696 | 222,191  | 222,024  | 222,257  | 223,461   | 227,527  | 231,212   |
| 339,782 | 344,596  | 353,690  | 357,566  | 363,043   | 375,533  | 387,642   |
| 209,764 | 210,289  | 213,096  | 214,710  | 216,209   | 222,345  | 227,774   |
| 65,076  | 65,079   | 65,076   | 65,077   | 65,074  | 65,079   | 65,082  |
| 1,239   | 1,865  | 2,155  | 2,418  | 3,368   | 6,921  | 8,069   |
| 1,865   | 1,800  | 1,535  | 1,535  | 1,177   | 0  | 0   |
| 30,093  | 28,459   | 28,469   | 28,372   | 28,413  | 28,477   | 28,630  |
|         | 888,143<br>20,041<br>29,680<br>220,696<br>339,782<br>209,764<br>65,076<br>1,239<br>1,865 | 888,143 898,532  20,041 21,973 29,680 30,739 220,696 222,191 339,782 344,596 209,764 210,289 65,076 65,079 1,239 1,865 1,865 1,800 | 888,143     898,532     914,102       20,041     21,973     24,207       29,680     30,739     32,319       220,696     222,191     222,024       339,782     344,596     353,690       209,764     210,289     213,096       65,076     65,079     65,076       1,239     1,865     2,155       1,865     1,800     1,535 | 888,143       898,532       914,102       922,493         20,041       21,973       24,207       25,186         29,680       30,739       32,319       33,744         220,696       222,191       222,024       222,257         339,782       344,596       353,690       357,566         209,764       210,289       213,096       214,710         65,076       65,079       65,076       65,077         1,239       1,865       2,155       2,418         1,865       1,800       1,535       1,535 | 888,143       898,532       914,102       922,493       933,278         20,041       21,973       24,207       25,186       25,384         29,680       30,739       32,319       33,744       35,562         220,696       222,191       222,024       222,257       223,461         339,782       344,596       353,690       357,566       363,043         209,764       210,289       213,096       214,710       216,209         65,076       65,079       65,076       65,077       65,074         1,239       1,865       2,155       2,418       3,368         1,865       1,800       1,535       1,535       1,177 | 888,143       898,532       914,102       922,493       933,278       959,960         20,041       21,973       24,207       25,186       25,384       25,450         29,680       30,739       32,319       33,744       35,562       37,105         220,696       222,191       222,024       222,257       223,461       227,527         339,782       344,596       353,690       357,566       363,043       375,533         209,764       210,289       213,096       214,710       216,209       222,345         65,076       65,079       65,076       65,077       65,074       65,079         1,239       1,865       2,155       2,418       3,368       6,921         1,865       1,800       1,535       1,535       1,177       0 |

Source : Housing & Development Board

14.11 RESIDENTIAL UNITS CONSTRUCTED AND SOLD BY HOUSING AND DEVELOPMENT BOARD

|  | 2009  | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|--|-------|--------|--------|--------|--------|--------|--------|
| Flats Constructed (No)   | 6,495 | 10,161 | 17,813 | 19,005 | 12,744 | 27,120 | 26,108 |
| Flats Sold Under ' Home Ownership<br>Scheme ' <sup>1</sup> (No)                                  | 4,419 | 6,697  | 15,008 | 13,098 | 12,594 | 25,183 | 23,445 |
| Percentage of Population <sup>2</sup> Living in<br>Public Flats<br>(End of Period <sup>3</sup> ) | 82    | 82     | 82     | 83     | 82     | 82     | 82     |

Source : Housing & Development Board

<sup>1</sup> Includes multi-generation flats.

<sup>2</sup> Excludes other residential properties. With effect from 2014, there are no HUDC flats under HDB's management.

<sup>1</sup> Flats are considered 'sold' only when keys are issued to the applicants.

From 2010, data include Studio Apartments and keys issued by private developers for Design, Build and Sell Scheme flats.

<sup>2</sup> Refers to resident population.

 $<sup>3\,</sup>$  As at 31 March of the calendar year.

14.12 RESIDENTIAL UNITS UNDER THE MANAGEMENT OF HOUSING AND DEVELOPMENT BOARD, 31 DECEMBER 2015

| Town <sup>1</sup> | Total   | 1-room | 2-room | 3-room  | 4-room  | 5-room  | Executive <sup>2</sup> | Stud<br>Apartm |
|-------------------|---------|--------|--------|---------|---------|---------|------------------------|----------------|
|                   |         |        |        |         |         |         | <u> </u>               | Apartii        |
| Total             | 984,908 | 26,247 | 38,882 | 231,212 | 387,642 | 227,774 | 65,082                 | 8.             |
| Total             | Ź       | Ź      | ,      | ,       | ,       | ŕ       | ,                      |                |
| Ang Mo Kio        | 49,168  | 1,318  | 3,500  | 24,237  | 13,682  | 5,654   | 490                    |                |
| Bedok             | 61,218  | 2,530  | 2,298  | 22,639  | 20,399  | 10,390  | 2,714                  |                |
| Bishan            | 19,664  | 396    | 2      | 2,357   | 9,359   | 5,716   | 1,660                  |                |
| Bukit Batok       | 32,274  | 305    | 96     | 10,278  | 13,851  | 4,833   | 2,732                  |                |
| Bukit Merah       | 51,554  | 4,731  | 5,763  | 15,929  | 15,125  | 9,479   | 44                     |                |
| Bukit Panjang     | 35,325  | 223    | 523    | 3,678   | 16,699  | 10,425  | 3,381                  |                |
| Bukit Timah       | 2,555   | 0      | 16     | 441     | 920     | 682     | 380                    |                |
| Central Area      | 12,571  | 2,075  | 1,316  | 4,739   | 3,529   | 903     | 9                      |                |
| Choa Chu Kang     | 44,374  | 355    | 861    | 2,069   | 21,494  | 14,301  | 4,762                  |                |
| Clementi          | 25,264  | 474    | 716    | 11,947  | 8,593   | 2,915   | 619                    |                |
| Geylang           | 30,230  | 1,044  | 3,203  | 11,705  | 9,607   | 3,591   | 830                    |                |
| Hougang           | 52,082  | 532    | 899    | 10,250  | 25,102  | 10,606  | 4,310                  |                |
| Jurong East       | 23,897  | 352    | 414    | 7,006   | 8,188   | 5,925   | 1,871                  |                |
| Jurong West       | 71,755  | 540    | 1,658  | 12,468  | 28,348  | 21,553  | 6,507                  |                |
| Kallang/Whampoa   | 35,740  | 4,401  | 2,469  | 13,151  | 9,849   | 5,366   | 504                    |                |
| Marine Parade     | 7,862   | 0      | 1,350  | 3,037   | 1,798   | 1,677   | 0                      |                |
| Pasir Ris         | 29,654  | 176    | 323    | 491     | 11,641  | 9,379   | 7,460                  |                |
| Punggol           | 39,981  | 871    | 1,396  | 3,261   | 18,654  | 14,201  | 1,126                  |                |
| Queenstown        | 31,504  | 575    | 3,237  | 14,210  | 8,794   | 3,972   | 354                    |                |
| Sembawang         | 20,311  | 321    | 768    | 349     | 8,447   | 7,556   | 2,870                  |                |
| Sengkang          | 62,643  | 685    | 1,465  | 3,312   | 29,180  | 22,984  | 4,462                  |                |
| Serangoon         | 21,293  | 182    | 219    | 4,543   | 10,231  | 3,753   | 2,365                  |                |
| Tampines          | 66,978  | 775    | 720    | 13,080  | 28,576  | 17,312  | 5,846                  |                |
| Toa Payoh         | 36,872  | 1,168  | 3,626  | 15,122  | 9,756   | 6,017   | 854                    |                |
| Woodlands         | 63,441  | 1,492  | 1,141  | 6,407   | 27,797  | 19,523  | 6,191                  |                |
| Yishun            | 56,698  | 726    | 903    | 14,506  | 28,023  | 9,061   | 2,741                  |                |

Source : Housing & Development Board

<sup>1</sup> Equivalent to Town Registration Boundary.

<sup>2</sup> Includes multi-generation flats.

14.13 TOTAL ALLOCATED, SUPPLY AND OCCUPANCY OF JTC CORPORATION FLATTED/STANDARD FACTORY SPACE AND PREPARED INDUSTRIAL LAND

| Factory Space/Industrial Land      | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Flatted Factory Space ('000 sq m)  |         |         |         |         |         |         |         |
| Gross Allocation                   | 49.1    | 70.4    | 26.3    | 15.7    | 14.1    | 17.9    | 37.2    |
| Returns                            | 58.8    | 57.8    | 41.4    | 19.1    | 14.6    | 19.2    | 28.8    |
| Total Allocated                    | 615.0   | 627.7   | 296.7   | 293.3   | 292.7   | 291.5   | 298.8   |
| Supply                             | 659.0   | 660.2   | 322.7   | 322.7   | 322.6   | 362.0   | 394.1   |
| Occupancy Rate (%)                 | 93.3    | 95.1    | 91.9    | 90.9    | 90.8    | 80.5    | 75.8    |
| Standard Factory Space ('000 sq m) |         |         |         |         |         |         |         |
| Gross Allocation                   | 8.9     | 17.3    | 23.9    | 38.0    | 34.4    | 13.6    | 22.5    |
| Returns                            | 25.2    | 22.1    | 33.9    | 40.1    | 47.4    | 29.7    | 42.3    |
| Total Allocated                    | 2,398.3 | 2,391.2 | 2,380.9 | 2,377.5 | 2,362.0 | 2,344.3 | 2,324.5 |
| Supply                             | 2,436.5 | 2,434.4 | 2,457.0 | 2,470.7 | 2,468.2 | 2,466.7 | 2,479.4 |
| Occupancy Rate (%)                 | 98.4    | 98.2    | 96.9    | 96.2    | 95.7    | 95.0    | 93.8    |
| Prepared Industrial Land(hectares) |         |         |         |         |         |         |         |
| Gross Allocation <sup>1</sup>      | 173.8   | 146.1   | 398.0   | 255.6   | 232.2   | 166.8   | 150.8   |
| Returns <sup>1</sup>               | 75.7    | 105.6   | 208.3   | 103.5   | 201.4   | 103.9   | 162.9   |
| Total Allocated <sup>2</sup>       | 5,853.7 | 5,883.7 | 6,218.0 | 6,374.7 | 6,433.8 | 6,510.9 | 6,505.0 |
| Supply <sup>2</sup>                | 6,584.7 | 6,709.5 | 6,952.5 | 7,070.6 | 7,246.2 | 7,337.9 | 7,361.3 |

Source : JTC Corporation

Note: Figures may not add up due to rounding.

The date of allocation is normally a few months after the date of tender award.

Data for "Total Allocated" and "Supply" are as at end of period.

<sup>1</sup> Excludes Prepared Industrial Land that is tendered out as part of the Industrial Government Land Sales (IGLS) programme.

<sup>2</sup> Includes Prepared Industrial Land that is tendered out as part of the IGLS programme and land occupied by JTC's Ready Built Facilities.

Data on Prepared Industrial Land from IGLS is based on date of allocation instead of date of tender award.

### 



The first statistical inquiry on the services industries was conducted by the Singapore Department of Statistics for reference year 1967. The next inquiry was for reference year 1972. Since then, the inquiry was conducted biennially until reference year 1984 and subsequently on an annual basis.

### **Scope and Coverage**

The Survey of Services covers all establishments, including statutory boards and non-profit organisations, engaged in wholesale & retail trade, transport & storage services, accommodation & food services, information & communications services, business services and recreation, community & personal services, as classified under Sections G, H, I, J, L, M, N, P, Q, R and S of the Singapore Standard Industrial Classification (SSIC) 2015. Establishments engaged in financial & insurance services and public administration activities are excluded. Taxi drivers, hawkers and stall-holders, independent artistes and other individual selfemployed persons not registered with the Corporate Accounting and Regulatory Authority (ACRA) are also excluded.

Censuses were conducted prior to 1976, and for reference years 1983, 1984, 1993 and 1994. Annual sample surveys were carried out between 1976 and 1982, and from reference year 1985 onwards.

Stratified random sampling by industry was adopted for sample surveys. Within each industry, establishments with large operating receipts were selected with certainty and the rest were selected using simple random sampling without replacement.

The statistical unit used in the survey is the establishment. A separate return is thus required from each unit of a multi-activity or multi-branch firm, organisation or enterprise.

### **Definitions**

*Establishment*: Refers to a business or organisation unit engaged in one activity and operating in a single location.

Operating Receipts: Refers to income earned from business operations, i.e. income from services rendered, sales of goods, commission fees, and rental of premises, machinery and equipment.

Operating Expenditure: Refers to all expenditure incurred by the establishment in its business operations with adjustment for changes in inventory. It includes remuneration, purchases, indirect taxes, work given out, rental and maintenance of machinery and equipment, legal, accounting and other professional services, rental and maintenance of premises, depreciation, transport and travelling, utilities, advertisement, entertainment, stationery and printing, postage and telecommunications, fuel and lubricants, cargo handling expenses, port charges, charter fees and other general expenses that are related to the establishment's operation.

Operating Surplus: Refers to the amount of operating receipts less operating expenditure plus depreciation of fixed assets. For non-profit organisations (i.e. entities which cannot distribute any surplus made to their shareholders) which mainly rely on funds (such as grants and donations) other than receipts from sales of goods and services rendered to cover their operating expenditure, operating surplus refers only to depreciation of fixed assets.

Value Added (at Basic Price): Comprises the value of operating surplus, remuneration and taxes (less subsidies) on production.

### Retail Sales and Food & Beverage Services Indices

The retail sales and food & beverage services indices measure the short-term performance of the retail and food & beverage services industries based on the sales records of retail and food & beverage establishments. Data for the compilation of the indices are primarily obtained from more than 650 enterprises covered in the monthly retail sales and food & beverage services surveys. The base year of the indices is 2014.

The indices are presented at both current prices and constant prices. Changes in the indices at current prices measure the changes in sales values resulting from changes in both price and quantity. By removing the price effect, the changes in indices at constant prices measure the changes in the volume of economic activity.

### Wholesale Trade Index

The Wholesale Trade Index (WTI) measures the short-term performance of wholesale trade activities. Data for the compilation of the WTI are sourced from over 700 wholesale establishments covered in the quarterly survey of wholesale trade as well as from administrative records. The base year for the WTI is 2012.

Two series of the WTI are compiled -Domestic WTI and Foreign WTI. The Domestic WTI records wholesale sales in Singapore. The Foreign WTI pertains to wholesale sales outside Singapore, which comprises domestic exports, re-exports, transhipment offshore cargo and merchandise.

The indices are presented at both current prices and constant prices. The indices at current prices measure the changes in sales values which can result from changes in both price and quantity. By removing the price effect, the indices at constant prices measure the changes in the volume of sales.

### **Business Receipts Index**

The Business Receipts Index (BRI) for services industries (excluding wholesale & retail trade and accommodation & food services) measures the changes in the amount of business or operating receipts on a quarterly basis.

The BRI is compiled based on survey data and administrative records of more than 11,000 enterprises in the transport & storage services, information & communications services, financial & insurance services, business services and recreation, community & personal services industries. The BRI is compiled at current prices, with 2014 as the base year.

### **Other References**

More information on the concepts and methodology as well as detailed statistics on the annual Survey of Services may be obtained from the 'Resources' pages of the Services Survey Series (SSS) available from the SingStat website, which focuses on several services industries of importance to the Singapore economy.

15.1 PRINCIPAL STATISTICS OF SERVICES

| Year | Establish-<br>ments | Operating Receipts | Operating<br>Expenditure | Operating Surplus | Value<br>Added |
|------|---------------------|--------------------|--------------------------|-------------------|----------------|
|      | Number              |                    | Million                  | Dollars           |                |
|      |                     | •                  | Total                    |                   |                |
| 2008 | 139,078             | 1,678,257          | 1,628,394                | 68,981            | 131,593        |
| 2009 | 132,983             | 1,459,609          | 1,409,910                | 70,412            | 134,083        |
| 2010 | 136,000             | 1,806,128          | 1,740,988                | 87,408            | 157,690        |
| 2011 | 143,677             | 2,286,896          | 2,215,761                | 94,336            | 170,740        |
| 2012 | 150,730             | 2,490,368          | 2,420,316                | 95,187            | 177,636        |
| 2013 | 153,567             | 2,768,919          | 2,698,890                | 96,730            | 184,770        |
| 2014 | 158,784             | 2,850,925          | 2,784,764                | 93,284            | 187,115        |
|      |                     |                    | Wholesale Trade          |                   |                |
| 2008 | 35,573              | 1,417,858          | 1,395,097                | 24,220            | 40,262         |
| 2009 | 33,463              | 1,202,407          | 1,174,625                | 29,298            | 45,017         |
| 2010 | 33,440              | 1,513,070          | 1,478,060                | 36,503            | 53,238         |
| 2011 | 34,058              | 1,970,138          | 1,929,760                | 41,938            | 59,992         |
| 2012 | 34,745              | 2,143,989          | 2,106,182                | 39,685            | 58,629         |
| 2013 | 34,016              | 2,400,484          | 2,363,526                | 38,816            | 58,419         |
| 2014 | 34,267              | 2,463,645          | 2,433,102                | 32,553            | 52,815         |
|      |                     |                    | Retail Trade             |                   |                |
| 2008 | 20,152              | 37,917             | 36,048                   | 2,197             | 5,036          |
| 2009 | 19,069              | 36,558             | 34,613                   | 2,280             | 5,084          |
| 2010 | 19,611              | 37,389             | 35,418                   | 2,318             | 5,296          |
| 2011 | 20,579              | 40,328             | 38,100                   | 2,608             | 5,935          |
| 2012 | 21,229              | 42,632             | 40,520                   | 2,551             | 6,104          |
| 2013 | 21,532              | 43,274             | 41,337                   | 2,431             | 6,223          |
| 2014 | 22,223              | 43,958             | 42,192                   | 2,302             | 6,417          |
|      |                     | Tra                | nsport & Storage Serv    | vices             |                |
| 2008 | 9,717               | 85,133             | 75,064                   | 15,629            | 24,210         |
| 2009 | 9,122               | 75,145             | 69,731                   | 11,665            | 20,237         |
| 2010 | 9,624               | 88,701             | 79,656                   | 14,771            | 23,920         |
| 2011 | 10,524              | 91,369             | 86,028                   | 10,946            | 20,693         |
| 2012 | 11,114              | 96,624             | 91,253                   | 11,353            | 21,870         |
| 2013 | 11,369              | 101,715            | 96,471                   | 11,686            | 22,815         |
| 2014 | 11,470              | 106,318            | 99,672                   | 12,907            | 24,949         |

(continued on the next page)

Notes: Data are classified according to the Singapore Standard Industrial Classification (SSIC) 2015.

Non-profit organisations are included in the respective services industries.

Data exclude mutual benefit organisations, citizens' consultative committees and residents' committees.

Data exclude financial & insurance services, public administration activities and own-account workers (e.g. freelancers, taxi-drivers, hawkers).

Additional Registration Fee (ARF), Certificates of Entitlement (COE) and betting, sweepstakes & private lottery duties are excluded from operating receipts and operating expenditure of industries engaged in wholesale & retail trade of motor vehicles and gaming activities.

<sup>1</sup> Value added is at basic prices.

15.1 PRINCIPAL STATISTICS OF SERVICES (continued)

| Year | Establish-<br>ments | Operating<br>Receipts | Operating<br>Expenditure | Operating<br>Surplus | Value<br>Added <sup>1</sup> |
|------|---------------------|-----------------------|--------------------------|----------------------|-----------------------------|
|      | Number              |                       | Million                  | Dollars              |                             |
|      |                     | Accommodat            | ion and Food & Beve      | erage Services       |                             |
| 2008 | 6,160               | 9,584                 | 8,213                    | 1,809                | 4,362                       |
| 2009 | 6,287               | 8,932                 | 7,910                    | 1,476                | 3,901                       |
| 2010 | 6,529               | 10,744                | 9,324                    | 1,934                | 4,855                       |
| 2011 | 6,853               | 12,694                | 10,754                   | 2,512                | 5,858                       |
| 2012 | 7,091               | 13,782                | 11,777                   | 2,614                | 6,305                       |
| 2013 | 7,123               | 14,392                | 12,581                   | 2,459                | 6,414                       |
| 2014 | 7,327               | 15,021                | 13,195                   | 2,538                | 6,659                       |
|      |                     | Information           | on & Communication       | s Services           |                             |
| 2008 | 6,783               | 32,125                | 28,819                   | 4,533                | 9,697                       |
| 2009 | 6,342               | 33,451                | 29,830                   | 4,955                | 10,576                      |
| 2010 | 6,628               | 36,419                | 32,870                   | 4,922                | 11,272                      |
| 2011 | 7,405               | 39,541                | 35,449                   | 5,551                | 12,524                      |
| 2012 | 8,166               | 44,121                | 39,834                   | 5,953                | 13,673                      |
| 2013 | 8,626               | 47,595                | 42,738                   | 6,666                | 14,811                      |
| 2014 | 9,259               | 53,121                | 48,196                   | 6,868                | 15,805                      |
|      |                     |                       | Business Services        |                      |                             |
| 2008 | 34,846              | 76,067                | 62,719                   | 17,310               | 34,578                      |
| 2009 | 33,633              | 82,083                | 69,390                   | 17,271               | 34,980                      |
| 2010 | 34,628              | 93,929                | 78,105                   | 21,212               | 40,504                      |
| 2010 | 37,220              | 103,575               | 85,319                   | 24,217               | 45,173                      |
| 2012 | 39,729              | 118,042               | 97,721                   | 26,500               | 48,990                      |
| 2012 | 41,231              | 128,265               | 106,626                  | 28,245               | 52,807                      |
| 2014 | 43,103              | 133,296               | 110,290                  | 29,471               | 55,517                      |
|      |                     | Recreation,           | Community & Person       | nal Services         |                             |
| 2008 | 25,846              | 19,572                | 22,433                   | 3,284                | 13,450                      |
| 2009 | 25,068              | 21,034                | 23,811                   | 3,467                | 14,288                      |
| 2010 | 25,539              | 25,876                | 27,556                   | 5,749                | 18,605                      |
| 2011 | 27,038              | 29,251                | 30,352                   | 6,564                | 20,565                      |
| 2012 | 28,655              | 31,179                | 33,030                   | 6,531                | 22,067                      |
| 2013 | 29,670              | 33,195                | 35,611                   | 6,428                | 23,281                      |
| 2014 | 31,135              | 35,567                | 38,117                   | 6,645                | 24,954                      |

 $Note:\ Data\ are\ classified\ according\ to\ the\ Singapore\ Standard\ Industrial\ Classification\ (SSIC)\ 2015.$ 

Non-profit organisations are included in the respective services industries.

Data exclude mutual benefit organisations, citizens' consultative committees and residents' committees.

Data exclude financial & insurance services, public administration activities and own-account workers (e.g. freelancers, taxi-drivers, hawkers).

Additional Registration Fee (ARF), Certificates of Entitlement (COE) and betting, sweepstakes & private lottery duties are excluded from operating receipts and operating expenditure of industries engaged in wholesale & retail trade of motor vehicles and gaming activities.

<sup>1</sup> Value added is at basic prices.

**15.2 RETAIL SALES INDEX** (2014 = 100)

|  | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012           | 2013  | 2014  | 2015  |
|--|----------------------|-------|-------|-------|----------------|-------|-------|-------|
|  | _                    |       |       | At    | Current Pric   | es    |       |       |
| Total  | 10,000               | 99.2  | 98.2  | 102.6 | 104.9          | 99.6  | 100.0 | 104.4 |
| Total (excl Motor Vehicles)                      | 8,923                | 84.3  | 90.1  | 97.1  | 99.6           | 100.5 | 100.0 | 98.8  |
| Department Stores                                | 1,738                | 80.7  | 86.6  | 92.7  | 94.1           | 97.6  | 100.0 | 103.0 |
| Supermarkets                                     | 511                  | 86.8  | 88.0  | 88.8  | 95.4           | 99.5  | 100.0 | 101.3 |
| Mini-marts and                                   |                      |       |       |       |                |       |       |       |
| Convenience Stores                               | 478                  | 89.9  | 89.3  | 95.0  | 98.2           | 100.2 | 100.0 | 97.5  |
| Food & Beverages                                 | 239                  | 81.8  | 82.2  | 88.2  | 92.2           | 96.9  | 100.0 | 93.7  |
| Motor Vehicles                                   | 1,077                | 181.1 | 135.7 | 128.0 | 129.5          | 95.5  | 100.0 | 150.8 |
| Petrol Service Stations                          | 621                  | 75.0  | 81.9  | 94.3  | 98.6           | 99.6  | 100.0 | 81.3  |
| Medical Goods & Toiletries                       | 566                  | 68.8  | 76.3  | 83.7  | 92.6           | 96.2  | 100.0 | 103.8 |
| Wearing Apparel & Footwear Furniture & Household | 1,016                | 87.1  | 95.6  | 101.4 | 103.4          | 103.9 | 100.0 | 97.3  |
| Equipment  | 894                  | 95.3  | 104.6 | 107.3 | 109.0          | 104.2 | 100.0 | 97.8  |
| Recreational Goods                               | 168                  | 98.4  | 100.8 | 104.3 | 105.5          | 106.1 | 100.0 | 93.8  |
| Watches & Jewellery                              | 995                  | 73.3  | 84.9  | 100.9 | 101.3          | 102.1 | 100.0 | 101.4 |
| Telecommunications Apparatus                     |                      | , 5.5 | 0,    | 100.9 | 10110          | 102.1 | 100.0 | 10111 |
| & Computers                                      | 614                  | 87.0  | 91.9  | 103.3 | 107.1          | 99.2  | 100.0 | 93.9  |
| Optical Goods & Books                            | 377                  | 97.0  | 101.1 | 99.0  | 96.6           | 100.5 | 100.0 | 94.1  |
| Others   | 706                  | 93.8  | 97.5  | 103.6 | 104.8          | 105.6 | 100.0 | 108.1 |
|  | _                    |       |       | At    | Constant Price | ces   |       |       |
| Total  | 10,000               | 103.5 | 100.9 | 102.9 | 104.2          | 99.7  | 100.0 | 104.6 |
| Total (excl Motor Vehicles)                      | 8,923                | 88.1  | 92.9  | 97.9  | 99.6           | 100.7 | 100.0 | 99.0  |
| Department Stores                                | 1,738                | 85.0  | 90.4  | 95.7  | 95.8           | 98.4  | 100.0 | 102.7 |
| Supermarkets                                     | 511                  | 97.2  | 96.8  | 94.8  | 99.9           | 102.2 | 100.0 | 100.4 |
| Mini-marts and                                   |                      |       |       |       |                |       |       |       |
| Convenience Stores                               | 478                  | 99.3  | 97.4  | 101.1 | 102.4          | 102.9 | 100.0 | 96.5  |
| Food & Beverages                                 | 239                  | 93.4  | 92.1  | 95.6  | 97.6           | 100.3 | 100.0 | 92.4  |
| Motor Vehicles                                   | 1,077                | 181.8 | 136.6 | 125.1 | 125.0          | 95.2  | 100.0 | 151.5 |
| Petrol Service Stations                          | 621                  | 96.5  | 97.3  | 100.3 | 101.6          | 100.3 | 100.0 | 85.5  |
| Medical Goods & Toiletries                       | 566                  | 72.4  | 79.5  | 85.6  | 93.7           | 96.4  | 100.0 | 104.2 |
| Wearing Apparel & Footwear                       | 1,016                | 87.6  | 96.0  | 101.8 | 102.4          | 102.6 | 100.0 | 97.6  |
| Furniture & Household                            |                      |       |       |       |                |       |       |       |
| Equipment  | 894                  | 91.8  | 101.4 | 105.0 | 108.9          | 104.4 | 100.0 | 97.6  |
| Recreational Goods                               | 168                  | 94.8  | 98.1  | 103.2 | 105.2          | 106.9 | 100.0 | 93.5  |
| Watches & Jewellery                              | 995                  | 79.5  | 84.1  | 90.8  | 88.5           | 98.1  | 100.0 | 101.3 |
| Telecommunications Apparatus                     |                      | . ,   | 0 111 | , 0.0 | 50.5           | 70.1  | 100.0 | 101.0 |
| & Computers                                      | 614                  | 76.7  | 85.2  | 100.2 | 107.4          | 99.5  | 100.0 | 94.0  |
| Optical Goods & Books                            | 377                  | 101.1 | 105.0 | 100.2 | 97.9           | 100.8 | 100.0 | 94.2  |
| Others   | 706                  | 98.3  | 100.7 | 101.5 | 104.3          | 100.8 | 100.0 | 108.5 |
| Outers   | , 00                 | 70.3  | 100.7 | 103.0 | 104.3          | 104.5 | 100.0 | 100.5 |

<sup>1</sup> The weights for the Retail Sales Index are computed based on the retail sales data from the Annual Survey of Retail Trade for reference year 2013.

15.3 FOOD & BEVERAGE SERVICES INDEX (2014 = 100)

|                     | Weights <sup>1</sup> | 2009               | 2010 | 2011  | 2012  | 2013  | 2014  | 2015  |  |  |
|---------------------|----------------------|--------------------|------|-------|-------|-------|-------|-------|--|--|
|                     | _                    | At Current Prices  |      |       |       |       |       |       |  |  |
| Total               | 1,000                | 82.1               | 87.1 | 92.9  | 97.1  | 99.1  | 100.0 | 97.2  |  |  |
| Restaurants         | 408                  | 83.3               | 89.2 | 93.3  | 96.9  | 100.2 | 100.0 | 95.1  |  |  |
| Fast Food Outlets   | 115                  | 79.2               | 85.2 | 93.6  | 96.2  | 98.4  | 100.0 | 101.0 |  |  |
| Food Caterers       | 115                  | 77.0               | 85.0 | 92.4  | 100.2 | 103.3 | 100.0 | 98.7  |  |  |
| Other Eating Places | 362                  | 83.8               | 86.4 | 92.4  | 96.6  | 96.8  | 100.0 | 97.8  |  |  |
|                     | -                    | At Constant Prices |      |       |       |       |       |       |  |  |
| Total               | 1,000                | 91.4               | 95.5 | 99.3  | 101.4 | 101.5 | 100.0 | 95.0  |  |  |
| Restaurants         | 408                  | 94.0               | 99.6 | 101.3 | 101.7 | 102.6 | 100.0 | 92.2  |  |  |
| Fast Food Outlets   | 115                  | 84.7               | 90.7 | 97.7  | 100.5 | 101.8 | 100.0 | 99.4  |  |  |
| Food Caterers       | 115                  | 80.4               | 88.7 | 95.2  | 102.4 | 104.6 | 100.0 | 98.5  |  |  |
| Other Eating Places | 362                  | 95.7               | 95.3 | 99.1  | 101.1 | 99.4  | 100.0 | 95.5  |  |  |

Note: Food & beverages sales refers to the sales of prepared food and drinks for in-premises consumption or on a take-away basis.

All eating places are included with the exception of hawker stalls.

<sup>1</sup> The weights for the Food & Beverage Services Index are computed based on the food & beverage sales data from the Annual Survey of Food & Beverage Services for reference year 2013.

15.4 domestic wholesale trade index (2012 = 100)

|                                     | Weights 1 | 2009  | 2010  | 2011   | 2012         | 2013  | 2014  | 2015  |
|-------------------------------------|-----------|-------|-------|--------|--------------|-------|-------|-------|
|                                     |           |       |       | At     | Current Pric | ces   |       |       |
| Total                               | 10,000    | 84.0  | 91.5  | 102.0  | 100.0        | 102.2 | 97.1  | 76.0  |
| Total (excl Petroleum)              | 4,864     | 86.4  | 97.5  | 101.2  | 100.0        | 102.2 | 99.4  | 88.3  |
| Food, Beverages & Tobacco           | 380       | 78.4  | 84.8  | 93.0   | 100.0        | 104.4 | 108.8 | 112.2 |
| Household Equipment & Furniture     | 218       | 88.9  | 96.0  | 90.9   | 100.0        | 88.9  | 88.6  | 89.6  |
| Petroleum & Petroleum Products      | 5,136     | 81.2  | 84.3  | 102.8  | 100.0        | 102.3 | 94.9  | 64.5  |
| Chemicals & Chemical Products       | 351       | 87.8  | 99.6  | 103.9  | 100.0        | 104.2 | 107.3 | 100.0 |
| Electronic Components               | 442       | 105.4 | 120.9 | 104.6  | 100.0        | 110.3 | 114.3 | 122.9 |
| Industrial & Construction Machinery | 345       | 87.4  | 94.2  | 103.0  | 100.0        | 102.9 | 107.2 | 104.3 |
| Telecommunications & Computers      | 549       | 84.9  | 95.1  | 97.7   | 100.0        | 107.7 | 109.0 | 116.4 |
| Metals, Timber & Construction       |           |       |       |        |              |       |       |       |
| Materials                           | 336       | 94.3  | 96.7  | 99.6   | 100.0        | 94.8  | 89.2  | 78.5  |
| General Wholesale Trade             | 396       | 61.7  | 91.6  | 102.9  | 100.0        | 107.0 | 102.8 | 63.8  |
| Ship Chandlers & Bunkering          | 1,039     | 80.6  | 85.4  | 99.8   | 100.0        | 91.3  | 79.4  | 42.1  |
| Transport Equipment                 | 170       | 92.4  | 94.9  | 99.1   | 100.0        | 96.7  | 99.5  | 102.8 |
| Other Wholesale Trade <sup>2</sup>  | 638       | 101.9 | 111.4 | 110.0  | 100.0        | 113.8 | 106.2 | 101.9 |
|                                     | -         |       |       | At Con | stant Prices |       |       |       |
| Total                               | 10,000    | 103.9 | 104.0 | 102.2  | 100.0        | 106.3 | 107.1 | 116.4 |
| Total (excl Petroleum)              | 4,864     | 90.5  | 100.0 | 100.3  | 100.0        | 105.9 | 106.5 | 105.5 |
| Food, Beverages & Tobacco           | 380       | 80.3  | 85.6  | 92.0   | 100.0        | 103.5 | 106.1 | 110.0 |
| Household Equipment & Furniture     | 218       | 78.2  | 87.8  | 88.5   | 100.0        | 93.1  | 99.7  | 101.5 |
| Petroleum & Petroleum Products      | 5,136     | 125.3 | 110.4 | 105.2  | 100.0        | 106.6 | 107.6 | 126.8 |
| Chemicals & Chemical Products       | 351       | 118.1 | 118.9 | 105.2  | 100.0        | 107.6 | 116.7 | 152.5 |
| Electronic Components               | 442       | 93.2  | 114.0 | 104.6  | 100.0        | 113.9 | 121.6 | 127.0 |
| Industrial & Construction Machinery | 345       | 76.8  | 87.2  | 101.1  | 100.0        | 104.1 | 108.5 | 105.7 |
| Telecommunications & Computers      | 549       | 67.8  | 81.9  | 94.0   | 100.0        | 116.5 | 129.0 | 141.2 |
| Metals, Timber & Construction       |           |       |       |        |              |       |       |       |
| Materials                           | 336       | 93.5  | 95.3  | 96.4   | 100.0        | 97.7  | 92.7  | 83.7  |
| General Wholesale Trade             | 396       | 70.0  | 99.7  | 103.3  | 100.0        | 109.9 | 108.7 | 79.9  |
| Ship Chandlers & Bunkering          | 1,039     | 126.6 | 111.7 | 102.0  | 100.0        | 96.2  | 89.8  | 78.9  |
| Transport Equipment                 | 170       | 87.2  | 94.2  | 99.8   | 100.0        | 96.3  | 92.9  | 92.0  |
| Other Wholesale Trade <sup>2</sup>  | 638       | 106.2 | 112.9 | 109.3  | 100.0        | 117.2 | 109.1 | 106.7 |

<sup>1</sup> The weights for the Domestic Wholesale Trade Index are compiled from the turnover data of the 2011 Annual Survey of Wholesale Trade.

<sup>2</sup> Data exclude Transport Equipment.

15.5 foreign wholesale trade index

(2012 = 100)

|  | Weights <sup>1</sup> | 2009               | 2010  | 2011  | 2012          | 2013  | 2014  | 2015  |  |
|--|----------------------|--------------------|-------|-------|---------------|-------|-------|-------|--|
|  | _                    |                    |       | At    | Current Price | ces   |       |       |  |
| Total  | 10,000               | 64.7               | 80.1  | 93.2  | 100.0         | 104.9 | 101.9 | 86.7  |  |
| Total (excl Petroleum)                                       | 5,524                | 72.9               | 87.0  | 97.5  | 100.0         | 108.0 | 107.3 | 102.2 |  |
| Food, Beverages & Tobacco                                    | 405                  | 89.7               | 93.5  | 101.4 | 100.0         | 99.0  | 97.2  | 96.5  |  |
| Household Equipment & Furniture                              | 110                  | 86.1               | 106.4 | 108.3 | 100.0         | 89.9  | 86.3  | 85.0  |  |
| Petroleum & Petroleum Products                               | 4,476                | 56.3               | 73.0  | 88.8  | 100.0         | 101.0 | 95.2  | 67.7  |  |
| Chemicals & Chemical Products                                | 492                  | 64.4               | 82.4  | 98.3  | 100.0         | 106.1 | 94.3  | 79.0  |  |
| Electronic Components  | 529                  | 86.8               | 94.4  | 94.8  | 100.0         | 112.0 | 109.4 | 112.1 |  |
| Industrial & Construction Machinery                          | 227                  | 67.2               | 86.8  | 97.4  | 100.0         | 76.5  | 70.6  | 63.7  |  |
| Telecommunications & Computers Metals, Timber & Construction | 790                  | 65.6               | 77.5  | 86.4  | 100.0         | 99.6  | 102.4 | 104.7 |  |
| Materials  | 711                  | 56.3               | 81.0  | 97.0  | 100.0         | 141.6 | 142.8 | 130.8 |  |
| General Wholesale Trade                                      | 708                  | 65.5               | 81.1  | 100.8 | 100.0         | 104.5 | 111.1 | 105.2 |  |
| Ship Chandlers & Bunkering                                   | 234                  | 66.4               | 82.3  | 97.7  | 100.0         | 101.4 | 101.0 | 63.   |  |
| Fransport Equipment  | 230                  | 70.1               | 85.6  | 79.8  | 100.0         | 96.9  | 95.1  | 96.   |  |
| Other Wholesale Trade <sup>2</sup>                           | 1,088                | 73.2               | 91.3  | 108.4 | 100.0         | 108.9 | 107.5 | 106.8 |  |
|  | _                    | At Constant Prices |       |       |               |       |       |       |  |
| Total  | 10,000               | 77.9               | 87.9  | 91.7  | 100.0         | 108.6 | 110.3 | 120.6 |  |
| Total (excl Petroleum)                                       | 5,524                | 70.9               | 82.7  | 92.4  | 100.0         | 111.7 | 113.1 | 112.8 |  |
| Food, Beverages & Tobacco                                    | 405                  | 95.9               | 98.1  | 101.4 | 100.0         | 102.7 | 100.5 | 96.3  |  |
| Household Equipment & Furniture                              | 110                  | 70.4               | 95.3  | 103.3 | 100.0         | 91.7  | 90.5  | 89.3  |  |
| Petroleum & Petroleum Products                               | 4,476                | 88.3               | 95.6  | 90.6  | 100.0         | 104.8 | 106.9 | 130.  |  |
| Chemicals & Chemical Products                                | 492                  | 85.0               | 97.3  | 99.2  | 100.0         | 110.0 | 101.5 | 109.9 |  |
| Electronic Components  | 529                  | 77.1               | 87.2  | 91.4  | 100.0         | 114.1 | 115.2 | 113.0 |  |
| Industrial & Construction Machinery                          | 227                  | 56.3               | 83.9  | 98.3  | 100.0         | 77.8  | 70.9  | 64.9  |  |
| Telecommunications & Computers                               | 790                  | 48.7               | 62.7  | 83.8  | 100.0         | 106.1 | 111.7 | 109.  |  |
| Metals, Timber & Construction                                |                      |                    |       |       |               |       |       |       |  |
| Materials  | 711                  | 57.9               | 78.2  | 89.6  | 100.0         | 143.1 | 142.8 | 143.  |  |
| General Wholesale Trade                                      | 708                  | 67.2               | 82.2  | 99.7  | 100.0         | 107.5 | 116.9 | 119.  |  |
| Ship Chandlers & Bunkering                                   | 234                  | 103.8              | 107.3 | 99.4  | 100.0         | 107.3 | 114.0 | 111.  |  |
| Transport Equipment  | 230                  | 64.8               | 82.1  | 80.1  | 100.0         | 95.6  | 89.0  | 88.   |  |
| Other Wholesale Trade <sup>2</sup>                           | 1.088                | 84.9               | 86.1  | 92.2  | 100.0         | 114.5 | 117.1 | 116.  |  |

<sup>1</sup> The weights for the Foreign Wholesale Trade Index are compiled from the turnover data of the 2011 Annual Survey of Wholesale Trade.

<sup>2</sup> Data exclude Transport Equipment.

15.6 BUSINESS RECEIPTS INDEX FOR SERVICES INDUSTRIES (2014 = 100)

|   | Weights <sup>1</sup> | 2009 | 2010 | 2011 | 2012  | 2013  | 2014  | 2015  |
|---|----------------------|------|------|------|-------|-------|-------|-------|
| Total Services <sup>2</sup>                 | 10,000               | 74.1 | 80.4 | 86.3 | 90.2  | 96.4  | 100.0 | 102.2 |
| Transport & Storage <sup>3</sup>            | 1,440                | 82.3 | 87.6 | 91.8 | 95.7  | 97.7  | 100.0 | 101.2 |
| Information & Communications                | 958                  | 80.7 | 87.9 | 91.4 | 93.6  | 95.9  | 100.0 | 103.1 |
| Financial & Insurance                       | 2,694                | 67.5 | 72.2 | 79.9 | 82.9  | 93.6  | 100.0 | 107.6 |
| Business Services <sup>4</sup>              | 3,422                | 72.5 | 80.3 | 86.3 | 90.3  | 97.8  | 100.0 | 99.0  |
| Education                                   | 473                  | 71.9 | 75.2 | 78.4 | 85.9  | 94.4  | 100.0 | 102.4 |
| Health & Social Services                    | 494                  | 69.9 | 72.0 | 79.7 | 87.5  | 91.8  | 100.0 | 106.9 |
| Recreation & Personal Services <sup>5</sup> | 519                  | 67.6 | 87.4 | 98.0 | 102.3 | 103.5 | 100.0 | 91.0  |
|   |                      |      |      |      |       |       |       |       |

<sup>1</sup> The weights for the 2014-based Business Receipts Index series are computed based on the value added contributions of the respective industries, using data obtained from the Annual Survey of Services for reference year 2013.

<sup>2</sup> Excludes wholesale and retail trade, accommodation & food services.

<sup>3</sup> Comprises land transport, water transport, air transport, warehousing & support activities for transportation and post & courier activities.

<sup>4</sup> Comprises real estate activities, professional, scientific & technical and office administrative & support service activities, e.g. legal & accounting activities, activities of head offices, management consultancy activities, architectural, engineering and technical activities, rental & leasing activities, employment activities, travel agencies and security activities.

<sup>5</sup> Comprises arts, entertainment & recreation, membership organisations' activities (e.g. business and professional membership organisations, religious organisations and interest groups), repair of computers, personal, household goods & vehicles and other personal services activities.

### 16



## Imade Trade International

#### Merchandise Trade

#### **Sources of Data**

Since April 1987, Singapore's merchandise trade statistics are compiled by the International Enterprise Singapore (IE Singapore) from the following information submitted to Singapore Customs:

- (i) Import and export permits by traders or declaring agents;
- (ii) Data on postal packages which are furnished by Singapore Post Pte Ltd; and
- (iii) Statement on bunkers and stores supplied to non-Singapore-registered ships and aircraft furnished by ships and aircraft agents.

Prior to April 1987, merchandise trade statistics were compiled by the Singapore Department of Statistics from the same sources.

#### Coverage

The "general" system for recording merchandise trade statistics is adopted in Singapore. Under this system, all goods imported into or exported from Singapore are included in the merchandise trade statistics with the following major exceptions:

- (i) Transhipment cargo on through bills of lading or through air waybills;
- (ii) Fish and other marine produce landed by Singapore and Peninsular Malaysia-registered vessels direct from sea;
- (iii) Goods imported and exported by, or on behalf of, diplomatic services and armed forces;
- (iv) Exposed cinematographic films imported or exported on a rental basis;

- (v) Television news films, news or press materials;
- (vi) Ships and aircraft arriving for or departing after repairs;
- (vii) Goods temporarily taken into or out of the country to be returned after a specific purpose, for example, for an exhibition;
- (viii) Personal and household effects accompanying passengers or crews;
- (ix) Samples and specimens for test or analysis; and unaccompanied personal effects and gifts not exceeding the value of \$400;
- (x) Gold bullion and gold coins; and
- (xi) Issued currency notes and coins.

Ships and aircraft are included if they are imported or exported as merchandise, whether or not they arrive or depart under their own power.

#### **Definitions**

Merchandise imports: Refers to all goods brought into Singapore, except those specified as excluded under the Coverage section, irrespective of whether they are for consumption, for processing, for use in manufacturing, or for subsequent re-shipment to other countries.

Merchandise exports: Refers to all goods taken out of Singapore, except those specified as excluded under the Coverage section. It comprises domestic exports and reexports.

Domestic Exports: Refers to exports of Singapore origin. It comprises (i) primary commodities grown or produced in Singapore and (ii) goods which have been transformed,

that is, manufactured, assembled or processed in Singapore including those with imported materials or parts.

Re-exports: Refers to all goods which are exported from Singapore in the same form as they have been imported (including goods that have undergone minor processing, such as re-packing, splitting into lots, sorting or grading, marking and the like).

Merchandise Trade at 2012 Prices: This is obtained by adjusting the recorded value of trade using import and export price indices with base year 2012. The series on trade at 2012 prices indicate the volume of trade after adjusting for the effect of price changes.

#### Valuation

Merchandise imports are valued at 'CIF', that is, the value of goods at the frontier of the exporting country plus the cost of insurance and freight and any other charges when sold for export to Singapore.

Merchandise exports are valued at 'FOB', that is, the value of goods when sold abroad up to the point where the goods are deposited on board the outgoing vessel, aircraft or vehicle.

#### Classification

With effect from 17 February 2012, the "Singapore Trade Classification, Customs and Excise Duties 2012" is adopted for the documentation of Singapore's merchandise trade. This classification adopts the ASEAN Harmonized Tariff Nomenclature 2012 (AHTN 2012) which is based on the 6-digit Harmonized Commodity Description and Coding System (HS), developed by the World Customs Organization (WCO). However, for publication of merchandise trade statistics, the Standard International Trade Classification (SITC), Revision 4.1 is used from 1999 onwards and SITC, Revision 3 for years prior to 1999. Merchandise imports are classified by country of origin and exports by country of destination.

#### Trade in Services

The main source for Singapore's trade in services statistics is the International Trade in Services Survey.

#### **Definitions**

*Exports of Services:* Refer to the value of cross-border services provided by residents to non-residents.

*Imports of Services:* Refer to the value of cross-border services provided by non-residents to residents.

#### **Other References**

Detailed monthly merchandise trade statistics are available in the "<u>Singapore's External Trade</u>" report published monthly by IE Singapore.

Detailed annual data on trade in services are available in the "<u>Singapore's International Trade in Services</u>" publication.

Aggregated services trade estimates are also released on a quarterly basis in the "Economic Survey of Singapore" published by the Ministry of Trade and Industry, as well as in IE Singapore's quarterly and annual reviews of trade performance.

16.1 MERCHANDISE TRADE BY TYPE

|                         |           |           |           |                |             |             | Million Dollar |
|-------------------------|-----------|-----------|-----------|----------------|-------------|-------------|----------------|
|                         | 2009      | 2010      | 2011      | 2012           | 2013        | 2014        | 2015           |
|                         |           |           |           | At Current Pri | ces         |             |                |
| Total Merchandise Trade | 747,417.4 | 902,062.6 | 972,593.5 | 983,404.3      | 975,945.6   | 977,026.4   | 884,053.3      |
| Merchandise Exports     | 391,118.2 | 478,840.7 | 514,137.4 | 508,942.2      | 509,191.1   | 513,247.7   | 476,285.4      |
| Oil                     | 78,398.0  | 103,511.0 | 136,773.5 | 130,900.0      | 124,960.9   | 122,862.5   | 81,828.7       |
| Non-oil                 | 312,720.2 | 375,329.8 | 377,363.9 | 378,042.2      | 384,230.2   | 390,385.2   | 394,456.6      |
| Domestic Exports        | 200,003.1 | 248,609.8 | 280,754.7 | 283,760.4      | 270,002.6   | 268,122.9   | 233,423.5      |
| Oil                     | 58,655.0  | 75,011.1  | 103,953.8 | 106,814.4      | 106,476.0   | 106,986.4   | 72,503.6       |
| Non-oil                 | 141,348.2 | 173,598.8 | 176,800.9 | 176,946.1      | 163,526.6   | 161,136.5   | 160,919.8      |
| Re-exports              | 191,115.0 | 230,230.9 | 233,382.7 | 225,181.8      | 239,188.5   | 245,124.8   | 242,861.9      |
| Merchandise Imports     | 356,299.2 | 423,221.8 | 458,456.1 | 474,462.1      | 466,754.5   | 463,778.7   | 407,767.9      |
| Oil                     | 89,000.6  | 115,591.6 | 149,945.6 | 154,803.0      | 146,278.6   | 143,740.2   | 88,772.5       |
| Non-oil                 | 267,298.6 | 307,630.2 | 308,510.5 | 319,659.2      | 320,475.9   | 320,038.5   | 318,995.4      |
|                         |           |           |           | At 2012 Price  | es          |             |                |
| Total Merchandise Trade | 811,502.4 | 950,187.4 | 970,799.2 | 983,404.3      | 1,004,238.7 | 1,030,998.3 | 1,048,093.9    |
| Merchandise Exports     | 416,827.6 | 497,232.4 | 512,066.9 | 508,942.2      | 523,958.9   | 539,850.2   | 548,495.3      |
| Oil                     | 123,470.9 | 135,889.0 | 140,180.6 | 130,900.0      | 131,938.4   | 138,523.4   | 147,063.9      |
| Non-oil                 | 293,356.7 | 361,343.4 | 371,886.3 | 378,042.2      | 392,020.5   | 401,326.8   | 401,431.4      |
| Domestic Exports        | 225,183.0 | 263,897.1 | 280,180.2 | 283,760.4      | 279,122.6   | 285,958.1   | 291,617.0      |
| Oil                     | 92,325.6  | 98,366.8  | 106,415.3 | 106,814.4      | 112,620.3   | 120,731.2   | 128,956.8      |
| Non-oil                 | 132,857.4 | 165,530.3 | 173,764.9 | 176,946.1      | 166,502.3   | 165,226.9   | 162,660.3      |
| Re-exports              | 191,644.6 | 233,335.3 | 231,886.7 | 225,181.8      | 244,836.3   | 253,892.1   | 256,878.3      |
| Merchandise Imports     | 394,674.8 | 452,955.0 | 458,732.3 | 474,462.1      | 480,279.8   | 491,148.1   | 499,598.6      |
| Oil                     | 140,091.4 | 152,074.7 | 153,988.0 | 154,803.0      | 152,752.4   | 161,982.0   | 171,405.4      |
| Non-oil                 | 254,583.4 | 300,880.3 | 304,744.2 | 319,659.2      | 327,527.4   | 329,166.1   | 328,193.1      |

16.2 TOTAL MERCHANDISE TRADE BY REGION/COUNTRY

|                             |           |           |           |           |           |           | Million Dollars |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Region / Country            | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total                       | 747,417.4 | 902,062.6 | 972,593.5 | 983,404.3 | 975,945.6 | 977,026.4 | 884,053.3       |
| A                           | 06 114 4  | 100 (72 2 | 117 177 0 | 115 246 7 | 110 241 0 | 112 202 2 | 102 210 7       |
| America                     | 96,114.4  | 109,672.3 | 117,177.9 | 115,346.7 | 119,241.9 | 113,282.3 | 102,219.7       |
| Brazil                      | 3,506.2   | 3,748.2   | 4,164.7   | 4,281.0   | 5,550.8   | 4,837.0   | 3,471.2         |
| Canada                      | 4,964.6   | 3,415.2   | 3,171.9   | 3,045.6   | 3,549.5   | 2,730.9   | 2,551.0         |
| United States               | 66,920.6  | 78,386.6  | 75,793.5  | 75,317.4  | 76,863.8  | 75,274.2  | 75,479.5        |
| Asia                        | 514,720.9 | 634,426.5 | 684,130.1 | 692,691.4 | 691,866.3 | 694,220.0 | 632,875.1       |
| Bahrain                     | 557.1     | 424.2     | 337.0     | 596.0     | 696.8     | 601.7     | 426.6           |
| Bangladesh                  | 2,147.3   | 2,396.0   | 2,989.0   | 2,742.8   | 3,331.8   | 4,313.1   | 3,345.5         |
| Brunei Darussalam           | 1,392.8   | 1,464.2   | 2,223.4   | 1,704.8   | 1,508.9   | 1,407.0   | 1,252.0         |
| Cambodia                    | 1,652.5   | 3,217.7   | 1,379.0   | 1,937.4   | 1,611.6   | 1,730.8   | 1,532.6         |
| China                       | 75,710.5  | 95,312.2  | 101,398.4 | 103,822.8 | 115,199.7 | 121,467.7 | 123,451.7       |
| Hong Kong                   | 49,168.2  | 60,084.7  | 60,181.9  | 59,240.9  | 60,468.8  | 60,579.5  | 58,152.4        |
| India                       | 21,585.7  | 30,667.5  | 35,424.1  | 29,805.2  | 25,452.1  | 24,566.4  | 22,509.2        |
| Indonesia                   | 58,517.0  | 67,920.9  | 78,015.6  | 79,359.4  | 74,578.9  | 71,700.6  | 58,695.6        |
| Japan                       | 44,951.8  | 55,593.6  | 56,058.7  | 52,134.4  | 47,505.7  | 46,660.6  | 46,480.2        |
| Korea, Republic of          | 38,558.1  | 44,062.1  | 46,776.6  | 52,738.7  | 50,866.4  | 48,491.3  | 44,922.7        |
| Kuwait                      | 4,260.9   | 3,852.3   | 4,700.6   | 6,214.3   | 4,724.0   | 4,575.7   | 3,909.3         |
| Laos                        | 53.2      | 35.1      | 44.2      | 44.3      | 40.2      | 62.5      | 100.4           |
| Malaysia                    | 86,144.8  | 106,603.8 | 112,001.5 | 113,370.6 | 113,492.7 | 111,354.2 | 97,312.8        |
| Myanmar                     | 1,462.4   | 1,690.7   | 1,632.6   | 1,772.4   | 3,034.2   | 3,233.8   | 3,543.1         |
| Pakistan                    | 1,237.4   | 1,715.5   | 2,460.4   | 1,200.1   | 1,424.5   | 1,725.4   | 1,804.1         |
| Philippines                 | 14,787.5  | 22,298.1  | 16,299.5  | 15,467.3  | 14,745.0  | 15,025.4  | 15,049.3        |
| Saudi Arabia                | 12,832.7  | 16,406.6  | 23,263.1  | 23,016.8  | 17,639.8  | 20,113.7  | 12,272.0        |
| Sri Lanka                   | 1,207.5   | 1,749.1   | 1,853.2   | 2,058.0   | 2,632.8   | 2,349.6   | 2,046.9         |
| Taiwan                      | 31,177.5  | 42,680.6  | 45,689.4  | 49,659.4  | 55,413.8  | 58,417.9  | 53,758.3        |
| Thailand                    | 26,519.9  | 31,284.2  | 31,877.7  | 32,169.3  | 30,592.2  | 30,161.9  | 29,592.8        |
| United Arab Emirates        | 11,594.8  | 13,875.3  | 20,374.7  | 25,492.7  | 27,699.3  | 27,115.6  | 18,290.4        |
| Vietnam                     | 13,413.0  | 12,254.1  | 14,832.8  | 15,407.2  | 16,742.9  | 19,532.0  | 21,599.5        |
| Europe                      | 99,836.4  | 116,169.8 | 122,015.6 | 122,817.2 | 115,794.7 | 117,657.2 | 108,903.0       |
| France                      | 17,340.2  | 17,649.5  | 18,352.5  | 19,158.3  | 15,414.0  | 14,494.4  | 14,187.9        |
| Germany                     | 17,436.7  | 20,494.2  | 21,486.0  | 20,645.3  | 20,914.2  | 20,306.6  | 19,928.4        |
| Italy                       | 4,597.5   | 4,762.3   | 5,699.4   | 5,478.5   | 5,830.4   | 6,147.3   | 5,654.5         |
| Netherlands                 | 11,811.5  | 15,667.6  | 18,249.1  | 18,677.9  | 15,188.1  | 15,191.2  | 14,150.3        |
| Sweden                      | 1,619.5   | 2,067.8   | 2,009.5   | 1,847.8   | 1,671.8   | 1,578.9   | 1,738.2         |
| United Kingdom              | 13,712.6  | 15,936.7  | 15,923.5  | 16,459.7  | 14,273.4  | 12,351.6  | 11,919.6        |
| Switzerland                 | 5,048.8   | 7,754.3   | 6,419.4   | 7,639.7   | 7,215.4   | 7,289.3   | 7,515.5         |
| Oceania                     | 27,688.9  | 29,780.5  | 35,442.7  | 38,465.5  | 34,938.8  | 36,432.2  | 28,576.0        |
| Australia                   | 21,120.4  | 21,821.3  | 24,782.1  | 27,387.8  | 24,614.2  | 25,336.6  | 20,207.9        |
| New Zealand                 | 2,808.0   | 3,106.3   | 3,926.2   | 3,480.6   | 3,407.9   | 3,949.7   | 3,363.4         |
| Africa                      | 9,056.7   | 12,013.4  | 13,827.4  | 14,083.5  | 14,103.9  | 15,434.8  | 11,479.4        |
| European Union <sup>1</sup> | 86,859.7  | 99,464.7  | 106,083.8 | 105,373.7 | 96,552.6  | 95,845.6  | 90,543.6        |

<sup>1</sup> The European Union (EU) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.3 MERCHANDISE IMPORTS BY REGION/COUNTRY

|                             |           |           |            |            |           |           | Million Dollars |
|-----------------------------|-----------|-----------|------------|------------|-----------|-----------|-----------------|
| Region / Country            | 2009      | 2010      | 2011       | 2012       | 2013      | 2014      | 2015            |
| Total                       | 356,299.2 | 423,221.8 | 458,456.1  | 474,462.1  | 466,754.5 | 463,778.7 | 407,767.9       |
| Total                       | 330,277.2 | 123,221.0 | 150, 150.1 | 17 1,102.1 | 100,751.5 | 105,770.7 | 101,101.5       |
| America                     | 52,204.0  | 59,728.4  | 63,727.6   | 63,733.7   | 66,015.2  | 64,084.4  | 55,639.5        |
| Brazil                      | 1,777.7   | 1,759.7   | 2,410.6    | 2,555.2    | 2,129.2   | 2,815.9   | 1,898.4         |
| Canada                      | 1,401.0   | 1,433.7   | 1,406.8    | 1,553.1    | 1,533.4   | 1,494.1   | 1,522.8         |
| United States               | 41,435.5  | 47,515.3  | 48,348.7   | 48,135.2   | 48,278.6  | 47,791.4  | 45,634.6        |
| Asia                        | 236,094.1 | 290,501.7 | 317,090.0  | 328,133.4  | 319,773.9 | 315,784.9 | 277,469.3       |
| Bahrain                     | 437.1     | 300.0     | 238.7      | 468.2      | 571.3     | 416.0     | 272.1           |
| Bangladesh                  | 101.2     | 78.1      | 134.7      | 131.6      | 154.6     | 167.7     | 209.3           |
| Brunei Darussalam           | 135.0     | 178.1     | 244.7      | 163.2      | 69.2      | 293.4     | 189.4           |
| Cambodia                    | 614.1     | 217.4     | 238.9      | 703.0      | 227.2     | 331.6     | 213.7           |
| China                       | 37,585.3  | 45,844.3  | 47,747.7   | 48,950.2   | 54,669.1  | 56,247.7  | 57,899.6        |
| Hong Kong                   | 3,894.4   | 4,003.7   | 3,610.3    | 3,616.9    | 3,687.4   | 4,180.1   | 3,651.1         |
| India                       | 8,156.5   | 12,566.1  | 17,770.9   | 16,212.7   | 11,415.8  | 10,480.0  | 7,921.8         |
| Indonesia                   | 20,659.2  | 22,937.1  | 24,245.6   | 25,228.2   | 24,049.3  | 23,784.0  | 19,749.3        |
| Japan                       | 27,147.6  | 33,261.5  | 32,963.6   | 29,538.6   | 25,510.6  | 25,477.1  | 25,553.0        |
| Korea, Republic of          | 20,338.7  | 24,514.5  | 27,317.9   | 32,025.5   | 30,069.1  | 27,353.3  | 25,021.4        |
| Kuwait                      | 4,006.0   | 3,607.0   | 4,515.2    | 5,991.3    | 4,325.1   | 4,326.4   | 3,667.5         |
| Laos                        | 0.4       | 3.8       | 0.6        | 6.8        | 7.2       | 19.6      | 18.3            |
| Malaysia                    | 41,336.3  | 49,489.6  | 49,166.9   | 50,501.4   | 51,090.7  | 49,431.9  | 45,424.7        |
| Myanmar                     | 171.5     | 112.9     | 108.0      | 98.8       | 224.3     | 201.1     | 169.4           |
| Pakistan                    | 77.7      | 123.6     | 95.4       | 81.0       | 150.2     | 245.1     | 319.5           |
| Philippines                 | 7,475.0   | 12,522.8  | 7,793.2    | 7,546.8    | 6,366.1   | 6,324.6   | 6,233.6         |
| Saudi Arabia                | 11,751.8  | 15,297.1  | 22,163.5   | 21,508.6   | 16,095.0  | 18,504.3  | 10,912.8        |
| Sri Lanka                   | 110.5     | 118.8     | 178.5      | 103.6      | 176.9     | 138.7     | 146.3           |
| Taiwan                      | 18,577.2  | 25,239.0  | 27,333.3   | 31,601.2   | 36,271.6  | 37,979.1  | 33,914.6        |
| Thailand                    | 11,906.9  | 14,000.5  | 14,232.6   | 12,669.5   | 11,605.3  | 11,106.4  | 10,683.2        |
| United Arab Emirates        | 6,206.1   | 8,692.8   | 14,544.9   | 19,603.7   | 20,685.7  | 19,458.3  | 11,214.5        |
| Vietnam                     | 3,299.3   | 2,193.0   | 2,084.6    | 2,806.7    | 3,825.8   | 4,052.2   | 4,943.1         |
| Europe                      | 59,740.0  | 65,907.0  | 70,036.2   | 73,148.7   | 72,084.7  | 72,860.2  | 66,367.3        |
| France                      | 12,184.8  | 10,118.8  | 10,662.5   | 11,343.5   | 10,115.9  | 10,254.8  | 10,035.6        |
| Germany                     | 11,424.2  | 12,124.5  | 13,078.0   | 13,203.6   | 13,604.7  | 13,482.4  | 12,304.1        |
| Italy                       | 3,967.4   | 3,830.1   | 4,475.7    | 4,473.8    | 4,900.9   | 5,242.2   | 4,863.3         |
| Netherlands                 | 4,607.9   | 7,279.8   | 8,761.7    | 9,799.8    | 7,156.2   | 5,958.8   | 5,635.7         |
| Sweden                      | 1,459.2   | 1,674.3   | 1,632.7    | 1,613.5    | 1,521.1   | 1,417.7   | 1,549.2         |
| United Kingdom              | 6,545.2   | 7,603.1   | 7,595.7    | 8,743.9    | 9,955.1   | 7,836.3   | 7,673.6         |
| Switzerland                 | 3,584.5   | 6,181.3   | 5,378.4    | 5,664.8    | 5,440.7   | 5,074.8   | 5,157.2         |
| Oceania                     | 6,858.7   | 5,597.4   | 6,086.1    | 7,160.3    | 6,340.0   | 7,131.5   | 5,718.5         |
| Australia                   | 5,803.7   | 4,710.6   | 4,705.3    | 6,129.0    | 5,195.3   | 5,928.9   | 4,414.7         |
| New Zealand                 | 833.4     | 783.9     | 1,253.2    | 872.4      | 1,062.5   | 1,125.2   | 989.9           |
| Africa                      | 1,402.5   | 1,487.4   | 1,516.2    | 2,286.0    | 2,540.6   | 3,917.7   | 2,573.3         |
| European Union <sup>1</sup> | 49,654.7  | 52,267.3  | 57,923.3   | 59,615.4   | 57,643.6  | 55,422.8  | 51,875.7        |

<sup>1</sup> The European Union (EU) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.4 MERCHANDISE EXPORTS BY REGION/COUNTRY

|                             |           |           |           |           |           |           | Million Dollars |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Region / Country            | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total                       | 391,118.2 | 478,840.7 | 514,137.4 | 508,942.2 | 509,191.1 | 513,247.7 | 476,285.4       |
| America                     | 43,910.5  | 49,943.9  | 53,450.3  | 51,613.0  | 53,226.7  | 49,197.9  | 46,580.2        |
| Brazil                      | 1,728.5   | 1,988.5   | 1,754.1   | 1,725.8   | 3,421.6   | 2,021.1   | 1,572.8         |
| Canada                      | 3,563.6   | 1,981.5   | 1,765.1   | 1,492.5   | 2,016.1   | 1,236.8   | 1,028.1         |
| United States               | 25,485.1  | 30,871.4  | 27,444.8  | 27,182.3  | 28,585.1  | 27,482.7  | 29,844.9        |
| Asia                        | 278,626.9 | 343,924.9 | 367,040.0 | 364,558.0 | 372,092.4 | 378,435.1 | 355,405.8       |
| Bahrain                     | 119.9     | 124.2     | 98.3      | 127.8     | 125.6     | 185.8     | 154.5           |
| Bangladesh                  | 2,046.1   | 2,317.9   | 2,854.3   | 2,611.3   | 3,177.2   | 4,145.4   | 3,136.2         |
| Brunei Darussalam           | 1,257.8   | 1,286.2   | 1,978.7   | 1,541.6   | 1,439.7   | 1,113.6   | 1,062.6         |
| Cambodia                    | 1,038.4   | 3,000.3   | 1,140.1   | 1,234.4   | 1,384.3   | 1,399.1   | 1,318.9         |
| China                       | 38,125.1  | 49,467.9  | 53,650.7  | 54,872.7  | 60,530.6  | 65,220.0  | 65,552.1        |
| Hong Kong                   | 45,273.8  | 56,081.0  | 56,571.7  | 55,624.0  | 56,781.4  | 56,399.4  | 54,501.2        |
| India                       | 13,429.3  | 18,101.4  | 17,653.2  | 13,592.4  | 14,036.4  | 14,086.4  | 14,587.4        |
| Indonesia                   | 37,857.8  | 44,983.8  | 53,770.0  | 54,131.2  | 50,529.6  | 47,916.6  | 38,946.2        |
| Japan                       | 17,804.2  | 22,332.1  | 23,095.2  | 22,595.8  | 21,995.1  | 21,183.4  | 20,927.2        |
| Korea, Republic of          | 18,219.4  | 19,547.7  | 19,458.7  | 20,713.2  | 20,797.3  | 21,137.9  | 19,901.3        |
| Kuwait                      | 254.8     | 245.3     | 185.3     | 223.0     | 399.0     | 249.3     | 241.7           |
| Laos                        | 52.9      | 31.3      | 43.6      | 37.6      | 33.0      | 42.9      | 82.1            |
| Malaysia                    | 44,808.5  | 57,114.2  | 62,834.6  | 62,869.2  | 62,402.0  | 61,922.2  | 51,888.1        |
| Myanmar                     | 1,290.9   | 1,577.7   | 1,524.7   | 1,673.6   | 2,809.9   | 3,032.7   | 3,373.7         |
| Pakistan                    | 1,159.7   | 1,591.9   | 2,365.0   | 1,119.0   | 1,274.3   | 1,480.2   | 1,484.6         |
| Philippines                 | 7,312.5   | 9,775.3   | 8,506.2   | 7,920.4   | 8,378.9   | 8,700.9   | 8,815.7         |
| Saudi Arabia                | 1,080.9   | 1,109.6   | 1,099.6   | 1,508.2   | 1,544.8   | 1,609.4   | 1,359.2         |
| Sri Lanka                   | 1,097.0   | 1,630.3   | 1,674.7   | 1,954.5   | 2,455.9   | 2,211.0   | 1,900.6         |
| Taiwan                      | 12,600.3  | 17,441.5  | 18,356.0  | 18,058.2  | 19,142.1  | 20,438.7  | 19,843.7        |
| Thailand                    | 14,613.0  | 17,283.8  | 17,645.1  | 19,499.8  | 18,986.9  | 19,055.5  | 18,909.6        |
| United Arab Emirates        | 5,388.7   | 5,182.5   | 5,829.9   | 5,889.0   | 7,013.6   | 7,657.3   | 7,075.9         |
| Vietnam                     | 10,113.7  | 10,061.1  | 12,748.2  | 12,600.5  | 12,917.1  | 15,479.7  | 16,656.4        |
| Europe                      | 40,096.4  | 50,262.8  | 51,979.4  | 49,668.6  | 43,710.0  | 44,797.0  | 42,535.7        |
| France                      | 5,155.4   | 7,530.6   | 7,690.0   | 7,814.8   | 5,298.1   | 4,239.6   | 4,152.3         |
| Germany                     | 6,012.5   | 8,369.7   | 8,408.0   | 7,441.8   | 7,309.5   | 6,824.2   | 7,624.3         |
| Italy                       | 630.0     | 932.1     | 1,223.7   | 1,004.7   | 929.6     | 905.1     | 791.2           |
| Netherlands                 | 7,203.6   | 8,387.8   | 9,487.4   | 8,878.1   | 8,031.9   | 9,232.3   | 8,514.6         |
| Sweden                      | 160.3     | 393.5     | 376.8     | 234.2     | 150.8     | 161.2     | 189.0           |
| United Kingdom              | 7,167.5   | 8,333.6   | 8,327.8   | 7,715.8   | 4,318.3   | 4,515.4   | 4,246.1         |
| Switzerland                 | 1,464.3   | 1,573.0   | 1,041.0   | 1,974.9   | 1,774.7   | 2,214.5   | 2,358.3         |
| Oceania                     | 20,830.2  | 24,183.1  | 29,356.6  | 31,305.2  | 28,598.8  | 29,300.7  | 22,857.5        |
| Australia                   | 15,316.7  | 17,110.7  | 20,076.8  | 21,258.8  | 19,419.0  | 19,407.7  | 15,793.1        |
| New Zealand                 | 1,974.6   | 2,322.4   | 2,672.9   | 2,608.2   | 2,345.4   | 2,824.5   | 2,373.5         |
| Africa                      | 7,654.2   | 10,526.0  | 12,311.1  | 11,797.5  | 11,563.3  | 11,517.0  | 8,906.1         |
| European Union <sup>1</sup> | 37,205.0  | 47,197.4  | 48,160.5  | 45,758.3  | 38,909.0  | 40,422.8  | 38,667.9        |

<sup>1</sup> The European Union (EU) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.5 DOMESTIC EXPORTS BY REGION/COUNTRY

|                             |           |           |           |           |           |           | Million Dollars |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Region / Country            | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total                       | 200,003.1 | 248,609.8 | 280,754.7 | 283,760.4 | 270,002.6 | 268,122.9 | 233,423.5       |
| America                     | 32,154.4  | 36,358.2  | 40,392.0  | 38,748.9  | 36,257.7  | 33,989.0  | 30,308.8        |
| Brazil                      | 1,044.9   | 1,243.2   | 851.8     | 904.4     | 885.4     | 838.2     | 563.6           |
| Canada                      | 3,218.6   | 1,430.6   | 1,056.5   | 942.1     | 921.6     | 767.4     | 574.7           |
| United States               | 15,754.9  | 19,697.5  | 17,339.5  | 17,156.3  | 16,471.1  | 15,375.3  | 16,572.9        |
| Asia                        | 122,946.2 | 154,912.5 | 174,388.6 | 178,786.6 | 176,242.0 | 177,747.5 | 157,127.1       |
| Bahrain                     | 61.4      | 53.1      | 36.1      | 41.3      | 59.2      | 73.2      | 82.9            |
| Bangladesh                  | 986.8     | 920.9     | 1,113.1   | 1,093.9   | 1,558.6   | 2,031.4   | 1,435.4         |
| Brunei Darussalam           | 418.6     | 480.0     | 1,190.3   | 707.8     | 545.7     | 386.2     | 477.3           |
| Cambodia                    | 459.5     | 539.3     | 559.5     | 604.5     | 690.5     | 715.6     | 494.8           |
| China                       | 18,026.4  | 24,019.0  | 28,447.9  | 29,247.1  | 30,568.3  | 32,434.8  | 29,112.6        |
| Hong Kong                   | 20,781.4  | 25,701.9  | 26,164.0  | 26,500.9  | 25,293.7  | 19,373.3  | 17,317.7        |
| India                       | 5,677.7   | 7,693.9   | 8,444.9   | 6,248.6   | 6,347.2   | 6,663.0   | 6,890.9         |
| Indonesia                   | 13,462.3  | 16,315.6  | 20,143.8  | 22,235.1  | 22,752.6  | 23,752.9  | 18,068.6        |
| Japan                       | 9,676.9   | 11,806.4  | 12,279.9  | 12,047.3  | 10,554.8  | 10,021.0  | 10,032.8        |
| Korea, Republic of          | 6,882.2   | 8,644.3   | 8,971.4   | 10,776.5  | 8,783.7   | 9,036.4   | 7,846.9         |
| Kuwait                      | 145.2     | 105.9     | 73.3      | 123.7     | 112.8     | 119.9     | 132.7           |
| Laos                        | 4.0       | 4.7       | 7.7       | 2.7       | 5.7       | 8.4       | 14.7            |
| Malaysia                    | 18,922.5  | 25,073.9  | 31,700.4  | 32,034.0  | 31,415.1  | 33,072.1  | 26,046.0        |
| Myanmar                     | 624.0     | 806.6     | 674.7     | 758.7     | 1,549.1   | 1,555.8   | 1,813.0         |
| Pakistan                    | 496.7     | 709.4     | 1,152.1   | 455.0     | 534.5     | 786.5     | 734.7           |
| Philippines                 | 3,670.6   | 5,488.8   | 4,283.4   | 3,919.7   | 3,880.0   | 4,094.7   | 4,103.0         |
| Saudi Arabia                | 494.2     | 650.8     | 593.3     | 1,034.6   | 697.1     | 1,040.9   | 918.9           |
| Sri Lanka                   | 514.3     | 576.6     | 826.6     | 974.4     | 963.6     | 1,282.4   | 1,049.2         |
| Taiwan                      | 6,997.1   | 10,061.3  | 10,263.4  | 10,993.6  | 11,222.1  | 11,879.1  | 10,257.3        |
| Thailand                    | 6,480.9   | 7,753.4   | 8,051.1   | 8,717.7   | 8,192.5   | 8,578.8   | 8,237.0         |
| United Arab Emirates        | 2,102.6   | 1,887.2   | 2,274.1   | 2,510.2   | 3,091.3   | 2,699.9   | 2,999.4         |
| Vietnam                     | 4,190.0   | 3,889.4   | 5,360.1   | 5,558.9   | 5,460.1   | 6,437.6   | 7,327.7         |
| Europe                      | 26,648.6  | 34,325.9  | 36,911.7  | 35,780.4  | 28,833.8  | 28,224.6  | 25,583.2        |
| France                      | 3,653.6   | 4,998.0   | 5,384.3   | 5,786.1   | 2,938.4   | 2,442.1   | 2,191.5         |
| Germany                     | 3,003.4   | 4,867.7   | 4,955.6   | 4,302.8   | 3,864.5   | 2,847.7   | 2,639.0         |
| Italy                       | 412.1     | 625.2     | 713.1     | 720.5     | 623.5     | 555.6     | 493.5           |
| Netherlands                 | 4,130.4   | 4,988.7   | 5,882.9   | 5,912.9   | 4,776.8   | 5,058.5   | 5,033.0         |
| Sweden                      | 96.0      | 285.1     | 230.3     | 123.2     | 106.3     | 115.4     | 123.5           |
| United Kingdom              | 5,438.3   | 6,358.2   | 6,616.4   | 5,758.6   | 2,361.9   | 2,525.0   | 2,188.0         |
| Switzerland                 | 693.9     | 858.5     | 591.8     | 1,086.4   | 970.4     | 1,248.4   | 1,176.8         |
| Oceania                     | 13,468.0  | 16,048.5  | 20,213.0  | 21,585.6  | 20,277.4  | 19,586.3  | 13,872.2        |
| Australia                   | 9,259.9   | 10,412.0  | 12,860.7  | 13,982.6  | 12,974.9  | 11,977.8  | 8,457.7         |
| New Zealand                 | 1,273.6   | 1,721.9   | 1,934.0   | 1,750.8   | 1,554.9   | 1,990.0   | 1,478.6         |
| Africa                      | 4,786.0   | 6,964.8   | 8,849.5   | 8,858.9   | 8,391.7   | 8,575.6   | 6,532.1         |
| European Union <sup>1</sup> | 24,840.8  | 32,512.2  | 34,038.1  | 33,275.9  | 25,397.0  | 25,457.0  | 23,354.0        |

<sup>1</sup> The European Union (EU) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.6 NON-OIL DOMESTIC EXPORTS BY REGION/COUNTRY

|                             |           |           |           |           |           |           | Million Dollars |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Region / Country            | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total                       | 141,348.2 | 173,598.8 | 176,800.9 | 176,946.1 | 163,526.6 | 161,136.5 | 160,919.8       |
| America                     | 24,199.2  | 25,616.3  | 26,677.0  | 24,369.8  | 21,496.4  | 21,301.6  | 22,210.0        |
| Brazil                      | 1,041.2   | 1,190.1   | 813.4     | 866.9     | 810.6     | 836.0     | 562.3           |
| Canada                      | 3,218.3   | 1,290.6   | 951.8     | 664.4     | 712.0     | 564.0     | 449.1           |
| United States               | 15,261.0  | 19,037.2  | 16,635.0  | 16,377.7  | 14,685.2  | 14,374.8  | 15,312.5        |
| Asia                        | 89,693.4  | 113,277.1 | 113,883.8 | 117,574.4 | 113,903.1 | 112,934.0 | 111,315.4       |
| Bahrain                     | 40.3      | 45.3      | 32.6      | 35.0      | 40.7      | 57.2      | 76.7            |
| Bangladesh                  | 345.2     | 473.5     | 465.1     | 378.6     | 466.7     | 633.9     | 623.8           |
| Brunei Darussalam           | 386.7     | 397.6     | 972.5     | 467.5     | 494.1     | 361.3     | 351.6           |
| Cambodia                    | 72.0      | 81.6      | 104.7     | 124.5     | 141.2     | 139.5     | 201.8           |
| China                       | 14,644.7  | 19,240.1  | 20,612.9  | 21,056.1  | 23,548.3  | 25,498.2  | 23,864.3        |
| Hong Kong                   | 12,146.0  | 16,565.7  | 14,448.0  | 16,069.3  | 14,906.5  | 11,510.7  | 11,773.6        |
| India                       | 4,237.7   | 5,339.1   | 5,724.6   | 5,192.2   | 5,537.7   | 5,703.1   | 5,753.9         |
| Indonesia                   | 9,116.4   | 11,162.7  | 11,017.5  | 11,718.7  | 10,612.3  | 10,150.5  | 9,126.8         |
| Japan                       | 8,460.4   | 10,586.2  | 10,767.2  | 11,012.9  | 9,900.6   | 9,203.9   | 9,151.0         |
| Korea, Republic of          | 5,859.5   | 7,964.4   | 7,746.1   | 8,672.7   | 6,477.5   | 6,189.9   | 6,402.4         |
| Kuwait                      | 116.2     | 86.3      | 67.1      | 113.3     | 86.8      | 86.6      | 128.5           |
| Laos                        | 4.0       | 4.7       | 7.7       | 2.7       | 5.7       | 8.4       | 14.1            |
| Malaysia                    | 12,221.3  | 14,560.1  | 14,576.6  | 13,703.5  | 12,305.3  | 13,156.9  | 12,817.1        |
| Myanmar                     | 288.1     | 293.8     | 367.7     | 380.8     | 853.0     | 571.7     | 584.9           |
| Pakistan                    | 406.7     | 423.7     | 388.1     | 349.3     | 366.3     | 353.7     | 374.1           |
| Philippines                 | 2,526.4   | 3,382.4   | 3,082.6   | 2,794.6   | 2,747.7   | 3,098.7   | 3,056.1         |
| Saudi Arabia                | 464.0     | 448.4     | 564.2     | 894.5     | 599.7     | 865.2     | 840.7           |
| Sri Lanka                   | 238.3     | 301.4     | 315.2     | 283.1     | 272.9     | 266.6     | 324.7           |
| Taiwan                      | 6,547.3   | 9,626.3   | 9,564.0   | 10,394.0  | 10,495.0  | 10,990.6  | 9,901.3         |
| Thailand                    | 5,832.2   | 7,057.3   | 7,107.2   | 7,640.8   | 7,127.7   | 6,986.6   | 7,317.2         |
| United Arab Emirates        | 1,905.4   | 1,727.6   | 1,824.2   | 2,139.5   | 2,510.4   | 2,298.0   | 2,664.2         |
| Vietnam                     | 2,372.6   | 2,177.7   | 2,677.9   | 2,748.8   | 3,034.8   | 3,382.7   | 4,436.7         |
| Europe                      | 21,874.6  | 28,013.0  | 28,800.7  | 27,284.7  | 21,580.3  | 20,117.5  | 20,820.5        |
| France                      | 3,511.7   | 4,782.4   | 5,186.9   | 5,598.8   | 2,775.2   | 2,322.8   | 2,118.0         |
| Germany                     | 2,395.9   | 3,972.4   | 4,004.7   | 3,623.1   | 3,199.7   | 2,236.1   | 2,356.5         |
| Italy                       | 272.1     | 302.6     | 332.9     | 288.8     | 322.1     | 298.5     | 366.8           |
| Netherlands                 | 3,615.2   | 4,679.6   | 5,035.8   | 4,283.2   | 4,304.5   | 4,704.9   | 4,472.0         |
| Sweden                      | 88.4      | 264.3     | 199.6     | 98.2      | 70.9      | 91.0      | 112.6           |
| United Kingdom              | 4,490.9   | 5,085.1   | 5,070.2   | 4,881.4   | 1,496.4   | 1,733.9   | 1,857.1         |
| Switzerland                 | 681.0     | 834.1     | 562.1     | 1,054.7   | 945.5     | 1,215.7   | 1,157.3         |
| Oceania                     | 4,324.3   | 5,272.5   | 5,700.1   | 5,650.0   | 5,112.5   | 5,402.7   | 5,407.8         |
| Australia                   | 3,707.7   | 4,461.6   | 4,828.6   | 4,727.2   | 4,155.2   | 4,224.1   | 4,412.5         |
| New Zealand                 | 494.2     | 655.6     | 652.3     | 620.0     | 654.7     | 909.8     | 741.4           |
| Africa                      | 1,256.7   | 1,419.8   | 1,739.3   | 2,067.1   | 1,434.2   | 1,380.7   | 1,166.1         |
| European Union <sup>1</sup> | 20,553.0  | 26,870.6  | 26,917.9  | 25,890.5  | 19,300.1  | 18,518.7  | 19,299.2        |

<sup>1</sup> The European Union (EU) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.7 MERCHANDISE IMPORTS BY COMMODITY SECTION

|   |           |           |           |           |           | ]         | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total   | 356,299.2 | 423,221.8 | 458,456.1 | 474,462.1 | 466,754.5 | 463,778.7 | 407,767.9       |
| Food  | 8,083.5   | 9,290.3   | 10,295.7  | 10,035.6  | 10,590.7  | 11,353.5  | 11,254.1        |
| Coffee, tea, cocoa, spices &  |           |           |           |           |           |           |                 |
| manufactures  | 1,035.3   | 1,173.3   | 1,410.3   | 1,282.5   | 1,248.2   | 1,525.2   | 1,568.5         |
| Fish, seafood (excl marine mammals) &                                   |           |           |           |           |           |           |                 |
| preparations  | 1,170.0   | 1,295.7   | 1,435.8   | 1,316.8   | 1,318.5   | 1,387.0   | 1,482.4         |
| Vegetables & fruits   | 1,369.4   | 1,523.1   | 1,665.6   | 1,723.5   | 1,874.4   | 2,012.9   | 2,148.5         |
| Beverages & Tobacco   | 2,714.1   | 3,067.8   | 3,678.7   | 4,015.4   | 4,490.4   | 4,399.2   | 4,368.1         |
| Beverages   | 2,029.2   | 2,333.4   | 2,849.0   | 3,070.6   | 3,475.8   | 3,361.0   | 3,233.9         |
| Tobacco & manufactures  | 684.9     | 734.5     | 829.7     | 944.9     | 1,014.6   | 1,038.3   | 1,134.3         |
| Crude Materials Metalliferous ores &                                    | 3,593.1   | 3,003.9   | 3,726.0   | 3,881.3   | 4,203.9   | 3,615.3   | 3,369.0         |
| metal scrap   | 347.1     | 439.9     | 804.8     | 906.1     | 758.9     | 635.9     | 472.8           |
| Crude rubber  | 367.9     | 688.1     | 902.4     | 716.8     | 517.8     | 377.7     | 653.0           |
| Crude fertilizers & minerals  | 307.5     | 000.1     | 702.1     | 710.0     | 317.0     | 377.7     | 033.0           |
| (excl coal petroleum &  |           |           |           |           |           |           |                 |
| precious stones)  | 2,082.9   | 1,031.0   | 1,070.2   | 1,113.9   | 1,625.3   | 1,295.3   | 970.8           |
| Crude animal & vegetable materials nes                                  | 315.6     | 327.1     | 394.6     | 398.0     | 474.3     | 457.0     | 444.7           |
| Mineral Fuels & Lubricants  | 89,000.6  | 115,591.6 | 149,945.6 | 154,803.0 | 146,278.6 | 143,740.2 | 88,772.5        |
| Petroleum & products <sup>1</sup> &                                     |           |           |           |           |           |           |                 |
| related materials   | 85,462.7  | 110,815.7 | 143,796.5 | 147,140.8 | 138,063.8 | 135,273.8 | 83,754.9        |
| Animal & Vegetable Oils   | 705.4     | 842.8     | 1,481.2   | 1,742.7   | 1,425.3   | 1,346.1   | 1,080.4         |
| Fixed vegetable fats & oils, crude,                                     | 703.4     | 042.0     | 1,401.2   | 1,742.7   | 1,423.3   | 1,540.1   | 1,000.4         |
| refined or fractionated   | 591.1     | 759.8     | 1,242.9   | 1,416.8   | 877.4     | 823.9     | 625.5           |
| Animal or vegetable fats & oils <sup>2</sup> nes                        | 103.2     | 68.8      | 41.3      | 47.9      | 43.4      | 67.0      | 78.9            |
| Allilliai of vegetable rats & ons lies                                  | 103.2     | 00.0      | 71.5      | 77.5      | 73.7      | 07.0      | 76.7            |
| Chemicals & Chemical Products   | 21,443.1  | 28,629.7  | 31,882.1  | 32,402.5  | 31,887.6  | 32,812.2  | 31,463.9        |
| Organic chemicals   | 5,660.6   | 7,603.8   | 8,523.5   | 8,791.9   | 9,361.5   | 9,593.1   | 8,331.9         |
| Plastics in primary forms   | 2,993.7   | 5,275.8   | 6,459.6   | 6,865.7   | 5,709.0   | 6,134.5   | 5,556.0         |
| Medicinal & pharmaceutical products Essential oils & resinoids &        | 2,989.9   | 3,253.8   | 3,525.6   | 3,263.4   | 3,263.7   | 3,352.7   | 3,669.2         |
| perfume materials; toilet polishing & cleansing preparations            | 2,667.7   | 3,155.1   | 3,478.8   | 3,502.7   | 3,858.2   | 4,016.3   | 4,258.0         |
|   |           |           |           |           |           |           |                 |
| Manufactured Goods  | 26,036.9  | 26,457.6  | 30,995.6  | 29,642.1  | 29,251.1  | 31,795.0  | 28,211.5        |
| Non-ferrous metals  | 5,882.6   | 4,990.5   | 6,535.4   | 5,307.9   | 4,822.9   | 6,357.7   | 5,394.5         |
| Iron & steel  | 6,624.0   | 6,786.8   | 8,639.9   | 8,163.0   | 7,943.6   | 7,399.7   | 5,966.7         |
| Manufactures of metals nes  | 5,851.7   | 6,338.7   | 6,320.8   | 6,553.9   | 6,725.5   | 6,874.9   | 6,334.0         |
| Non-metallic mineral manufactures nes<br>Textile yarn, fabrics, made-up | 3,243.9   | 3,223.5   | 3,604.9   | 3,799.8   | 4,226.4   | 5,656.0   | 5,118.6         |
| articles nes & related products Paper, paperboard & articles of         | 1,316.7   | 1,423.7   | 1,446.5   | 1,390.6   | 1,386.2   | 1,373.8   | 1,339.6         |
| paper pulp or paperboard pulp   | 1,574.3   | 1,773.8   | 2,303.7   | 2,278.9   | 2,169.4   | 2,131.1   | 2,067.1         |
| Rubber manufactures nes   | 1,045.9   | 1,297.4   | 1,487.1   | 1,474.5   | 1,261.5   | 1,226.4   | 1,120.7         |
|   |           |           |           |           |           |           |                 |

(continued on the next page)

Source : International Enterprise Singapore

<sup>1</sup> Includes oil bunkers.

<sup>2</sup> Includes processed waxes of animal or vegetable origin, inedible mixtures or preparations of animal or vegetable fats or oil nes.

16.7 MERCHANDISE IMPORTS BY COMMODITY SECTION (continued)

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Machinery & Equipment  | 169,832.5 | 196,105.6 | 188,268.1 | 196,288.1 | 195,446.1 | 191,976.9 | 194,597.3       |
| Electronics  | 100,092.7 | 123,201.8 | 113,381.7 | 115,648.1 | 119,543.3 | 117,484.2 | 118,366.9       |
| Integrated circuits  | 51,543.4  | 67,380.0  | 59,403.3  | 63,207.6  | 69,934.5  | 69,081.2  | 68,144.8        |
| Parts of personal computers  | 12,674.0  | 13,678.0  | 11,794.7  | 10,862.1  | 9,790.7   | 9,644.8   | 9,838.6         |
| Disk drives  | 2,300.5   | 2,604.8   | 2,324.8   | 2,545.0   | 2,401.8   | 2,474.2   | 2,719.6         |
| Telecommunications equipment <sup>3</sup>                                  | 10,013.3  | 11,443.0  | 12,711.3  | 12,722.0  | 11,886.4  | 10,874.0  | 11,432.8        |
| Consumer electronics <sup>4</sup>  | 5,469.7   | 5,798.0   | 5,213.9   | 4,618.7   | 4,220.1   | 4,093.2   | 3,502.6         |
| Personal computers   | 3,357.8   | 4,408.9   | 4,834.4   | 5,123.7   | 4,761.7   | 4,302.7   | 4,782.3         |
| Parts of integrated circuits   | 3,563.6   | 4,199.3   | 4,331.2   | 4,364.5   | 4,369.0   | 4,797.8   | 4,759.4         |
| Diodes and transistors   | 5,511.0   | 6,787.6   | 6,311.9   | 5,504.3   | 5,857.5   | 6,251.2   | 7,003.3         |
| Non-electronics  | 69,739.8  | 72,903.7  | 74,886.4  | 80,640.0  | 75,902.8  | 74,492.6  | 76,230.4        |
| Electrical circuit apparatus   | 4,150.4   | 5,193.8   | 5,093.0   | 5,187.2   | 5,438.3   | 5,485.5   | 5,422.8         |
| Electrical machinery nes   | 3,833.9   | 4,878.1   | 4,899.3   | 4,738.8   | 4,429.8   | 4,582.7   | 4,980.5         |
| Miscellaneous Manufactures Professional scientific & controlling           | 24,869.5  | 29,683.6  | 30,861.2  | 33,934.6  | 35,966.4  | 35,237.3  | 35,686.0        |
| instruments & apparatus nes Photographic apparatus equipment &             | 7,011.9   | 8,609.6   | 8,565.2   | 9,647.7   | 10,536.4  | 10,538.6  | 10,918.6        |
| supplies & optical goods nes;<br>watches & clocks<br>Articles of apparel & | 3,906.3   | 4,450.9   | 4,956.6   | 4,615.3   | 4,572.4   | 4,765.4   | 4,898.1         |
| clothing accessories   | 2,461.6   | 2,669.8   | 2,934.8   | 2,985.7   | 3,649.1   | 3,272.1   | 3,350.0         |
| Miscellaneous manufactured articles nes                                    | 8,734.4   | 10,727.7  | 10,847.8  | 12,833.1  | 13,169.2  | 12,488.6  | 12,174.4        |
| Miscellaneous  | 10,020.5  | 10,548.9  | 7,322.0   | 7,716.8   | 7,214.3   | 7,503.1   | 8,965.3         |

<sup>3</sup> Includes pagers, cellular/hand phones, TV cameras, video cameras and recorders, radar and navigational equipment, radio remote controls, satellite discs and parts for these products.

<sup>4</sup> Includes television receivers, radio broadcast receivers, video and sound recorders, microphones, loudspeakers, headphones, earphones, television cameras, still image video cameras and other video camera recorders, and parts for these products.

16.8 MERCHANDISE EXPORTS BY COMMODITY SECTION

|   |           |           |           |           |           |           | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total   | 391,118.2 | 478,840.7 | 514,137.4 | 508,942.2 | 509,191.1 | 513,247.7 | 476,285.4       |
| Food  | 4,718.2   | 5,455.3   | 6,663.2   | 6,230.0   | 7,063.7   | 8,231.7   | 8,219.7         |
| Coffee, tea, cocoa, spices &  |           |           |           |           |           |           |                 |
| manufactures  | 1,183.6   | 1,322.5   | 1,905.4   | 1,445.3   | 1,394.7   | 1,718.4   | 1,589.0         |
| Fish, seafood (excl marine mammals) &                                   |           |           |           |           |           |           |                 |
| preparations  | 446.3     | 502.7     | 505.1     | 445.0     | 409.6     | 406.8     | 512.0           |
| Vegetables & fruits   | 270.6     | 307.8     | 396.5     | 388.8     | 411.6     | 459.6     | 484.1           |
| Beverages & Tobacco   | 2,824.6   | 3,256.5   | 3,789.6   | 4,354.7   | 4,619.0   | 4,774.3   | 5,427.2         |
| Beverages   | 2,095.0   | 2,466.2   | 2,913.7   | 3,311.6   | 3,501.4   | 3,506.7   | 3,749.7         |
| Tobacco & manufactures  | 729.6     | 790.3     | 875.9     | 1,043.1   | 1,117.6   | 1,267.6   | 1,677.5         |
| Crude Materials   | 2,262.1   | 2,819.9   | 3,315.2   | 3,030.6   | 3,643.2   | 3,472.5   | 3,572.3         |
| Metalliferous ores &  |           |           |           |           |           |           |                 |
| metal scrap   | 842.8     | 1,119.6   | 1,294.5   | 1,303.9   | 1,340.8   | 1,356.5   | 1,172.7         |
| Crude rubber  | 293.5     | 658.7     | 872.5     | 647.4     | 581.0     | 691.8     | 1,156.2         |
| Crude fertilizers & minerals (excl coal petroleum &                     |           |           |           |           |           |           |                 |
| precious stones)  | 474.0     | 303.5     | 372.6     | 341.1     | 701.7     | 395.8     | 281.9           |
| Crude animal & vegetable materials nes                                  | 212.6     | 210.5     | 230.4     | 229.9     | 281.1     | 247.6     | 208.6           |
| Mineral Fuels & Lubricants  | 78,398.0  | 103,511.0 | 136,773.5 | 130,900.0 | 124,960.9 | 122,862.5 | 81,828.7        |
| Petroleum & products 1 &  |           |           |           |           |           |           |                 |
| related materials   | 78,004.1  | 103,220.1 | 136,470.0 | 130,406.1 | 124,640.1 | 122,495.7 | 81,465.8        |
| Animal & Vegetable Oils   | 593.0     | 610.6     | 546.1     | 403.2     | 367.7     | 351.5     | 274.8           |
| Fixed vegetable fats & oils, crude,                                     |           |           |           |           |           |           |                 |
| refined or fractionated   | 410.2     | 394.7     | 433.5     | 279.5     | 243.5     | 227.3     | 168.5           |
| Animal or vegetable fats & oils <sup>2</sup> nes                        | 167.1     | 197.4     | 100.3     | 107.6     | 102.3     | 103.0     | 89.7            |
| Chemicals & Chemical Products   | 46,597.8  | 56,644.3  | 64,777.1  | 67,518.6  | 63,522.0  | 67,252.0  | 65,614.1        |
| Organic chemicals   | 18,413.2  | 21,889.9  | 26,091.7  | 24,959.8  | 22,109.1  | 22,257.5  | 21,398.0        |
| Plastics in primary forms   | 8,612.1   | 12,911.7  | 14,135.3  | 14,539.9  | 15,206.1  | 17,805.6  | 15,824.6        |
| Medicinal & pharmaceutical products Essential oils & resinoids &        | 8,377.3   | 8,332.1   | 8,847.5   | 11,431.5  | 9,998.0   | 10,411.7  | 10,477.7        |
| perfume materials; toilet polishing                                     |           |           |           |           |           |           |                 |
| & cleansing preparations  | 3,618.1   | 4,884.1   | 6,087.6   | 6,400.5   | 6,172.8   | 6,383.2   | 6,842.1         |
| Manufactured Goods  | 16,798.4  | 18,860.7  | 20,123.8  | 19,144.6  | 20,157.8  | 21,563.7  | 19,585.6        |
| Non-ferrous metals  | 3,409.1   | 4,249.2   | 4,546.8   | 3,779.7   | 4,215.2   | 4,354.2   | 4,645.7         |
| Iron & steel  | 4,197.9   | 4,200.2   | 4,694.1   | 4,770.8   | 4,476.7   | 4,310.3   | 3,209.8         |
| Manufactures of metals nes  | 4,148.9   | 4,978.7   | 4,433.0   | 4,449.3   | 4,870.7   | 4,953.9   | 4,395.7         |
| Non-metallic mineral manufactures nes<br>Textile yarn, fabrics, made-up | 1,398.1   | 1,421.7   | 1,977.4   | 1,545.4   | 2,093.6   | 3,452.7   | 2,785.6         |
| articles nes & related products   | 1,022.2   | 1,101.9   | 1,069.5   | 1,015.5   | 1,129.3   | 1,121.2   | 1,064.7         |
| Paper, paperboard & articles of paper pulp or paperboard pulp           | 1,341.2   | 1,480.5   | 1,792.0   | 1,975.3   | 1,983.7   | 2,011.7   | 2,031.7         |
| Rubber manufactures nes   | 1,060.0   | 1,480.3   | 1,792.0   | 1,299.8   | 1,983.7   | 1,046.2   | 1,026.2         |

(continued on the next page)

Source: International Enterprise Singapore

Includes oil bunkers.

<sup>2</sup> Includes processed waxes of animal or vegetable origin, inedible mixtures or preparations of animal or vegetable fats or oil nes.

16.8 MERCHANDISE EXPORTS BY COMMODITY SECTION (continued)

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Machinery & Equipment  | 202,512.0 | 244,128.0 | 235,345.6 | 230,884.9 | 237,685.1 | 237,385.1 | 243,737.6       |
| Electronics  | 142,381.1 | 175,660.2 | 157,916.7 | 153,270.4 | 161,591.7 | 161,803.4 | 165,382.1       |
| Integrated circuits  | 73,146.8  | 93,928.6  | 88,291.0  | 87,398.3  | 96,293.3  | 98,778.7  | 100,725.4       |
| Parts of personal computers  | 21,898.2  | 24,983.9  | 21,484.3  | 18,442.0  | 15,876.0  | 13,768.4  | 12,851.1        |
| Disk drives  | 7,071.3   | 7,613.4   | 4,524.1   | 5,116.9   | 4,550.8   | 4,190.4   | 4,334.8         |
| Telecommunications equipment <sup>3</sup>                                  | 7,524.8   | 8,085.2   | 9,623.2   | 10,047.4  | 10,038.0  | 10,093.5  | 13,423.3        |
| Consumer electronics <sup>4</sup>  | 6,180.9   | 6,255.8   | 5,170.3   | 4,531.8   | 4,318.7   | 3,819.3   | 3,381.2         |
| Personal computers   | 2,797.0   | 3,651.7   | 5,051.3   | 5,593.6   | 6,583.5   | 6,658.0   | 8,318.2         |
| Parts of integrated circuits   | 6,439.0   | 10,894.5  | 6,779.1   | 6,124.9   | 7,639.3   | 7,223.3   | 3,357.3         |
| Diodes and transistors   | 9,591.4   | 12,298.2  | 9,390.9   | 8,280.9   | 8,548.3   | 10,083.6  | 11,650.0        |
| Non-electronics  | 60,130.9  | 68,467.8  | 77,428.9  | 77,614.5  | 76,093.4  | 75,581.7  | 78,355.5        |
| Electrical circuit apparatus   | 5,141.8   | 6,245.5   | 7,264.5   | 7,325.8   | 6,557.7   | 6,134.5   | 5,884.0         |
| Electrical machinery nes   | 4,752.7   | 6,717.0   | 6,908.2   | 6,739.5   | 6,240.9   | 7,060.5   | 8,067.4         |
| Miscellaneous Manufactures Professional scientific & controlling           | 27,875.5  | 33,775.1  | 35,582.9  | 38,615.1  | 40,525.6  | 41,002.7  | 41,897.3        |
| instruments & apparatus nes Photographic apparatus equipment &             | 8,175.9   | 10,204.1  | 11,411.6  | 13,233.3  | 14,278.8  | 14,813.7  | 15,365.8        |
| supplies & optical goods nes;<br>watches & clocks<br>Articles of apparel & | 3,511.2   | 4,063.7   | 4,123.1   | 4,343.7   | 4,738.9   | 4,941.3   | 5,137.2         |
| clothing accessories   | 1,515.1   | 1,454.9   | 1,495.6   | 1,667.9   | 1,591.2   | 1,704.7   | 1,854.6         |
| Miscellaneous manufactured articles nes                                    | 13,427.2  | 16,691.9  | 17,043.6  | 17,845.0  | 17,058.0  | 16,719.5  | 17,369.7        |
| Miscellaneous  | 8,538.6   | 9,779.5   | 7,220.4   | 7,860.4   | 6,646.1   | 6,351.6   | 6,128.1         |

<sup>3</sup> Includes pagers, cellular/hand phones, TV cameras, video cameras and recorders, radar and navigational equipment, radio remote controls, satellite discs and parts for these products.

<sup>4</sup> Includes television receivers, radio broadcast receivers, video and sound recorders, microphones, loudspeakers, headphones, earphones, television cameras, still image video cameras and other video camera recorders, and parts for these products.

16.9 DOMESTIC EXPORTS BY COMMODITY SECTION

|   |           |           |           |           |           |           | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total   | 200,003.1 | 248,609.8 | 280,754.7 | 283,760.4 | 270,002.6 | 268,122.9 | 233,423.5       |
| Food  | 3,138.3   | 3,639.7   | 4,108.5   | 4,202.6   | 4,948.3   | 5,867.1   | 5,746.3         |
| Coffee, tea, cocoa, spices &  |           |           |           |           |           |           |                 |
| manufactures  | 781.5     | 904.4     | 959.4     | 852.0     | 853.2     | 999.2     | 874.0           |
| Fish, seafood (excl marine mammals) &                                   |           |           |           |           |           |           |                 |
| preparations  | 200.3     | 194.7     | 194.6     | 183.6     | 153.2     | 144.0     | 159.9           |
| Vegetables & fruits   | 26.1      | 27.8      | 31.7      | 37.4      | 43.4      | 48.7      | 52.1            |
| Beverages & Tobacco   | 403.2     | 426.1     | 457.6     | 554.7     | 579.1     | 655.0     | 1,026.3         |
| Beverages   | 171.7     | 183.6     | 195.5     | 239.3     | 241.5     | 240.1     | 254.3           |
| Tobacco & manufactures  | 231.6     | 242.6     | 262.1     | 315.5     | 337.6     | 414.9     | 771.9           |
| Crude Materials   | 1,115.0   | 1,523.5   | 1,705.6   | 1,654.3   | 1,798.3   | 2,073.9   | 2,044.9         |
| Metalliferous ores &  | 7.7.7     | 1.0261    | 1.200.0   | 1 22 1 0  | 1.267.0   | 1 262 0   | 1 1110          |
| metal scrap   | 767.7     | 1,026.1   | 1,208.9   | 1,224.9   | 1,267.9   | 1,262.0   | 1,114.0         |
| Crude rubber  | 4.2       | 21.4      | 5.9       | 7.1       | 92.3      | 409.5     | 594.7           |
| Crude fertilizers & minerals  |           |           |           |           |           |           |                 |
| (excl coal petroleum &  | 97.8      | 151.4     | 140.1     | 126.9     | 167.6     | 128.6     | 85.5            |
| precious stones)  |           |           |           |           |           |           |                 |
| Crude animal & vegetable materials nes                                  | 70.4      | 61.6      | 56.2      | 54.5      | 47.7      | 51.9      | 51.6            |
| Mineral Fuels & Lubricants  | 58,655.0  | 75,011.1  | 103,953.8 | 106,814.4 | 106,476.0 | 106,986.4 | 72,503.6        |
| Petroleum & products <sup>1</sup> &                                     |           |           |           |           |           |           |                 |
| related materials   | 58,262.5  | 74,722.3  | 103,651.7 | 106,322.6 | 106,157.1 | 106,621.9 | 72,240.6        |
| Animal & Vegetable Oils   | 246.4     | 267.2     | 236.8     | 226.8     | 227.6     | 217.4     | 163.0           |
| Fixed vegetable fats & oils, crude,                                     |           |           |           |           |           |           |                 |
| refined or fractionated   | 92.7      | 104.8     | 130.7     | 108.1     | 109.9     | 98.2      | 65.3            |
| Animal or vegetable fats & oils <sup>2</sup> nes                        | 138.8     | 146.0     | 97.3      | 105.1     | 98.5      | 98.9      | 81.9            |
| Chemicals & Chemical Products   | 36,821.2  | 43,528.3  | 48,450.9  | 50,685.9  | 46,397.1  | 49,382.6  | 47,629.2        |
| Organic chemicals   | 16,666.6  | 19,497.8  | 23,006.0  | 22,082.1  | 19,064.3  | 19,058.6  | 18,840.5        |
| Plastics in primary forms   | 6,934.7   | 9,627.2   | 9,383.3   | 9,050.4   | 10,346.6  | 13,033.0  | 11,668.8        |
| Medicinal & pharmaceutical products Essential oils & resinoids &        | 7,307.6   | 7,133.7   | 7,632.3   | 10,169.1  | 8,501.1   | 8,971.4   | 8,157.8         |
| perfume materials; toilet polishing                                     |           |           |           |           |           |           |                 |
| & cleansing preparations  | 1,444.1   | 2,107.8   | 2,557.7   | 2,976.5   | 2,358.0   | 2,017.3   | 2,091.9         |
| Manufactured Goods  | 5,427.2   | 7,027.7   | 6,932.1   | 5,980.0   | 6,243.2   | 6,507.4   | 6,094.5         |
| Non-ferrous metals  | 655.2     | 1,097.7   | 1,059.9   | 785.7     | 744.8     | 878.9     | 730.7           |
| Iron & steel  | 748.3     | 824.2     | 870.1     | 799.1     | 735.1     | 845.7     | 689.7           |
| Manufactures of metals nes  | 1,888.5   | 2,557.2   | 2,005.5   | 1,937.8   | 2,340.5   | 2,389.2   | 2,056.0         |
| Non-metallic mineral manufactures nes<br>Textile yarn, fabrics, made-up | 451.9     | 646.8     | 1,121.9   | 665.3     | 541.1     | 437.7     | 590.3           |
| articles nes & related products Paper, paperboard & articles of         | 302.6     | 362.7     | 331.4     | 324.4     | 367.2     | 420.2     | 424.9           |
| paper pulp or paperboard pulp   | 983.3     | 1,092.3   | 1,070.8   | 1,065.9   | 1,046.7   | 1,064.6   | 1,133.9         |
| Rubber manufactures nes   | 316.5     | 341.2     | 332.1     | 275.1     | 309.2     | 324.4     | 325.3           |
|   | 210.5     | J.1.2     | JJ1       | 2,0.1     | 207.2     | 22        | 520.5           |

(continued on the next page)

Source : International Enterprise Singapore

<sup>1</sup> Includes oil bunkers.

<sup>2</sup> Includes processed waxes of animal or vegetable origin, inedible mixtures or preparations of animal or vegetable fats or oil nes.

16.9 DOMESTIC EXPORTS BY COMMODITY SECTION (continued)

|  |          |          |          |          |          |          | Million Dollars |
|--|----------|----------|----------|----------|----------|----------|-----------------|
| Commodity Section  | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015            |
| Machinery & Equipment  | 75,465.5 | 94,412.0 | 91,057.6 | 87,557.9 | 78,863.5 | 73,567.0 | 75,867.4        |
| Electronics  | 51,403.8 | 64,685.5 | 56,135.0 | 53,590.9 | 48,871.9 | 44,058.7 | 44,045.1        |
| Integrated circuits  | 18,753.5 | 26,872.2 | 25,434.9 | 25,002.7 | 22,522.4 | 20,849.9 | 21,904.6        |
| Parts of personal computers  | 11,880.9 | 12,884.6 | 11,051.3 | 9,643.4  | 7,084.1  | 5,528.9  | 4,420.4         |
| Disk drives  | 5,432.6  | 5,472.6  | 2,801.5  | 3,103.8  | 2,440.4  | 1,910.0  | 1,670.3         |
| Telecommunications equipment <sup>3</sup>  | 1,295.4  | 1,665.3  | 1,932.1  | 2,644.0  | 1,528.9  | 1,453.9  | 2,220.8         |
| Consumer electronics <sup>4</sup>  | 2,233.7  | 1,786.1  | 1,258.7  | 1,221.7  | 1,239.1  | 861.1    | 650.4           |
| Personal computers   | 1,219.7  | 1,657.7  | 2,338.0  | 2,461.3  | 3,698.4  | 3,784.1  | 5,187.9         |
| Parts of integrated circuits   | 4,873.2  | 7,811.8  | 4,730.3  | 3,804.1  | 4,259.9  | 3,933.8  | 1,465.9         |
| Diodes and transistors   | 2,686.0  | 3,558.4  | 3,777.6  | 2,991.6  | 3,278.5  | 3,412.2  | 3,940.6         |
| Non-electronics  | 24,061.7 | 29,726.4 | 34,922.6 | 33,967.1 | 29,991.6 | 29,508.3 | 31,822.3        |
| Electrical circuit apparatus   | 2,355.9  | 2,979.2  | 2,961.0  | 3,001.2  | 2,800.3  | 2,316.8  | 2,115.5         |
| Electrical machinery nes   | 2,050.6  | 3,204.1  | 3,017.8  | 3,012.8  | 2,447.7  | 2,911.0  | 2,993.1         |
| Miscellaneous Manufactures   | 15,483.6 | 19,498.7 | 20,727.1 | 22,127.9 | 21,159.8 | 19,800.9 | 19,859.9        |
| Professional scientific & controlling instruments & apparatus nes Photographic apparatus equipment & | 4,514.5  | 5,889.5  | 6,803.6  | 7,789.7  | 8,175.7  | 8,014.2  | 8,097.9         |
| supplies & optical goods nes;<br>watches & clocks<br>Articles of apparel &                           | 1,081.4  | 1,513.3  | 1,498.4  | 1,609.7  | 1,494.6  | 1,674.7  | 1,707.8         |
| clothing accessories  Miscellaneous manufactured   | 225.8    | 184.2    | 184.1    | 163.2    | 178.0    | 165.9    | 141.2           |
| articles nes   | 9,346.3  | 11,566.9 | 11,854.4 | 12,200.4 | 9,746.5  | 9,570.1  | 9,579.5         |
| Miscellaneous  | 3,247.7  | 3,275.5  | 3,124.6  | 3,955.9  | 3,309.6  | 3,065.2  | 2,488.4         |

<sup>3</sup> Includes pagers, cellular/hand phones, TV cameras, video cameras and recorders, radar and navigational equipment, radio remote controls, satellite discs and parts for these products.

<sup>4</sup> Includes television receivers, radio broadcast receivers, video and sound recorders, microphones, loudspeakers, headphones, earphones, television cameras, still image video cameras and other video camera recorders, and parts for these products.

16.10 RE-EXPORTS BY COMMODITY SECTION

|   | _         | _         |           |           |           | _         | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total   | 191,115.0 | 230,230.9 | 233,382.7 | 225,181.8 | 239,188.5 | 245,124.8 | 242,861.9       |
| Food  | 1,579.9   | 1,815.6   | 2,554.6   | 2,027.4   | 2,115.4   | 2,364.6   | 2,473.4         |
| Coffee, tea, cocoa, spices &  |           |           |           |           |           |           |                 |
| manufactures  | 402.1     | 418.0     | 946.1     | 593.4     | 541.4     | 719.2     | 715.0           |
| Fish, seafood (excl marine mammals) &                                   |           |           |           |           |           |           |                 |
| preparations  | 246.0     | 308.0     | 310.6     | 261.5     | 256.4     | 262.8     | 352.1           |
| Vegetables & fruits   | 244.6     | 279.9     | 364.8     | 351.5     | 368.1     | 410.8     | 432.0           |
| Beverages & Tobacco   | 2,421.3   | 2,830.3   | 3,332.0   | 3,800.0   | 4,040.0   | 4,119.3   | 4,400.9         |
| Beverages   | 1,923.3   | 2,282.6   | 2,718.2   | 3,072.4   | 3,259.9   | 3,266.6   | 3,495.4         |
| Tobacco & manufactures  | 498.0     | 547.7     | 613.8     | 727.6     | 780.0     | 852.6     | 905.5           |
| Crude Materials   | 1,147.1   | 1,296.4   | 1,609.6   | 1,376.3   | 1,844.9   | 1,398.6   | 1,527.3         |
| Metalliferous ores &  |           |           |           |           |           |           |                 |
| metal scrap   | 75.0      | 93.6      | 85.6      | 79.0      | 72.9      | 94.6      | 58.8            |
| Crude rubber  | 289.3     | 637.2     | 866.6     | 640.3     | 488.7     | 282.3     | 561.5           |
| Crude fertilizers & minerals (excl coal petroleum &                     |           |           |           |           |           |           |                 |
| precious stones)  | 376.2     | 152.1     | 232.6     | 214.3     | 534.1     | 267.2     | 196.4           |
| Crude animal & vegetable materials nes                                  | 142.2     | 149.0     | 174.3     | 175.4     | 233.4     | 195.7     | 157.0           |
| Mineral Fuels & Lubricants  | 19,743.1  | 28,499.9  | 32,819.7  | 24,085.7  | 18,484.9  | 15,876.1  | 9,325.1         |
| Petroleum & products <sup>1</sup> & related materials                   | 19,741.7  | 28,497.8  | 32,818.3  | 24,083.4  | 18,483.0  | 15,873.7  | 9,225.2         |
| Animal & Vegetable Oils   | 346.6     | 343.4     | 309.3     | 176.4     | 140.0     | 134.2     | 111.8           |
| Fixed vegetable fats & oils, crude,                                     |           |           |           |           |           |           |                 |
| refined or fractionated   | 317.5     | 290.0     | 302.7     | 171.4     | 133.6     | 129.0     | 103.1           |
| Animal or vegetable fats & oils <sup>2</sup> nes                        | 28.3      | 51.4      | 3.0       | 2.4       | 3.8       | 4.1       | 7.7             |
| Chemicals & Chemical Products   | 9,776.6   | 13,116.0  | 16,326.2  | 16,832.7  | 17,124.9  | 17,869.4  | 17,985.0        |
| Organic chemicals   | 1,746.6   | 2,392.0   | 3,085.8   | 2,877.8   | 3,044.8   | 3,198.9   | 2,557.5         |
| Plastics in primary forms   | 1,677.4   | 3,284.5   | 4,752.1   | 5,489.6   | 4,859.5   | 4,772.6   | 4,155.8         |
| Medicinal & pharmaceutical products                                     | 1,069.8   | 1,198.4   | 1,215.2   | 1,262.4   | 1,496.8   | 1,440.3   | 2,319.9         |
| Essential oils & resinoids & perfume materials; toilet polishing        | ,         | ,         | ,         | , -       | ,         | ,         | ,               |
| & cleansing preparations  | 2,174.0   | 2,776.3   | 3,529.9   | 3,424.0   | 3,814.9   | 4,365.8   | 4,750.2         |
| Manufactured Goods  | 11,371.2  | 11,833.0  | 13,191.7  | 13,164.7  | 13,914.6  | 15,056.3  | 13,491.1        |
| Non-ferrous metals  | 2,753.9   | 3,151.5   | 3,486.9   | 2,994.0   | 3,470.4   | 3,475.3   | 3,915.0         |
| Iron & steel  | 3,449.7   | 3,376.0   | 3,823.9   | 3,971.7   | 3,741.6   | 3,464.7   | 2,520.1         |
| Manufactures of metals nes  | 2,260.3   | 2,421.5   | 2,427.5   | 2,511.4   | 2,530.1   | 2,564.7   | 2,339.7         |
| Non-metallic mineral manufactures nes<br>Textile yarn, fabrics, made-up | 946.1     | 775.0     | 855.6     | 880.1     | 1,552.4   | 3,015.1   | 2,195.4         |
| articles nes & related products Paper, paperboard & articles of         | 719.6     | 739.2     | 738.0     | 691.1     | 762.1     | 701.0     | 639.8           |
| paper pulp or paperboard pulp   | 357.9     | 388.2     | 721.2     | 909.4     | 937.0     | 947.0     | 897.8           |
| Rubber manufactures nes   | 743.4     | 816.5     | 926.6     | 1,024.7   | 749.0     | 721.8     | 700.8           |

(continued on the next page)

Source : International Enterprise Singapore

<sup>1</sup> Includes oil bunkers.

<sup>2</sup> Includes processed waxes of animal or vegetable origin, inedible mixtures or preparations of animal or vegetable fats or oil nes.

16.10 RE-EXPORTS BY COMMODITY SECTION (continued)

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| Commodity Section  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Machinery & Equipment  | 127,046.5 | 149,716.0 | 144,288.0 | 143,327.0 | 158,821.6 | 163,818.1 | 167,870.2       |
| Electronics  | 90,977.3  | 110,974.7 | 101,781.7 | 99,679.5  | 112,719.9 | 117,744.7 | 121,337.1       |
| Integrated circuits  | 54,393.3  | 67,056.4  | 62,856.1  | 62,395.6  | 73,770.9  | 77,928.9  | 78,820.8        |
| Parts of personal computers  | 10,017.3  | 12,099.3  | 10,433.1  | 8,798.6   | 8,791.8   | 8,239.5   | 8,430.7         |
| Disk drives  | 1,638.6   | 2,140.9   | 1,722.6   | 2,013.2   | 2,110.4   | 2,280.4   | 2,664.5         |
| Telecommunications equipment <sup>3</sup>  | 6,229.3   | 6,420.0   | 7,691.1   | 7,403.4   | 8,509.2   | 8,639.6   | 11,202.5        |
| Consumer electronics <sup>4</sup>  | 3,947.3   | 4,469.6   | 3,911.6   | 3,310.1   | 3,079.7   | 2,958.2   | 2,730.9         |
| Personal computers   | 1,577.3   | 1,993.9   | 2,713.3   | 3,132.2   | 2,885.2   | 2,873.9   | 3,130.3         |
| Parts of integrated circuits   | 1,565.8   | 3,082.7   | 2,048.9   | 2,320.8   | 3,379.4   | 3,289.4   | 1,891.4         |
| Diodes and transistors   | 6,905.4   | 8,739.8   | 5,613.3   | 5,289.2   | 5,269.8   | 6,671.4   | 7,709.4         |
| Non-electronics  | 36,069.2  | 38,741.3  | 42,506.3  | 43,647.4  | 46,101.7  | 46,073.4  | 46,533.1        |
| Electrical circuit apparatus   | 2,785.9   | 3,266.3   | 4,303.5   | 4,324.6   | 3,757.4   | 3,817.7   | 3,768.4         |
| Electrical machinery nes   | 2,702.1   | 3,513.0   | 3,890.4   | 3,726.7   | 3,793.2   | 4,149.4   | 5,074.3         |
| Miscellaneous Manufactures Professional scientific & controlling                             | 12,391.9  | 14,276.4  | 14,855.8  | 16,487.2  | 19,365.8  | 21,201.7  | 22,037.3        |
| instruments & apparatus nes Photographic apparatus equipment & supplies & optical goods nes; | 3,661.4   | 4,314.6   | 4,608.0   | 5,443.6   | 6,103.1   | 6,799.5   | 7,267.9         |
| watches & clocks Articles of apparel &   | 2,429.8   | 2,550.4   | 2,624.7   | 2,734.0   | 3,244.3   | 3,266.6   | 3,429.4         |
| clothing accessories Miscellaneous manufactured  | 1,289.2   | 1,270.6   | 1,311.5   | 1,504.6   | 1,413.3   | 1,538.8   | 1,713.4         |
| articles nes   | 4,080.9   | 5,125.0   | 5,189.2   | 5,644.6   | 7,311.5   | 7,149.4   | 7,790.2         |
| Miscellaneous  | 5,290.9   | 6,504.0   | 4,095.8   | 3,904.5   | 3,336.4   | 3,286.4   | 3,639.7         |

<sup>3</sup> Includes pagers, cellular/hand phones, TV cameras, video cameras and recorders, radar and navigational equipment, radio remote controls, satellite discs and parts for these products.

<sup>4</sup> Includes television receivers, radio broadcast receivers, video and sound recorders, microphones, loudspeakers, headphones, earphones, television cameras, still image video cameras and other video camera recorders, and parts for these products.

### 16.11 TRADE IN SERVICES

|                         |           |           |           |           |           |           | Million Dollars |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|                         | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total Trade in Services | 241,396.2 | 275,488.2 | 298,266.1 | 321,813.4 | 358,804.8 | 388,010.6 | 389,185.3       |
| Exports of Services     | 119,020.1 | 137,484.7 | 149,580.8 | 159,663.9 | 175,503.1 | 191,008.2 | 191,940.3       |
| Imports of Services     | 122,376.1 | 138,003.5 | 148,685.3 | 162,149.5 | 183,301.7 | 197,002.4 | 197,245.0       |

Note: Figures presented in this table are compiled from various sources. The bulk of the data is compiled from the International Trade in Services Survey conducted by the Singapore Department of Statistics.

These are supplemented by data from other sources.

16.12 EXPORTS OF SERVICES BY MAJOR TRADING PARTNER

|                                     | 1 1      |          |          |          |          |          | Million Dolla |
|-------------------------------------|----------|----------|----------|----------|----------|----------|---------------|
| Trading Partner                     | 2008     | 2009     | 2010     | 2011     | 2012     | 2013     | 2014          |
| Asia                                | 44,927.8 | 41,903.4 | 47,943.5 | 49,496.3 | 51,546.9 | 56,237.9 | 62,390.7      |
| Brunei Darussalam                   | 271.3    | 335.1    | 507.6    | 476.8    | 528.7    | 526.5    | 815.6         |
| Cambodia                            | 140.1    | 101.0    | 78.7     | 109.6    | 115.1    | 89.8     | 87.1          |
| China                               | 6,053.8  | 5,706.1  | 7,814.8  | 7,134.7  | 7,574.1  | 9,220.9  | 10,864.6      |
| Hong Kong                           | 4,696.4  | 4,371.4  | 4,925.8  | 5,094.3  | 5,138.7  | 5,080.7  | 5,671.9       |
| India                               | 3,569.2  | 3,842.8  | 4,241.6  | 4,351.1  | 4,442.0  | 4,978.2  | 4,352.4       |
| Indonesia                           | 3,427.7  | 3,820.5  | 3,410.9  | 3,634.3  | 4,191.9  | 4,526.9  | 4,828.0       |
| Japan                               | 7,386.6  | 5,628.5  | 6,835.4  | 7,850.1  | 8,241.4  | 9,377.7  | 11,365.6      |
| Korea, Republic of                  | 2,815.9  | 2,303.1  | 2,542.7  | 2,640.2  | 2,742.0  | 2,865.5  | 3,511.9       |
| Malaysia                            | 3,945.9  | 4,096.3  | 3,697.8  | 4,015.3  | 4,433.8  | 4,654.7  | 5,044.8       |
| Myanmar                             | 232.7    | 200.5    | 179.3    | 219.8    | 228.4    | 372.3    | 360.7         |
| Philippines                         | 1,036.4  | 1,000.3  | 1,164.3  | 1,258.5  | 1,249.9  | 1,375.6  | 1,702.7       |
| Saudi Arabia                        | 514.1    | 569.6    | 617.5    | 746.1    | 564.1    | 613.1    | 607.0         |
| Taiwan                              | 2,094.8  | 2,053.5  | 2,567.9  | 2,171.4  | 2,102.8  | 2,220.6  | 2,633.7       |
| Thailand                            | 2,291.1  | 1,901.6  | 2,601.1  | 2,756.7  | 3,375.5  | 3,489.5  | 3,724.8       |
| United Arab Emirates                | 1,954.4  | 1,633.2  | 1,745.0  | 1,709.0  | 1,883.2  | 1,722.9  | 1,608.1       |
| Vietnam                             | 949.5    | 1,027.7  | 959.0    | 1,340.1  | 1,521.1  | 1,737.7  | 1,940.5       |
| Europe                              | 26,779.8 | 24,930.9 | 26,460.2 | 28,536.3 | 29,100.1 | 33,645.8 | 35,380.8      |
| Belgium                             | 464.2    | 371.9    | 508.0    | 482.2    | 394.4    | 515.8    | 572.1         |
| Denmark                             | 2,324.1  | 2,158.7  | 1,963.6  | 1,839.7  | 1,532.8  | 1,624.1  | 1,622.6       |
| France                              | 1,081.2  | 1,075.7  | 1,462.0  | 1,405.2  | 1,566.5  | 1,684.9  | 1,884.8       |
| Germany                             | 3,180.8  | 2,918.9  | 3,210.5  | 3,506.3  | 3,499.2  | 3,801.4  | 3,848.5       |
| Italy                               | 470.7    | 404.3    | 496.7    | 571.1    | 685.8    | 693.3    | 729.3         |
| Netherlands                         | 2,565.2  | 2,099.6  | 2,533.4  | 2,505.2  | 2,469.3  | 2,924.9  | 3,008.4       |
| Norway                              | 1,763.5  | 1,924.2  | 1,746.6  | 1,506.2  | 1,692.2  | 2,060.0  | 2,115.5       |
| Switzerland                         | 2,310.2  | 2,335.5  | 2,471.4  | 3,331.0  | 4,261.1  | 4,833.4  | 5,909.4       |
| United Kingdom                      | 7,926.9  | 7,810.5  | 7,575.1  | 8,210.9  | 8,314.7  | 10,686.0 | 10,780.2      |
| North America                       | 16,266.9 | 14,471.5 | 17,099.3 | 17,570.3 | 20,119.2 | 22,138.5 | 23,122.0      |
| United States of America            | 15,471.6 | 13,628.2 | 15,968.8 | 16,400.7 | 18,947.0 | 20,880.5 | 21,749.2      |
| Canada                              | 788.7    | 841.4    | 1,129.0  | 1,167.6  | 1,169.6  | 1,257.8  | 1,372.6       |
| Oceania                             | 7,576.3  | 8,970.7  | 10,455.6 | 12,525.3 | 14,348.2 | 14,645.8 | 15,997.8      |
| Australia                           | 6,281.1  | 7,442.9  | 8,866.9  | 10,535.5 | 11,619.8 | 11,680.7 | 13,052.2      |
| New Zealand                         | 911.6    | 865.3    | 855.8    | 1,038.9  | 1,314.8  | 1,468.7  | 1,677.1       |
| South and Central America           |          |          |          |          |          |          |               |
| and the Carribbean                  | 4,011.0  | 3,325.3  | 4,151.8  | 5,061.9  | 5,648.0  | 7,202.1  | 8,165.9       |
| Panama                              | 183.3    | 163.9    | 279.9    | 237.0    | 359.8    | 357.8    | 368.1         |
| Africa                              | 2,327.2  | 2,131.7  | 2,014.7  | 2,503.7  | 2,870.0  | 4,768.6  | 5,970.3       |
| South Africa                        | 516.8    | 400.1    | 379.8    | 410.5    | 435.6    | 675.0    | 603.5         |
|                                     |          |          |          |          |          |          |               |
| ASEAN 1                             | 12,426.0 | 12,574.5 | 12,730.8 | 13,904.0 | 15,716.3 | 16,793.4 | 18,543.0      |
| European Union (EU-28) <sup>2</sup> | 21,054.2 | 19,470.9 | 20,765.4 | 22,426.1 | 21,795.1 | 25,152.6 | 26,140.0      |
|                                     |          |          |          |          |          |          |               |

Note: Figures presented in this table are solely compiled from the International Trade in Services Survey.

<sup>1</sup> ASEAN includes Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Thailand and Vietnam.

<sup>2</sup> The European Union (EU-28) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

16.13 IMPORTS OF SERVICES BY MAJOR TRADING PARTNER

|                                     | 1 1           | 1               | Т                | T T              | Т                |                  | Million Dolla    |
|-------------------------------------|---------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| Trading Partner                     | 2008          | 2009            | 2010             | 2011             | 2012             | 2013             | 2014             |
| Asia                                | 28,887.2      | 27,919.5        | 32,179.9         | 36,004.7         | 36,803.7         | 41,331.7         | 48,328.3         |
| Brunei Darussalam                   | 112.0         | 43.5            | 38.9             | 43.7             | 65.4             | 55.7             | 59.9             |
| Cambodia                            | 113.0         | 103.3           | 111.5            | 133.9            | 132.8            | 71.5             | 68.5             |
| China                               | 4,159.4       | 4,521.3         | 5,347.7          | 6,681.3          | 7,172.8          | 8,157.3          | 10,292.1         |
| Hong Kong                           | 3,659.2       | 3,570.6         | 4,307.3          | 4,002.8          | 4,236.1          | 5,088.2          | 7,582.7          |
| India                               | 2,348.7       | 2,399.7         | 2,907.5          | 2,978.8          | 2,962.9          | 3,447.8          | 3,652.2          |
| Indonesia                           | 1,722.5       | 1,632.3         | 1,826.0          | 1,809.4          | 1,889.8          | 1,965.1          | 2,058.1          |
| Japan                               | 5,942.3       | 5,154.1         | 5,720.9          | 7,054.5          | 6,328.4          | 6,699.8          | 6,951.9          |
| Korea, Republic of                  | 1,925.1       | 1,556.4         | 1,867.6          | 2,237.1          | 2,458.5          | 2,601.6          | 3,251.3          |
| Malaysia                            | 2,133.0       | 1,990.3         | 2,132.4          | 2,354.9          | 2,598.0          | 2,768.9          | 2,791.8          |
| Myanmar                             | 63.8          | 77.1            | 75.3             | 77.1             | 82.1             | 172.3            | 154.4            |
| Philippines                         | 680.0         | 677.2           | 750.8            | 908.2            | 890.0            | 1,201.1          | 997.0            |
| Saudi Arabia                        | 143.0         | 115.5           | 146.5            | 211.8            | 163.0            | 167.1            | 235.8            |
| Taiwan                              | 1,806.6       | 1,912.3         | 2,320.5          | 2,519.7          | 2,409.7          | 2,768.0          | 3,664.6          |
| Thailand                            | 1,471.0       | 1,230.2         | 1,375.6          | 1,462.0          | 1,435.7          | 1,571.9          | 2,149.5          |
| United Arab Emirates                | 635.3         | 1,062.5         | 1,107.5          | 1,303.6          | 1,456.2          | 1,888.8          | 1,821.7          |
| Vietnam                             | 583.5         | 585.6           | 672.9            | 744.5            | 915.5            | 916.6            | 929.2            |
| Europe                              | 25,881.1      | 23,165.4        | 27,346.4         | 30,666.6         | 32,776.8         | 41,566.5         | 40,894.1         |
| Belgium                             | 315.2         | 235.4           | 242.2            | 388.3            | 362.3            | 556.5            | 690.8            |
| Denmark                             | 940.3         | 745.1           | 768.3            | 965.8            | 1,117.4          | 1,327.1          | 1,612.6          |
| France                              | 2,334.2       | 2,196.5         | 2,186.8          | 2,561.4          | 3,014.3          | 3,618.0          | 4,180.0          |
| Germany                             | 2,220.9       | 2,300.5         | 2,594.1          | 3,065.0          | 2,793.8          | 3,085.3          | 3,430.7          |
| Italy                               | 284.1         | 274.2           | 367.5            | 519.4            | 459.5            | 422.2            | 874.1            |
| Netherlands                         | 4,242.4       | 4,073.0         | 6,707.7          | 6,335.8          | 7,830.0          | 9,773.3          | 9,682.6          |
| Norway                              | 1,039.5       | 990.1           | 1,020.5          | 1,051.8          | 981.9            | 1,183.3          | 1,425.8          |
| Switzerland                         | 2,278.6       | 2,291.7         | 2,571.9          | 3,551.7          | 4,289.0          | 5,955.4          | 5,882.4          |
| United Kingdom                      | 9,548.3       | 7,312.2         | 7,647.3          | 8,221.8          | 7,656.0          | 8,262.9          | 6,589.5          |
| North America                       | 21,838.3      | 23,827.3        | 25,498.3         | 21,102.8         | 28,485.4         | 28,998.7         | 34,456.1         |
| United States of America            | 21,299.3      | 23,199.1        | 24,729.7         | 20,392.3         | 27,559.8         | 27,889.7         | 33,052.2         |
| Canada                              | 539.0         | 450.1           | 594.7            | 710.5            | 730.3            | 1,108.8          | 1,219.9          |
| Oceania                             | 3,186.5       | 3,439.6         | 3,856.0          | 5,661.9          | 6,585.5          | 7,362.9          | 7,915.3          |
| Australia                           | 2,483.8       | 2,785.4         | 3,121.5          | 4,489.6          | 4,923.0          | 5,513.3          | 5,450.4          |
| New Zealand                         | 335.5         | 341.8           | 335.5            | 562.1            | 812.2            | 802.9            | 810.9            |
| South and Central America           |               |                 |                  |                  |                  |                  |                  |
| and the Carribbean                  | 5,585.0       | 6,515.7         | 8,156.5          | 11,549.5         | 12,398.5         | 15,688.2         | 14,738.9         |
| Panama                              | 349.5         | 340.5           | 476.8            | 457.1            | 522.6            | 947.0            | 1,228.9          |
| A fri aa                            | 049.2         | 1 066 5         | 1 140 0          | 1 466 5          | 1 600 0          | 1 900 7          | 2 401 2          |
| Africa<br>South Africa              | 948.2<br>88.1 | 1,066.5<br>97.2 | 1,140.8<br>147.9 | 1,466.5<br>162.8 | 1,609.0<br>230.5 | 1,892.7<br>304.4 | 2,401.2<br>281.3 |
| South Africa                        | 88.1          | 97.2            | 147.9            | 162.8            | 230.5            | 304.4            | 281.3            |
| 1                                   |               |                 |                  |                  | 0.672.7          | 0.617.7          | 0.224            |
| ASEAN 1                             | 6,908.9       | 6,385.7         | 7,021.0          | 7,595.6          | 8,052.5          | 8,917.7          | 9,221.1          |
| European Union (EU-28) <sup>2</sup> | 21,451.7      | 18,790.6        | 22,729.7         | 24,773.8         | 26,000.9         | 32,664.5         | 31,341.2         |

Note: Figures presented in this table are solely compiled from the International Trade in Services Survey

<sup>1</sup> ASEAN includes Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines Thailand and Vietnam.

<sup>2</sup> The European Union (EU-28) comprises Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Rep, Slovenia, Spain, Sweden and the United Kingdom.

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#### **Maritime Statistics**

The Maritime and Port Authority of (MPA) is responsible Singapore Singapore's port and maritime development, taking on the roles of port authority, port regulator, port planner, International Maritime Centre (IMC) champion, and national maritime representative. MPA partners the industry and other agencies to enhance safety, security and environmental protection in Singapore's port waters, facilitate port operations and growth, expand the cluster of maritime ancillary services, and promote maritime research and development as well as manpower development.

Singapore is both a premier global hub port, as well as an international maritime centre for ship owners, operators and other maritime service providers. In total, the Singapore maritime cluster comprises over 5,000 establishments.

Statistics on vessel traffic, cargo volumes and other port activities within Singapore port waters are collated by MPA.

#### **Definitions**

Vessel arrivals: Refer to the number of vessels exceeding 75 Gross Tonnage that arrive at the Port of Singapore during the year.

Total cargo: Refers to the volume of cargo handled by vessels at the Port of Singapore. The figures include transhipment cargo.

Total container throughput: Refers to the total number of containers (expressed in Twenty-Foot Equivalent Units) loaded and unloaded at the Port of Singapore. The figures include transhipment containers.

*Bunker sales:* Refer to the volume of bunkers delivered within the Port of Singapore to vessels that are on international voyages.

Singapore Registry of Ships: Refers to the total number and tonnage of vessels registered under the Singapore flag.

#### **Civil Air Traffic**

The Civil Aviation Authority of Singapore (CAAS) provides air navigation services, regulates, promotes and facilitates the use and development of air services, airports and aerospace industries, as well as promotes facilitates development and the improvement of civil aviation capabilities and skills in Singapore. Following the corporatisation of Changi Airport on 1 July 2009, the operations of Changi Airport, including the collection of data on passengers, airfreight, airmail and aircraft traffic passing through Changi Airport and Seletar Aerodrome, are managed by Changi Airport Group Pte Ltd (CAG).

Statistics on passenger, airfreight, parcel mail and aircraft movements are compiled by CAAS from the data collected by CAG.

#### Roads

Data on public roads refer to the length of roads in lane-kilometres and are classified into expressways, arterial roads, collector roads and local access roads<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Road length in lane-km data includes all public roads maintained by the Land Transport Authority. It does not include certain roads such as those maintained by the National Parks Board (Nparks), Housing and Development Board (HDB) and Urban Redevelopment Authority (URA), JTC Corporation (JTC) - including roads in Jurong Island , National Environment Agency (NEA) , Ministry of Home Affairs (ISD) , Ministry of Home Affairs (POLICE), Singapore General Hospital (SGH) , Public Utilities Board (PUB), Singapore Land Authority (SLA) , AGRI-Food and Veterinary Authority of Singapore (AVA) as well as roads within Sentosa Island (SDC), airports (maintained by CAAS), seaports (maintained by PSA), universities (NTU and NUS), Community Improvement Project Committee (CIPC), Ministry of Home Affairs (prisons), Immigration & Checkpoints Authority (ICA) and military (MINDEF) and privately-owned areas.

#### **Definitions**

Expressways: Refer to roads that provide planned long-distance mobility from one part of the island to another without the interruption of traffic lights.

Arterial Roads: Refer to roads connecting an expressway with roads surrounding through passing estate or developments. They also improve traffic circulation between adjacent towns.

Collector Roads: Refer to roads forming links between local roads and arterial roads and providing links to building or land developments.

Local Access Roads: Refer to roads that provide direct access to buildings and other developments and that only connect with collector roads.

#### Vehicles Registered

All vehicles to be kept or used in Singapore must be registered with the Land Transport Authority of Singapore.

#### **Road Traffic Accident Casualties**

Data on road traffic accident casualties are compiled from police records of fatal and injury traffic accidents that occurred on Singapore roads.

#### **Public Transport**

As the agency responsible for planning, building and maintaining Singapore's land transport infrastructure and systems, the Land Transport Authority (LTA) plays a significant role in making Singapore a vibrant and bustling metropolis. LTA's aim is to make walking, cycling and riding public transport come alive

so travellers of all ages will look forward to their daily journeys. In addition, LTA wants to make daily travel a way of life that is healthier, greener and more sustainable.

17.1 SEA CARGO AND SHIPPING STATISTICS

|  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Vessel Arrivals                                |           |           |           |           |           |           |           |
| Number   | 130,575   | 127,299   | 127,998   | 130,422   | 139,417   | 134,883   | 132,922   |
| Shipping Tonnage ('000 GT)                     | 1,784,669 | 1,919,408 | 2,120,282 | 2,254,353 | 2,326,121 | 2,371,107 | 2,504,155 |
| Total Cargo ('000 tonnes)                      | 472,300   | 503,342   | 531,176   | 538,012   | 560,888   | 581,268   | 575,846   |
| General  | 280,349   | 313,683   | 335,511   | 353,542   | 365,116   | 384,418   | 361,858   |
| Bulk   | 191,951   | 189,659   | 195,665   | 184,470   | 195,772   | 196,850   | 213,987   |
| Total Container Throughput                     |           |           |           |           |           |           |           |
| ('000 TEUs)                                    | 25,867    | 28,431    | 29,938    | 31,649    | 32,579    | 33,869    | 30,922    |
| Bunker Sales ('000 tonnes)                     | 36,387    | 40,853    | 43,154    | 42,685    | 42,682    | 42,417    | 45,155    |
| Singapore Registry of Ships<br>(End of Period) |           |           |           |           |           |           |           |
| Number   | 3,950     | 3,978     | 4,111     | 4,232     | 4,379     | 4,595     | 4,739     |
| '000 GT  | 45,632    | 48,783    | 57,360    | 65,018    | 73,615    | 82,249    | 86,300    |

 $Source: \ \ Maritime \ and \ Port \ Authority \ of \ Singapore$ 

Notes: GT refers to Gross Tonnage

TEU refers to Twenty-Foot Equivalent Unit

17.2 CIVIL AIRCRAFT ARRIVALS/DEPARTURES, PASSENGERS AND MAIL

|                   | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Aircraft (No)     |         |         |         |         |         |         |         |
| Arrivals          | 120,184 | 131,769 | 150,827 | 162,349 | 171,850 | 170,680 | 173,152 |
| Departures        | 120,176 | 131,824 | 150,884 | 162,373 | 171,915 | 170,706 | 173,182 |
| Passengers ('000) |         |         |         |         |         |         |         |
| Arriving          | 18,026  | 20,486  | 22,778  | 25,056  | 26,500  | 26,669  | 27,491  |
| Departing         | 18,063  | 20,437  | 22,651  | 24,854  | 26,275  | 26,620  | 27,344  |
| In Transit        | 1,115   | 1,115   | 1,115   | 1,272   | 951     | 804     | 613     |
| Mail (Tonnes)     |         |         |         |         |         |         |         |
| In-coming         | 12,111  | 11,165  | 14,361  | 15,789  | 14,770  | 14,168  | 14,459  |
| Out-going         | 14,938  | 16,027  | 19,235  | 19,844  | 20,973  | 22,163  | 19,386  |

Source : Civil Aviation Authority of Singapore Note : Refers to Changi Airport only.

17.3 AIR CARGO DISCHARGED BY REGION/COUNTRY OF ORIGIN

|                 |         |         |         |         |         |           | Tonnes    |
|-----------------|---------|---------|---------|---------|---------|-----------|-----------|
| Region/Country  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014      | 2015      |
| Total           | 846,671 | 941,403 | 983,110 | 975,842 | 995,808 | 1,004,559 | 1,015,296 |
| South East Asia | 151,260 | 160,634 | 162,933 | 161,444 | 150,621 | 162,186   | 155,838   |
| Indonesia       | 54,772  | 59,368  | 63,787  | 58,058  | 57,714  | 57,303    | 53,803    |
| Malaysia        | 24,772  | 18,412  | 17,529  | 14,457  | 13,836  | 15,331    | 16,711    |
| Philippines     | 13,678  | 15,126  | 13,527  | 12,648  | 11,360  | 11,684    | 11,032    |
| Thailand        | 45,112  | 49,963  | 52,470  | 57,062  | 46,545  | 53,929    | 51,299    |
| Vietnam         | 10,960  | 14,584  | 12,904  | 15,370  | 16,865  | 19,468    | 18,336    |
| North East Asia | 377,184 | 435,604 | 455,946 | 458,739 | 465,479 | 478,074   | 470,155   |
| China           | 109,511 | 126,636 | 140,730 | 152,143 | 153,717 | 154,635   | 147,863   |
| Hong Kong       | 102,392 | 119,850 | 128,050 | 135,449 | 138,482 | 140,056   | 139,585   |
| Japan           | 61,077  | 69,998  | 67,479  | 60,775  | 63,751  | 72,660    | 78,870    |
| South Asia      | 56,054  | 60,784  | 64,206  | 62,796  | 70,103  | 64,752    | 62,486    |
| Middle East     | 17,213  | 22,536  | 22,859  | 26,936  | 30,280  | 30,691    | 34,671    |
| Oceania         | 91,011  | 83,365  | 83,869  | 85,871  | 93,229  | 97,156    | 121,314   |
| Europe          | 132,502 | 147,350 | 158,544 | 150,280 | 160,746 | 151,968   | 152,347   |
| France          | 10,535  | 8,949   | 9,714   | 8,208   | 8,446   | 9,095     | 8,748     |
| Germany         | 17,327  | 20,627  | 25,349  | 25,276  | 27,567  | 16,807    | 14,681    |
| United Kingdom  | 18,786  | 21,522  | 23,110  | 22,902  | 27,436  | 25,449    | 25,224    |
| North America   | 17,566  | 27,106  | 30,467  | 25,183  | 21,510  | 16,678    | 15,885    |
| Other Regions   | 3,881   | 4,024   | 4,285   | 4,593   | 3,840   | 3,055     | 2,598     |
|                 |         |         |         |         |         |           |           |

Note: Refers to Changi Airport only.

Data exclude passenger baggage, diplomatic cargo and aircraft stores.

17.4 AIR CARGO LOADED BY REGION/COUNTRY OF DESTINATION

|                 |         |         |         |         |         |         | 7    |
|-----------------|---------|---------|---------|---------|---------|---------|------|
| Region/Country  | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 201  |
| Total           | 787,120 | 872,406 | 882,142 | 853,278 | 841,894 | 839,240 | 837, |
| South East Asia | 171,982 | 186,976 | 183,053 | 187,900 | 185,266 | 182,370 | 175, |
| Indonesia       | 56,355  | 62,726  | 67,358  | 65,095  | 69,631  | 60,832  | 55,  |
| Malaysia        | 28,167  | 31,494  | 28,977  | 29,054  | 29,881  | 29,881  | 29,  |
| Philippines     | 21,815  | 16,309  | 15,332  | 16,487  | 16,144  | 20,316  | 20,  |
| Thailand        | 41,959  | 50,213  | 48,082  | 55,639  | 44,743  | 45,338  | 43,  |
| Vietnam         | 19,120  | 20,987  | 17,752  | 15,684  | 16,986  | 17,530  | 17,  |
| North East Asia | 235,575 | 283,049 | 296,887 | 275,545 | 279,504 | 281,000 | 285, |
| China           | 65,699  | 84,084  | 87,420  | 78,801  | 82,602  | 79,801  | 85,  |
| Hong Kong       | 61,202  | 74,531  | 70,945  | 70,264  | 73,352  | 73,503  | 74,  |
| Japan           | 53,619  | 65,566  | 69,615  | 65,373  | 61,167  | 67,106  | 68,  |
| South Asia      | 72,612  | 76,527  | 74,211  | 69,059  | 67,213  | 68,605  | 68,  |
| Middle East     | 32,803  | 31,144  | 30,974  | 33,049  | 35,047  | 34,591  | 37,  |
| Oceania         | 94,828  | 107,074 | 115,393 | 120,755 | 118,970 | 123,250 | 125, |
| Europe          | 130,088 | 134,549 | 131,523 | 118,869 | 115,521 | 116,346 | 111, |
| France          | 11,644  | 9,549   | 8,910   | 8,022   | 8,247   | 8,245   | 7,   |
| Germany         | 24,655  | 28,855  | 26,845  | 25,351  | 21,743  | 19,317  | 18,  |
| United Kingdom  | 25,731  | 29,669  | 30,048  | 31,723  | 33,908  | 35,370  | 35,  |
| North America   | 38,065  | 42,209  | 37,682  | 31,654  | 29,100  | 22,183  | 24,  |
| Other Regions   | 11,167  | 10,878  | 12,419  | 16,446  | 11,274  | 10,896  | 9.   |

Note: Refers to Changi Airport only.

Data exclude passenger baggage, diplomatic cargo and aircraft stores.

17.5 AIR PASSENGER ARRIVALS BY REGION/COUNTRY OF EMBARKATION

|                 |        |        |        |        |        |        | Tho  |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Region/Country  | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 201  |
| Total           | 18,026 | 20,486 | 22,778 | 25,056 | 26,500 | 26,669 | 27,4 |
| South East Asia | 7,456  | 8,812  | 10,037 | 11,013 | 11,928 | 11,807 | 12,0 |
| Indonesia       | 2,213  | 2,761  | 3,154  | 3,401  | 3,715  | 3,760  | 3,4  |
| Malaysia        | 1,920  | 2,212  | 2,412  | 2,485  | 2,712  | 2,728  | 2,3  |
| Philippines     | 806    | 967    | 1,191  | 1,251  | 1,279  | 1,273  | 1,3  |
| Thailand        | 1,529  | 1,727  | 2,038  | 2,475  | 2,699  | 2,375  | 2,0  |
| Vietnam         | 618    | 725    | 797    | 881    | 905    | 988    | 1,0  |
| North East Asia | 4,189  | 4,962  | 5,631  | 6,214  | 6,637  | 6,901  | 7,   |
| China           | 1,445  | 1,679  | 1,855  | 2,180  | 2,322  | 2,298  | 2,4  |
| Hong Kong       | 1,156  | 1,435  | 1,701  | 1,717  | 1,716  | 1,870  | 1,   |
| Japan           | 786    | 889    | 914    | 1,049  | 1,209  | 1,286  | 1,   |
| South Asia      | 1,509  | 1,711  | 1,858  | 2,106  | 2,226  | 2,339  | 2,4  |
| Middle East     | 405    | 420    | 461    | 530    | 605    | 639    | ,    |
| Oceania         | 2,214  | 2,287  | 2,411  | 2,651  | 2,715  | 2,707  | 2,8  |
| Europe          | 1,853  | 1,866  | 1,961  | 2,095  | 1,976  | 1,936  | 1,9  |
| France          | 228    | 236    | 231    | 239    | 240    | 215    |      |
| Germany         | 357    | 394    | 408    | 451    | 393    | 367    |      |
| United Kingdom  | 688    | 654    | 692    | 722    | 633    | 594    | (    |
| North America   | 258    | 295    | 308    | 337    | 315    | 246    |      |
| Other Regions   | 142    | 134    | 111    | 111    | 101    | 95     |      |

Notes : Refers to Changi Airport only.

Data exclude transit passengers who continued their journey on the same flight.

17.6 AIR PASSENGER DEPARTURES BY REGION/COUNTRY OF DISEMBARKATION

| Region/Country  | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 201 |
|-----------------|--------|--------|--------|--------|--------|--------|-----|
| Region/Country  | 2007   | 2010   | 2011   | 2012   | 2013   | 2014   | 20. |
| Total           | 18,063 | 20,437 | 22,651 | 24,854 | 26,275 | 26,620 | 27, |
| South East Asia | 7,385  | 8,755  | 9,907  | 10,873 | 11,752 | 11,725 | 11, |
| Indonesia       | 2,205  | 2,790  | 3,149  | 3,420  | 3,702  | 3,758  | 3,  |
| Malaysia        | 1,934  | 2,226  | 2,416  | 2,530  | 2,739  | 2,743  | 2,  |
| Philippines     | 778    | 934    | 1,156  | 1,189  | 1,236  | 1,238  | 1,  |
| Thailand        | 1,489  | 1,670  | 1,946  | 2,352  | 2,567  | 2,333  | 2,  |
| Vietnam         | 618    | 732    | 805    | 868    | 900    | 981    | 1,  |
| North East Asia | 4,218  | 4,973  | 5,631  | 6,165  | 6,609  | 6,877  | 7,  |
| China           | 1,470  | 1,703  | 1,868  | 2,183  | 2,321  | 2,293  | 2,  |
| Hong Kong       | 1,135  | 1,414  | 1,691  | 1,684  | 1,692  | 1,846  | 1,  |
| Japan           | 806    | 894    | 906    | 1,044  | 1,212  | 1,287  | 1,  |
| South Asia      | 1,544  | 1,709  | 1,839  | 2,050  | 2,131  | 2,278  | 2,  |
| Middle East     | 398    | 412    | 448    | 545    | 623    | 643    |     |
| Oceania         | 2,249  | 2,292  | 2,486  | 2,709  | 2,770  | 2,817  | 2,  |
| Europe          | 1,870  | 1,869  | 1,924  | 2,080  | 1,984  | 1,945  | 1,  |
| France          | 229    | 236    | 228    | 236    | 242    | 218    |     |
| Germany         | 365    | 394    | 403    | 458    | 391    | 374    |     |
| United Kingdom  | 681    | 647    | 658    | 693    | 629    | 586    |     |
| North America   | 249    | 286    | 297    | 314    | 302    | 237    |     |
| Other Regions   | 149    | 140    | 119    | 118    | 105    | 98     |     |

Notes: Refers to Changi Airport only.

Data exclude transit passengers who continued their journey on the same flight.

17.7 PUBLIC ROADS
(End of Period)

Lane-Kilometres 2010 2012 2015 2009 2011 2013 2014 Paved Roads 8,848 8,895 9,045 9,081 9,178 9,233 9,246 Expressways 1,059 1,059 1,059 1,059 1,093 1,093 1,093 Arterial Roads 2,931 3,027 3,054 3,147 2,938 3,100 3,146 Collector Roads 1,492 1,526 1,580 1,584 1,593 1,599 1,607 Local Access Roads 3,365 3,380 3,384 3,399 3,372 3,392 3,394

Source : Land Transport Authority

17.8 MOTOR VEHICLE POPULATION <sup>1</sup> BY TYPE OF VEHICLE (End of Period)

|                        |         |         |         |         |         |         | Number  |
|------------------------|---------|---------|---------|---------|---------|---------|---------|
|                        | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Total                  | 925,518 | 945,829 | 956,704 | 969,910 | 974,170 | 972,037 | 957,246 |
| Cars <sup>2</sup>      | 566,608 | 584,399 | 592,361 | 605,149 | 607,292 | 600,176 | 575,353 |
| Rental Cars            | 12,763  | 13,347  | 13,919  | 14,862  | 16,396  | 18,847  | 29,369  |
| Taxis                  | 24,702  | 26,073  | 27,051  | 28,210  | 27,695  | 28,736  | 28,259  |
| Buses                  | 16,023  | 16,309  | 17,046  | 17,162  | 17,509  | 17,554  | 18,183  |
| Motorcycles & Scooters | 147,215 | 148,160 | 146,559 | 144,110 | 144,934 | 145,026 | 143,900 |
| Goods & Other Vehicles | 158,207 | 157,541 | 159,768 | 160,417 | 160,344 | 161,698 | 162,182 |
|                        |         |         |         |         |         |         |         |

Source : Land Transport Authority

<sup>1</sup> Includes vehicles which are exempted from vehicle quota system (VQS) and all other taxes

<sup>2</sup> Includes private and company cars.

17.9 CAR POPULATION BY CC RATING (End of Period)

|                   |         |         |         |         |         |         | Number  |
|-------------------|---------|---------|---------|---------|---------|---------|---------|
| CC Rating         | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Total             | 576,988 | 595,185 | 603,723 | 617,570 | 621,345 | 616,609 | 602,311 |
| 1,000 cc & below  | 7,650   | 7,367   | 6,622   | 6,490   | 6,364   | 6,189   | 5,799   |
| 1,001 to 1,600 cc | 325,418 | 331,246 | 329,957 | 335,409 | 335,419 | 331,104 | 321,082 |
| 1,601 to 2,000 cc | 146,836 | 153,471 | 157,846 | 162,217 | 164,768 | 164,424 | 162,791 |
| 2,001 to 3,000 cc | 83,774  | 87,986  | 92,432  | 94,712  | 95,295  | 95,251  | 93,358  |
| 3,001 cc & above  | 13,310  | 15,115  | 16,866  | 18,742  | 19,499  | 19,641  | 19,281  |
|                   |         |         |         |         |         |         |         |

Source : Land Transport Authority

Notes: Data refer to private cars, company cars and rental cars only.

They do not include taxis and tax exempted cars.

17.10 AGE DISTRIBUTION OF CARS (End of Period)

|               |         |         |         |         |         |         | Number  |  |  |
|---------------|---------|---------|---------|---------|---------|---------|---------|--|--|
| Age (Years)   | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |  |  |
| Total         | 576,988 | 595,185 | 603,723 | 617,570 | 621,345 | 616,609 | 602,311 |  |  |
| Below 1       | 68,464  | 41,407  | 27,748  | 27,297  | 21,952  | 28,547  | 57,387  |  |  |
| 1 - below 2   | 96,927  | 68,503  | 41,426  | 27,759  | 27,299  | 21,943  | 28,540  |  |  |
| 2 - below 3   | 106,281 | 96,887  | 68,512  | 41,439  | 27,747  | 27,288  | 21,932  |  |  |
| 3 - below 4   | 116,043 | 105,917 | 96,877  | 68,512  | 41,420  | 27,727  | 27,267  |  |  |
| 4 - below 5   | 93,610  | 115,583 | 105,783 | 96,822  | 68,488  | 41,402  | 27,701  |  |  |
| 5 - below 6   | 44,002  | 88,437  | 115,335 | 105,599 | 96,742  | 68,460  | 41,372  |  |  |
| 6 - below 7   | 17,511  | 37,564  | 87,554  | 115,056 | 105,403 | 96,674  | 68,437  |  |  |
| 7 - below 8   | 5,936   | 14,014  | 34,178  | 86,307  | 114,665 | 105,216 | 96,602  |  |  |
| 8 - below 9   | 5,465   | 4,713   | 11,710  | 29,983  | 84,212  | 113,962 | 104,943 |  |  |
| 9 - below 10  | 1,574   | 3,790   | 3,376   | 8,089   | 23,039  | 73,764  | 107,529 |  |  |
| 10 - below 11 | 505     | 558     | 588     | 368     | 628     | 1,840   | 9,561   |  |  |
| 11 - below 12 | 586     | 501     | 558     | 585     | 362     | 614     | 1,817   |  |  |
| 12 - below 13 | 488     | 581     | 501     | 558     | 582     | 357     | 592     |  |  |
| 13 - below 14 | 1,096   | 475     | 575     | 500     | 556     | 567     | 345     |  |  |
| 14 - below 15 | 577     | 1,082   | 464     | 559     | 493     | 533     | 526     |  |  |
| 15 & above    | 17,923  | 15,173  | 8,538   | 8,137   | 7,757   | 7,715   | 7,760   |  |  |

Source : Land Transport Authority

Notes: Data refer to private cars, company cars and rental cars only.

They do not include taxis and tax exempted cars.

17.11 ROAD TRAFFIC ACCIDENT CASUALTIES

|                                     | 1      | 1      | Ī      |        |       | 1     | Num    |
|-------------------------------------|--------|--------|--------|--------|-------|-------|--------|
|                                     | 2009   | 2010   | 2011   | 2012   | 2013  | 2014  | 2015   |
| Total Casualties                    |        |        |        |        |       |       |        |
| Fatalities                          | 183    | 193    | 195    | 168    | 160   | 155   | 151    |
| Injured                             | 10,886 | 11,328 | 10,611 | 10,253 | 9,751 | 9,858 | 10,412 |
| Pedestrians                         |        |        |        |        |       |       |        |
| Fatalities                          | 45     | 55     | 49     | 44     | 43    | 45    | 43     |
| Injured                             | 1,073  | 1,057  | 1,049  | 1,069  | 989   | 883   | 973    |
| Cyclists & Pillions <sup>1</sup>    |        |        |        |        |       |       |        |
| Fatalities                          | 17     | 16     | 15     | 16     | 15    | 15    | 17     |
| Injured                             | 569    | 562    | 513    | 442    | 436   | 503   | 606    |
| Motor Cyclists & Pillion Riders     |        |        |        |        |       |       |        |
| Fatalities                          | 92     | 89     | 99     | 76     | 73    | 74    | 72     |
| Injured                             | 5,304  | 5,490  | 5,003  | 4,800  | 4,383 | 4,634 | 4,928  |
| Motor Vehicle Drivers & Passengers  |        |        |        |        |       |       |        |
| Cars & Station Wagons               |        |        |        |        |       |       |        |
| Fatalities                          | 12     | 14     | 15     | 14     | 16    | 12    | 7      |
| Injured                             | 2,794  | 2,839  | 2,982  | 2,782  | 2,811 | 2,686 | 2,746  |
| Goods Vans and Pick-Ups             |        |        |        |        |       |       |        |
| Fatalities                          | 5      | 3      | 1      | 0      | 3     | 2     | 2      |
| Injured                             | 278    | 282    | 258    | 234    | 226   | 193   | 219    |
| Lorries, Tipper Trucks and Trailers |        |        |        |        |       |       |        |
| Fatalities                          | 8      | 9      | 15     | 11     | 9     | 6     | 8      |
| Injured                             | 472    | 580    | 531    | 574    | 647   | 578   | 554    |
| Buses                               |        |        |        |        |       |       |        |
| Fatalities                          | 3      | 2      | 1      | 4      | 1     | 0     | 2      |
| Injured                             | 361    | 481    | 245    | 320    | 243   | 342   | 358    |
| Others                              |        |        |        |        |       |       |        |
| Fatalities                          | 1      | 5      | 0      | 3      | 0     | 1     | (      |
| Injured                             | 35     | 37     | 30     | 32     | 16    | 39    | 28     |

Source: Traffic Police Department
1 Includes those using power assisted bicycles.

17.12 VEHICLES INVOLVED IN FATAL AND INJURY ROAD TRAFFIC ACCIDENTS BY TYPE OF VEHICLE

|                                      |        |        |        |        |        |        | Numbe  |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                      | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                                | 15,185 | 15,569 | 15,296 | 14,357 | 13,906 | 14,324 | 14,982 |
| Bicycles and Power Assisted Bicycles | 600    | 590    | 538    | 472    | 466    | 530    | 643    |
| Motor Cycles & Scooters              | 4,958  | 5,100  | 4,801  | 4,572  | 4,231  | 4,506  | 4,694  |
| Motor Cars & Station Wagons          | 7,085  | 7,168  | 7,308  | 6,821  | 6,637  | 6,725  | 6,930  |
| Goods Vans and Pick-Ups              | 698    | 697    | 702    | 592    | 630    | 576    | 617    |
| Lorries, Tipper Trucks and Trailers  | 1,246  | 1,372  | 1,364  | 1,345  | 1,361  | 1,384  | 1,413  |
| Buses                                | 498    | 557    | 496    | 465    | 499    | 505    | 568    |
| Others                               | 100    | 85     | 87     | 90     | 82     | 98     | 117    |

Source : Traffic Police Department

17.13 PUBLIC TRANSPORT OPERATION AND RIDERSHIP

|  | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|--|--------|--------|--------|--------|--------|--------|--------|
| Rail Length                                    | 147.7  | 158.7  | 175.3  | 177.7  | 182.0  | 183.0  | 199.6  |
|  |        |        |        |        |        |        |        |
| Mass Rapid Transit (MRT)                       | 118.9  | 129.9  | 146.5  | 148.9  | 153.2  | 154.2  | 170.8  |
| Light Rail Transit (LRT)                       | 28.8   | 28.8   | 28.8   | 28.8   | 28.8   | 28.8   | 28.8   |
| Rail Km Operated                               |        |        |        |        |        |        |        |
| MRT Km Operated (Train-km) ('000)              | 18,025 | 20,265 | 22,465 | 26,492 | 26,420 | 28,173 | 28,795 |
| LRT Km Operated (Car-km) ('000)                | 3,303  | 3,311  | 3,620  | 3,883  | 4,435  | 4,787  | 5,937  |
| Average Daily Ridership ('000 passenger-trips) |        |        |        |        |        |        |        |
| MRT  | 1,782  | 2,069  | 2,295  | 2,525  | 2,623  | 2,762  | 2,871  |
| LRT  | 90     | 100    | 111    | 124    | 132    | 137    | 153    |
| Bus  | 3,047  | 3,199  | 3,385  | 3,481  | 3,601  | 3,751  | 3,891  |
| Taxi   | 860    | 912    | 933    | 967    | 967    | 1,020  | 1,010  |

Source : Land Transport Authority

## 18



# InfoComm and Media

#### Revenue of the Information and **Communication Technology Industry**

The revenue of the information and communication technology industry refers to all sales income that is derived from carrying out the main activities of the enterprise from the industry, and is booked in Singapore, as reflected in total receipts.

It includes the total value of services rendered and commissions earned, agency fees, as well as administration and management fees, but excludes Goods and Services Tax and other sources of income such as rental and interests earned. manufacturing output and sales to distributors are also excluded.

From 1999, the survey frame comprises companies with business activities relating IT products and services as classified by SSIC, companies in the telecommunications business and companies providing content services. Companies based on the 5-digit SSIC as identified by the Infocomm Development Authority of Singapore are selected from the Commercial Establishment Information System (CEIS) database.

#### Radio and Television

Mediacorp has the widest range of media platforms in Singapore, spanning digital, television, radio, print and out-of-home (OOH) media. It pioneered the development of Singapore's broadcasting industry, with the broadcast of radio in 1936 and television in 1963. Today, Mediacorp has over 50 products in four languages (English, Mandarin, Malay and Tamil).

SPH Radio Pte Ltd manages and operates three radio stations, ONE FM 91.3, Kiss92 and UFM 100.3. ONE FM 91.3 is a 24hour English music station that caters to male

listeners above 30 years of age, offering music popular among this demographic group, together with up-to-date sports and men's lifestyle news from leading sources.

Kiss92 is a 24-hour English music station that caters to female listeners aged 25 years and over. It provides in-depth content for women and families, coupled with adult contemporary music. Kiss92 is one of the nation's fastest growing radio stations, reaching out to almost 600,000 listeners weekly.

UFM 100.3 is a 24-hour Mandarin infotainment station that caters to listeners between 35 and 49 years of age. It delivers relevant and informative content in current affairs, health and wellness, financial planning, property investment, lifestyle, music and entertainment in a lively style, engaging more than 350,000 listeners weekly.

SAFRA Radio is a radio broadcaster specialising in defence-related information and lifestyle content including travel, food and movies. It has two radio stations under its wings, namely 88.3Jia FM and Power 98FM. 88.3Jia FM is the only bilingual station in Singapore that plays both Mandarin and English all-time favourite ballads from the 1980s to current hits. Power 98FM is an English lifestyle station that plays songs from the 1980s to current hits. In 2015, 88.3Jia FM achieved an average weekly listenership of 225,000 while Power 98FM had an average weekly listenership of 171,000.

18.1 POSTAL ARTICLES HANDLED AND TELECOMMUNICATIONS

|                                      | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Postal Articles Handled (million)    | 1,929.3  | 2,009.1  | 2,085.5  | 2,029.6  | 1,997.7  | 1,997.8  | 1,983.4  |
| Subscriptions <sup>1</sup> ('000)    |          |          |          |          |          |          |          |
| Fixed Line                           | 1,896.1  | 1,983.9  | 2,016.9  | 1,989.5  | 1,970.8  | 1,996.6  | 2,017.3  |
| Residential                          | 1,128.3  | 1,203.1  | 1,237.1  | 1,214.1  | 1,207.7  | 1,247.6  | 1,280.6  |
| Corporate                            | 767.8    | 780.8    | 779.7    | 775.4    | 763.1    | 749.0    | 736.8    |
| Mobile Phone                         | 6,857.2  | 7,288.6  | 7,755.2  | 8,063.0  | 8,420.7  | 8,093.3  | 8,211.4  |
| 2G                                   |          |          |          |          |          |          |          |
| Post-paid                            | 456.2    | 289.8    | 204.5    | 152.7    | 117.8    | 89.8     | 49.2     |
| Pre-paid                             | 3,240.7  | 2,294.4  | 1,795.3  | 1,429.7  | 993.7    | 213.1    | 172.4    |
| $3G^2$                               | 3,160.3  | 4,704.5  | 5,755.4  | 6,480.6  | 5,258.3  | 4,608.8  | 3,913.5  |
| Post-paid                            | 2,989.4  | 3,472.7  | 3,825.3  | 4,113.2  | 2,393.9  | 1,674.4  | 1,163.4  |
| Pre-paid                             | 170.9    | 1,231.8  | 1,930.1  | 2,367.4  | 2,864.4  | 2,934.4  | 2,750.1  |
| $4G^3$                               | na       | na       | na       | na       | 2,050.8  | 3,181.6  | 4,076.3  |
| Post-paid                            | na       | na       | na       | na       | na       | 2,924.0  | 3,628.6  |
| Pre-paid                             | na       | na       | na       | na       | na       | 257.6    | 447.7    |
| Dial-up Internet <sup>4</sup>        | 79.9     | 67.5     | 58.3     | 23.8     | 20.6     | 18.3     | 12.9     |
| Broadband <sup>5</sup>               | 5,819.0  | 7,849.3  | 9,222.3  | 10,194.9 | 10,653.6 | 11,537.2 | 11,992.1 |
| Residential Wired <sup>6</sup>       | na       | na       | 1,237.9  | 1,277.6  | 1,295.4  | 1,347.5  | 1,359.9  |
| Corporate Wired <sup>7</sup>         | na       | na       | 85.5     | 93.4     | 98.0     | 106.5    | 113.4    |
| Wireless <sup>8</sup>                | 4,717.4  | 6,587.2  | 7,898.9  | 8,823.9  | 9,260.1  | 10,083.3 | 10,518.8 |
| Total SMS Messages 9 (million)       | 23,287.2 | 27,714.3 | 28,947.0 | 24,052.9 | 17,893.4 | 13,508.0 | 11,447.9 |
| International Telephone              |          |          |          |          |          |          |          |
| Call Minutes <sup>10</sup> (million) | 10,169.0 | 12,436.3 | 12,367.4 | 13,444.8 | 14,489.6 | 18,165.5 | 22,018.2 |

Source: Singapore Post

Infocomm Development Authority of Singapore

- 1 Refers to end of period.
- 2 Includes pre-paid and post-paid 3G subscriptions.

Data breakdown for prepaid and postpaid 3G subscriptions are available with effect from December 2009.

- 3 Includes post-paid and pre-paid subscriptions.
- 4 Includes contributions from Internet Access Service Providers (IASPs).
- 5 Includes retail xDSL, cable modems, leased line Internet, 3G, 3.5G/HSDPA, WiMAX or its equivalent and Wi-Fi hotspots access (including Wireless@SG subscriptions).
- 6 Includes all retail residential wired broadband subscriptions provided over xDSL, cable modems, leased line and optical fibre. Residential wireless broadband subscriptions are excluded.
- 7 Includes all retail corporate wired broadband subscriptions provided over xDSL, cable modems, leased line and optical fibre. Corporate wireless broadband subscriptions are excluded.
- 8 Includes all retail broadband Internet access subscriptions provided via wireless platforms such as 3G, 3.5G/HSDPA, WiMAX or its equivalent and Wi-Fi hotspots (including Wireless@SG subscriptions).
- 9 Includes 2G and 3G phones. Includes both sent and received SMS messages.
  - With effect from Mar 2013, data includes SMS messages sent and received over 4G mobile network.
- 10 Includes traffic contributed by all Service-Based Operators (SBO).

18.2 REVENUE OF THE INFORMATION AND COMMUNICATION TECHNOLOGY INDUSTRY

|   |        |        |        |         |         |         | Million Dollars |
|---|--------|--------|--------|---------|---------|---------|-----------------|
|   | 2009   | 2010   | 2011   | 2012    | 2013    | 2014    | 2015            |
| Local and Export Market <sup>1</sup>                  |        |        |        |         |         |         |                 |
| Total   | 80,687 | 82,842 | 94,521 | 113,286 | 156,341 | 167,054 | 189,569         |
| Local   | 40,248 | 36,216 | 35,822 | 35,455  | 48,531  | 50,695  | 53,393          |
| Export  | 40,438 | 46,626 | 58,699 | 77,831  | 107,810 | 116,359 | 136,177         |
| Hardware and Software/IT Services Market <sup>1</sup> |        |        |        |         |         |         |                 |
| Total   | 80,687 | 82,842 | 94,521 | 113,286 | 156,341 | 167,054 | 189,569         |
| Hardware  | 44,957 | 44,988 | 59,481 | 74,904  | 106,606 | 114,962 | 138,612         |
| Software / IT Services                                | 23,225 | 21,787 | 22,021 | 25,420  | 34,037  | 34,829  | 34,803          |
| Telecommunications                                    | 10,770 | 14,038 | 10,221 | 10,838  | 12,281  | 13,941  | 12,412          |
| Content Activities <sup>2</sup>                       | 1,735  | 2,029  | 2,798  | 2,125   | 3,417   | 3,322   | 3,742           |

Source: Infocomm Development Authority of Singapore

Note: Revenues were computed using data from large ICT companies and a sample of

the remaining ICT companies stratified by the Singapore Standard Industrial Classification 2010.

Numbers may not add up to total due to rounding.

<sup>1</sup> Includes telecommunication services revenue, resellers revenue and content services revenue.

 $<sup>2\</sup>quad Excludes \ revenue \ from \ 'Advertising \ activities' \ and \ 'Art \ and \ graphic \ design \ services'.$ 

## 18.3 RADIO AND TELEVISION TRANSMISSION AND PAY TV SUBSCRIBERS

|   | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|-------|-------|-------|-------|-------|-------|-------|
| Radio<br>(MediaCorp,<br>SPH Radio &<br>SAFRA) | 2,856 | 2,856 | 2,856 | 2,856 | 3,024 | 3,024 | 3,024 |
| Television<br>(Mediacorp)                     | 949   | 951   | 959   | 961   | 1,007 | 1,007 | 1,007 |
| Pay TV Subscribers <sup>1</sup> ('000)        | 694   | 802   | 898   | 934   | 951   | 962   | 960   |

Source: StarHub Cable Vision Ltd

Singapore Telecommunications (Singtel)

Mediacorp Pte Ltd SPH Radio Pte Ltd SAFRA Radio

1 End of period.

## 18.4 DAILY NEWSPAPER CIRCULATION

|         |           |           |           |           |           |           | Number    |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|         | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
| Total   | 1,498,133 | 1,520,424 | 1,498,078 | 1,466,150 | 1,439,563 | 1,374,856 | 1,337,718 |
| English | 799,310   | 782,295   | 763,149   | 747,419   | 738,760   | 715,025   | 696,046   |
| Chinese | 623,923   | 663,774   | 660,409   | 649,127   | 635,115   | 597,826   | 585,465   |
| Malay   | 60,114    | 59,530    | 57,350    | 53,299    | 49,986    | 46,584    | 43,280    |
| Tamil   | 14,786    | 14,825    | 17,170    | 16,305    | 15,702    | 15,421    | 12,927    |

Source: Singapore Press Holdings Ltd

Mediacorp Press Ltd

otes: Refers to daily average circulation for January-December.

English Newspapers - The Straits Times / Sunday Times, Business Times, New Paper / New Paper Sunday / Little Red Dot / IN / TODAY,

Tabla

Chinese Newspapers - Lianhe Zaobao, Lianhe Wanbao, Shin Min Daily News, Thumbs Up, Thumbs Up Junior (from 2011),

Thumbs Up Little Junior (from 2013), My Paper, and zbComma.

Malay Newspapers - Berita Harian / Berita Minggu.

Tamil Newspapers - Tamil Murasu / Tamil Murasu Sunday.

# 



### **International Visitor Arrivals**

The Singapore Tourism Board publishes monthly statistics on international visitor arrivals. Quarterly and annual summaries of visitor profiles from major source markets are available from the "Quarterly Tourism Focus" and "Annual Report on Tourism Statistics" reports.

Data on international visitor arrivals are compiled from Disembarkation/Embarkation Forms (IMM 27) completed by all visitors arriving in Singapore at the points of entry.

### **Definitions**

Length of Stay: Refers to the actual length of stay in Singapore. The date of arrival as indicated in the disembarkation/embarkation card is matched against the date of departure to compute the actual length of stay. As some visitors may not depart within the calendar year, the number of visitor departures may be lower than total visitor arrivals during the year.

In computing the average length of stay, visitors staying beyond 60 days were treated as having stayed 60 days for comparability among the ASEAN countries. This is to ensure that the overall average length of stay is not affected by long-staying visitors.

Standard Average Occupancy Rate: Obtained by dividing gross lettings (roomnights) by available room-nights. Gross lettings refer to both paid and complimentary lettings. Available room-nights refer to room-nights available for occupancy, excluding rooms closed for renovations and staff use as declared by the hotels.

19.1 INTERNATIONAL VISITOR ARRIVALS BY REGION/COUNTRY OF RESIDENCE

|                                   |         |          |          |          |          |          | Thousa   |
|-----------------------------------|---------|----------|----------|----------|----------|----------|----------|
| Region/Country                    | 2009    | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
| Total                             | 9,682.7 | 11,641.7 | 13,171.3 | 14,496.1 | 15,567.9 | 15,095.2 | 15,231.5 |
| Americas                          | 467.7   | 524.8    | 563.7    | 616.4    | 641.5    | 635.3    | 657.3    |
| Canada                            | 70.0    | 75.1     | 82.9     | 87.8     | 92.7     | 92.8     | 96.2     |
| United States                     | 370.7   | 417.2    | 440.6    | 477.2    | 491.9    | 484.9    | 499.5    |
| Asia                              | 6,894.5 | 8,678.6  | 10,039.1 | 11,077.4 | 12,006.1 | 11,568.4 | 11,684.7 |
| ASEAN 1                           | 3,684.8 | 4,821.8  | 5,414.3  | 5,779.6  | 6,166.4  | 6,113.1  | 5,748.2  |
| China                             | 936.7   | 1,171.5  | 1,577.5  | 2,034.2  | 2,269.9  | 1,722.4  | 2,106.2  |
| Hong Kong                         | 294.4   | 387.6    | 464.4    | 472.2    | 539.8    | 631.0    | 609.9    |
| India                             | 725.6   | 829.0    | 869.0    | 895.0    | 933.6    | 943.6    | 1,014.0  |
| Japan                             | 490.0   | 529.0    | 656.4    | 757.1    | 832.8    | 824.7    | 789.2    |
| Korea, Republic of                | 272.0   | 360.7    | 414.9    | 445.2    | 471.8    | 537.0    | 577.     |
| Pakistan                          | 22.3    | 21.9     | 20.9     | 21.2     | 20.2     | 17.7     | 18.      |
| Saudi Arabia                      | 10.8    | 12.6     | 17.0     | 18.0     | 19.9     | 25.8     | 16.      |
| Sri Lanka                         | 70.0    | 79.0     | 84.0     | 83.4     | 95.6     | 88.8     | 93.      |
| Taiwan                            | 156.8   | 191.2    | 238.5    | 282.2    | 350.3    | 337.4    | 378.     |
| United Arab Emirates              | 49.5    | 56.5     | 62.7     | 65.6     | 72.6     | 75.7     | 78.      |
| Europe                            | 1,307.4 | 1,373.5  | 1,401.5  | 1,537.3  | 1,591.2  | 1,617.2  | 1,635.   |
| Austria                           | 17.5    | 20.1     | 19.9     | 23.3     | 24.7     | 26.5     | 25.      |
| Belgium & Luxembourg              | 21.4    | 24.4     | 25.0     | 26.8     | 27.4     | 28.7     | 27.      |
| France                            | 119.7   | 130.5    | 140.3    | 158.9    | 160.0    | 156.9    | 157.     |
| Germany                           | 183.7   | 209.3    | 220.0    | 252.4    | 251.6    | 263.5    | 286.     |
| Greece                            | 9.3     | 8.0      | 7.1      | 8.1      | 7.2      | 8.3      | 8.       |
| Italy                             | 46.8    | 51.1     | 53.5     | 65.6     | 66.7     | 67.1     | 69.      |
| Netherlands                       | 76.4    | 76.5     | 81.1     | 81.6     | 82.9     | 81.8     | 79.      |
| Scandinavia <sup>2</sup>          | 92.8    | 96.5     | 97.0     | 111.5    | 113.1    | 109.5    | 105.     |
| Switzerland                       | 63.8    | 74.4     | 79.0     | 83.9     | 94.4     | 103.4    | 100.     |
| United Kingdom                    | 469.8   | 461.8    | 442.6    | 446.5    | 461.5    | 451.9    | 473.     |
| CIS <sup>3</sup> & Eastern Europe | 110.4   | 119.7    | 127.9    | 153.8    | 177.5    | 191.2    | 167.     |
| Oceania                           | 936.5   | 989.1    | 1,093.4  | 1,189.1  | 1,261.1  | 1,207.9  | 1,186.   |
| Australia                         | 830.3   | 880.6    | 956.0    | 1,050.4  | 1,125.2  | 1,074.9  | 1,043.   |
| New Zealand                       | 93.8    | 95.8     | 123.0    | 123.7    | 120.4    | 118.7    | 127.     |
| Others                            | 76.6    | 75.6     | 73.5     | 75.8     | 68.1     | 66.4     | 67.      |
| Africa                            | 76.4    | 75.5     | 73.4     | 68.0     | 66.6     | 66.1     | 67.      |

Source : Singapore Tourism Board

Note: Data for visitor arrivals are compiled from Disembarkation/Embarkation Forms (IMM 27) completed by all visitors arriving in Singapore at the points of entry. Excludes arrivals of Malaysians by land

<sup>1</sup> ASEAN comprises Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines Singapore, Thailand and Vietnam. However, when used in this statistical table, the term excludes Singapore.

<sup>2</sup> Scandinavia comprises Denmark, Norway and Sweden.

<sup>3</sup> CIS denotes The Commonwealth of Independent States comprising Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

 $19.2 \quad \text{international visitor arrivals by (a) Sex and (b) age group}$ 

|                    |         |          |          |          |          |          | Thousand |
|--------------------|---------|----------|----------|----------|----------|----------|----------|
|                    | 2009    | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
| Total <sup>1</sup> | 9,682.7 | 11,641.7 | 13,171.3 | 14,496.1 | 15,567.9 | 15,095.2 | 15,231.5 |
| Sex                |         |          |          |          |          |          |          |
| Males              | 5,081.1 | 6,029.1  | 6,743.9  | 7,471.4  | 8,104.8  | 7,872.9  | 7,841.8  |
| Females            | 4,215.7 | 5,131.0  | 5,920.0  | 6,705.0  | 7,458.1  | 7,222.2  | 7,389.7  |
| Age Group (Years)  |         |          |          |          |          |          |          |
| Under 15           | 738.7   | 970.3    | 1,131.2  | 1,219.4  | 1,420.3  | 1,424.7  | 1,428.9  |
| 15 - 19            | 331.8   | 412.5    | 480.3    | 514.7    | 552.8    | 533.7    | 548.6    |
| 20 - 24            | 718.6   | 813.7    | 915.8    | 1,014.3  | 1,079.6  | 1,065.2  | 1,058.7  |
| 25 - 34            | 2,256.6 | 2,645.3  | 3,004.2  | 3,304.0  | 3,501.0  | 3,456.4  | 3,423.9  |
| 35 - 44            | 2,084.8 | 2,538.8  | 2,855.7  | 3,071.3  | 3,262.9  | 3,208.6  | 3,150.1  |
| 45 - 54            | 1,727.1 | 2,082.8  | 2,320.4  | 2,534.9  | 2,678.1  | 2,547.1  | 2,563.3  |
| 55 - 64            | 1,180.6 | 1,415.9  | 1,598.2  | 1,827.1  | 1,962.6  | 1,807.0  | 1,904.0  |
| 65 & Over          | 623.7   | 736.9    | 838.6    | 985.1    | 1,091.2  | 1,052.5  | 1,154.0  |
| Not Stated         | 20.8    | 25.5     | 26.8     | 25.3     | 19.4     | 0.0      | 0.0      |
|                    |         |          |          |          |          |          |          |

Source : Singapore Tourism Board

Note: Data for visitor arrivals are compiled from Disembarkation/Embarkation Forms (IMM 27) completed by all visitors arriving in Singapore at the points of entry. Excludes arrivals of Malaysians by land

<sup>1</sup> Includes sex not stated.

19.3 INTERNATIONAL VISITOR ARRIVALS BY LENGTH OF STAY

|                               |         |          |          |          |          |          | Thousand |
|-------------------------------|---------|----------|----------|----------|----------|----------|----------|
| Length of Stay (Days)         | 2009    | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
| Total                         | 9,214.9 | 11,126.9 | 12,644.5 | 13,937.2 | 14,983.1 | 14,513.4 | 14,595.2 |
| Under 1                       | 2,194.2 | 2,480.5  | 2,781.1  | 3,397.8  | 3,669.5  | 3,231.3  | 3,179.5  |
| 1                             | 1,907.4 | 2,188.4  | 2,464.0  | 2,786.7  | 3,065.2  | 2,627.1  | 2,729.7  |
| 2                             | 1,589.9 | 1,961.1  | 2,225.7  | 2,358.7  | 2,565.4  | 2,572.3  | 2,494.4  |
| 3                             | 1,225.4 | 1,636.2  | 1,954.8  | 2,058.6  | 2,156.9  | 2,265.4  | 2,274.8  |
| 4                             | 643.0   | 874.5    | 1,045.0  | 1,094.4  | 1,170.4  | 1,286.5  | 1,370.2  |
| 5                             | 354.4   | 469.8    | 535.0    | 560.0    | 593.0    | 659.5    | 707.4    |
| 6                             | 227.7   | 289.1    | 321.6    | 333.6    | 353.3    | 388.5    | 398.6    |
| 7                             | 171.1   | 204.3    | 226.8    | 232.4    | 245.9    | 264.6    | 270.7    |
| 8-10                          | 243.8   | 285.3    | 315.3    | 320.0    | 333.6    | 352.0    | 354.6    |
| 11-14                         | 180.6   | 204.7    | 220.1    | 221.2    | 229.5    | 236.1    | 235.9    |
| 15 - 29                       | 297.9   | 352.7    | 373.7    | 387.5    | 408.2    | 438.6    | 415.6    |
| 30 - 59                       | 130.3   | 130.7    | 133.5    | 137.5    | 141.3    | 140.9    | 117.1    |
| 60 & Over                     | 49.3    | 49.8     | 47.9     | 48.7     | 51.1     | 50.7     | 46.7     |
| Average Length of Stay (Days) | 4.0     | 3.9      | 3.7      | 3.5      | 3.5      | 3.7      | 3.6      |

Source : Singapore Tourism Board

Note: Data for visitor arrivals are compiled from Disembarkation/Embarkation Forms (IMM 27) completed by all visitors arriving in Singapore at the points of entry. Excludes arrivals of Malaysians by land Refers to visitors who left Singapore during the period specified.

19.4 TOURISM RECEIPTS BY MAJOR COMPONENTS

|                              |        |        |        |        |        |        | Million Dollars |
|------------------------------|--------|--------|--------|--------|--------|--------|-----------------|
|                              | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015            |
| Tourism Receipts             | 12,642 | 18,931 | 22,277 | 23,081 | 23,469 | 23,560 | 21,777          |
| Accommodation                | 2,839  | 3,623  | 4,390  | 5,038  | 5,332  | 5,309  | 4,680           |
| Food & Beverage              | 1,512  | 1,903  | 2,239  | 2,246  | 2,294  | 2,263  | 2,319           |
| Shopping                     | 3,377  | 3,971  | 4,489  | 4,588  | 4,553  | 4,116  | 3,913           |
| Sightseeing, Entertainment & |        |        |        |        |        |        |                 |
| Gaming 1                     | 201    | 4,013  | 5,391  | 5,240  | 5,471  | 5,823  | 5,093           |
| Others <sup>2</sup>          | 4,712  | 5,421  | 5,768  | 5,970  | 5,819  | 6,049  | 5,772           |
|                              |        |        |        |        |        |        |                 |

Source: Singapore Tourism Board

<sup>1</sup> From 2010, data includes gaming expenditure.

<sup>2</sup> Includes expenditure on airfares, port taxes, local transportation, business, medical, education and transit visitors.

19.5 OUTBOUND DEPARTURES OF SINGAPORE RESIDENTS BY MODE OF TRANSPORT

|       |           |           |           |           |           |           | Number    |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|       | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
| Total | 6,960,724 | 7,342,276 | 7,752,926 | 8,047,808 | 8,647,066 | 8,902,705 | 9,125,331 |
| Air   | 4,959,767 | 5,617,110 | 6,082,620 | 6,485,268 | 6,960,428 | 7,163,778 | 7,371,377 |
| Sea   | 2,000,957 | 1,725,166 | 1,670,306 | 1,562,540 | 1,686,638 | 1,738,927 | 1,753,954 |

Source : Immigration & Checkpoints Authority

## 19.6 GAZETTED HOTEL STATISTICS

| Unit | 2009            | 2010  | 2011   | 2012  | 2013  | 2014  | 2015  |
|------|-----------------|---|--|---|---|---|---|
|      |                 |   |  |   |   |   |   |
|      | 101             | 96  | 98   | 101   | 113   | 134   | 154   |
| '000 | 10,874.8        | 11,262.0                                      | 12,377.9   | 12,450.9  | 13,118.4  | 14,241.5  | 15,241.0  |
| %    | 75.8            | 85.2  | 86.4   | 86.5  | 86.3  | 85.5  | 84.9  |
| \$   | 189.1           | 217.9   | 247.1  | 261.7   | 258.1   | 258.1   | 244.7   |
| \$m  | 1,559.7         | 2,091.0                                       | 2,643.5  | 2,818.4   | 2,923.1   | 3,146.9   | 3,174.5   |
| \$m  | 890.6           | 1,052.0                                       | 1,315.1  | 1,309.9   | 1,344.7   | 1,424.9   | 1,462.7   |
|      | '000<br>%<br>\$ | 101 '000 10,874.8 % 75.8 \$ 189.1 \$m 1,559.7 | 101 96 '000 10,874.8 11,262.0 % 75.8 85.2 \$ 189.1 217.9 \$m 1,559.7 2,091.0 | 101 96 98 '000 10,874.8 11,262.0 12,377.9 % 75.8 85.2 86.4 \$ 189.1 217.9 247.1 \$m 1,559.7 2,091.0 2,643.5 | 101 96 98 101<br>'000 10,874.8 11,262.0 12,377.9 12,450.9<br>% 75.8 85.2 86.4 86.5<br>\$ 189.1 217.9 247.1 261.7<br>\$m 1,559.7 2,091.0 2,643.5 2,818.4 | 101 96 98 101 113<br>'000 10,874.8 11,262.0 12,377.9 12,450.9 13,118.4<br>% 75.8 85.2 86.4 86.5 86.3<br>\$ 189.1 217.9 247.1 261.7 258.1<br>\$m 1,559.7 2,091.0 2,643.5 2,818.4 2,923.1 | 101 96 98 101 113 134<br>'000 10,874.8 11,262.0 12,377.9 12,450.9 13,118.4 14,241.5<br>% 75.8 85.2 86.4 86.5 86.3 85.5<br>\$ 189.1 217.9 247.1 261.7 258.1 258.1<br>\$m 1,559.7 2,091.0 2,643.5 2,818.4 2,923.1 3,146.9 |

Source: Singapore Tourism Board (STB)

- 1 Refers to gazetted hotels.
- 2 Based on monthly hotel returns submitted to STB
- 3 Refers to room-nights available for occupancy. Excludes rooms closed for renovations and staff use as declared by the hotels
- 4 Refers to gross lettings (room nights) divided by available room-nights.
- 5 Refers to total room revenue divided by gross lettings

# 20



# Finance

### **Household Sector Balance Sheet**

The Singapore Department of Statistics has, since 2012, compiled the quarterly household sector balance sheet from reference period 1<sup>st</sup> Quarter 1995. The household sector balance sheet shows the household sector's assets and liabilities at a particular point in time (i.e. as at end-of-period).

Household assets can be classified as financial or non-financial assets. Financial assets include currency and deposits, shares and securities (e.g. listed shares, unlisted shares, unit trusts and investment funds), life insurance (attributable to households as policyholders), CPF balances and pension funds. Non-financial assets, which refer mainly to residential property assets, are categorised into public housing and private Household liabilities housing. comprise mortgages (from HDB and financial institutions) and personal loans (e.g. motor vehicle loans, credit or charge card loans and other personal loans from banks and other financial institutions).

### **Banking, Finance and Insurance**

Before 1971, the various monetary functions normally associated with a central bank were performed by several government departments and agencies. To centralise these functions, the Monetary Authority of Singapore (MAS) was established in 1971 to assume the central bank role except for the currency issuing function which remained the responsibility of the Board of Commissioners of Currency Singapore (BCCS). In October 2002, the BCCS was merged with the MAS.

The MAS conducts monetary and exchange rate policies appropriate for sustained and non-inflationary economic growth in Singapore. It administers the statutes pertaining to money and banking and formulates policies for the development of a sound banking system and an orderly financial market. It aims to

develop Singapore into an international financial centre.

Statistics on banking, finance and insurance are compiled from returns submitted to the MAS. They may be found in the "Monthly Statistical Bulletin" and Annual Reports published by the MAS.

### **Asian Dollar Market**

The Asian Dollar Market was officially established in October 1968 when approval was first given for a bank to operate an Asian Currency Unit (ACU). Since then, merchant banks have also been allowed to operate ACUs. As at 31 December 2015, there was a total of 155 ACUs in operation.

### **Insurance**

The insurance industry is regulated by the MAS under the Insurance Act (Cap 142).

Insurance business in Singapore is divided into two classes – life business and general business.

The range of products offered by life insurers includes traditional whole life, endowment, term, accident, health and annuity plans as well as investment-linked insurance plans. General insurers provide coverage for a wide range of risks such as fire, marine and aviation, motor, work injury compensation and public liability.

### **Central Provident Fund**

Please see Chapter 5.

### **Definitions**

Money Supply: Refers to the amount of money in an economy. Narrowly defined, money supply (M1) consists of currency in active circulation and demand deposits. A broad

definition of money supply (M2) comprises M1 and quasi money. The latter includes fixed, savings and other deposits with banks as well as negotiable certificates of deposit in Singapore dollar issued by Singapore banks. Money supply (M3) consists of M2 and net deposits with non-bank financial institutions.

Asian Currency Unit (ACU): Refers to an operational entity of a financial institution which has been granted approval by the MAS to participate in the Asian Dollar Market in Singapore. The ACU is essentially a separate accounting unit of a financial institution set up for its transactions in the Asian Dollar Market.

Official Foreign Reserves: Refers to the gross official reserves held by the MAS. These include gold and foreign exchange, Special Drawing Rights and Singapore's reserve position in the International Monetary Fund (IMF). Prior to May 1999, Singapore's official foreign reserves were valued at book cost. With effect from May 1999, the book value of foreign reserve assets are translated at market exchange rates prevailing at the end of each reporting month.

Special Drawing Rights (SDR): Refers to an international reserve asset created by the IMF and allocated to its members in proportion to their quotas as a supplement to existing reserve assets. The SDR serves as the unit of account of the IMF. The valuation of the SDR is determined on the basis of a basket of four currencies: the US dollar, Euro, Japanese Yen and Pound Sterling.

Main Cards and Supplementary Cards: Refer to both credit and charge cards issued by the card issuing companies.

Total Cards Billings: Refer to total billings of Singapore cardholders excluding interest charges and membership fees.

Rolled Over Balances: Refer to balances that are subject to interest charges because they are not settled within the 'free credit' period. These include the minimum payment not settled by due date as well as the amount that is rolled over after settlement of the minimum sum.

Bad Debts Written Off: They are included as and when they occur. This is because the period when bad debts are written off differs from one card issuer to another.

20.1 HOUSEHOLD SECTOR BALANCE SHEET (End of Period)

|                                     |             |             |             |             |             |             | Million Dollars |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|
|                                     | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015            |
| Net Worth                           | 1,036,279.3 | 1,191,575.5 | 1,273,593.2 | 1,376,495.1 | 1,431,182.8 | 1,467,471.7 | 1,517,981.7     |
| Assets                              | 1,226,603.5 | 1,403,144.1 | 1,510,197.0 | 1,639,395.9 | 1,711,222.2 | 1,761,792.8 | 1,819,325.0     |
| Financial Assets                    | 650,547.2   | 713,793.2   | 750,090.9   | 826,206.0   | 882,806.7   | 943,082.3   | 985,835.3       |
| Currency & Deposits                 | 228,995.1   | 247,094.2   | 273,927.1   | 298,331.4   | 322,598.2   | 342,274.6   | 365,832.0       |
| Shares & Securities                 | 143,378.9   | 160,796.1   | 146,391.8   | 164,041.2   | 168,822.4   | 174,514.4   | 164,179.0       |
| Listed Shares                       | 71,844.1    | 83,375.7    | 70,851.4    | 86,318.6    | 90,106.8    | 90,261.3    | 81,399.6        |
| Unlisted Shares                     | 34,336.6    | 37,757.7    | 35,036.8    | 31,470.8    | 30,014.9    | 30,412.6    | 30,611.2        |
| Unit Trusts & Investment Funds      | 37,198.2    | 39,662.7    | 40,503.6    | 46,251.8    | 48,700.7    | 53,840.5    | 52,168.2        |
| Life Insurance                      | 99,232.5    | 107,262.3   | 108,533.9   | 119,720.0   | 124,339.1   | 136,665.7   | 141,861.5       |
| Central Provident Fund <sup>1</sup> | 166,804.0   | 185,888.0   | 207,545.5   | 230,157.7   | 252,968.6   | 275,363.9   | 299,522.4       |
| Pension Funds                       | 12,136.7    | 12,752.6    | 13,692.7    | 13,955.7    | 14,078.4    | 14,263.7    | 14,440.4        |
| Residential Property Assets         | 576,056.2   | 689,351.0   | 760,106.1   | 813,189.9   | 828,415.5   | 818,710.5   | 833,489.7       |
| Public Housing                      | 304,977.7   | 349,156.4   | 389,420.4   | 415,738.5   | 412,752.5   | 394,669.3   | 400,951.4       |
| Private Housing                     | 271,078.6   | 340,194.6   | 370,685.7   | 397,451.4   | 415,663.0   | 424,041.2   | 432,538.3       |
| Liabilities                         | 190,324.2   | 211,568.6   | 236,603.8   | 262,900.9   | 280,039.4   | 294,321.1   | 301,343.3       |
| Mortgages                           | 140,177.1   | 158,326.3   | 174,589.5   | 193,006.9   | 205,385.2   | 216,755.7   | 224,776.6       |
| Financial Institutions              | 94,317.9    | 115,279.6   | 133,605.7   | 154,071.2   | 168,623.1   | 179,577.7   | 186,907.6       |
| Housing Development Board           | 45,859.2    | 43,046.7    | 40,983.8    | 38,935.7    | 36,762.1    | 37,178.0    | 37,869.0        |
| Personal Loans                      | 50,147.2    | 53,242.3    | 62,014.4    | 69,894.0    | 74,654.2    | 77,565.4    | 76,566.7        |
| Motor Vehicle Loans                 | 15,988.3    | 15,075.7    | 14,449.2    | 14,333.9    | 12,432.8    | 10,257.2    | 9,559.0         |
| Credit/Charge Cards                 | 6,173.8     | 6,899.9     | 7,891.3     | 8,972.8     | 9,948.8     | 10,429.1    | 10,266.5        |
| Others                              | 27,985.0    | 31,266.7    | 39,673.9    | 46,587.3    | 52,272.7    | 56,879.0    | 56,741.2        |

Note: Data are non-seasonally adjusted.

Numbers may not add up due to rounding.

<sup>1</sup> Refers to the total amount due to members (net of withdrawals).

20.2 CURRENCY IN CIRCULATION (End of Period)

|                         | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|
| Gross Circulation (\$m) | 23,295.9 | 25,772.8 | 28,180.1 | 32,266.1 | 33,806.1 | 36,428.8 | 39,688.8 |
| Notes                   | 22,151.7 | 24,585.4 | 26,941.7 | 30,984.2 | 32,479.5 | 35,049.4 | 38,254.1 |
| Coins                   | 1,144.1  | 1,187.4  | 1,238.4  | 1,281.9  | 1,326.6  | 1,379.4  | 1,434.7  |

MONEY SUPPLY (End of Period)

| Million   |   |  |   |   |  |   |  |  |  |  |
|-----------|---|--|---|---|--|---|--|--|--|--|
| 2009      | 2010  | 2011   | 2012  | 2013  | 2014   | 2015  |  |  |  |  |
| 03 472 1  | 112 487 0   | 130 501 0  | 140 700 1   | 15/1507.3   | 160 217 7  | 160,445.8   |  |  |  |  |
| 20,216.5  | 22,299.5  | 24,690.3   | 26,361.3  | 28,851.6  | 31,506.9   | 34,042.3  |  |  |  |  |
| 73,255.6  | 90,187.5  | 105,901.6  | 114,347.8   | 125,745.7   | 128,710.8  | 126,403.5   |  |  |  |  |
| 371,207.9 | 403,096.1   | 443,358.1  | 475,392.5   | 495,907.8   | 512,430.8  | 520,239.7   |  |  |  |  |
| 93,472.1  | 112,487.0   | 130,591.9  | 140,709.1   | 154,597.3   | 160,217.7  | 160,445.8   |  |  |  |  |
| 277,735.8 | 290,609.1   | 312,766.2  | 334,683.4   | 341,310.5   | 352,213.1  | 359,793.9   |  |  |  |  |
| 156,731.1 | 154,417.3   | 160,699.6  | 175,270.8   | 171,989.3   | 172,712.0  | 174,465.4   |  |  |  |  |
| 0.0       | 20.0  | 165.0  | 90.2  | 482.8   | 390.8  | 722.0   |  |  |  |  |
| 121,004.7 | 136,171.8   | 151,901.6  | 159,322.4   | 168,838.4   | 179,110.3  | 184,606.5   |  |  |  |  |
| 378,526.0 | 410,109.3   | 451,666.3  | 485,915.4   | 506,900.0   | 524,166.4  | 532,944.5   |  |  |  |  |
| 371,207.9 | 403,096.1   | 443,358.1  | 475,392.5   | 495,907.8   | 512,430.8  | 520,239.7   |  |  |  |  |
| 7,318.1   | 7,013.2   | 8,308.2  | 10,522.9  | 10,992.2  | 11,735.6   | 12,704.8  |  |  |  |  |
|           | 93,472.1<br>20,216.5<br>73,255.6<br>371,207.9<br>93,472.1<br>277,735.8<br>156,731.1<br>0.0<br>121,004.7<br>378,526.0<br>371,207.9 | 93,472.1 112,487.0 20,216.5 22,299.5 73,255.6 90,187.5 371,207.9 403,096.1 93,472.1 112,487.0 277,735.8 290,609.1 156,731.1 154,417.3 0.0 20.0 121,004.7 136,171.8 378,526.0 410,109.3 371,207.9 403,096.1 | 93,472.1 112,487.0 130,591.9<br>20,216.5 22,299.5 24,690.3<br>73,255.6 90,187.5 105,901.6<br>371,207.9 403,096.1 443,358.1<br>93,472.1 112,487.0 130,591.9<br>277,735.8 290,609.1 312,766.2<br>156,731.1 154,417.3 160,699.6<br>0.0 20.0 165.0<br>121,004.7 136,171.8 151,901.6<br>378,526.0 410,109.3 451,666.3<br>371,207.9 403,096.1 443,358.1 | 93,472.1 112,487.0 130,591.9 140,709.1 20,216.5 22,299.5 24,690.3 26,361.3 73,255.6 90,187.5 105,901.6 114,347.8 371,207.9 403,096.1 443,358.1 475,392.5 93,472.1 112,487.0 130,591.9 140,709.1 277,735.8 290,609.1 312,766.2 334,683.4 156,731.1 154,417.3 160,699.6 175,270.8 0.0 20.0 165.0 90.2 121,004.7 136,171.8 151,901.6 159,322.4 378,526.0 410,109.3 451,666.3 485,915.4 371,207.9 403,096.1 443,358.1 475,392.5 | 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 20,216.5 22,299.5 24,690.3 26,361.3 28,851.6 73,255.6 90,187.5 105,901.6 114,347.8 125,745.7 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 277,735.8 290,609.1 312,766.2 334,683.4 341,310.5 156,731.1 154,417.3 160,699.6 175,270.8 171,989.3 0.0 20.0 165.0 90.2 482.8 121,004.7 136,171.8 151,901.6 159,322.4 168,838.4 378,526.0 410,109.3 451,666.3 485,915.4 506,900.0 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 | 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 160,217.7 20,216.5 22,299.5 24,690.3 26,361.3 28,851.6 31,506.9 73,255.6 90,187.5 105,901.6 114,347.8 125,745.7 128,710.8 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 512,430.8 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 160,217.7 277,735.8 290,609.1 312,766.2 334,683.4 341,310.5 352,213.1 156,731.1 154,417.3 160,699.6 175,270.8 171,989.3 172,712.0 0.0 20.0 165.0 90.2 482.8 390.8 121,004.7 136,171.8 151,901.6 159,322.4 168,838.4 179,110.3 378,526.0 410,109.3 451,666.3 485,915.4 506,900.0 524,166.4 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 512,430.8 |  |  |  |  |

Source : Monetary Authority of Singapore (MAS)

<sup>1</sup> Figures excludes commemorative, numismatic and bullion coins issued by Monetary Authority of Singapore and cash held by commercial banks and other financial instituitions.

20.4 MONETARY SURVEY (End of Period)

|            |   |   |   |  |  | Million Dollar   |
|------------|---|---|---|--|--|--|
| 2009       | 2010  | 2011  | 2012  | 2013   | 2014   | 2015   |
|            |   |   |   |  |  |  |
| 93,472.1   | 112,487.0   | 130,591.9   | 140,709.1   | 154,597.3  | 160,217.7  | 160,445.8  |
| 277,735.8  | 290,609.1   | 312,766.2   | 334,683.4   | 341,310.5  | 352,213.1  | 359,793.9  |
| 371,207.9  | 403,096.1   | 443,358.1   | 475,392.5   | 495,907.8  | 512,430.8  | 520,239.7  |
| 362,231.1  | 402,502.2   | 466,122.4   | 522,034.6   | 582,704.8  | 626,023.9  | 638,949.6  |
| 88,700.4   | 92,334.1  | 98,231.2  | 105,428.5   | 105,211.8  | 113,234.5  | 116,760.6  |
| 273,530.7  | 310,168.1   | 367,891.2   | 416,606.1   | 477,493.0  | 512,789.4  | 522,189.0  |
| 120,401.9  | 142,188.2   | 160,243.4   | 178,122.1   | 162,779.8  | 133,431.9  | 151,767.7  |
| 299,275.1  | 309,700.1   | 301,355.1   | 304,296.3   | 291,126.5  | 291,399.7  | 303,663.8  |
| 262,347.1  | 287,658.8   | 306,983.9   | 315,467.1   | 341,133.8  | 343,503.9  | 352,515.5  |
| 36,928.0   | 22,041.3  | -5,628.8  | -11,170.8   | -50,007.3  | -52,104.2  | -48,851.7  |
| -169,896.4 | -166,918.0  | -163,876.0  | -172,816.3  | -215,143.7   | -271,560.9   | -270,606.0   |
|            | 93,472.1<br>277,735.8<br>371,207.9<br>362,231.1<br>88,700.4<br>273,530.7<br>120,401.9<br>299,275.1<br>262,347.1<br>36,928.0 | 93,472.1 112,487.0<br>277,735.8 290,609.1<br>371,207.9 403,096.1<br>362,231.1 402,502.2<br>88,700.4 92,334.1<br>273,530.7 310,168.1<br>120,401.9 142,188.2<br>299,275.1 309,700.1<br>262,347.1 287,658.8<br>36,928.0 22,041.3 | 93,472.1 112,487.0 130,591.9<br>277,735.8 290,609.1 312,766.2<br>371,207.9 403,096.1 443,358.1<br>362,231.1 402,502.2 466,122.4<br>88,700.4 92,334.1 98,231.2<br>273,530.7 310,168.1 367,891.2<br>120,401.9 142,188.2 160,243.4<br>299,275.1 309,700.1 301,355.1<br>262,347.1 287,658.8 306,983.9<br>36,928.0 22,041.3 -5,628.8 | 93,472.1 112,487.0 130,591.9 140,709.1 277,735.8 290,609.1 312,766.2 334,683.4 371,207.9 403,096.1 443,358.1 475,392.5 362,231.1 402,502.2 466,122.4 522,034.6 88,700.4 92,334.1 98,231.2 105,428.5 273,530.7 310,168.1 367,891.2 416,606.1 120,401.9 142,188.2 160,243.4 178,122.1 299,275.1 309,700.1 301,355.1 304,296.3 262,347.1 287,658.8 306,983.9 315,467.1 36,928.0 22,041.3 -5,628.8 -11,170.8 | 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 277,735.8 290,609.1 312,766.2 334,683.4 341,310.5 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 362,231.1 402,502.2 466,122.4 522,034.6 582,704.8 88,700.4 92,334.1 98,231.2 105,428.5 105,211.8 273,530.7 310,168.1 367,891.2 416,606.1 477,493.0 120,401.9 142,188.2 160,243.4 178,122.1 162,779.8 299,275.1 309,700.1 301,355.1 304,296.3 291,126.5 262,347.1 287,658.8 306,983.9 315,467.1 341,133.8 36,928.0 22,041.3 -5,628.8 -11,170.8 -50,007.3 | 93,472.1 112,487.0 130,591.9 140,709.1 154,597.3 160,217.7 277,735.8 290,609.1 312,766.2 334,683.4 341,310.5 352,213.1 371,207.9 403,096.1 443,358.1 475,392.5 495,907.8 512,430.8 362,231.1 402,502.2 466,122.4 522,034.6 582,704.8 626,023.9 88,700.4 92,334.1 98,231.2 105,428.5 105,211.8 113,234.5 273,530.7 310,168.1 367,891.2 416,606.1 477,493.0 512,789.4 120,401.9 142,188.2 160,243.4 178,122.1 162,779.8 133,431.9 299,275.1 309,700.1 301,355.1 304,296.3 291,126.5 291,399.7 262,347.1 287,658.8 306,983.9 315,467.1 341,133.8 343,503.9 36,928.0 22,041.3 -5,628.8 -11,170.8 -50,007.3 -52,104.2 |

20.5 OFFICIAL FOREIGN RESERVES (End of Period)

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total Foreign Reserves                                 | 263,955.4 | 288,954.1 | 308,403.2 | 316,744.2 | 344,729.2 | 340,438.1 | 350,990.8       |
| Special Drawing Rights                                 | 2,205.3   | 1,969.8   | 1,732.9   | 1,641.1   | 1,697.7   | 1,677.9   | 1,717.7         |
| Reserve Position in the<br>International Monetary Fund | 375.5     | 421.0     | 1,080.8   | 1,115.8   | 1,296.7   | 1,084.1   | 852.6           |
| Gold & Foreign Exchange                                | 261,374.6 | 286,563.3 | 305,589.5 | 313,987.3 | 341,734.8 | 337,676.1 | 348,420.5       |
| Total Foreign Reserves (million US\$)                  | 187,809.1 | 225,754.2 | 237,737.0 | 259,307.1 | 273,065.1 | 256,860.4 | 247,747.4       |

20.6 EXCHANGE RATES (Average for the Year)

| Currency               | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| S\$ Per Unit of:       |        |        |        |        |        |        |        |
| Australian Dollar      | 1.1473 | 1.2524 | 1.2971 | 1.2940 | 1.2107 | 1.1431 | 1.0339 |
| Chinese Renminbi       | 0.2129 | 0.2014 | 0.1946 | 0.1981 | 0.2035 | 0.2057 | 0.2187 |
| Euro                   | 2.0242 | 1.8095 | 1.7495 | 1.6071 | 1.6621 | 1.6837 | 1.5267 |
| Hong Kong Dollar       | 0.1876 | 0.1755 | 0.1616 | 0.1611 | 0.1613 | 0.1634 | 0.1773 |
| Malaysian Ringgit      | 0.4126 | 0.4234 | 0.4111 | 0.4046 | 0.3973 | 0.3873 | 0.3534 |
| Pound Sterling         | 2.2737 | 2.1073 | 2.0161 | 1.9803 | 1.9573 | 2.0873 | 2.1023 |
| US Dollar              | 1.4545 | 1.3635 | 1.2579 | 1.2497 | 1.2513 | 1.2671 | 1.3748 |
| S\$ Per 100 Units of : |        |        |        |        |        |        |        |
| Indian Rupee           | 3.0057 | 2.9827 | 2.7027 | 2.3442 | 2.1448 | 2.0768 | 2.1434 |
| Indonesian Rupiah      | 0.0140 | 0.0150 | 0.0143 | 0.0133 | 0.0120 | 0.0107 | 0.0103 |
| Japanese Yen           | 1.5562 | 1.5543 | 1.5780 | 1.5672 | 1.2840 | 1.1996 | 1.1364 |
| Korean Won             | 0.1143 | 0.1180 | 0.1135 | 0.1109 | 0.1144 | 0.1204 | 0.1215 |
| New Taiwan Dollar      | 4.4023 | 4.3292 | 4.2798 | 4.2262 | 4.2155 | 4.1812 | 4.3298 |
| Philippine Peso        | 3.0532 | 3.0228 | 2.9038 | 2.9592 | 2.9492 | 2.8535 | 3.0199 |
| Thai Baht              | 4.2351 | 4.2986 | 4.1252 | 4.0199 | 4.0750 | 3.9002 | 4.0175 |

Source : Monetary Authority of Singapore

20.7 NUMBER OF FINANCIAL INSTITUTIONS IN SINGAPORE

|                                |      |      |      |      |      |      | Number |
|--------------------------------|------|------|------|------|------|------|--------|
|                                | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016   |
| Banks                          | 120  | 120  | 123  | 123  | 124  | 126  | 124    |
| Local                          | 7    | 6    | 6    | 6    | 5    | 5    | 5      |
| Full banks                     | 6    | 5    | 5    | 6    | 5    | 5    | 5      |
| Wholesale banks <sup>1</sup>   | 1    | 1    | 1    | 0    | 0    | 0    | 0      |
| Foreign                        | 113  | 114  | 117  | 117  | 119  | 121  | 119    |
| Full banks                     | 25   | 26   | 26   | 27   | 28   | 28   | 28     |
| Wholesale banks <sup>1</sup>   | 46   | 50   | 52   | 53   | 55   | 56   | 53     |
| Offshore banks                 | 42   | 38   | 39   | 37   | 36   | 37   | 38     |
| (Banking offices including     |      |      |      |      |      | -    |        |
| head offices and main offices) | 421  | 428  | 432  | 425  | 449  | 432  | 438    |
| Asian Currency Units           | 162  | 163  | 165  | 161  | 159  | 160  | 155    |
| Banks                          | 117  | 117  | 120  | 120  | 121  | 123  | 122    |
| Merchant banks                 | 45   | 46   | 45   | 41   | 38   | 37   | 33     |
| Finance Companies              | 3    | 3    | 3    | 3    | 3    | 3    | 3      |
| (Finance companies' offices    |      | •    | •    | •    | •    |      | •      |
| including head offices)        | 39   | 39   | 39   | 39   | 39   | 39   | 39     |
| Merchant Banks                 | 46   | 47   | 46   | 42   | 39   | 38   | 34     |
| Insurance Companies            | 158  | 157  | 164  | 168  | 177  | 181  | 186    |
| Direct insurers                | 64   | 63   | 70   | 72   | 79   | 80   | 79     |
| Professional reinsurers        | 26   | 28   | 29   | 28   | 31   | 31   | 32     |
| Authorised reinsurers          | 6    | 6    | 6    | 6    | 6    | 6    | 5      |
| Captive insurers               | 62   | 60   | 59   | 62   | 61   | 64   | 70     |
| Insurance Brokers              | 63   | 64   | 67   | 69   | 71   | 74   | 75     |
| Bank Representative Offices    | 30   | 34   | 36   | 38   | 36   | 38   | 41     |
| International Money Brokers    | 10   | 10   | 9    | 9    | 9    | 10   | 12     |
| Licensed Financial Advisers    | 71   | 67   | 67   | 62   | 58   | 60   | 62     |

(continued on the next page)

Source: Monetary Authority of Singapore Note: Data as at end March of each year. 1 Previously known as restricted banks.

20.7 NUMBER OF FINANCIAL INSTITUTIONS IN SINGAPORE (continued)

|   |      |      |      |      |      |      | Number |
|---|------|------|------|------|------|------|--------|
|   | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016   |
| Capital Markets Services Licensees                | 224  | 251  | 250  | 295  | 443  | 493  | 533    |
| Dealing in securities                             | 99   | 98   | 94   | 106  | 118  | 123  | 137    |
| Trading in Futures Contracts                      | 48   | 47   | 50   | 52   | 59   | 60   | 68     |
| Advising on Corporate Finance                     | 34   | 33   | 34   | 37   | 40   | 42   | 40     |
| Fund Management                                   | 107  | 118  | 119  | 158  | 289  | 335  | 367    |
| Leveraged Foreign Exchange Trading                | 19   | 19   | 20   | 23   | 24   | 24   | 27     |
| Securities Financing                              | 17   | 18   | 17   | 17   | 17   | 17   | 17     |
| Providing Custodial Services for Securities       | 39   | 40   | 40   | 38   | 37   | 37   | 37     |
| Real Estate Investment Trust Management           | 7    | 22   | 23   | 26   | 31   | 34   | 36     |
| Providing Credit Rating Services <sup>2</sup>     | na   | na   | na   | 3    | 3    | 4    | 4      |
| Licensed Trust Companies                          | 40   | 48   | 50   | 51   | 52   | 54   | 53     |
| Registered Fund Management Companies <sup>3</sup> | na   | na   | na   | 74   | 236  | 275  | 273    |

Notes: Data as at end March of each year.

As the data breakdown of "Capital Markets Services Licensees" refer to the types of regulated activities which a "Capital Markets Services Licensee" is licenseed to conduct, the components of "Capital Markets Services Licensees" will not add up to its total.

<sup>2</sup> Regulation of credit rating services came into effect on 17 January 2012.

<sup>3</sup> Registration of fund management companies commenced under an enhanced regulatory regime which came into effect on 7 August 2012.

20.8 ASSETS OF DOMESTIC BANKING UNITS (End of Period)

|  |           |           |           |           |           |             | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-------------|-----------------|
|  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014        | 2015            |
| Total Assets                               | 706,814.2 | 781,607.4 | 855,811.4 | 911,009.0 | 973,226.8 | 1,059,642.3 | 1,057,520.6     |
| Cash                                       | 2,026.8   | 2,219.9   | 2,796.4   | 2,756.0   | 2,807.5   | 2,917.1     | 4,396.2         |
| Amounts Due from Banks                     | 227,923.9 | 232,272.3 | 216,223.0 | 184,902.7 | 142,986.5 | 183,016.5   | 170,139.1       |
| In Singapore                               | 57,188.2  | 77,972.8  | 58,857.6  | 44,059.5  | 27,601.4  | 32,391.8    | 26,960.5        |
| Asian Currency Units                       | 87,208.0  | 69,152.1  | 62,125.1  | 44,061.6  | 29,216.8  | 46,889.1    | 51,660.2        |
| Outside Singapore                          | 83,527.7  | 85,147.4  | 95,240.3  | 96,781.5  | 86,168.3  | 103,735.6   | 91,518.4        |
| Balances with Monetary                     |           |           |           |           |           |             |                 |
| Authority of Singapore                     | 13,999.9  | 15,878.7  | 17,815.3  | 19,503.3  | 32,107.0  | 20,311.6    | 22,218.5        |
| Securities and Equities Issued             |           |           |           |           |           |             |                 |
| by Private Entities                        | 27,974.5  | 36,034.3  | 38,484.1  | 41,562.4  | 49,723.3  | 56,476.5    | 58,452.8        |
| Debt Securities                            |           |           |           |           |           |             |                 |
| In Singapore                               | 5,672.7   | 8,365.6   | 9,922.2   | 10,973.6  | 12,326.8  | 11,414.4    | 11,106.5        |
| Outside Singapore                          | 8,925.6   | 12,416.8  | 13,572.4  | 14,803.7  | 12,376.5  | 12,633.0    | 14,122.2        |
| Equity Investments                         |           |           |           |           |           |             |                 |
| In Singapore                               | 8,557.4   | 10,088.1  | 9,957.9   | 10,362.0  | 11,541.7  | 18,523.9    | 11,474.7        |
| Outside Singapore                          | 4,818.9   | 5,163.8   | 5,031.6   | 5,423.1   | 13,478.3  | 13,905.3    | 21,749.3        |
| Debt Securities by Government              |           |           |           |           |           |             |                 |
| Related Entities                           | 94,993.5  | 94,047.0  | 99,227.4  | 111,755.8 | 117,755.4 | 128,484.0   | 136,437.7       |
| Government of Singapore                    | 81,318.8  | 84,853.4  | 91,417.5  | 98,422.4  | 98,213.9  | 106,234.3   | 108,845.3       |
| Statutory Authorities                      | 3,193.7   | 4,219.1   | 6,780.8   | 9,372.0   | 17,111.0  | 17,996.2    | 17,924.1        |
| Other Governments                          | 10,481.1  | 4,974.6   | 1,029.2   | 3,961.4   | 2,430.5   | 4,253.6     | 9,668.3         |
| Loans & Advances including                 |           |           |           |           |           |             |                 |
| Bills Financing                            | 281,296.8 | 322,743.8 | 420,455.5 | 490,706.5 | 574,274.4 | 607,200.5   | 599,756.0       |
| Bills Discounted or Purchased <sup>1</sup> | 11,308.5  | 20,050.4  | 44,582.2  | 56,292.0  | 79,657.4  | 75,343.9    | 52,846.8        |
| Payable In Singapore                       | 3,464.1   | 4,430.6   | 6,947.6   | 8,490.1   | 12,921.7  | 11,735.7    | 11,410.3        |
| Payable Outside Singapore                  | 7,844.4   | 15,619.8  | 37,634.6  | 47,801.9  | 66,735.7  | 63,608.2    | 41,436.5        |
| Loans & Advances                           | 269,988.3 | 302,693.4 | 375,873.3 | 434,414.5 | 494,617.1 | 531,856.6   | 546,909.1       |
| Resident                                   | 252,642.6 | 283,064.5 | 334,282.5 | 377,408.3 | 423,591.8 | 453,119.3   | 470,273.3       |
| Non-Resident                               | 17,345.7  | 19,628.9  | 41,590.8  | 57,006.2  | 71,025.3  | 78,737.3    | 76,635.8        |
| Other Assets <sup>2</sup>                  | 58,598.7  | 78,411.4  | 60,809.6  | 59,822.4  | 53,572.6  | 61,236.0    | 66,120.4        |

<sup>1</sup> Excludes bills rediscounted between banks.

<sup>2</sup> Includes S\$NCDs held and the value of fixed assets is reported before depreciation.

20.9 LIABILITIES OF DOMESTIC BANKING UNITS (End of Period)

|   |           |           |           |           |           |             | Million Dollars |
|---|-----------|-----------|-----------|-----------|-----------|-------------|-----------------|
|   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014        | 2015            |
| Total                                       | 706,814.2 | 781,607.4 | 855,811.4 | 911,009.0 | 973,226.8 | 1,059,642.3 | 1,057,520.6     |
| Capital & Reserves                          | 54,967.6  | 62,441.7  | 64,845.4  | 66,305.4  | 66,291.7  | 70,995.6    | 76,103.1        |
| Deposits of Non-bank Customers <sup>1</sup> | 391,495.1 | 433,757.8 | 483,110.3 | 518,840.7 | 537,582.9 | 550,363.9   | 560,011.5       |
| Demand Deposits                             | 81,047.0  | 100,394.2 | 120,133.3 | 130,965.7 | 142,676.7 | 147,007.3   | 141,953.0       |
| Fixed Deposits                              | 179,571.8 | 185,564.8 | 197,609.5 | 213,657.9 | 210,490.5 | 207,959.3   | 216,838.7       |
| Savings Deposits                            | 129,995.1 | 146,802.5 | 163,782.5 | 171,785.5 | 181,865.7 | 192,101.8   | 197,140.1       |
| Other Deposits                              | 881.3     | 996.3     | 1,585.1   | 2,431.7   | 2,549.9   | 3,295.4     | 4,079.6         |
| Amounts Due to Banks                        | 176,394.4 | 188,564.9 | 226,427.6 | 244,892.2 | 293,986.6 | 339,195.4   | 318,251.5       |
| In Singapore                                | 13,869.4  | 14,189.7  | 9,900.5   | 12,088.7  | 11,244.2  | 12,876.3    | 11,353.0        |
| Asian Currency Units                        | 113,588.1 | 119,350.8 | 147,478.7 | 162,746.8 | 206,129.6 | 224,430.8   | 211,980.9       |
| Outside Singapore                           | 48,936.9  | 55,024.4  | 69,048.4  | 70,056.7  | 76,612.7  | 101,888.2   | 94,917.6        |
| Other Liabilities <sup>2</sup>              | 83,957.0  | 96,843.1  | 81,428.0  | 80,970.7  | 75,365.7  | 99,087.4    | 103,154.6       |

<sup>1</sup> Excludes non-bank customers' holdings of Singapore dollar negotiable certificates of deposits (S\$NCDs).

<sup>2</sup> Includes accumulated depreciation for fixed assets and S\$NCDs issued.

20.10 LOANS AND ADVANCES OF DOMESTIC BANKING UNITS TO NON-BANK CUSTOMERS BY INDUSTRY (End of Period)

|                                      |           |           |           |           |           |           | Million Dollars |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|                                      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Total                                | 281,296.8 | 322,743.8 | 420,455.5 | 490,706.5 | 574,274.4 | 607,200.5 | 599,756.0       |
| Loans to Businesses                  | 153,360.0 | 171,224.5 | 240,916.4 | 284,173.2 | 349,231.0 | 370,760.6 | 357,001.0       |
| Agriculture, Mining &                |           |           |           |           |           |           |                 |
| Quarrying                            | 260.3     | 382.2     | 1,719.7   | 2,104.3   | 4,905.9   | 5,536.0   | 5,611.6         |
| Manufacturing                        | 10,547.3  | 10,917.6  | 19,023.5  | 27,166.3  | 31,601.6  | 29,614.7  | 26,000.9        |
| Building & Construction <sup>1</sup> | 48,940.6  | 53,593.9  | 67,304.4  | 78,704.0  | 91,274.7  | 103,712.6 | 119,405.2       |
| General Commerce                     | 23,357.4  | 30,982.9  | 48,809.6  | 57,349.8  | 75,888.3  | 78,082.4  | 65,954.1        |
| Transport, Storage &                 |           |           |           |           |           |           |                 |
| Communication                        | 10,612.3  | 9,018.1   | 11,883.2  | 13,089.2  | 17,162.7  | 20,045.3  | 20,810.4        |
| Business Services                    | 4,938.7   | 2,990.5   | 4,667.6   | 4,748.1   | 7,056.6   | 8,586.9   | 7,246.9         |
| Financial Institutions               | 32,465.3  | 37,984.6  | 55,550.9  | 64,895.1  | 76,387.4  | 80,984.1  | 68,697.9        |
| Professional & Private Individuals - |           |           |           |           |           |           |                 |
| Business Purposes                    | 2,968.8   | 3,258.0   | 4,237.3   | 5,920.7   | 7,186.5   | 9,746.0   | 9,419.1         |
| Others                               | 19,269.3  | 22,096.7  | 27,720.2  | 30,195.7  | 37,767.3  | 34,452.6  | 33,854.9        |
| Consumer Loans                       | 127,937.0 | 151,519.4 | 179,539.0 | 206,533.3 | 225,043.5 | 236,439.9 | 242,754.8       |
| Housing & Bridging Loans             | 91,429.5  | 112,381.3 | 131,106.5 | 152,003.0 | 166,542.0 | 177,434.6 | 184,680.6       |
| Professional & Private Individuals   |           |           |           |           |           |           |                 |
| Car Loans                            | 12,001.7  | 11,678.5  | 12,743.9  | 12,523.5  | 10,693.3  | 8,641.5   | 7,845.3         |
| Credit Cards                         | 6,162.9   | 6,888.9   | 7,881.6   | 8,963.9   | 9,941.1   | 10,422.4  | 10,260.5        |
| Share Financing                      | 1,142.0   | 1,319.6   | 931.5     | 1,060.1   | 1,167.0   | 989.6     | 2,266.7         |
| Others                               | 17,200.9  | 19,251.1  | 26,875.5  | 31,982.8  | 36,700.1  | 38,951.8  | 37,701.7        |
|                                      |           |           |           |           |           |           |                 |

Source : Monetary Authority of Singapore Notes : Data include bills financing.

The industry categories have been refined according to Singapore Standard Industrial Classification 2015, and is by end-use of loans.

If this classification is not possible, the borrower's main business activity will be used.

<sup>1</sup> Includes loans to building and building co-operative societies, building developers and real estate agent

20.11 ASSETS AND LIABILITIES OF ASIAN CURRENCY UNITS (End of Period)

|                                |           |           |             | _           |             | M           | fillion US Dollars |
|--------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|--------------------|
|                                | 2009      | 2010      | 2011        | 2012        | 2013        | 2014        | 2015               |
|                                |           |           |             | Assets      |             |             |                    |
| Total                          | 869,399.6 | 971,299.4 | 1,019,532.9 | 1,093,264.6 | 1,180,703.6 | 1,190,631.8 | 1,155,822.6        |
| Loans to Non-bank Customers    | 219,614.4 | 268,081.7 | 312,814.0   | 340,914.0   | 400,597.0   | 433,648.4   | 407,968.8          |
| Inter-bank Funds               | 460,726.4 | 501,891.4 | 528,823.2   | 562,970.6   | 614,645.6   | 569,140.4   | 536,726.3          |
| In Singapore                   | 80,941.5  | 92,715.5  | 113,361.8   | 133,171.6   | 162,830.7   | 169,487.9   | 149,080.8          |
| Inter-Asian Currency Units     | 41,678.4  | 53,762.1  | 53,383.9    | 53,768.7    | 56,274.7    | 51,138.2    | 60,510.7           |
| Outside Singapore              | 338,106.5 | 355,413.7 | 362,077.5   | 376,030.3   | 395,540.2   | 348,514.3   | 327,134.9          |
| Debt Securities & Equities     | 122,250.2 | 130,155.8 | 97,100.6    | 113,131.6   | 90,751.0    | 98,626.6    | 118,749.3          |
| Other Assets                   | 66,808.7  | 71,170.5  | 80,795.1    | 76,248.3    | 74,710.0    | 89,216.4    | 92,378.2           |
|                                |           |           |             | Liabilities |             |             |                    |
| Total                          | 869,399.6 | 971,299.4 | 1,019,532.9 | 1,093,264.6 | 1,180,703.6 | 1,190,631.8 | 1,155,822.6        |
| Deposits of Non-bank Customers | 269,370.2 | 273,980.3 | 296,376.6   | 327,863.5   | 365,141.3   | 393,116.8   | 395,070.2          |
| Inter-bank Funds               | 502,232.6 | 584,218.2 | 599,568.3   | 628,109.0   | 648,170.8   | 615,078.7   | 574,762.8          |
| In Singapore                   | 87,208.3  | 79,206.4  | 77,629.4    | 75,466.9    | 60,529.3    | 62,608.9    | 63,393.3           |
| Inter-Asian Currency Units     | 41,778.1  | 53,812.3  | 53,603.0    | 53,934.8    | 56,261.1    | 51,721.6    | 60,595.7           |
| Outside Singapore              | 373,246.2 | 451,199.5 | 468,335.9   | 498,707.3   | 531,380.3   | 500,748.2   | 450,773.8          |
| Other Liabilities              | 97,796.8  | 113,100.9 | 123,588.0   | 137,292.1   | 167,391.4   | 182,436.3   | 185,989.6          |

Note: Asian Currency Unit is a separate accounting unit of banks and other financial institutions given approval to transact in the Asian Dollar Market.

20.12 ASSETS AND LIABILITIES OF FINANCE COMPANIES (End of Period)

|                                     |          |          |          |             |          | 1        | Million Dolla |
|-------------------------------------|----------|----------|----------|-------------|----------|----------|---------------|
|                                     | 2009     | 2010     | 2011     | 2012        | 2013     | 2014     | 2015          |
|                                     | -        |          |          | Assets      |          |          |               |
| Total                               | 11,691.9 | 11,523.6 | 12,165.3 | 14,967.5    | 14,985.7 | 15,975.7 | 17,409.8      |
| Cash & Balances with Monetary       |          |          |          |             |          |          |               |
| Authority of Singapore              | 231.0    | 225.6    | 263.3    | 328.6       | 339.2    | 368.8    | 397.4         |
| Deposits with Banks & Other         |          |          |          |             |          |          |               |
| Institutions                        | 1,809.4  | 1,885.0  | 1,176.2  | 1,810.1     | 1,369.2  | 1,495.4  | 1,895.9       |
| Securities & Equities               | 1,453.7  | 1,259.3  | 1,161.9  | 1,414.7     | 1,522.5  | 1,613.0  | 1,735.6       |
| Loans & Advances                    | 8,092.0  | 8,058.2  | 9,460.2  | 11,311.5    | 11,653.9 | 12,385.4 | 13,251.7      |
| Hire Purchase                       | 2,361.3  | 2,069.9  | 2,037.7  | 2,089.9     | 1,891.5  | 1,779.4  | 1,978.1       |
| On Motor Vehicles                   | 2,158.6  | 1,930.4  | 1,899.6  | 1,877.1     | 1,637.0  | 1,464.8  | 1,619.4       |
| On Consumer Durables                | 0.1      | 0.1      | 0.0      | 10.6        | 0.2      | 0.1      | 0.3           |
| On Other Goods                      | 202.5    | 139.4    | 138.0    | 202.3       | 254.3    | 314.6    | 358.3         |
| Housing Loans                       | 1,226.4  | 1,485.5  | 1,517.1  | 1,402.8     | 1,394.0  | 1,448.4  | 1,475.8       |
| Other Loans & Advances <sup>1</sup> | 4,504.3  | 4,502.8  | 5,905.4  | 7,818.8     | 8,368.4  | 9,157.6  | 9,797.9       |
| Other Assets                        | 105.8    | 95.5     | 103.7    | 102.5       | 101.0    | 113.1    | 129.2         |
|                                     |          |          |          | Liabilities |          |          |               |
| Total                               | 11,691.9 | 11,523.6 | 12,165.3 | 14,967.5    | 14,985.7 | 15,975.7 | 17,409.8      |
| Capital & Reserves                  | 1,824.9  | 1,926.2  | 1,999.2  | 2,104.8     | 2,109.6  | 2,214.2  | 2,242.4       |
| Deposits                            | 9,111.0  | 8,891.4  | 9,481.0  | 12,347.6    | 12,396.1 | 13,295.7 | 14,667.1      |
| Savings Deposits                    | 238.2    | 266.6    | 252.7    | 220.9       | 240.3    | 217.3    | 197.9         |
| Fixed Deposits                      | 8,861.1  | 8,614.6  | 9,218.7  | 11,909.9    | 11,887.0 | 12,897.2 | 14,313.5      |
| Other Deposits                      | 11.7     | 10.2     | 9.7      | 216.8       | 268.7    | 181.2    | 155.8         |
| Other Creditors                     | 97.5     | 79.6     | 45.6     | 22.6        | 17.0     | 6.9      | 4.3           |
| Other Liabilities                   | 658.5    | 626.4    | 639.5    | 492.5       | 463.0    | 458.9    | 496.0         |

1 Includes block discounting.

20.13 FINANCE COMPANIES' LOANS AND ADVANCES BY INDUSTRY (End of Period)

|                                     |         |         |         |         |         |         | Million Dollars |
|-------------------------------------|---------|---------|---------|---------|---------|---------|-----------------|
|                                     | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015            |
| Total <sup>1</sup>                  | 4,410.3 | 4,394.4 | 5,786.0 | 7,685.2 | 8,230.5 | 9,002.6 | 9,588.0         |
| Agriculture, Mining & Quarrying     | 0.1     | 0.0     | 0.0     | 0.0     | 0.9     | 0.9     | 0.8             |
| Manufacturing                       | 52.9    | 39.7    | 64.3    | 65.6    | 71.2    | 109.8   | 126.1           |
| Building & Construction             | 2,150.1 | 2,204.6 | 3,228.8 | 4,190.6 | 4,736.8 | 4,846.5 | 4,791.6         |
| General Commerce                    | 182.1   | 187.4   | 166.2   | 188.9   | 194.5   | 237.9   | 300.2           |
| Transport, Storage & Communications | 104.6   | 89.4    | 73.3    | 164.0   | 152.2   | 201.6   | 247.9           |
| Financial Institutions              | 357.1   | 182.8   | 349.7   | 694.1   | 898.3   | 1,157.9 | 1,409.0         |
| Professional & Private Individuals  | 833.7   | 834.3   | 876.9   | 878.2   | 841.4   | 895.0   | 876.3           |
| Others                              | 729.6   | 856.1   | 1,026.7 | 1,503.9 | 1,335.3 | 1,553.1 | 1,836.1         |
|                                     |         |         |         |         |         |         |                 |

<sup>1</sup> Excludes lease financing, factoring, block discounting and warehouse inventory financing and accounts receivable financing.

20.14 ASSETS AND LIABILITIES OF DOMESTIC AND ASIAN CURRENCY UNIT OPERATIONS OF MERCHANT BANKS

(End of Period)

|                        |          |          |          |             |          |          | Million Dollars |
|------------------------|----------|----------|----------|-------------|----------|----------|-----------------|
|                        | 2009     | 2010     | 2011     | 2012        | 2013     | 2014     | 2015            |
|                        |          |          |          | Assets      |          |          |                 |
| Total                  | 76,354.4 | 89,760.3 | 87,851.1 | 92,411.0    | 84,944.9 | 96,256.8 | 106,583.2       |
| Amounts Due from Banks | 22,327.0 | 22,604.2 | 22,815.1 | 21,646.5    | 21,226.5 | 19,532.4 | 25,050.5        |
| In Singapore           | 1,488.4  | 2,254.7  | 2,567.3  | 3,170.6     | 3,433.8  | 3,556.6  | 2,803.5         |
| Asian Currency Units   | 7,153.9  | 5,097.9  | 4,615.0  | 5,300.3     | 5,212.7  | 7,432.7  | 9,345.2         |
| Outside Singapore      | 13,684.7 | 15,251.7 | 15,632.8 | 13,175.6    | 12,580.0 | 8,543.2  | 12,901.8        |
| Loans & Advances to    |          |          |          |             |          |          |                 |
| Non-bank Customers     | 23,451.1 | 25,976.8 | 29,095.7 | 26,832.3    | 25,533.8 | 26,640.2 | 23,322.0        |
| Securities & Equities  | 24,484.6 | 36,100.0 | 28,618.0 | 38,303.3    | 32,642.1 | 43,415.1 | 50,320.9        |
| Other Assets           | 6,091.7  | 5,079.2  | 7,322.2  | 5,628.9     | 5,542.5  | 6,669.1  | 7,889.8         |
|                        |          |          |          | Liabilities |          |          |                 |
| Total                  | 76,354.4 | 89,760.3 | 87,851.1 | 92,411.0    | 84,944.9 | 96,256.8 | 106,583.2       |
| Capital & Reserves     | 8,855.7  | 9,510.2  | 9,983.6  | 12,168.2    | 12,381.3 | 12,560.9 | 13,024.6        |
| Amounts Due to Banks   | 37,963.7 | 51,264.3 | 46,928.5 | 55,045.1    | 51,658.0 | 63,112.6 | 70,528.6        |
| In Singapore           | 3,265.6  | 3,101.8  | 585.8    | 615.2       | 408.6    | 406.4    | 514.3           |
| Asian Currency Units   | 13,138.0 | 22,920.9 | 23,772.5 | 22,413.9    | 20,349.2 | 21,296.9 | 23,184.9        |
| Outside Singapore      | 21,560.0 | 25,241.5 | 22,570.2 | 32,016.0    | 30,900.2 | 41,409.4 | 46,829.4        |
| Borrowings from        |          |          |          |             |          |          |                 |
| Non-bank Customers     | 23,824.0 | 21,249.1 | 22,623.4 | 17,741.8    | 13,600.6 | 12,564.7 | 13,291.2        |
| Other Liabilities      | 5,711.0  | 7,736.8  | 8,315.7  | 7,456.0     | 7,305.0  | 8,018.6  | 9,738.7         |

Source: Monetary Authority of Singapore

Note: Provision of corporate financial advisory services, underwriting and operations in the gold market are not reflected in the data

20.15 DOMESTIC INTEREST RATES (End of Period)

|   | _      |        |        | _     |        | Per    | Cent Per Annu |
|---|--------|--------|--------|-------|--------|--------|---------------|
|   | 2009   | 2010   | 2011   | 2012  | 2013   | 2014   | 2015          |
| Banks <sup>1</sup>                            |        |        |        |       |        |        |               |
| Prime Lending Rate                            | 5.38   | 5.38   | 5.38   | 5.38  | 5.38   | 5.35   | 5.35          |
| Singapore Overnight Rate Average <sup>2</sup> | 0.1583 | 0.1181 | 0.1011 | 0.038 | 0.0698 | 0.2484 | 0.7159        |
| Fixed Deposits                                |        |        |        |       |        |        |               |
| 3 Months                                      | 0.25   | 0.19   | 0.14   | 0.14  | 0.14   | 0.14   | 0.18          |
| 6 Months                                      | 0.34   | 0.28   | 0.19   | 0.20  | 0.20   | 0.21   | 0.24          |
| 12 Months                                     | 0.53   | 0.45   | 0.32   | 0.32  | 0.32   | 0.31   | 0.34          |
| Savings Deposits                              | 0.15   | 0.13   | 0.11   | 0.11  | 0.10   | 0.11   | 0.14          |
| Finance Companies <sup>3</sup>                |        |        |        |       |        |        |               |
| Fixed Deposits                                |        |        |        |       |        |        |               |
| 3 Months                                      | 0.25   | 0.19   | 0.15   | 0.20  | 0.18   | 0.18   | 0.30          |
| 6 Months                                      | 0.27   | 0.26   | 0.22   | 0.28  | 0.25   | 0.25   | 0.38          |
| 12 Months                                     | 0.55   | 0.53   | 0.46   | 0.53  | 0.53   | 0.53   | 0.58          |
| Savings Deposits                              | 0.25   | 0.25   | 0.17   | 0.17  | 0.17   | 0.17   | 0.17          |

<sup>1</sup> Refers to the average quoted by 10 leading banks.

<sup>2</sup> Refers to the closing offer rates quoted by money brokers

<sup>3</sup> Refers to the average of all finance companies.

20.16 CONTRIBUTIONS AND WITHDRAWALS OF CENTRAL PROVIDENT FUND

|  |           |           |           |           |           |           | Million Dollars |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Contributions (net of refunds) by members <sup>1</sup> | 20,124.9  | 21,992.7  | 24,628.4  | 26,048.4  | 28,530.0  | 29,722.1  | 32,049.1        |
| Interest credited to members                           | 6,092.6   | 6,709.8   | 7,472.7   | 8,290.6   | 9,144.2   | 9,971.9   | 10,834.5        |
| Withdrawals (net of refunds) by members <sup>2</sup>   | 10,720.5  | 9,618.5   | 10,443.6  | 11,726.8  | 14,863.2  | 17,298.7  | 18,725.1        |
| Amount due to members                                  | 166,804.0 | 185,888.0 | 207,545.5 | 230,157.7 | 252,968.6 | 275,363.9 | 299,522.4       |

Source : Central Provident Fund Board

 $<sup>2\ \</sup> With drawals\ include\ transfers\ to\ /\ from\ Reserve\ Account\ /\ general\ moneys\ of\ the\ Fund.$ 

20.17 WITHDRAWALS OF CENTRAL PROVIDENT FUND BY TYPE

|  | 2009     | 2010    | 2011     | 2012            | 2013     | 2014     | 2015     |
|--|----------|---------|----------|-----------------|----------|----------|----------|
|  |          |         | I        | Million Dollars |          |          |          |
| Withdrawals (net of refunds) by members                  | 10,720.5 | 9,618.5 | 10,443.6 | 11,726.8        | 14,863.2 | 17,298.7 | 18,725.1 |
| Housing Schemes  |          |         |          |                 |          |          |          |
| Public Housing   | 4,067.9  | 4,006.8 | 5,464.3  | 5,703.1         | 5,841.3  | 6,892.3  | 7,069.9  |
| Residential Properties                                   | 1,768.6  | 845.9   | 1,346.6  | 2,290.6         | 2,500.1  | 2,706.0  | 3,310.6  |
| Reached 55 Years of Age and Above                        | 1,800.3  | 1,771.1 | 1,940.1  | 2,048.2         | 2,819.6  | 2,945.8  | 3,720.7  |
| Leaving Singapore & Malaysia<br>Permanently              | 442.9    | 454.6   | 505.5    | 541.5           | 579.8    | 665.6    | 712.8    |
| Death  | 358.8    | 378.3   | 434.6    | 487.9           | 530.4    | 606.8    | 672.8    |
| Medisave Scheme  | 600.8    | 678.2   | 721.7    | 767.4           | 798.5    | 852.9    | 899.9    |
| Private Medical Insurance Scheme                         | 234.0    | 286.1   | 335.5    | 384.6           | 484.1    | 542.9    | 581.0    |
| Others <sup>1</sup>                                      | 1,447.2  | 1,197.5 | -304.7   | -496.5          | 1,309.4  | 2,086.4  | 1,757.4  |
|  |          |         |          | Number          |          |          |          |
| Housing Schemes <sup>2</sup>                             |          |         |          |                 |          |          |          |
| Public Housing <sup>3</sup>                              | 15,349   | 14,154  | 37,608   | 46,690          | 39,847   | 28,367   | 27,961   |
| Residential Properties                                   | 11,077   | 6,270   | 11,339   | 17,869          | 17,872   | 10,686   | 13,134   |
| Reached 55 Years of Age <sup>4</sup>                     | 199,552  | 207,868 | 227,540  | 245,645         | 261,573  | 290,452  | 383,297  |
| Leaving Singapore & Malaysia<br>Permanently <sup>5</sup> | 12,255   | 13,454  | 14,619   | 15,038          | 13,868   | 14,081   | 13,591   |
| Death  | 19,802   | 18,544  | 19,869   | 18,472          | 18,796   | 19,395   | 20,510   |

Source: Central Provident Fund Board

<sup>1</sup> Includes withdrawals under Home Protection Insurance, Minimum Sum, Dependants' Protection Insurance, Education, MediShield, ElderShield, Lifelong Income, Non-residential Properties, Investment and Special Discounted Shares schemes transfers to/from Reserve Account/general moneys of the Fund and on grounds of permanent incapacity and unsound mind.

<sup>2</sup> Refers to the change in membership size for the year. It includes members who joined the scheme in the year and excludes members who exited from the scheme in the same year

<sup>3</sup> In 2014, there were changes in criteria defining participation under Public Housing. The change in membership size unde Public Housing Scheme (PHS) between 2013 and 2014 is based on the difference in membership after applying the revised criteria on both 2013 and 2014 data.

<sup>4</sup> Includes first and subsequent withdrawals.

<sup>5</sup> Includes Malaysians leaving Singapore permanently

20.18 TURNOVER ON THE SINGAPORE EXCHANGE (EQUITIES)

|                    | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| SGX Mainboard      |           |           |           |           |           |           |
| Volume (million)   | 342,864.0 | 254,663.2 | 357,633.8 | 541,726.2 | 307,505.1 | 262,911.6 |
| Basic Materials    | 20,403.7  | 13,129.9  | 14,168.3  | 16,097.6  | 14,343.8  | 12,020.1  |
| Consumer Goods     | 73,556.3  | 58,493.9  | 94,724.5  | 115,598.2 | 45,164.9  | 38,991.7  |
| Consumer Services  | 50,640.8  | 32,932.4  | 34,476.8  | 42,775.7  | 27,282.2  | 20,498.5  |
| Financials         | 47,610.5  | 37,527.6  | 38,856.2  | 77,412.1  | 40,738.7  | 47,372.6  |
| Health Care        | 8,626.4   | 3,478.1   | 3,858.5   | 2,995.9   | 2,364.2   | 2,959.5   |
| Industrials        | 90,137.0  | 64,617.9  | 120,133.5 | 184,896.5 | 102,478.6 | 82,566.7  |
| Oil & Gas          | 13,308.0  | 18,302.1  | 13,160.3  | 23,613.4  | 19,184.5  | 17,882.5  |
| Technology         | 25,390.8  | 12,673.7  | 27,685.7  | 49,125.2  | 23,865.9  | 26,032.3  |
| Telecommunications | 6,044.9   | 6,792.4   | 7,256.1   | 6,326.9   | 5,128.2   | 6,957.3   |
| Utilities          | 7,145.5   | 6,715.1   | 3,313.8   | 22,884.9  | 26,954.1  | 7,630.4   |
| Value (S\$m)       | 376,751.6 | 341,256.1 | 306,418.9 | 322,357.3 | 244,061.6 | 263,867.4 |
| Basic Materials    | 11,582.6  | 9,153.2   | 8,049.1   | 5,140.7   | 3,381.3   | 1,657.4   |
| Consumer Goods     | 49,241.6  | 44,473.8  | 48,174.1  | 36,501.3  | 21,822.8  | 15,562.5  |
| Consumer Services  | 72,301.5  | 61,357.6  | 35,316.2  | 35,930.6  | 25,617.3  | 27,861.8  |
| Financials         | 115,972.5 | 100,174.4 | 84,491.6  | 115,431.2 | 96,621.3  | 119,251.3 |
| Health Care        | 6,427.9   | 2,858.9   | 3,743.1   | 2,682.6   | 2,212.1   | 2,940.7   |
| Industrials        | 66,978.0  | 60,046.7  | 65,390.0  | 60,024.9  | 45,022.6  | 45,915.0  |
| Oil & Gas          | 28,735.9  | 37,886.7  | 31,398.3  | 30,288.7  | 22,684.9  | 19,191.2  |
| Technology         | 6,120.2   | 3,233.6   | 7,815.0   | 12,013.2  | 3,873.5   | 3,198.9   |
| Telecommunications | 16,531.1  | 19,491.4  | 20,843.5  | 21,729.2  | 17,411.4  | 25,711.7  |
| Utilities          | 2,860.3   | 2,580.1   | 1,198.0   | 2,614.9   | 5,414.6   | 2,577.0   |

(continued on the next page)

Source : Singapore Exchange Limited

Note: All Mainboard and Catalist stocks are classified based on Industry Classification Benchmark. Includes Ordinary Shares, Stapled Securities and Unit Trusts.

20.18 TURNOVER ON THE SINGAPORE EXCHANGE (EQUITIES) (continued)

|                    | 2010     | 2011     | 2012     | 2013      | 2014      | 2015    |
|--------------------|----------|----------|----------|-----------|-----------|---------|
| SGX Catalist       |          |          |          |           |           |         |
| Volume (million)   | 37,683.2 | 27,039.6 | 86,015.5 | 268,959.6 | 127,480.1 | 83,075. |
| Basic Materials    | 19.4     | 605.7    | 650.3    | 32,834.3  | 19,418.7  | 8,698.  |
| Consumer Goods     | 2,652.8  | 1,317.7  | 7,424.9  | 14,180.0  | 5,439.4   | 3,119.  |
| Consumer Services  | 1,813.3  | 1,447.2  | 9,935.4  | 32,541.6  | 6,926.9   | 5,933.  |
| Financials         | 132.7    | 1,084.6  | 1,805.8  | 1,251.9   | 8,984.7   | 3,222.  |
| Health Care        | 4,825.5  | 874.9    | 3,281.3  | 13,537.4  | 11,046.3  | 17,120. |
| Industrials        | 19,564.8 | 14,926.2 | 26,854.7 | 93,561.0  | 50,807.0  | 28,839. |
| Oil & Gas          | 1,702.6  | 1,514.4  | 5,585.0  | 457.2     | 3,037.9   | 4,787.  |
| Technology         | 5,698.4  | 4,682.8  | 11,501.5 | 44,318.9  | 9,144.8   | 8,200   |
| Telecommunications | 0.0      | 0.0      | 0.0      | 0.0       | 0.0       | 0.      |
| Utilities          | 1,273.8  | 586.2    | 18,976.6 | 36,277.3  | 12,674.5  | 3,154   |
| Value (S\$m)       | 4,953.7  | 3,380.9  | 7,743.8  | 18,322.8  | 13,030.4  | 8,232   |
| Basic Materials    | 2.2      | 290.3    | 286.9    | 2,745.3   | 1,625.3   | 743     |
| Consumer Goods     | 304.9    | 132.4    | 361.4    | 748.2     | 284.9     | 71      |
| Consumer Services  | 613.8    | 256.0    | 257.5    | 1,260.2   | 789.2     | 750     |
| Financials         | 20.8     | 166.9    | 514.5    | 409.4     | 807.3     | 232     |
| Health Care        | 804.7    | 82.7     | 239.5    | 1,263.6   | 2,773.6   | 3,429   |
| Industrials        | 2,104.2  | 1,700.3  | 2,783.4  | 8,280.4   | 4,385.3   | 1,918   |
| Oil & Gas          | 692.5    | 578.1    | 2,553.7  | 222.5     | 1,286.3   | 543     |
| Technology         | 316.4    | 142.0    | 263.3    | 1,587.8   | 313.4     | 474     |
| Telecommunications | 0.0      | 0.0      | 0.0      | 0.0       | 0.0       | 0       |
| Utilities          | 94.1     | 32.0     | 483.7    | 1,805.5   | 765.3     | 70      |

Source: Singapore Exchange Limited

Note: All Mainboard and Catalist stocks are classified based on Industry Classification Benchmark.

Includes Ordinary Shares, Stapled Securities and Unit Trusts.

20.19 PLEDGES AT PAWNSHOPS

|                             | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|
|                             |         |         |         |         |         |         |         |
| Pledges ('000)              |         |         |         |         |         |         |         |
| Received                    | 2,778.2 | 2,977.1 | 3,498.1 | 4,003.9 | 4,206.0 | 4,236.2 | 4,374.4 |
| Redeemed                    | 2,575.1 | 2,788.8 | 3,342.0 | 3,793.2 | 4,017.4 | 4,081.0 | 4,198.6 |
| Amount of Loans (\$m)       |         |         |         |         |         |         |         |
| Given Out                   | 2,006.3 | 2,745.4 | 4,946.8 | 7,067.6 | 5,470.6 | 5,276.1 | 5,381.1 |
| Redeemed including Interest | 1,955.9 | 2,604.3 | 4,755.1 | 7,123.5 | 5,577.7 | 5,310.5 | 5,420.3 |

Source : Registry of Pawnbrokers

20.20 LIFE INSURANCE POLICIES (End of Period)

|                                  | 2008      | 2009      | 2010      | 2011             | 2012      | 2013      | 2014     |
|----------------------------------|-----------|-----------|-----------|------------------|-----------|-----------|----------|
|                                  |           |           |           | Thousand         |           |           |          |
|                                  |           |           |           |                  |           |           |          |
| Policies in Force                | 10,427.5  | 11,386.2  | 11,763.7  | 12,191.8         | 12,591.7  | 12,900.4  | 13,140.  |
| New Policies                     | 1,094.6   | 1,058.5   | 1,065.0   | 1,128.2          | 1,121.2   | 1,097.4   | 1,046.   |
| Policies Matured or Discontinued | 595.6     | 99.8      | 687.5     | 700.1            | 721.3     | 788.7     | 807.     |
|                                  |           |           |           | Million Dolla    | rs        |           |          |
|                                  |           |           |           | IVIIIIOII DOIIAI | 13        |           |          |
| Policies in Force                |           |           |           |                  |           |           |          |
| Amount Insured                   | 534,944.3 | 586,346.2 | 629,474.7 | 713,645.4        | 783,874.9 | 839,804.0 | 903,071. |
| Annual Premiums                  | 7,735.7   | 8,407.5   | 9,213.5   | 10,324.4         | 11,407.1  | 13,015.5  | 14,352.  |
| New Policies                     |           |           |           |                  |           |           |          |
| Amount Insured                   | 92,268.1  | 82,707.7  | 91,616.1  | 116,309.6        | 134,122.9 | 123,355.7 | 132,495. |
| Single Premium                   | 7,647.4   | 5,177.1   | 5,610.4   | 6,537.3          | 5,861.1   | 7,038.1   | 8,672.   |
| Annual Premiums                  | 1,194.3   | 1,151.8   | 1,451.2   | 1,784.5          | 2,133.9   | 2,687.9   | 2,451.   |
| Policies Matured or Discontinued |           |           |           |                  |           |           |          |
| Amount Insured                   | 48,850.8  | 31,305.9  | 48,487.6  | 55,770.1         | 63,904.7  | 67,530.1  | 69,228.  |
| Annual Premiums                  | 625.1     | 480.1     | 645.2     | 695.3            | 1,051.4   | 1,088.9   | 1,114    |

20.21 REVENUE AND EXPENDITURE ACCOUNTS OF LIFE INSURANCE FUNDS

|  |           |          |          |             |          |          | Million Dollars |
|--|-----------|----------|----------|-------------|----------|----------|-----------------|
|  | 2008      | 2009     | 2010     | 2011        | 2012     | 2013     | 2014            |
|  |           |          |          | Revenue     |          |          |                 |
| Total                                  | -2,777.2  | 29,422.6 | 23,471.0 | 15,713.6    | 28,010.5 | 21,947.3 | 32,487.7        |
| Net Premiums Written                   | 15,537.2  | 13,357.6 | 14,300.4 | 16,395.8    | 16,841.2 | 19,189.7 | 22,225.4        |
| Net Investment Income                  | -18,512.6 | 15,872.5 | 6,693.6  | -901.4      | 10,948.8 | 2,485.7  | 9,998.8         |
| Miscellaneous                          | 198.2     | 192.5    | 2,477.0  | 219.2       | 220.5    | 271.9    | 263.5           |
|  |           |          |          | Expenditure |          |          |                 |
| Total                                  | -2,777.2  | 29,422.6 | 23,471.0 | 15,713.6    | 28,010.5 | 21,947.3 | 32,487.7        |
| Claims on Death, Disability & Maturity | 5,580.7   | 6,325.0  | 6,377.1  | 7,329.9     | 8,487.7  | 9,657.7  | 10,193.7        |
| Surrenders                             | 3,591.9   | 2,949.6  | 3,253.3  | 3,259.3     | 3,285.0  | 3,707.3  | 4,067.4         |
| Cash Bonuses & Annuities               | 417.6     | 433.3    | 452.0    | 472.0       | 480.7    | 514.5    | 565.4           |
| Management Expenses                    | 597.1     | 596.2    | 628.9    | 729.6       | 768.4    | 880.2    | 934.1           |
| Distribution Expenses                  | 1,146.2   | 1,135.9  | 1,235.2  | 1,582.9     | 1,820.2  | 2,090.7  | 2,334.2         |
| Miscellaneous                          | -14,110.7 | 17,982.6 | 11,524.5 | 2,339.9     | 13,168.5 | 5,096.9  | 14,392.9        |

Note: Data are based on the risk-based capital (RBC) framework.

20.22 ASSETS OF LIFE INSURANCE FUNDS (End of Period)

|  |          |           |           |           |           |           | Million Dollars |
|--|----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|  | 2008     | 2009      | 2010      | 2011      | 2012      | 2013      | 2014            |
| Total  | 91,769.4 | 108,404.4 | 117,673.8 | 118,606.3 | 132,476.3 | 136,178.8 | 151,329.3       |
| Land & Buildings                                 | 2,987.3  | 2,658.6   | 2,889.4   | 3,055.8   | 3,109.4   | 3,187.8   | 3,243.4         |
| Loans  |          |           |           |           |           |           |                 |
| On Mortgages                                     | 1,354.6  | 1,631.7   | 1,387.6   | 974.1     | 659.4     | 680.5     | 640.9           |
| On Policies                                      | 2,418.7  | 2,383.9   | 2,347.8   | 2,340.9   | 2,326.9   | 2,333.7   | 2,377.3         |
| Others   | 202.7    | 177.2     | 313.5     | 579.9     | 345.5     | 312.4     | 318.1           |
| Investments                                      |          |           |           |           |           |           |                 |
| Debt Securities                                  | 50,532.6 | 56,067.7  | 60,460.5  | 64,850.1  | 75,322.0  | 76,196.0  | 87,457.7        |
| Equity Securities                                | 24,591.9 | 38,263.2  | 41,900.8  | 36,235.1  | 41,288.5  | 46,102.7  | 50,936.3        |
| Cash & Deposits                                  | 6,044.0  | 4,765.7   | 5,244.8   | 8,085.7   | 6,675.5   | 5,578.9   | 5,070.5         |
| Miscellaneous (including Outstanding Premiums) 1 | 3,637.6  | 2,456.4   | 3,129.4   | 2,484.7   | 2,749.1   | 1,786.8   | 1,285.1         |

Source : Monetary Authority of Singapore Note: Data are based on the risk-based capital (RBC) framework.

1 Includes furniture.

20.23 PREMIUMS AND CLAIMS OF GENERAL INSURANCE FUNDS

|                             |         |         |         |                 |                 |         | Million Dollars |
|-----------------------------|---------|---------|---------|-----------------|-----------------|---------|-----------------|
|                             | 2008    | 2009    | 2010    | 2011            | 2012            | 2013    | 2014            |
|                             |         |         | 1       | Net Premiums    | <u> </u>        |         |                 |
| Total                       | 2,324.8 | 2,235.8 | 2,518.1 | 2,645.3         | 2,784.9         | 2,866.9 | 2,936.1         |
| Marine, Aviation or Transit | 245.5   | 209.3   | 231.1   | 229.7           | 225.0           | 215.0   | 229.5           |
| Others                      |         |         |         |                 |                 |         |                 |
| Fire                        | 188.7   | 195.1   | 199.4   | 211.7           | 218.7           | 235.1   | 244.9           |
| Motor Vehicles              | 841.8   | 1,015.3 | 1,112.8 | 1,148.9         | 1,182.5         | 1,169.7 | 1,123.1         |
| Miscellaneous               | 1,048.8 | 816.1   | 974.8   | 1,055.0         | 1,158.7         | 1,247.1 | 1,338.6         |
|                             |         |         | Ne      | t Claims Settle | ed <sup>2</sup> |         |                 |
| Total                       | 1,083.0 | 1,175.9 | 1,157.5 | 1,176.1         | 1,353.2         | 1,366.3 | 1,355.7         |
| Marine, Aviation or Transit | 82.0    | 88.3    | 78.8    | 94.8            | 101.6           | 106.9   | 110.2           |
| Others                      |         |         |         |                 |                 |         |                 |
| Fire                        | 53.9    | 48.7    | 50.2    | 56.5            | 102.5           | 69.8    | 41.6            |
| Motor Vehicles              | 612.0   | 654.3   | 632.6   | 623.8           | 693.4           | 689.6   | 660.7           |
| Miscellaneous               | 335.1   | 384.6   | 395.9   | 401.0           | 455.7           | 500.0   | 543.2           |

<sup>1</sup> Refers to gross premiums less premiums paid for re-insurance in and out of Singapore

<sup>2</sup> Refers to gross claims paid less recoveries from re-insurance placed in and out of Singapore

20.24 REVENUE AND EXPENDITURE ACCOUNTS OF GENERAL INSURANCE FUNDS

|   |         |         |         |             |         |         | Million Dollars |
|---|---------|---------|---------|-------------|---------|---------|-----------------|
|   | 2008    | 2009    | 2010    | 2011        | 2012    | 2013    | 2014            |
|   |         |         |         | Revenue     |         |         |                 |
| Total                                     | 2,198.8 | 2,572.1 | 2,762.2 | 2,709.4     | 3,120.6 | 3,028.6 | 3,226.3         |
| Net Premiums Written                      | 2,324.8 | 2,235.8 | 2,518.1 | 2,645.3     | 2,784.9 | 2,866.9 | 2,936.1         |
| Net Investment Income                     | -151.3  | 311.5   | 219.7   | 44.1        | 302.9   | 135.1   | 246.2           |
| Miscellaneous                             | 25.3    | 24.8    | 24.4    | 20.0        | 32.8    | 26.6    | 44.0            |
|   |         |         |         | Expenditure |         |         |                 |
| Total                                     | 2,198.8 | 2,572.1 | 2,762.2 | 2,709.4     | 3,120.6 | 3,028.6 | 3,226.3         |
| Net Claims Settled                        | 1,083.0 | 1,175.9 | 1,157.5 | 1,176.1     | 1,353.2 | 1,366.3 | 1,355.7         |
| Management Expenses                       | 406.8   | 431.4   | 482.4   | 532.5       | 542.8   | 601.5   | 658.2           |
| Distribution Expenses                     | 340.9   | 322.9   | 350.8   | 361.9       | 371.2   | 396.9   | 416.9           |
| Increase (Decrease) in Policy Liabilities | 342.3   | 44.7    | 251.2   | 342.3       | 172.1   | 131.9   | 65.4            |
| Miscellaneous                             | 25.8    | 597.2   | 520.3   | 296.6       | 681.3   | 532.0   | 730.1           |

Note: Data are based on the risk-based capital (RBC) framework

20.25 ASSETS OF GENERAL INSURANCE FUNDS (End of Period)

|                   |         |         |         |         |         |         | Million Dollars |
|-------------------|---------|---------|---------|---------|---------|---------|-----------------|
|                   | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014            |
| Total             | 7,424.9 | 7,761.4 | 8,363.9 | 8,742.2 | 9,446.5 | 9,989.2 | 10,489.3        |
| Land & Buildings  | 232.7   | 183.0   | 165.3   | 199.9   | 200.2   | 260.9   | 293.0           |
| Loans             | 43.5    | 43.1    | 49.9    | 34.5    | 39.8    | 48.6    | 44.8            |
| Investments       |         |         |         |         |         |         |                 |
| Debt Securities   | 3,745.6 | 3,880.9 | 4,274.2 | 4,451.4 | 4,703.5 | 4,967.9 | 5,495.9         |
| Equity Securities | 417.5   | 517.3   | 906.6   | 800.1   | 960.1   | 1,016.0 | 1,027.9         |
| Cash & Deposits   | 2,306.6 | 2,460.3 | 2,212.2 | 2,399.6 | 2,578.0 | 2,721.0 | 2,577.2         |
| Miscellaneous     | 679.0   | 676.8   | 755.7   | 856.7   | 964.9   | 974.8   | 1,050.5         |
|                   |         |         |         |         |         |         |                 |

Note: Data are based on the risk-based capital (RBC) framework.

20.26 CREDIT AND CHARGE CARDS

|                                     | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Main Cards <sup>1</sup>             | 5,418,553 | 6,141,870 | 6,883,993 | 7,843,765 | 7,984,608 | 8,183,105 | 8,075,293 |
| Supplementary Cards <sup>1</sup>    | 1,284,064 | 1,378,817 | 1,450,282 | 1,502,591 | 1,573,936 | 1,553,963 | 1,490,055 |
| Total Card Billings (\$m)           | 26,030.4  | 30,941.9  | 35,230.1  | 38,419.2  | 41,602.2  | 44,582.4  | 47,103.9  |
| Rollover Balance <sup>1</sup> (\$m) | 3,702.1   | 4,014.7   | 4,537.9   | 4,991.8   | 5,362.9   | 5,500.6   | 5,290.3   |
| Bad Debts Written Off (\$m)         | 183.9     | 181.9     | 186.7     | 226.6     | 247.8     | 273.9     | 319.1     |

Source : Monetary Authority of Singapore

1 As at end of period.

# 21



# **Public Finance**

The presentation of the annual Government Budget is based on the financial year (FY) of the Government, which runs from 1 April of the year to 31 March of the following year.

Under Singapore's Constitution, a distinction is made between the reserves accumulated by the Government during its current term of office, and past reserves, which refer to the reserves accumulated in previous terms of Government. The Government is expected to balance the budget within its term and can only draw on past reserves with the approval of the President. This Constitutional framework protects past reserves by enforcing financial prudence, while allowing the Government to draw on them in times of need.

As a result of the distinction made between current and past reserves, not all Government revenues and receipts collected can be spent by the Government. Receipts such as land sales and investment income that is not available for spending accrue to past reserves.

The Overall Budget Balance that is published by the Ministry of Finance and presented to the Parliament is based on revenues that the Government of the day can spend under the Constitution.

Singapore separately publishes a set of government finance data that follows the International Monetary Fund's presentation format for government finance statistics. This set of data includes all receipts, including items not available for spending by the Government of the day under Singapore's Constitution.

### **Government Revenue**

The main revenue-collecting agencies are the Inland Revenue Authority of Singapore

(IRAS) and the Singapore Customs. IRAS is responsible for the collection of income tax, property tax, Goods and Services Tax (GST), stamp duty, betting duty, casino tax and private lotteries duty. The Singapore Customs collects import GST as well as customs and excise duties on liquors, tobacco, petroleum products and motor vehicles.

A person who has stayed or exercised employment in Singapore for a period of 183 days or more in the year preceding the year of assessment would be considered a tax resident of Singapore. Tax residents pay personal income tax at progressive rates on the chargeable income of the preceding year after appropriate deductions have been made. For the Year of Assessment (YA) 2015, tax rates range from 0 per cent to 20 per cent. There are several tax deductions and reliefs available, such as for earned income, maintenance of spouse, children, parents dependants, as well as contributions to the Central Provident Fund (CPF). Parenthood tax rebate is also available for qualified newborns or legally adopted children. In addition, there is a once-off personal tax rebate of 50 per cent of tax payable, up to \$1,000. Non-tax resident individuals are not entitled to personal reliefs or rebates and are normally taxed at a flat rate (15 per cent or the resident rate on employment income, whichever gives rise to higher tax, and 20 per cent on other income).

The corporate income tax rate for YA 2015 is 17 per cent and companies are given a 30 per cent corporate income tax rebate capped at \$30,000. A company also enjoys partial tax exemption on the first \$300,000 of its normal chargeable income<sup>1</sup>. In addition, a qualifying new company enjoys full tax exemption on the first \$100,000 of its normal chargeable income and a 50 per cent

<sup>&</sup>lt;sup>1</sup> Normal chargeable income refers to income to be taxed at the prevailing corporate tax rate.

exemption on the next \$200,000 of its normal chargeable income for its first three consecutive YAs.

GST is a consumption tax levied on the import of goods, and all supplies of goods and services in Singapore, except for the sales and leases of residential properties, importation and local supply of investment precious metals and the provision of financial services. The GST rate is 7 per cent. International services and export of goods are zero-rated (i.e. GST is charged at 0 per cent).

### **Government Expenditure**

Total Expenditure consists of Operating Expenditure and Development Expenditure.

Operating Expenditure includes Running Costs and Transfers. Running Costs represent the day-to-day operating expenditure Ministries the Government Departments on the maintenance of the operations and other regular activities of the Government. The main components of Running Costs are expenditure on manpower, operating grants to statutory boards and other organisations as well as other operating expenditure. Transfers are payments made by the Government to members of the public and outside organisations. These include public subsidies. subventions assistance. Government contributions to local and external organisations. Operating Expenditure is met from the Consolidated Fund.

Development Expenditure refers to expenses that represent a longer-term investment or result in the formation of a capitalisable asset of the Government. Examples of spending areas are the acquisition of heavy equipment, as well as capitalisable assets, for example, buildings and roads. Development Expenditure is met from the

Development Fund, which is established by the Development Fund Act (Cap. 80, 2013 Revised Edition).

The funding sources of the Development Fund are:

- (i) Monies appropriated from time to time from the Consolidated Fund;
- (ii) Proceeds of any loan raised for the purposes of the fund and appropriated to such purposes by the law raising the loan;
- (iii) Interest and other income from investments of the fund and profits arising from realisation of any such investments; and
- (iv) Repayments of any loans made from the fund or payments of interest on such loans.

The Development Fund may be used for:

- (i) Construction, improvement, acquisition or replacement of capital assets (for example, buildings, vehicles, aircraft, machinery, rollingstock or roads) required in respect of or in connection with the economic development or general welfare of Singapore;
- (ii) Acquisition of land and of any right or interest in or over land and in respect of the use of any invention; and
- (iii) Grants and loans to, or investments in any public authority or corporation for any of the purposes mentioned in (i) and (ii) above.

### **Government Debt**

The Government issues two types of Singapore debt securities: Government Securities (SGS) and Special Singapore Government Securities (SSGS). SGS bonds and treasury bills are tradable debt instruments issued for the purposes of developing Singapore's debt markets, while Singapore Savings Bonds (SSB) are a new type of nontradable SGS, designed to offer individuals a long-term, flexible savings option. SSGS are non-tradable bonds issued to the Central Provident Fund (CPF) Board, Singapore's national pension fund.

The Government does not borrow to fund its Budget. Under the Protection of Reserves Framework in Singapore's Constitution and the Government Securities Act, the Government cannot spend the monies raised from SGS and SSGS. All borrowing proceeds from the issuance of SGS and SSGS are invested. These investment returns are more than sufficient to cover the debt servicing costs.

The Singapore Government has a strong balance sheet with assets in excess of its liabilities, and therefore has no net debt.

21.1 OVERALL FISCAL POSITION

|   |          |          |          |          |          |          | Million Dollars |
|---|----------|----------|----------|----------|----------|----------|-----------------|
|   | FY2008   | FY2009   | FY2010   | FY2011   | FY2012   | FY2013   | FY2014          |
|   | •        |          |          |          |          | •        |                 |
| Operating Revenue <sup>1</sup>  | 41,086.2 | 39,546.5 | 46,060.2 | 51,077.2 | 55,814.5 | 57,020.3 | 60,838.2        |
| Corporate Income Tax  | 10,553.6 | 9,550.9  | 10,686.6 | 12,096.3 | 12,821.3 | 12,679.6 | 13,371.5        |
| Personal Income Tax   | 5,414.2  | 6,113.5  | 6,469.6  | 6,871.4  | 7,713.7  | 7,688.1  | 8,926.7         |
| Withholding Tax   | 1,176.0  | 1,137.2  | 957.4    | 1,258.0  | 1,337.3  | 1,152.4  | 1,126.0         |
| Statutory Boards' Contributions   | 2,142.6  | 409.7    | 573.2    | 353.2    | 539.1    | 529.8    | 515.9           |
| Assets Taxes  | 2,903.6  | 1,987.3  | 2,803.2  | 3,901.9  | 3,768.3  | 4,181.9  | 4,340.6         |
| Customs and Excise Taxes  | 2,065.2  | 2,125.3  | 2,048.5  | 2,132.8  | 2,141.7  | 2,189.4  | 2,539.7         |
| Goods and Services Tax  | 6,486.7  | 6,913.7  | 8,198.0  | 8,687.0  | 9,038.0  | 9,512.7  | 10,215.0        |
| Motor Vehicle Taxes   | 1,834.7  | 1,855.6  | 1,850.9  | 1,919.6  | 1,802.9  | 1,654.6  | 1,602.9         |
| Betting Taxes   | 1,771.0  | 1,727.0  | 2,278.7  | 2,373.4  | 2,304.8  | 2,378.8  | 2,591.0         |
| Stamp Duty  | 1,431.6  | 2,386.2  | 3,276.5  | 3,175.1  | 4,309.5  | 3,929.9  | 2,783.5         |
| Other Taxes   | 1,929.5  | 2,410.0  | 2,705.6  | 3,307.3  | 4,341.8  | 5,248.4  | 6,097.1         |
| Vehicle Quota Premiums  | 367.4    | 623.3    | 1,602.1  | 2,112.0  | 2,572.1  | 2,721.7  | 3,394.0         |
| Other Fees and Charges  | 2,845.0  | 2,141.8  | 2,384.3  | 2,587.2  | 2,707.7  | 2,903.0  | 3,010.5         |
| Others  | 165.0    | 164.8    | 225.8    | 302.0    | 416.1    | 250.0    | 323.8           |
| Total Expenditure <sup>2</sup>  | 38,090.5 | 41,890.9 | 45,337.8 | 46,563.4 | 49,003.9 | 51,727.8 | 56,648.3        |
| Social Development  | 15,938.4 | 18,145.6 | 20,102.1 | 21,659.5 | 21,877.4 | 24,179.4 | 27,206.8        |
| Security and External Relations   | 13,996.5 | 14,383.5 | 14,637.5 | 14,805.7 | 15,397.4 | 16,093.6 | 17,196.1        |
| Economic Development  | 6,927.6  | 8,041.6  | 9,156.5  | 8,570.2  | 9,824.8  | 9,573.8  | 10,146.8        |
| Government Administration   | 1,228.1  | 1,320.2  | 1,441.7  | 1,528.0  | 1,904.4  | 1,881.0  | 2,098.6         |
| Primary Surplus/(Deficit)   | 2,995.7  | -2,344.3 | 722.4    | 4,513.7  | 6,810.6  | 5,292.5  | 4,189.9         |
| Special Transfers <sup>3</sup>  | 7,099.2  | 5,481.4  | 7,094.6  | 8,426.7  | 8,859.5  | 8,583.6  | 12,356.2        |
| Special Transfers Excluding Top-ups to Endowment and Trust Funds          | 4,089.2  | 4,071.4  | 1,504.6  | 2,909.2  | 1,457.5  | 2,989.6  | 3,856.2         |
| Basic Surplus/(Deficit) <sup>4</sup>                                      | -1,093.5 | -6,415.7 | -782.3   | 1,604.5  | 5,353.0  | 2,302.9  | 333.7           |
| Top-ups to Endowment and Trust Funds                                      | 3,010.0  | 1,410.0  | 5,590.0  | 5,517.5  | 7,402.0  | 5,594.0  | 8,500.0         |
| Net Investment Income/Net Investment<br>Returns Contribution <sup>5</sup> | 4,342.6  | 7,006.5  | 7,352.4  | 7,915.6  | 7,870.1  | 8,289.4  | 8,737.8         |
| Overall Budget Surplus/ (Deficit)   | 239.1    | -819.2   | 980.1    | 4,002.7  | 5,821.1  | 4,998.2  | 571.5           |

Source: Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year.

<sup>1</sup> Operating Revenue excludes the repayment of loans and advances, interest income, investment income and capital receipts.

<sup>2</sup> Total Expenditure comprises Operating Expenditure and Development Expenditure. Development Expenditure excludes loans to statutory boards, industrial and commercial enterprises and land-related expenditure items.

<sup>3</sup> Special Transfers refer to discretionary transfers made by the Government and these include one-off direct transfers to businesses and households, as well as top-ups to endowment and trust funds created by the Government for specific expenditure objectives.

<sup>4</sup> Surplus/ Deficit before Top-ups to Endowment and Trust Funds and Net Investment Income/Returns Contribution.

<sup>5</sup> Net Investment Returns Contribution (NIRC) is the sum of: (1) up to 50% of the expected long-term real return on the relevant assets specified in the Constitution; and (2) up to 50% of the net investment income on the remaining assets.

21.2 GOVERNMENT OPERATING REVENUE

|                                      |          |          |          |          |          | 1        | Million Dollars |
|--------------------------------------|----------|----------|----------|----------|----------|----------|-----------------|
|                                      | FY2008   | FY2009   | FY2010   | FY2011   | FY2012   | FY2013   | FY2014          |
| Total <sup>1</sup>                   | 41,086.2 | 39,546.5 | 46,060.2 | 51,077.2 | 55,814.5 | 57,020.3 | 60,838.2        |
| Tax Revenue                          | 37,708.8 | 36,616.6 | 41,848.0 | 46,076.1 | 50,118.5 | 51,145.6 | 54,109.8        |
| Income Tax                           | 19,286.4 | 17,211.3 | 18,686.8 | 20,578.9 | 22,411.4 | 22,049.9 | 23,940.0        |
| Corporate Income Tax                 | 10,553.6 | 9,550.9  | 10,686.6 | 12,096.3 | 12,821.3 | 12,679.6 | 13,371.5        |
| Personal Income Tax                  | 5,414.2  | 6,113.5  | 6,469.6  | 6,871.4  | 7,713.7  | 7,688.1  | 8,926.7         |
| Withholding Tax <sup>2</sup>         | 1,176.0  | 1,137.2  | 957.4    | 1,258.0  | 1,337.3  | 1,152.4  | 1,125.9         |
| Contributions by Statutory Boards    | 2,142.6  | 409.7    | 573.2    | 353.2    | 539.1    | 529.8    | 515.9           |
| Assets Taxes                         | 2,903.6  | 1,987.3  | 2,803.2  | 3,901.9  | 3,768.3  | 4,181.9  | 4,340.6         |
| Property Tax                         | 2,856.2  | 1,979.1  | 2,798.0  | 3,898.9  | 3,760.1  | 4,178.8  | 4,340.1         |
| Estate Duty <sup>3</sup>             | 47.4     | 8.2      | 5.2      | 2.9      | 8.2      | 3.1      | 0.5             |
| Customs and Excise Duties            | 2,065.2  | 2,125.3  | 2,048.5  | 2,132.8  | 2,141.7  | 2,189.4  | 2,539.7         |
| Liquors                              | 414.5    | 432.5    | 469.5    | 495.9    | 516.6    | 518.3    | 634.0           |
| Tobacco                              | 793.5    | 931.6    | 889.1    | 967.1    | 969.1    | 1,042.8  | 1,227.7         |
| Petroleum Products                   | 398.1    | 413.3    | 418.8    | 416.4    | 414.8    | 414.2    | 419.4           |
| Motor Vehicles                       | 455.6    | 343.6    | 266.5    | 248.0    | 233.3    | 206.2    | 250.5           |
| Compressed Natural Gas               |          |          |          |          |          |          |                 |
| Unit Duty                            | na       | na       | na       | 0.7      | 3.2      | 2.8      | 2.6             |
| Others                               | 3.6      | 4.2      | 4.5      | 4.7      | 4.8      | 5.1      | 5.5             |
| Goods and Services Tax               | 6,486.7  | 6,913.7  | 8,198.0  | 8,687.0  | 9,038.0  | 9,512.7  | 10,215.0        |
| Taxes on Motor Vehicles <sup>4</sup> | 1,834.7  | 1,855.6  | 1,850.9  | 1,919.6  | 1,802.9  | 1,654.6  | 1,602.9         |
| Betting Taxes <sup>5</sup>           | 1,771.0  | 1,727.0  | 2,278.7  | 2,373.4  | 2,304.8  | 2,378.8  | 2,591.0         |
| Stamp Duty                           | 1,431.6  | 2,386.2  | 3,276.5  | 3,175.1  | 4,309.5  | 3,929.9  | 2,783.6         |
| Others <sup>6</sup>                  | 1,929.5  | 2,410.0  | 2,705.6  | 3,307.3  | 4,341.8  | 5,248.4  | 6,097.1         |

Source: Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year. Figures may not add up due to rounding.

<sup>1</sup> Operating Revenue refers to receipts credited to the Consolidated Revenue Account and Development Fund Account, but excludes the repayment of loans and advances, interest income, investment income and capital receipts.

<sup>2</sup> With effect from April 2010, Withholding Tax, which was included in the figures reported under Personal Income Tax, has been reported separately. This item refers to collections under Section 45 of the Income Tax Act, which is a withholding tax on locally-sourced income earned by non-residents.

<sup>3</sup> Estate Duty, which is a tax on the total market value of a person's assets (cash and non-cash) at the date of his or her death, has been removed for deaths occurring on and after 15 February 2008.

<sup>4</sup> Taxes on Motor Vehicles comprise additional registration fees, road tax, special tax on heavy-oil engines, passenger vehicle seating fees and non-motor vehicle licences, but exclude excise duties on motor vehicles which are classified under Customs and Excise Duties.

<sup>5</sup> With effect from March 2010, Betting Taxes include casino tax collected under Section 146 of the Casino Control Act.

<sup>6</sup> Includes the foreign worker levy, annual tonnage tax, water conservation tax and development charge. The development charge has been reclassified from the "Fees and Charges" to "Taxes: Others" category with effect from April 2009 to more accurately reflect its nature as a tax under Section 35 of the Planning Act.

# 21.2 GOVERNMENT OPERATING REVENUE (continued)

|   |                  |                  |                    |                    |                    | ]                  | Million Dollars    |
|---|------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|   | FY2008           | FY2009           | FY2010             | FY2011             | FY2012             | FY2013             | FY2014             |
| Fees and Charges Vehicle Quota Premiums | 3,212.4<br>367.4 | 2,765.2<br>623.3 | 3,986.4<br>1,602.1 | 4,699.1<br>2,112.0 | 5,279.8<br>2,572.1 | 5,624.7<br>2,721.7 | 6,404.5<br>3,394.1 |
| Other Fees and Charges <sup>7</sup>     | 2,845.0          | 2,141.8          | 2,384.3            | 2,587.2            | 2,707.7            | 2,903.0            | 3,010.4            |
| Other Receipts <sup>8</sup>             | 165.0            | 164.8            | 225.8              | 302.0              | 416.1              | 250.0              | 323.8              |

Source : Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year. Figures may not add up due to rounding.

<sup>7</sup> Includes revenue from licenses, permits, service fees, sales of goods, rental of premises, fines and forfeitures and reimbursements.

<sup>8</sup> Excludes repayment of loans and advances, interest income, investment income and capital receipts.

# 21.3 GOVERNMENT OPERATING EXPENDITURE

|   |          |          |          |          |          |          | Million Dollars |
|---|----------|----------|----------|----------|----------|----------|-----------------|
|   | FY2008   | FY2009   | FY2010   | FY2011   | FY2012   | FY2013   | FY2014          |
| Total Operating Expenditure <sup>1</sup>    | 28,733.6 | 30,908.9 | 33,270.1 | 35,150.0 | 36,420.8 | 39,724.9 | 42,685.2        |
| Social Development                          | 13,200.2 | 14,714.2 | 16,458.9 | 18,056.3 | 18,495.6 | 20,943.2 | 22,611.8        |
| Education                                   | 7,476.5  | 7,837.9  | 8,998.7  | 9,697.8  | 9,637.3  | 10,664.9 | 10,712.4        |
| National Development                        | 805.1    | 959.3    | 789.5    | 1,428.0  | 948.8    | 673.3    | 857.9           |
| Health                                      | 2,378.5  | 2,920.2  | 3,258.0  | 3,488.8  | 4,066.1  | 5,043.9  | 5,872.4         |
| The Environment and Water Resources         | 605.8    | 656.2    | 720.0    | 726.4    | 812.7    | 957.5    | 1,048.5         |
| Culture, Community and Youth <sup>2</sup>   | na       | na       | na       | na       | 364.5    | 1,003.0  | 1,335.0         |
| Social and Family Development <sup>2</sup>  | 1,181.9  | 1,564.7  | 1,828.7  | 1,721.5  | 1,739.3  | 1,598.3  | 1,722.4         |
| Communications and Information <sup>2</sup> | 412.1    | 421.9    | 500.0    | 524.5    | 429.7    | 336.0    | 354.5           |
| Manpower (Financial Security)               | 340.2    | 354.1    | 364.0    | 469.4    | 497.3    | 666.4    | 708.7           |
| Security and External Relations             | 13,219.3 | 13,522.5 | 13,919.8 | 14,088.0 | 14,677.6 | 15,233.3 | 16,289.7        |
| Defence                                     | 10,397.4 | 10,603.3 | 10,623.4 | 10,796.8 | 11,056.0 | 11,329.1 | 11,866.9        |
| Home Affairs                                | 2,477.7  | 2,576.7  | 2,936.8  | 2,947.4  | 3,266.3  | 3,521.9  | 4,029.1         |
| Foreign Affairs                             | 344.2    | 342.6    | 359.6    | 343.8    | 355.4    | 382.3    | 393.7           |
| Economic Development                        | 1,283.6  | 1,564.8  | 1,666.3  | 1,674.6  | 1,869.8  | 2,027.3  | 2,223.7         |
| Transport                                   | 366.9    | 370.6    | 455.8    | 463.8    | 501.9    | 554.9    | 597.7           |
| Trade and Industry                          | 659.5    | 704.2    | 683.6    | 670.8    | 685.4    | 709.6    | 728.5           |
| Manpower (excluding Financial Security)     | 223.7    | 413.8    | 439.1    | 379.9    | 455.9    | 495.9    | 519.8           |
| Info-Communications and Media               |          |          |          |          |          |          |                 |
| Development <sup>2</sup>                    | 33.5     | 76.2     | 87.7     | 160.1    | 226.6    | 267.0    | 377.7           |
| Government Administration                   | 1,030.5  | 1,107.4  | 1,225.1  | 1,331.1  | 1,377.8  | 1,521.1  | 1,560.0         |
| Finance                                     | 484.1    | 528.0    | 552.4    | 616.9    | 630.8    | 711.4    | 681.8           |
| Law   | 118.0    | 126.8    | 119.2    | 122.9    | 162.7    | 167.3    | 176.8           |
| Organs of State                             | 234.8    | 249.3    | 313.2    | 318.1    | 325.5    | 352.3    | 383.6           |
| Prime Minister's Office                     | 193.6    | 203.3    | 240.3    | 273.3    | 258.8    | 290.2    | 317.8           |

Source: Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year. Refinements have been made over time to the sectoral classification of Ministries' expenditure to better reflect the nature of the programmes. In FY2013, expenditure by the Ministry of Manpower under the Financial Security and Lifelong Employability programme (subsequently re-named as the Financial Security for Singaporeans programme) was reclassified from the Economic Development sector to the Social Development sector. Figures may not add up due to rounding.

<sup>1</sup> Refers to expenditure on manpower, other operating expenditure (excluding expenses on investment and agency fees on land sales), operating grants and transfers.

<sup>2</sup> With effect from 1 November 2012, the Ministry of Community Development, Youth and Sports (MCYS) and the Ministry of Information, Communications and the Arts (MICA) were restructured to form three Ministries:

(i) MCYS was renamed the Ministry of Social and Family Development (MSF),
(ii) MICA was renamed the Ministry of Communications and Information (MCI) and
(iii) the new Ministry of Culture, Community and Youth (MCCY) was formed to undertake functions transferred from MCYS and MICA.

21.4 GOVERNMENT DEVELOPMENT EXPENDITURE

|   |         |          |          |          |          |          | Million Dollars |
|---|---------|----------|----------|----------|----------|----------|-----------------|
|   | FY2008  | FY2009   | FY2010   | FY2011   | FY2012   | FY2013   | FY2014          |
| Total Development Expenditure <sup>1</sup>  | 9,356.9 | 10,981.9 | 12,067.8 | 11,413.4 | 12,583.2 | 12,003.0 | 13,963.1        |
| Social Development                          | 2,738.2 | 3,431.4  | 3,643.2  | 3,603.2  | 3,381.8  | 3,236.3  | 4,595.1         |
| Education                                   | 753.2   | 847.1    | 876.7    | 1,042.5  | 859.6    | 973.4    | 886.0           |
| National Development                        | 1,094.6 | 1,307.0  | 1,646.4  | 1,572.1  | 1,353.7  | 900.7    | 1,307.9         |
| Health                                      | 336.5   | 710.5    | 484.8    | 453.1    | 605.4    | 722.9    | 1,146.8         |
| The Environment and Water Resources         | 325.0   | 323.1    | 406.0    | 349.0    | 352.3    | 325.2    | 427.3           |
| Culture, Community and Youth <sup>2</sup>   | na      | na       | na       | na       | 95.3     | 212.5    | 617.1           |
| Social and Family Development <sup>2</sup>  | 96.0    | 115.3    | 120.4    | 63.6     | 36.8     | 40.7     | 61.8            |
| Communications and Information <sup>2</sup> | 132.4   | 128.0    | 108.8    | 122.9    | 78.7     | 60.8     | 148.2           |
| Manpower (Financial Security)               | 0.5     | 0.3      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0             |
| Security and External Relations             | 777.2   | 861.0    | 717.8    | 717.8    | 719.7    | 860.3    | 906.5           |
| Defence                                     | 328.5   | 440.0    | 437.7    | 479.4    | 467.7    | 422.4    | 428.6           |
| Home Affairs                                | 387.4   | 350.2    | 240.4    | 194.1    | 207.0    | 378.9    | 437.9           |
| Foreign Affairs                             | 61.3    | 70.7     | 39.7     | 44.3     | 45.0     | 59.1     | 40.0            |
| Economic Development                        | 5,644.0 | 6,476.8  | 7,490.2  | 6,895.6  | 7,955.0  | 7,546.6  | 7,923.0         |
| Transport                                   | 3,378.7 | 4,082.0  | 4,249.7  | 4,002.9  | 5,413.7  | 5,503.8  | 5,488.6         |
| Trade and Industry                          | 2,183.0 | 2,334.1  | 2,673.1  | 2,552.7  | 2,387.2  | 1,946.6  | 2,101.8         |
| Manpower (excluding Financial Security)     | 34.8    | 22.3     | 42.4     | 61.7     | 27.7     | 28.3     | 36.7            |
| Info-Communications and Media               |         |          |          |          |          |          |                 |
| Development <sup>2</sup>                    | 47.5    | 38.3     | 524.9    | 278.2    | 126.4    | 67.9     | 295.9           |
| Government Administration                   | 197.6   | 212.8    | 216.6    | 196.9    | 526.6    | 359.8    | 538.5           |
| Finance                                     | 25.0    | 17.0     | 21.1     | 29.9     | 24.1     | 25.2     | 43.9            |
| Law   | 153.4   | 166.4    | 148.0    | 130.5    | 316.4    | 273.2    | 434.4           |
| Organs of State                             | 10.1    | 17.5     | 13.8     | 16.6     | 163.1    | 21.5     | 22.6            |
| Prime Minister's Office                     | 9.1     | 11.9     | 33.8     | 19.9     | 23.0     | 40.0     | 37.6            |

Source : Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year. Refinements have been made over time to the sectoral classification of Ministries' expenditure to better reflect the nature of the programmes. In FY2013, expenditure by the Ministry of Manpower under the Financial Security and Lifelong Employability programme (subsequently re-named as the Financial Security for Singaporeans programme) was reclassified from the Economic Development sector to the Social Development sector.

Figures may not add up due to rounding.

<sup>1</sup> Excludes loans to statutory boards, industrial and commercial enterprises and land-related expenditure items.

<sup>2</sup> With effect from 1 November 2012, the Ministry of Community Development, Youth and Sports (MCYS) and the Ministry of Information, Communications and the Arts (MICA) were restructured to form three Ministries: (i) MCYS was renamed the Ministry of Social and Family Development (MSF), (ii) MICA was renamed the Ministry of Communications and Information (MCI) and (iii) the new Ministry of Culture, Community and Youth (MCCY) was formed to undertake functions transferred from MCYS and MICA.

## 21.5 GOVERNMENT DEBT BY INSTRUMENT (As at End of Calendar Year)

|  |   |  |  |  |  |   | Million Dollars                               |
|--|---|--|--|--|--|---|---|
|  | 2009  | 2010   | 2011   | 2012   | 2013   | 2014  | 2015  |
| Total  | 291,501.8                                     | 321,182.3                                      | 354,023.4                                      | 384,997.6                                      | 390,407.1                                      | 387,250.7                                     | 421,302.1                                     |
| Domestic Debt<br>Registered Stocks and Bonds<br>Treasury Bills<br>Advance Deposits | 291,501.8<br>230,046.8<br>52,100.0<br>9,355.0 | 321,182.3<br>253,841.3<br>57,100.0<br>10,241.0 | 354,023.4<br>279,635.0<br>59,100.0<br>15,288.4 | 384,997.6<br>304,946.0<br>60,000.0<br>20,051.6 | 390,407.1<br>333,943.8<br>38,800.0<br>17,663.3 | 387,250.7<br>362,741.4<br>8,000.0<br>16,509.3 | 421,302.1<br>396,598.8<br>8,500.0<br>16,203.3 |
| External Debt  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   |
| Memorandum item : Debt Guarantees <sup>1</sup>                                     | -   | -  | -  | -  | -  | -   | -   |

Source : Accountant-General's Department Monetary Authority of Singapore

Note: The debt is raised through the issuance of the Singapore Government Securities (SGS) (comprising SGS Bonds, Treasury Bills and Singapore Savings Bonds) and Special Singapore Government Securities (SSGS).

SGS are for purposes of developing Singapore's debt markets, while SSGS are non-tradable bonds issued specifically to the Central Provident Fund (CPF) Board. Under the Protection of Reserves Framework in the Singapore Constitution and the Government Securities Act, the Singapore Government cannot spend the monies raised from SGS and SSGS. All borrowing proceeds from the issuance of SGS and SSGS are invested. These investment returns are more than sufficient to cover the debt servicing costs.

## 21.6 GOVERNMENT DEBT BY MATURITY (As at End of Calendar Year)

|                                  |           |           |           |           |           |           | Million Dollars |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
|                                  | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015            |
| Domestic Debt (excluding Advance |           |           |           |           |           |           |                 |
| Deposits)                        | 282,146.8 | 310,941.3 | 338,735.0 | 364,946.0 | 372,743.8 | 370,741.4 | 405,098.8       |
| 1 year maturity or less          | 73,180.0  | 80,915.5  | 84,615.5  | 83,815.5  | 68,894.0  | 32,554.0  | 38,854.0        |
| More than 1 year maturity        | 208,966.8 | 230,025.8 | 254,119.5 | 281,130.5 | 303,849.8 | 338,187.4 | 366,244.8       |
| External Debt                    | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       | 0.0             |

Source: Monetary Authority Singapore

Note: The debt is raised through the issuance of the Singapore Government Securities (SGS) (comprising SGS Bonds, Treasury Bills and Singapore Savings Bonds) and Special Singapore Government Securities (SSGS).

SGS are for purposes of developing Singapore's debt markets, while SSGS are non-tradable bonds issued specifically to the Central Provident Fund (CPF) Board. Under the Protection of Reserves Framework in the Singapore Constitution and the Government Securities Act, the Singapore Government cannot spend the monies raised from SGS and SSGS. All borrowing proceeds from the issuance of SGS and SSGS are invested. These investment returns are more than sufficient to cover the debt servicing costs.

<sup>1</sup> Refers to the market value of debt guarantees.

21.7 TAXABLE INDIVIDUALS BY ASSESSED INCOME GROUP, YEAR OF ASSESSMENT 2014

|                               |           | Assessed Income Group (\$) |                   |                   |                   |                   |                   |  |  |
|-------------------------------|-----------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|--|
|                               | Total     | 20,000 & below             | 20,001-<br>25,000 | 25,001-<br>30,000 | 30,001-<br>40,000 | 40,001-<br>50,000 | 50,001-<br>60,000 |  |  |
|                               |           |                            |                   |                   |                   |                   |                   |  |  |
| Taxpayers (No)                | 1,578,917 | 19,929                     | 73,965            | 137,897           | 290,618           | 225,289           | 163,331           |  |  |
| Tax resident                  | 1,548,062 | 0                          | 71,842            | 136,256           | 288,519           | 224,042           | 162,440           |  |  |
| Non-tax resident <sup>1</sup> | 30,855    | 19,929                     | 2,123             | 1,641             | 2,099             | 1,247             | 89                |  |  |
| Assessable Income (\$m)       | 137,601   | 150                        | 1,723             | 3,818             | 10,138            | 10,088            | 8,950             |  |  |
| Tax resident                  | 136,657   | 0                          | 1,676             | 3,773             | 10,066            | 10,033            | 8,90              |  |  |
| Non-tax resident <sup>1</sup> | 944       | 150                        | 48                | 45                | 72                | 56                | 49                |  |  |
| Net Tax Assessed (\$m)        | 8,886     | 25                         | 12                | 21                | 65                | 97                | 129               |  |  |
| Tax resident                  | 8,719     | 0                          | 3                 | 13                | 52                | 87                | 120               |  |  |
| Non-tax resident <sup>1</sup> | 168       | 25                         | 9                 | 8                 | 13                | 10                | 9                 |  |  |

|                               |                   | Assessed Income Group (\$) |                     |                     |                     |                       |                   |  |  |
|-------------------------------|-------------------|----------------------------|---------------------|---------------------|---------------------|-----------------------|-------------------|--|--|
|                               | 60,001-<br>80,000 | 80,001-<br>100,000         | 100,001-<br>150,000 | 150,001-<br>200,000 | 200,001-<br>300,000 | 300,001-<br>1,000,000 | 1,000,001 & above |  |  |
|                               |                   |                            |                     |                     |                     |                       |                   |  |  |
| Taxpayers (No)                | 202,526           | 121,125                    | 158,903             | 70,558              | 59,560              | 50,634                | 4,582             |  |  |
| Tax resident                  | 201,459           | 120,538                    | 158,244             | 70,315              | 59,346              | 50,504                | 4,557             |  |  |
| Non-tax resident <sup>1</sup> | 1,067             | 587                        | 659                 | 243                 | 214                 | 130                   | 25                |  |  |
| Assessable Income (\$m)       | 13,981            | 10,819                     | 19,313              | 12,137              | 14,398              | 23,298                | 8,787             |  |  |
| Tax resident                  | 13,907            | 10,766                     | 19,234              | 12,095              | 14,346              | 23,235                | 8,625             |  |  |
| Non-tax resident <sup>1</sup> | 74                | 53                         | 79                  | 42                  | 52                  | 63                    | 162               |  |  |
| Net Tax Assessed (\$m)        | 299               | 323                        | 861                 | 815                 | 1,357               | 3,252                 | 1,630             |  |  |
| Tax resident                  | 287               | 314                        | 847                 | 808                 | 1,348               | 3,242                 | 1,598             |  |  |
| Non-tax resident <sup>1</sup> | 13                | 9                          | 13                  | 7                   | 9                   | 10                    | 32                |  |  |

Source : Inland Revenue Authority of Singapore

less than 183 days in the previous year (i.e. 2013 for Year of Assessment 2014).

<sup>1</sup> Refers to an individual who has worked in Singapore for

21.8 TAXABLE COMPANIES BY CHARGEABLE INCOME GROUP, YEAR OF ASSESSMENT 2014

|                               |         | Chargeable Income Group (\$) |                   |                   |                   |                    |  |  |  |  |
|-------------------------------|---------|------------------------------|-------------------|-------------------|-------------------|--------------------|--|--|--|--|
|                               | Total   | 10,000 &<br>below            | 10,001-<br>20,000 | 20,001-<br>30,000 | 30,001-<br>60,000 | 60,001-<br>100,000 |  |  |  |  |
|                               |         |                              |                   |                   |                   |                    |  |  |  |  |
| Companies (No)                | 64,770  | 16,252                       | 6,552             | 4,667             | 8,708             | 6,551              |  |  |  |  |
| Tax resident                  | 62,783  | 15,911                       | 6,338             | 4,460             | 8,363             | 6,356              |  |  |  |  |
| Non-tax resident <sup>1</sup> | 1,987   | 341                          | 214               | 207               | 345               | 19:                |  |  |  |  |
| Chargeable Income (\$m)       | 101,860 | 54                           | 96                | 115               | 379               | 512                |  |  |  |  |
| Tax resident                  | 91,122  | 52                           | 93                | 110               | 364               | 49                 |  |  |  |  |
| Non-tax resident <sup>1</sup> | 10,738  | 1                            | 3                 | 5                 | 15                | 13                 |  |  |  |  |
| Net Tax Assessed (\$m)        | 13,209  | 7                            | 12                | 14                | 47                | 64                 |  |  |  |  |
| Tax resident                  | 11,906  | 6                            | 12                | 14                | 45                | 62                 |  |  |  |  |
| Non-tax resident 1            | 1,303   | 0                            | 0                 | 1                 | 2                 | ,                  |  |  |  |  |

|                               |                     | Chargeable Income Group (\$) |                       |                         |                         |                   |  |  |  |  |
|-------------------------------|---------------------|------------------------------|-----------------------|-------------------------|-------------------------|-------------------|--|--|--|--|
|                               | 100,001-<br>300,000 | 300,001-<br>500,000          | 500,001-<br>1,000,000 | 1,000,001-<br>3,000,000 | 3,000,001-<br>5,000,000 | 5,000,001 & above |  |  |  |  |
|                               |                     |                              |                       |                         |                         |                   |  |  |  |  |
| Companies (No)                | 9,333               | 2,882                        | 3,310                 | 3,375                   | 935                     | 2,205             |  |  |  |  |
| Tax resident                  | 9,109               | 2,811                        | 3,222                 | 3,267                   | 897                     | 2,049             |  |  |  |  |
| Non-tax resident <sup>1</sup> | 224                 | 71                           | 88                    | 108                     | 38                      | 156               |  |  |  |  |
| Chargeable Income (\$m)       | 1,553               | 1,126                        | 2,319                 | 5,817                   | 3,593                   | 86,296            |  |  |  |  |
| Tax resident                  | 1,516               | 1,098                        | 2,258                 | 5,624                   | 3,447                   | 76,062            |  |  |  |  |
| Non-tax resident <sup>1</sup> | 36                  | 28                           | 61                    | 193                     | 145                     | 10,234            |  |  |  |  |
| Net Tax Assessed (\$m)        | 195                 | 137                          | 299                   | 872                     | 556                     | 11,008            |  |  |  |  |
| Tax resident                  | 190                 | 133                          | 291                   | 843                     | 534                     | 9,777             |  |  |  |  |
| Non-tax resident <sup>1</sup> | 5                   | 4                            | 8                     | 29                      | 22                      | 1,231             |  |  |  |  |

Source: Inland Revenue Authority of Singapore

<sup>1</sup> Refers to a company where the control and management of its business is not exercised in Singapore.

21.9 TAXABLE COMPANIES BY ECONOMIC SECTOR, YEAR OF ASSESSMENT 2014

|  | Number of Companies | Chargeable Income (\$m) | Net Tax Assessed (\$m |
|--|---------------------|-------------------------|-----------------------|
| otal   | 64,770              | 101,860                 | 13,209                |
| Manufacturing                                  | 4,890               | 9,955                   | 1,296                 |
| Construction                                   | 5,204               | 3,403                   | 543                   |
| Utilities <sup>1</sup>                         | 176                 | 910                     | 151                   |
| Other Goods Industries <sup>2</sup>            | 162                 | 159                     | 24                    |
| Wholesale & Retail Trade                       | 18,451              | 24,044                  | 2,674                 |
| Accommodation & Food Service Activities        | 1,984               | 1,348                   | 218                   |
| Transportation & Storage                       | 3,455               | 5,411                   | 793                   |
| Information & Communications                   | 2,777               | 3,285                   | 491                   |
| Financial & Insurance Activities               | 7,333               | 30,553                  | 3,860                 |
| Real Estate & Business Activities <sup>3</sup> | 15,052              | 19,527                  | 2,860                 |
| Others <sup>4</sup>                            | 5,286               | 3,265                   | 298                   |

Source: Inland Revenue Authority of Singapore

The industries are classified according to Singapore Standard Industrial Classification (SSIC) 2010.

<sup>1</sup> Includes Electricity, Gas & Air-Conditioning Supply, Water Supply, Sewerage, and Waste Management & Remediation Activities.

<sup>2</sup> Includes Agriculture & Fishing and Mining & Quarrying.

<sup>3</sup> Includes Real Estate Activities, Professional, Scientific & Technical Activities, and Administrative & Support Service Activities.

<sup>4</sup> Includes all other industries such as Education, Health & Social Services, Arts, Entertainment & Recreation, and Other Service Activities.

# 21.10 SOURCES AND USES OF DEVELOPMENT FUND

|                           |        |        |        |        |         | M       | Iillion Dollar |
|---------------------------|--------|--------|--------|--------|---------|---------|----------------|
|                           | FY2008 | FY2009 | FY2010 | FY2011 | FY2012  | FY2013  | FY2014         |
| Balance (Beginning of     |        |        |        |        |         |         |                |
| Financial Year)           | 99,364 | 93,488 | 89,015 | 98,712 | 103,567 | 104,202 | 100,736        |
| Sources                   |        |        |        |        |         |         |                |
| Total                     | 8,503  | 16,464 | 26,608 | 20,461 | 17,364  | 14,825  | 18,162         |
| Consolidated Revenue      |        |        |        |        |         |         |                |
| Account                   | 4,364  | 7,916  | 16,441 | 12,200 | 8,685   | 5,579   | 7,200          |
| Consolidated Loan Account | 0      | 0      | 0      | 0      | 0       | 0       | 0              |
| Others                    | 4,139  | 8,548  | 10,167 | 8,261  | 8,679   | 9,247   | 10,962         |
| Uses                      |        |        |        |        |         |         |                |
| Total                     | 14,379 | 20,937 | 16,910 | 15,606 | 16,730  | 18,291  | 20,399         |
| Government Development    |        |        |        |        |         |         |                |
| Expenditure               | 11,075 | 14,053 | 13,710 | 12,929 | 13,855  | 13,222  | 15,331         |
| Loans to Statutory Boards |        |        |        |        |         |         |                |
| & Enterprises             | 3,304  | 6,884  | 3,200  | 2,677  | 2,875   | 5,069   | 5,068          |
| Others                    | 0      | 0      | 0      | 0      | 0       | 0       | 0              |

Source : Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year.

# 21.11 GENERAL GOVERNMENT FINANCE

|  |        |        |         |         |         | M       | lillion Dollars |
|--|--------|--------|---------|---------|---------|---------|-----------------|
|  | FY2008 | FY2009 | FY2010  | FY2011  | FY2012  | FY2013  | FY2014          |
| Cash surplus/deficit 1                                 | 20,904 | 4,421  | 24,407  | 31,889  | 31,185  | 31,006  | 28,460          |
| Net cash inflow from operating                         |        |        |         |         |         |         |                 |
| activities   | 16,190 | 7,767  | 14,277  | 14,927  | 18,781  | 18,721  | 19,556          |
| Cash receipts from operating                           |        |        |         |         |         |         |                 |
| activities   | 55,925 | 48,161 | 54,864  | 59,806  | 64,449  | 66,350  | 71,894          |
| Cash payments for operating                            |        |        |         |         |         |         |                 |
| activities   | 39,735 | 40,394 | 40,587  | 44,879  | 45,668  | 47,629  | 52,338          |
| Net cash outflow from investments                      |        |        |         |         |         |         |                 |
| in non-financial assets                                | -4,714 | 3,346  | -10,130 | -16,962 | -12,404 | -12,285 | -8,904          |
| Purchases of non-financial assets                      | 5,003  | 7,380  | 6,172   | 5,904   | 6,032   | 5,265   | 6,022           |
| Sales of non-financial assets                          | 9,717  | 4,034  | 16,302  | 22,866  | 18,436  | 17,550  | 14,926          |
| Net cash inflow from financing activities <sup>2</sup> | 21,315 | 34,810 | 35,171  | 39,364  | 32,448  | -15,314 | 15,454          |
| Net incurrence of liabilities                          | 20,422 | 36,283 | 31,331  | 36,461  | 29,457  | -14,899 | 14,652          |
| Domestic   | 20,422 | 36,283 | 31,331  | 36,461  | 29,457  | -14,899 | 14,652          |
| Foreign  | 0      | 0      | 0       | 0       | 0       | 0       | 0               |
| Net acquisition of financial assets other              |        |        |         |         |         |         |                 |
| than cash  | -893   | 1,473  | -3,840  | -2,903  | -2,991  | 415     | -802            |
| Domestic excluding cash                                | -893   | 1,473  | -3,840  | -2,903  | -2,991  | 415     | -802            |
| Foreign excluding cash                                 | 0      | 0      | 0       | 0       | 0       | 0       | 0               |

Source: Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year.

Presentation format of the table follows that of the National Summary Data Page for Singapore, which disseminates the data prescribed by the International Monetary Fund's Special Data Dissemination Standards. Data in the table represent a broader definition of Government revenues and receipts than what are permissible for Government spending as presented in each year's Budget Statement. This is because some revenues and receipts accrue to the Government's past reserves, which cannot be drawn on without the approval of the President.

The data follow the IMF Government Financial Statistics Manual (GFSM) 2001. Details on the reporting format for GFSM 2001 can be found in IMF's website <a href="http://www.imf.org/external/pubs/ft/gfs/manual/aboutgfs.htm">http://www.imf.org/external/pubs/ft/gfs/manual/aboutgfs.htm</a>

General government finance includes budgetary and extra-budgetary accounts.

<sup>1</sup> Does not reflect the fiscal position of the current term of government, as it takes into account land sales and capital receipts (which accrue primarily to past reserves) in addition to taxes and other revenues, as well as land-related expenditure.

<sup>2</sup> Data reflect the net issuance of Government securities and lending minus repayments.

# 21.12 GOVERNMENT FINANCE

|  |        |        |         |         |         | N       | Iillion Dollars |
|--|--------|--------|---------|---------|---------|---------|-----------------|
|  | FY2008 | FY2009 | FY2010  | FY2011  | FY2012  | FY2013  | FY2014          |
| Cash surplus/deficit <sup>1</sup>                      | 16,527 | -442   | 19,621  | 27,366  | 25,321  | 25,262  | 22,358          |
| Net cash inflow from operating                         |        |        |         |         |         |         |                 |
| activities   | 11,813 | 2,904  | 9,491   | 10,404  | 12,917  | 12,977  | 13,454          |
| Cash receipts from operating                           |        |        |         |         |         |         |                 |
| activities   | 54,560 | 46,741 | 53,451  | 58,454  | 62,932  | 64,750  | 69,973          |
| Cash payments for operating                            | ,      |        |         | ,       |         |         |                 |
| activities   | 42,747 | 43,837 | 43,959  | 48,050  | 50,015  | 51,773  | 56,519          |
| Net cash outflow from investments                      |        |        |         |         |         |         |                 |
| in non-financial assets                                | -4,714 | 3,346  | -10,130 | -16,962 | -12,404 | -12,285 | -8,904          |
| Purchases of non-financial assets                      | 5,003  | 7,380  | 6,172   | 5,904   | 6,032   | 5,265   | 6,022           |
| Sales of non-financial assets                          | 9,717  | 4,034  | 16,302  | 22,866  | 18,436  | 17,550  | 14,926          |
| Net cash inflow from financing activities <sup>2</sup> | 21,315 | 34,810 | 35,171  | 39,364  | 32,447  | -15,314 | 15,454          |
| Net incurrence of liabilities                          | 20,422 | 36,283 | 31,331  | 36,461  | 29.457  | -14,899 | 14,652          |
| Domestic   | 20,422 | 36,283 | 31,331  | 36,461  | 29,457  | -14,899 | 14,652          |
| Foreign  | 0      | 0      | 0       | 0       | 0       | 0       | 0               |
| Net acquisition of financial assets                    |        |        |         |         |         |         |                 |
| other than cash  | -893   | 1,473  | -3,840  | -2,903  | -2,991  | 415     | -802            |
| Domestic excluding cash                                | -893   | 1,473  | -3,840  | -2,903  | -2,991  | 415     | -802            |
| Foreign excluding cash                                 | 0      | 0      | 0       | 0       | 0       | 0       | 0               |

Source: Accountant-General's Department

Note: Data refer to the Government's financial year, which begins on 1 April of the current year and ends on 31 March of the following year

Presentation format of the table follows that of the National Summary Data Page for Singapore, which disseminates the data prescribed by the International Monetary Fund's Special Data Dissemination Standards. Data in the table represent a broader definition of Government revenues and receipts than what are permissible for Government spending as presented in each year's Budget Statement. This is because some revenues and receipts accrue to the Government's past reserves, which cannot be drawn on without the approval of the President.

The data follow the IMF Government Financial Statistics Manual (GFSM) 2001. Details on the reporting format for GFSM 2001 can be found in IMF's website <a href="http://www.imf.org/external/pubs/ft/gfs/manual/aboutgfs.htm">http://www.imf.org/external/pubs/ft/gfs/manual/aboutgfs.htm</a>

<sup>1</sup> Does not reflect the fiscal position of the current term of government, as it takes into account land sales and capital receipts (which accrue primarily to past reserves) in addition to taxes and other revenues, as well as land-related expenditure.

<sup>2</sup> Data reflect the net issuance of Government securities and lending minus repayments.

# **22**



# Prices

#### **Consumer Price Index**

The Consumer Price Index (CPI) measures the average price changes in a fixed basket of consumption goods and services commonly purchased by households over time. The weighting pattern for the 2014-based CPI was derived from the expenditure values collected in the Household Expenditure Survey (HES) conducted from October 2012 to September 2013. These expenditure values were updated to 2014 values by taking into account price changes between 2012/13 and 2014.

The CPI is compiled on a monthly basis. The annual CPI is derived by taking a simple average of the 12 months' indices for the year. The annual inflation rate for a specific year is computed by comparing the average for the 12 monthly indices with that for the preceding year.

Details on the compilation of the 2014-based CPI can be obtained from the Information Paper "Rebasing of The Consumer Price Index (Base Year 2014 = 100)", published by the Singapore Department of Statistics (DOS).

### **Retail Prices**

Retail prices of selected goods and services are collected regularly from a wide range of retailers and service providers commonly patronised by households.

The frequency of the data collection depends on the price behaviour of the item. Items whose prices are volatile (for example, perishable food items) are surveyed weekly, while items with more stable prices such as service & conservancy (S&C) charges for HDB flats, utility tariffs, bus or train fares, school fees, medical services and household durables are surveyed monthly, quarterly, half-yearly or as and when the prices or rates change.

A total of 6,600 brands priced from some 4,200 outlets are selected for the compilation of the 2014-based CPI.

# Singapore Manufactured Products & Domestic Supply Price Indices

The Singapore Manufactured Products Price Index measures the changes in the prices of goods manufactured by local manufacturers. The Domestic Supply Price Index monitors the price changes of commodities, either locally manufactured or imported from abroad, which are retained for use in the domestic economy. The 2012-based series is compiled using the 'modified Laspeyres' formula, whereby the weight reference period of 2011 preceded the price reference period of 2012.

The weights for Singapore manufactured products are derived from production data collected in the 2011 Census of Industrial Production. The weights for the Domestic Supply Price Index are made proportionate to the combined value of retained imports and locally manufactured goods sold in the domestic market. Ex-factory prices are collected from selected local manufacturers every month.

Indices at the commodity division and commodity section levels can be found on the SingStat website via the following selections: Economy → Prices → Producer Price Indices. Analyses of price changes are published in the monthly reports on Singapore Manufactured Products & Domestic Supply Price Indices.

### **Import & Export Price Indices**

Import & Export Price Indices track the price movements of imported and exported goods. For imported products, prices are valued at 'cif' (cost, insurance and freight). Prices for exported products are valued at

'fob' (free on board). The 2012-based series is compiled using the Laspeyres formula, whereby the price and weight reference periods are aligned to the year 2012.

The weights for imported and exported products are derived from import and export statistics in 2012. Monthly prices are collected from selected importers and exporters.

Indices at the commodity division and commodity section levels can be found on the SingStat website via the following selections: Economy -> Prices -> International Trade Price Indices. Analyses of price changes are available in the monthly report on Import & Export Price Indices.

### **Construction Material Market Prices**

The Construction Building and Authority (BCA) compiles data on construction material market prices. Construction material market prices are computed based on the average market prices of construction materials for the respective years.

### **Other Price Indices**

The Housing and Development Board (HDB) compiles the Price Index of HDB Resale Flats, while the Urban Redevelopment Authority (URA) compiles the Private Residential Property Price Index and Commercial Property Price and Rental Indices. The Industrial Property Price Index, previously released by URA, is compiled by the JTC Corporation with effect from the fourth quarter of 2013.

**22.1** CONSUMER PRICE INDEX (2014 = 100)

| Division and Group   | Weights 1 | 2009  | 2010   | 2011         | 2012        | 2013     | 2014  | 2015  |
|--|-----------|-------|--------|--------------|-------------|----------|-------|-------|
|  |           |       |        | Consumer     | Price Index |          |       |       |
| All Items  | 10,000    | 85.4  | 87.8   | 92.5         | 96.7        | 99.0     | 100.0 | 99.5  |
| Food   | 2,167     | 89.0  | 90.2   | 93.0         | 95.1        | 97.1     | 100.0 | 101.9 |
| Clothing & Footwear  | 273       | 98.3  | 98.9   | 99.0         | 100.5       | 100.8    | 100.0 | 100.1 |
| Housing & Utilities  | 2,625     | 80.4  | 82.2   | 89.6         | 97.1        | 99.9     | 100.0 | 96.5  |
| Household Durables & Services  | 475       | 85.0  | 85.9   | 91.4         | 93.6        | 98.2     | 100.0 | 99.4  |
| Health Care  | 615       | 86.2  | 87.7   | 89.8         | 93.7        | 97.3     | 100.0 | 99.9  |
| Transport  | 1,579     | 74.9  | 82.6   | 92.4         | 99.0        | 101.2    | 100.0 | 98.6  |
| Communication  | 385       | 105.6 | 103.2  | 101.7        | 101.6       | 100.2    | 100.0 | 100.3 |
| Recreation & Culture   | 788       | 96.6  | 97.6   | 96.2         | 97.1        | 98.2     | 100.0 | 100.3 |
| Education  | 615       | 83.6  | 86.4   | 89.5         | 93.1        | 96.7     | 100.0 | 103.4 |
| Miscellaneous Goods & Services   | 478       | 94.4  | 95.0   | 95.9         | 96.9        | 98.7     | 99.9  | 99.9  |
| All Items less Imputed Rentals on<br>Owner-Occupied Accommodation <sup>2</sup> | 8,101     | 87.0  | 89.8   | 93.6         | 97.0        | 98.8     | 100.0 | 100.1 |
| MAS Core Inflation Measure <sup>3</sup>  | 6,564     | 90.7  | 92.0   | 94.0         | 96.4        | 98.1     | 100.0 | 100.5 |
|  |           |       | Percer | itage Change | Over Previo | ous Year |       |       |
| All Items  | 10,000    | 0.6   | 2.8    | 5.2          | 4.6         | 2.4      | 1.0   | -0.5  |
| Food   | 2,167     | 2.3   | 1.4    | 3.0          | 2.3         | 2.1      | 2.9   | 1.9   |
| Clothing & Footwear  | 273       | 0.9   | 0.5    | 0.1          | 1.5         | 0.3      | -0.8  | 0.1   |
| Housing & Utilities  | 2,625     | 2.0   | 2.2    | 9.0          | 8.4         | 2.8      | 0.1   | -3.5  |
| Household Durables & Services  | 475       | 1.1   | 1.0    | 6.4          | 2.4         | 4.9      | 1.8   | -0.6  |
| Health Care  | 615       | 1.8   | 1.8    | 2.4          | 4.4         | 3.8      | 2.8   | -0.1  |
| Transport  | 1,579     | -3.1  | 10.3   | 11.9         | 7.1         | 2.3      | -1.2  | -1.4  |
| Communication  | 385       | 0.2   | -2.2   | -1.5         | -0.1        | -1.4     | -0.2  | 0.3   |
| Recreation & Culture   | 788       | -1.3  | 1.0    | -1.4         | 1.0         | 1.1      | 1.8   | 0.3   |
| Education  | 615       | 0.8   | 3.4    | 3.6          | 4.1         | 3.8      | 3.4   | 3.4   |
| Miscellaneous Goods & Services   | 478       | 0.3   | 0.7    | 0.9          | 1.1         | 1.9      | 1.2   | -     |
| All Items less Imputed Rentals on<br>Owner-Occupied Accommodation <sup>2</sup> | 8,101     | -0.4  | 3.3    | 4.2          | 3.6         | 1.9      | 1.2   | 0.1   |
| MAS Core Inflation Measure <sup>3</sup>  | 6,564     | -     | 1.5    | 2.2          | 2.5         | 1.7      | 1.9   | 0.5   |

<sup>1</sup> The weighting pattern of the Consumer Price Index (CPI) was derived from the expenditure values collected from the 2012/13 Household Expenditure Survey (HES) and updated to 2014 values by taking into account price changes between 2012/13 and 2014.

<sup>2</sup> A significant share of the CPI Accommodation group is "owner-occupied accommodation (OOA) cost", which is computed based on the imputed rental concept under the rental equivalence method. Besides the imputed rentals on OOA, actual rentals paid on rented units are included separately under the CPI Accommodation group. Given that imputed rentals on OOA have no impact on the cash expenditure of most households in Singapore as they already own their homes, "All Items less imputed rentals on OOA" is compiled as an additional indicator.

<sup>3</sup> MAS Core Inflation Measure excludes the components of "Accommodation" and "Private Road Transport".

22.2 consumer price index for households in different income groups (2014 = 100)

| Income (                            | Group | All Items                  | Food                    | Clothing &<br>Footwear  | Housing<br>&<br>Utilities | House-<br>hold<br>Durables<br>&<br>Services | Health<br>Care          | Transport               | Comm-<br>unication      | Recreation &            | Education               | Miscella-<br>neous<br>Goods &<br>Services | All Items less<br>Imputed Rentals<br>on Owner-<br>Occupied<br>Accommodation <sup>2</sup> |
|-------------------------------------|-------|----------------------------|-------------------------|-------------------------|---------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---|--|
|                                     |       |                            |                         |                         |                           |   | We                      | ights 1 Per 1           | 0,000                   |                         |                         |   |  |
| Lowest 2<br>Middle 6<br>Highest 2   | 60%   | 10,000<br>10,000<br>10,000 | 2,435<br>2,360<br>1,835 | 157<br>283<br>280       | 4,002<br>2,615<br>2,396   | 359<br>432<br>555                           | 812<br>623<br>562       | 732<br>1,404<br>1,984   | 397<br>453<br>288       | 466<br>737<br>920       | 261<br>602<br>700       | 379<br>491<br>480                         | 7,076<br>8,104<br>8,263  |
|                                     |       |                            |                         |                         |                           |   | Con                     | sumer Price             | Index                   |                         |                         |   |  |
| 2013<br>Lowest<br>Middle<br>Highest | 60%   | 98.5<br>98.8<br>99.3       | 97.1<br>97.1<br>97.3    | 101.1<br>100.9<br>100.7 | 99.4<br>99.6<br>100.5     | 98.7<br>98.5<br>97.9                        | 97.1<br>97.3<br>97.4    | 99.3<br>101.1<br>101.5  | 100.2<br>100.2<br>100.1 | 98.1<br>98.1<br>98.5    | 97.3<br>96.7<br>96.6    | 97.4<br>98.5<br>99.3                      | 98.2<br>98.7<br>99.0   |
| 2014                                |       |                            |                         |                         |                           |   |                         |                         |                         |                         |                         |   |  |
| Lowest<br>Middle<br>Highest         | 60%   | 100.0<br>100.0<br>100.0    | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0   | 100.0<br>100.0<br>100.0                     | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0 | 100.0<br>100.0<br>100.0 | 99.9<br>99.9<br>99.9                      | 100.0<br>100.0<br>100.0  |
| 2015                                |       |                            |                         |                         |                           |   |                         |                         |                         |                         |                         |   |  |
| Lowest<br>Middle<br>Highest         | 60%   | 98.9<br>99.7<br>99.3       | 101.6<br>101.9<br>102.1 | 100.3<br>100.2<br>99.9  | 96.7<br>96.5<br>96.4      | 99.3<br>99.4<br>99.3                        | 96.8<br>99.7<br>101.5   | 100.7<br>99.7<br>97.3   | 100.1<br>100.3<br>100.5 | 100.5<br>100.4<br>100.2 | 101.6<br>103.2<br>103.7 | 100.2<br>100.0<br>99.5                    | 99.6<br>100.3<br>99.8  |
|                                     |       |                            |                         |                         |                           | Per   | rcentage C              | Change Over             | r Previous Y            | 'ear                    |                         |   |  |
| 2013                                |       |                            |                         |                         |                           |   |                         |                         |                         |                         |                         |   |  |
| Lowest<br>Middle<br>Highest         | 60%   | 2.7<br>2.4<br>2.3          | 2.0<br>2.1<br>2.2       | 0.3<br>0.3<br>0.4       | 3.7<br>3.4<br>1.7         | 4.0<br>4.7<br>5.2                           | 3.9<br>3.8<br>4.0       | 2.1<br>2.3<br>2.4       | -1.0<br>-1.4<br>-1.4    | 1.5<br>1.3<br>0.9       | 4.4<br>3.6<br>4.1       | 0.8<br>1.2<br>3.2                         | 1.2<br>1.7<br>2.2  |
| 2014                                |       |                            |                         |                         |                           |   |                         |                         |                         |                         |                         |   |  |
| Lowest                              |       | 1.5                        | 3.0                     | -1.1                    | 0.6                       | 1.3   | 2.9                     | 0.7                     | -0.3                    | 1.9                     | 2.7                     | 2.6                                       | 1.8  |
| Middle<br>Highest                   |       | 1.2<br>0.7                 | 3.0<br>2.8              | -0.9<br>-0.7            | 0.4<br>-0.5               | 1.5<br>2.1                                  | 2.7<br>2.7              | -1.1<br>-1.5            | -0.2<br>-0.1            | 1.9<br>1.5              | 3.4<br>3.5              | 1.4<br>0.6                                | 1.3<br>1.0   |
| 2015                                |       |                            |                         |                         |                           |   |                         |                         |                         |                         |                         |   |  |
| Lowest<br>Middle                    |       | -1.1<br>-0.3               | 1.6<br>1.9              | 0.3<br>0.2              | -3.3<br>-3.5              | -0.7<br>-0.6                                | -3.1<br>-0.3            | 0.7<br>-0.3             | 0.1<br>0.3              | 0.5<br>0.4              | 1.6<br>3.2              | 0.2<br>0.1                                | -0.4<br>0.3  |
| Middle<br>Highest                   |       | -0.5                       | 2.1                     | -0.1                    | -3.5<br>-3.6              | -0.6  | 1.5                     | -0.3<br>-2.6            | 0.5                     | 0.4                     | 3.7                     | -0.4                                      | -0.1   |

<sup>1</sup> The weighting pattern of the Consumer Price Index (CPI) was derived from the expenditure values collected from the 2012/13 Household Expenditure Survey (HES) and updated to 2014 values by taking into account price changes between 2012/13 and 2014.

<sup>2</sup> A significant share of the CPI Accommodation group is "owner-occupied accommodation (OOA) cost", which is computed based on the imputed rental concept under the rental equivalence method. Besides the imputed rentals on OOA, actual rentals paid on rented units are included separately under the CPI Accommodation group. Given that imputed rentals on OOA have no impact on the cash expenditure of most households in Singapore as they already own their homes, "All Items less imputed rentals on OOA" is compiled as an additional indicator.

| Item  | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Utilities   |                      |       |       |       |       |       |       |       |
| Water Tariff  | 54                   | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Electricity Tariff  | 215                  | 80.1  | 91.7  | 101.6 | 109.2 | 102.6 | 100.0 | 84.9  |
| Gas Tariff  | 18                   | 78.5  | 89.1  | 90.0  | 102.8 | 100.4 | 100.0 | 87.4  |
| Liquefied Petroleum Gas   | 16                   | 76.6  | 84.0  | 92.0  | 96.7  | 98.2  | 100.0 | 91.1  |
| Health Care   |                      |       |       |       |       |       |       |       |
| Medical & Dental Treatment  | 475                  | 84.9  | 86.5  | 88.5  | 92.8  | 96.8  | 100.0 | 99.6  |
| Consultation Fees at Polyclinics & General Practitioners                  | 57                   | 89.1  | 90.2  | 91.7  | 96.6  | 99.6  | 100.0 | 87.7  |
| Transport   |                      |       |       |       |       |       |       |       |
| Petrol  | 250                  | 77.8  | 84.3  | 94.0  | 97.0  | 99.4  | 100.0 | 95.3  |
| Overall Bus & Train Fares   | 174                  | 97.4  | 96.5  | 97.0  | 97.8  | 97.8  | 100.0 | 102.7 |
| Taxi Fares  | 105                  | 88.3  | 88.3  | 89.0  | 99.1  | 99.2  | 100.0 | 100.3 |
| Education   |                      |       |       |       |       |       |       |       |
| Miscellaneous Fees<br>for Primary Schools                                 | 25                   | 82.8  | 82.8  | 82.8  | 82.8  | 99.7  | 100.0 | 100.0 |
| School & Miscellaneous Fees<br>for Secondary Schools &<br>Junior Colleges | 40                   | 79.8  | 82.2  | 84.3  | 86.7  | 101.6 | 100.0 | 100.1 |
| Tuition Fees for Polytechnics<br>& Local Universities                     | 107                  | 83.9  | 86.4  | 90.2  | 93.6  | 97.0  | 100.0 | 102.7 |

<sup>1</sup> The weighting pattern of the Consumer Price Index (CPI) was derived from the expenditure values collected from the 2012/13 Household Expenditure Survey (HES) and updated to 2014 values by taking into account price changes between 2012/13 and 2014.

22.4 AVERAGE RETAIL PRICES OF SELECTED CONSUMER ITEMS

|                             |                  |       |       |       |       |       |       | Dollars |
|-----------------------------|------------------|-------|-------|-------|-------|-------|-------|---------|
| Item                        | Unit             | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015    |
| Bread & Cereals             |                  |       |       |       |       |       |       |         |
| Thai Rice 100% Fragrant     | 5 kg pkt         | 11.70 | 12.43 | 12.45 | 12.67 | 12.78 | 13.07 | 13.07   |
| Ordinary White Bread        | 400 g            | 1.40  | 1.40  | 1.45  | 1.46  | 1.49  | 1.57  | 1.60    |
| Vitamin Enriched Bread      | 400 g            | 1.62  | 1.63  | 1.60  | 1.60  | 1.68  | 1.88  | 1.88    |
| Wholemeal Bread             | 420 g            | na    | na    | na    | na    | na    | 2.14  | 2.14    |
| Instant Noodles             | 5 pkts           | 2.12  | 2.16  | 2.23  | 2.23  | 2.23  | 2.21  | 2.19    |
| Meat                        |                  |       |       |       |       |       |       |         |
| Chilled Lean Pork           | Per kg           | 12.36 | 12.66 | 12.75 | 13.07 | 13.14 | 13.21 | 13.32   |
| Chilled Streaky Pork        | Per kg           | 13.09 | 13.62 | 13.91 | 14.40 | 14.67 | 14.88 | 15.04   |
| Chilled Pork Rib Bones      | Per kg           | 15.09 | 15.84 | 16.13 | 16.48 | 16.40 | 16.44 | 16.72   |
| Chilled Beef                | Per kg           | 19.15 | 20.25 | 21.23 | 21.96 | 21.43 | 21.64 | 22.15   |
| Chilled Mutton              | Per kg           | 13.45 | 15.12 | 17.60 | 17.79 | 17.89 | 17.79 | 18.15   |
| Hen                         | Per kg           | 5.48  | 5.54  | 5.82  | 5.87  | 5.96  | 6.14  | 6.11    |
| Chilled Chicken Wing        | Per kg           | na    | na    | na    | na    | na    | 7.87  | 7.89    |
| Duck                        | Per kg           | 6.77  | 6.59  | 6.78  | 6.75  | 6.87  | 6.83  | 6.95    |
| Fish & Seafood              |                  |       |       |       |       |       |       |         |
| Cod Fish                    | Per kg           | 39.21 | 39.79 | 46.30 | 48.85 | 49.58 | 48.60 | 51.61   |
| Gold Banded Scad (kuning)   | Per kg           | 5.73  | 5.71  | 6.11  | 6.57  | 6.57  | 6.77  | 6.96    |
| Flowery Grouper             | Per kg           | 13.28 | 13.09 | 14.28 | 14.62 | 14.63 | 13.79 | 13.88   |
| White Pomfret               | Per kg           | 20.38 | 21.85 | 24.28 | 24.76 | 24.70 | 25.02 | 26.29   |
| Salmon                      | Per kg           | 23.63 | 25.10 | 26.17 | 25.41 | 26.23 | 27.42 | 27.26   |
| Sea Bass                    | Per kg           | 11.21 | 10.67 | 12.15 | 12.46 | 12.29 | 12.35 | 11.97   |
| Sea Bream (kerisi)          | Per kg           | 6.99  | 7.22  | 7.56  | 8.27  | 8.43  | 8.61  | 8.60    |
| Golden Snapper              | Per kg           | 15.51 | 15.43 | 16.74 | 16.77 | 17.71 | 18.04 | 18.78   |
| Spanish Mackerel (tenggiri) | Per kg           | 9.96  | 10.15 | 10.44 | 10.97 | 11.07 | 11.36 | 11.61   |
| Kurau (cut)                 | Per kg           | 42.33 | 42.77 | 44.36 | 44.80 | 48.53 | 51.18 | 52.93   |
| Small Prawns                | Per kg           | 9.76  | 10.02 | 10.47 | 11.17 | 11.69 | 12.92 | 13.19   |
| Medium Prawns               | Per kg           | 15.38 | 15.98 | 16.91 | 17.23 | 17.88 | 18.69 | 18.65   |
| Large Prawns                | Per kg           | 19.53 | 21.95 | 24.01 | 23.53 | 24.71 | 24.78 | 24.71   |
| Squids                      | Per kg           | 8.97  | 9.81  | 11.15 | 11.32 | 11.97 | 12.72 | 13.30   |
| Fish Balls                  | Per 10           | 1.59  | 1.79  | 1.88  | 1.91  | 1.90  | 1.92  | 1.97    |
| Milk, Cheese & Eggs         |                  |       |       |       |       |       |       |         |
| Fresh Milk                  | 1 litre pkt      | 2.78  | 2.76  | 2.85  | 2.88  | 2.93  | 2.87  | 2.84    |
| Infant Milk Powder          | 900 g tin        | 33.41 | 35.44 | 38.81 | 40.28 | 44.30 | 51.01 | 53.69   |
| Cheese                      | Pkt of 12 slices | 4.65  | 4.76  | 5.06  | 5.07  | 4.85  | 4.74  | 4.77    |
| Hen Eggs                    | Per 10           | 1.87  | 1.85  | 1.98  | 1.88  | 1.94  | 2.14  | 2.22    |

Note: Prices of items starting from January 2014 are based on the 2014-based CPI basket. Prices may not be strictly comparable with those published based on the earlier CPI baskets due to changes in the sample of brands/varieties and outlets priced.

22.4 AVERAGE RETAIL PRICES OF SELECTED CONSUMER ITEMS (continued)

|                               |                  |       |       |       |       |       |       | Dollars |
|-------------------------------|------------------|-------|-------|-------|-------|-------|-------|---------|
| Item                          | Unit             | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015    |
| Oil & Fats                    |                  |       |       |       |       |       |       |         |
| Cooking Oil                   | 2 kg bottle      | 5.81  | 5.52  | 6.04  | 5.99  | 5.67  | 6.50  | 6.31    |
| Fruits                        |                  |       |       |       |       |       |       |         |
| Bananas (emas)                | Per kg           | 1.46  | 1.51  | 1.56  | 1.65  | 1.81  | 2.12  | 2.18    |
| Papaya                        | Per kg           | 1.54  | 1.55  | 1.68  | 1.79  | 1.92  | 2.15  | 1.96    |
| Watermelon                    | Per kg           | 1.20  | 1.16  | 1.31  | 1.34  | 1.46  | 1.65  | 1.61    |
| Orange                        | Each             | 0.34  | 0.34  | 0.34  | 0.34  | 0.36  | 0.35  | 0.39    |
| Apple                         | Each             | 0.39  | 0.37  | 0.38  | 0.40  | 0.42  | 0.45  | 0.45    |
| Grapes                        | Per kg           | 7.71  | 7.68  | 7.66  | 7.88  | 8.43  | 8.92  | 9.25    |
| Pear                          | Each             | 0.86  | 0.88  | 0.92  | 0.93  | 0.95  | 0.97  | 0.94    |
| Vegetables                    |                  |       |       |       |       |       |       |         |
| Broccoli                      | Per kg           | 6.34  | 6.83  | 6.80  | 7.54  | 7.38  | 6.06  | 5.90    |
| Cabbage                       | Per kg           | 1.66  | 1.73  | 1.81  | 1.91  | 1.94  | 2.01  | 2.09    |
| Kale                          | Per kg           | 3.98  | 4.02  | 4.11  | 4.13  | 4.31  | 5.14  | 5.17    |
| Small Mustard                 | Per kg           | 2.70  | 2.81  | 3.16  | 2.97  | 3.04  | 3.20  | 3.18    |
| Spinach (bayam)               | Per kg           | 2.59  | 2.64  | 2.83  | 2.79  | 2.81  | 2.79  | 2.78    |
| Tomatoes                      | Per kg           | 1.85  | 2.03  | 1.96  | 2.00  | 2.20  | 2.33  | 2.37    |
| Potatoes                      | Per kg           | 1.47  | 1.59  | 1.79  | 1.71  | 1.78  | 1.95  | 1.98    |
| Carrots                       | Per kg           | 1.84  | 1.90  | 1.95  | 1.96  | 1.98  | 2.04  | 2.07    |
| Sugar, Preserves & Confection | ery              |       |       |       |       |       |       |         |
| Sugar                         | 2 kg pkt         | 2.76  | 3.16  | 3.37  | 3.34  | 3.28  | 3.19  | 3.13    |
| Ice Cream                     | 1.5 litre tub    | 5.91  | 6.00  | 6.03  | 6.09  | 6.20  | 5.12  | 4.74    |
| Non-Alcoholic Beverages       |                  |       |       |       |       |       |       |         |
| Instant Coffee                | 200 g packaging  | 9.38  | 9.33  | 9.79  | 10.07 | 9.96  | 9.94  | 10.11   |
| Aerated Soft Drinks           | 330 ml can       | 0.62  | 0.62  | 0.65  | 0.67  | 0.68  | 0.68  | 0.69    |
| Non-Aerated,                  |                  |       |       |       |       |       |       |         |
| Soft Drinks                   | 6 pkts of 250 ml | 2.31  | 2.32  | 2.36  | 2.38  | 2.42  | 2.49  | 2.46    |
| Alcoholic Drinks & Tobacco    |                  |       |       |       |       |       |       |         |
| Beer                          | 330 ml can       | 3.15  | 3.10  | 3.09  | 3.10  | 3.10  | 3.22  | 3.30    |
| Cigarettes                    | 20-stick pack    | 10.46 | 10.66 | 10.73 | 10.80 | 10.86 | 11.82 | 11.99   |
| Petroleum Related Products    |                  |       |       |       |       |       |       |         |
| Diesel                        | Per litre        | 1.15  | 1.22  | 1.46  | 1.50  | 1.51  | 1.50  | 1.17    |
| Petrol, 98 Octane             | Per litre        | 1.72  | 1.84  | 2.04  | 2.13  | 2.20  | 2.22  | 2.19    |
| Petrol, 95 Octane             | Per litre        | 1.60  | 1.75  | 1.96  | 2.00  | 2.05  | 2.05  | 1.92    |
| Petrol, 92 Octane             | Per litre        | 1.56  | 1.69  | 1.90  | 1.95  | 1.99  | 2.00  | 1.87    |
| Liquefied Petroleum Gas       | Per kg           | 2.62  | 2.87  | 3.09  | 3.15  | 3.20  | 3.34  | 3.04    |
|                               |                  |       |       |       |       |       |       |         |

Note: Prices of items starting from January 2014 are based on the 2014-based CPI basket. Prices may not be strictly comparable with those published based on the earlier CPI baskets due to changes in the sample of brands/varieties and outlets priced.

22.5 DOMESTIC SUPPLY PRICE INDEX (2012 = 100)

| Item   | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|--|----------------------|-------|-------|-------|-------|-------|-------|-------|
| All Items  | 10,000               | 87.7  | 91.8  | 99.5  | 100.0 | 97.3  | 94.1  | 79.7  |
| Food & Live Animals  | 327                  | 95.7  | 99.4  | 102.7 | 100.0 | 101.9 | 104.8 | 101.7 |
| Live animals   | 14                   | 94.6  | 96.4  | 103.6 | 100.0 | 101.9 | 103.8 | 102.8 |
| Meat & meat preparations                                       | 44                   | 92.3  | 96.5  | 101.7 | 100.0 | 101.1 | 103.3 | 100.3 |
| Dairy products & birds' eggs                                   | 72                   | 91.3  | 101.6 | 107.2 | 100.0 | 109.4 | 116.2 | 100.3 |
| Fish, seafood & preparations                                   | 23                   | 98.2  | 100.9 | 101.5 | 100.0 | 98.5  | 100.6 | 103.9 |
| Cereals & cereal preparations                                  | 49                   | 98.3  | 96.6  | 101.7 | 100.0 | 102.2 | 102.9 | 102.6 |
| Vegetables & fruit   | 26                   | 93.6  | 95.1  | 99.6  | 100.0 | 106.7 | 108.6 | 110.9 |
| Sugar, sugar preparations &                                    |                      |       |       |       |       |       |       |       |
| honey  | 13                   | 86.0  | 101.9 | 105.7 | 100.0 | 92.8  | 88.3  | 85.6  |
| Coffee, tea, cocoa, spices &                                   |                      |       |       |       |       |       |       |       |
| manufactures   | 27                   | 100.4 | 106.0 | 105.9 | 100.0 | 93.2  | 101.5 | 106.0 |
| Animal feeding stuff (excl                                     |                      |       |       |       |       |       |       |       |
| unmilled cereals)  | 4                    | 105.6 | 101.6 | 96.7  | 100.0 | 100.0 | 104.4 | 103.8 |
| Miscellaneous food   |                      |       |       |       |       |       |       |       |
| preparations   | 55                   | 98.1  | 101.4 | 101.0 | 100.0 | 98.5  | 99.0  | 100.1 |
| Beverages & Tobacco  | 44                   | 103.0 | 102.1 | 100.5 | 100.0 | 99.9  | 101.0 | 101.9 |
| Beverages  | 31                   | 104.0 | 102.1 | 99.2  | 100.0 | 99.4  | 100.5 | 100.8 |
| Tobacco & manufactures   | 13                   | 101.2 | 102.2 | 103.0 | 100.0 | 101.1 | 102.3 | 104.4 |
| Crude Materials (excl fuels)                                   | 59                   | 87.0  | 90.0  | 99.6  | 100.0 | 99.4  | 100.5 | 96.5  |
| Hides, skins & furskins raw                                    | 2                    | na    | na    | na    | 100.0 | 106.5 | 108.0 | 106.0 |
| Oil seeds & oleaginous fruits                                  | 1                    | 104.9 | 91.5  | 95.4  | 100.0 | 99.0  | 96.0  | 102.3 |
| Crude rubber   | 2                    | 67.1  | 108.5 | 132.4 | 100.0 | 99.9  | 103.8 | 101.4 |
| Cork & wood  | 5                    | 88.3  | 90.2  | 95.8  | 100.0 | 96.1  | 94.7  | 96.0  |
| Textile fibres & their wastes                                  | 1                    | na    | na    | na    | 100.0 | 104.1 | 107.8 | 108.6 |
| Crude fertilizers & minerals                                   | 31                   | 100.9 | 94.6  | 98.3  | 100.0 | 99.8  | 100.1 | 93.9  |
| Metalliferous ores &   |                      |       |       |       |       |       |       |       |
| metal scrap  | 11                   | 67.0  | 72.7  | 90.8  | 100.0 | 93.9  | 95.6  | 90.2  |
| Crude animal & vegetable                                       |                      |       |       |       |       |       |       |       |
| materials nes  | 6                    | 93.4  | 98.7  | 99.9  | 100.0 | 108.5 | 114.6 | 116.4 |
| Mineral Fuels, Lubricants &                                    |                      |       |       |       |       |       |       |       |
| Related Materials  | 3,700                | 64.0  | 76.2  | 97.6  | 100.0 | 95.9  | 88.7  | 52.1  |
| Petroleum & products &   |                      |       |       |       |       |       |       |       |
| related materials  | 3,527                | 64.0  | 76.2  | 97.6  | 100.0 | 95.6  | 88.4  | 51.7  |
| Gas  | 173                  | 64.4  | 85.6  | 94.0  | 100.0 | 101.5 | 93.9  | 59.9  |
| Animal & Vegetable Oils,                                       |                      | -0-   |       |       | 100 5 |       |       |       |
| Fats & Waxes   | 44                   | 78.7  | 88.3  | 104.9 | 100.0 | 84.9  | 84.2  | 74.2  |
| Fixed vegetable fats & oils<br>Animal & vegetable oils, fats & | 32<br>%              | 78.5  | 90.3  | 103.9 | 100.0 | 83.6  | 83.6  | 72.4  |
| waxes nes  | 12                   | 79.6  | 83.4  | 110.1 | 100.0 | 88.5  | 85.8  | 79.2  |

Note: The Domestic Supply Price Index measures the change in prices of imported and locally manufactured products retained for use in the economy.

<sup>1</sup> The weight for each commodity item was proportional to the value of its total supply or availability in the domestic market in 2011.

22.5 DOMESTIC SUPPLY PRICE INDEX (continued) (2012 = 100)

|                                      | , [                  |       | ***    |        |       |       |       |       |
|--------------------------------------|----------------------|-------|--------|--------|-------|-------|-------|-------|
| Item                                 | Weights <sup>1</sup> | 2009  | 2010   | 2011   | 2012  | 2013  | 2014  | 2015  |
|                                      | 1 101                | 00.4  | 05.0   | 100.7  | 100.0 | 100.1 | 00.0  | 06.2  |
| Chemicals & Chemical Products        | 1,181                | 89.4  | 95.8   | 100.7  | 100.0 | 100.1 | 98.8  | 86.2  |
| Organic chemicals                    | 612                  | 83.2  | 93.7   | 101.8  | 100.0 | 102.0 | 100.6 | 79.6  |
| Inorganic chemicals                  | 64                   | 80.4  | 87.4   | 98.8   | 100.0 | 87.8  | 83.9  | 83.5  |
| Dyeing, tanning & colouring          | 1.7                  | 0.5.5 | 062    | 00.0   | 100.0 | 02.5  | 02.2  | 00.5  |
| materials                            | 17                   | 95.7  | 96.2   | 98.0   | 100.0 | 93.5  | 92.3  | 90.5  |
| Medicinal & pharmaceutical           | 102                  | 07.1  | 100.4  | 00.1   | 100.0 | 05.1  | 02.0  | 05.4  |
| products                             | 102                  | 97.1  | 100.4  | 98.1   | 100.0 | 95.1  | 92.0  | 85.4  |
| Essential oils & perfume; toilet     | 20                   | 100.0 | 101.1  | 100.1  | 1000  | 100 5 | 101.0 | 00.0  |
| cleaning products                    | 30                   | 103.2 | 101.1  | 100.1  | 100.0 | 100.6 | 101.8 | 98.8  |
| Plastics in primary forms            | 92                   | 93.6  | 100.7  | 103.8  | 100.0 | 101.4 | 103.7 | 90.8  |
| Plastics in non-primary forms        | 24                   | 103.3 | 102.1  | 101.9  | 100.0 | 100.9 | 101.3 | 100.6 |
| Chemical materials & products nes    | 240                  | 97.5  | 94.5   | 97.1   | 100.0 | 100.6 | 99.3  | 99.0  |
| Manufactured Goods                   | 668                  | 100.3 | 102.0  | 104.1  | 100.0 | 97.4  | 96.7  | 94.8  |
| Leather manufactures nes             | 2                    | 94.7  | 99.2   | 97.9   | 100.0 | 107.1 | 120.2 | 122.5 |
| Rubber manufactures nes              | 18                   | 101.7 | 98.7   | 98.3   | 100.0 | 96.4  | 94.5  | 98.1  |
| Wood & cork manufactures (excl       |                      |       |        |        |       |       |       |       |
| furniture)                           | 7                    | 100.2 | 98.9   | 99.4   | 100.0 | 99.7  | 100.3 | 101.2 |
| Paper manufactures                   | 67                   | 99.3  | 103.1  | 102.7  | 100.0 | 99.1  | 99.1  | 100.4 |
| Textile manufactures                 | 11                   | 106.4 | 106.3  | 103.8  | 100.0 | 98.2  | 98.9  | 101.0 |
| Non-metal mineral manufactures nes   | 130                  | 103.7 | 93.0   | 98.9   | 100.0 | 100.9 | 102.4 | 102.6 |
| Iron & steel                         | 148                  | 105.3 | 103.4  | 106.7  | 100.0 | 94.6  | 92.1  | 85.0  |
| Non-ferrous metals                   | 118                  | 87.7  | 105.2  | 110.5  | 100.0 | 94.6  | 91.9  | 86.5  |
| Manufactures of metals nes           | 167                  | 101.6 | 101.2  | 101.1  | 100.0 | 98.5  | 98.6  | 99.5  |
| Machinery & Transport Equipment      | 3,229                | 111.3 | 105.5  | 100.3  | 100.0 | 97.4  | 95.9  | 98.6  |
| Power-generating machinery &         | -, -                 |       |        |        |       |       |       |       |
| equipment                            | 176                  | 98.1  | 97.0   | 96.1   | 100.0 | 103.4 | 108.8 | 120.2 |
| Machinery specialized for particular |                      |       |        |        |       |       |       |       |
| industries                           | 188                  | 116.3 | 109.4  | 102.4  | 100.0 | 97.8  | 97.0  | 96.8  |
| Metal working machinery              | 6                    | 97.4  | 98.7   | 100.4  | 100.0 | 99.3  | 98.2  | 98.7  |
| General industrial machinery         | 149                  | 103.3 | 101.5  | 100.3  | 100.0 | 100.2 | 101.4 | 102.1 |
| Office machines & data-processing    |                      |       |        |        |       |       |       |       |
| machines                             | 234                  | 117.4 | 109.6  | 102.3  | 100.0 | 97.9  | 98.1  | 99.6  |
| Telecommunication apparatus          | 233                  | 122.7 | 115.5  | 106.1  | 100.0 | 91.9  | 79.7  | 76.8  |
| Electrical machinery apparatus nes,  | 200                  |       | - 10.0 | - 50.1 | -00.0 | ,,    | ,,,,  | , 0.0 |
| electrical parts                     | 2,176                | 111.9 | 104.8  | 99.1   | 100.0 | 97.2  | 95.6  | 98.8  |
| Road vehicles                        | 67                   | 104.8 | 102.6  | 100.9  | 100.0 | 98.7  | 105.2 | 105.8 |
|                                      |                      |       |        | ~ ~    | ~ ~   |       |       |       |

Note: The Domestic Supply Price Index measures the change in prices of imported and locally manufactured products retained for use in the economy.

 $<sup>1 \ \ \, \</sup>text{The weight for each commodity item was proportional to the value of its total supply or availability in the domestic market in 2011.}$ 

22.5 DOMESTIC SUPPLY PRICE INDEX (continued) (2012 = 100)

| Item                                    | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Miscellaneous Manufactured Articles     | 748                  | 94.7  | 95.7  | 97.7  | 100.0 | 97.9  | 98.0  | 98.5  |
| Prefab building, sanitary plumbing,     | 740                  | 74.1  | 75.1  | 71.1  | 100.0 | 71.7  | 70.0  | 70.5  |
| lighting nes                            | 10                   | 90.3  | 92.5  | 95.6  | 100.0 | 100.3 | 100.8 | 102.0 |
| Furniture, bedding, mattresses,         |                      |       |       |       |       |       |       |       |
| cushions & others                       | 51                   | 109.3 | 108.3 | 100.8 | 100.0 | 99.7  | 100.9 | 102.5 |
| Travel goods, handbags & similar        |                      |       |       |       |       |       |       |       |
| containers                              | 22                   | 100.0 | 100.5 | 97.7  | 100.0 | 103.7 | 110.7 | 116.6 |
| Articles of apparel & clothing          |                      |       |       |       |       |       |       |       |
| accessories                             | 24                   | 97.1  | 94.1  | 95.2  | 100.0 | 103.4 | 105.5 | 107.4 |
| Footwear                                | 14                   | 98.8  | 100.1 | 99.7  | 100.0 | 100.2 | 103.8 | 103.1 |
| Professional scientific & controlling   |                      |       |       |       |       |       |       |       |
| instruments                             | 312                  | 103.9 | 103.9 | 100.4 | 100.0 | 100.0 | 100.9 | 100.7 |
| Photographic & optical goods nes;       |                      |       |       |       |       |       |       |       |
| watches & clocks                        | 93                   | 98.9  | 97.5  | 98.4  | 100.0 | 98.4  | 98.8  | 98.4  |
| Miscellaneous manufactured articles nes | 222                  | 86.4  | 89.0  | 95.8  | 100.0 | 93.1  | 90.5  | 91.4  |

Note: The Domestic Supply Price Index measures the change in prices of imported and locally manufactured products retained for use in the economy.

<sup>1</sup> The weight for each commodity item was proportional to the value of its total supply or availability in the domestic market in 2011.

| All Items 10,000 93.0 94.6 99.6 100.0 96.9 93.6  Food & Live Animals 266 95.3 98.7 101.3 100.0 101.3 104.9 In Meat & meat preparations 22 97.8 99.1 101.7 100.0 100.7 101.5 In Dairy products & birds' eggs 58 94.6 103.9 103.2 100.0 106.6 109.7 In Fish, seafood & preparations 7 96.0 97.3 100.2 100.0 98.6 107.5 In Cereals & cereal preparations 44 96.7 95.3 99.5 100.0 101.6 104.1 In Vegetables & fruit 4 94.6 93.8 97.8 100.0 100.0 100.0 100.0 In Sugar, sugar preparations & honey 2 na na na na 100.0 101.0 100.0 In Sugar, sugar preparations & honey 2 na na na na 100.0 101.0 109.6 Coffee, tea, cocoa, spices & manufactures 31 88.3 98.6 103.9 100.0 93.8 109.5 In Animal feeding stuff (excl unmilled cereals) 9 104.8 100.8 97.9 100.0 97.7 103.6 In Miscellaneous food preparations 89 97.8 99.0 100.4 100.0 101.2 101.6 In Beverages & Tobacco 54 97.9 98.5 98.9 100.0 99.9 100.6 In Beverages & Tobacco 54 97.9 98.5 98.5 97.3 100.0 99.4 100.5 In Tobacco & manufactures 27 98.5 98.4 101.2 100.0 100.4 100.7 In Crude Materials (excl fuels) 7 63.7 104.2 100.4 100.0 101.7 104.2 In Crude Fertilizers & minerals 3 55.9 106.4 101.5 100.0 100.0 101.7 104.2 In Crude Fertilizers & minerals 3 55.9 106.4 101.5 100.0 100.0 98.5 98.5 98.5 Mineral Fuels, Lubricants & Related Materials 2,218 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & Vegetable Gils, East & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5   |                               |                      |       |       | Г     |       | T     | T     |       |
|--|-------------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Food & Live Animals  | Item                          | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
| Meat & meat preparations         22         97.8         99.1         101.7         100.0         100.7         101.5         II           Dairy products & birds' eggs         58         94.6         103.9         103.2         100.0         106.6         109.7         IV           Fish, seafood & preparations         7         96.0         97.3         100.2         100.0         98.6         107.5         IV           Cereals & cereal preparations         44         96.7         95.3         99.5         100.0         101.6         104.1         IV           Vegetables & fruit         4         94.6         93.8         97.8         100.0   | All Items                     | 10,000               | 93.0  | 94.6  | 99.6  | 100.0 | 96.9  | 93.6  | 85.0  |
| Dairy products & birds' eggs 58 94.6 103.9 103.2 100.0 106.6 109.7 In the second preparations 7 96.0 97.3 100.2 100.0 98.6 107.5 In the second preparations 44 96.7 95.3 99.5 100.0 101.6 104.1 In the second preparations 44 96.7 95.3 99.5 100.0 100.0 100.0 100.0 In the second preparations are second probable as fruit 4 94.6 93.8 97.8 100.0 100.0 100.0 In the second preparations are second probable as fruit 4 94.6 93.8 97.8 100.0 100.0 100.0 In the second preparations are second probable as fruit 4 94.6 93.8 97.8 100.0 100.0 100.0 In the second probable are second probable as fruit 4 94.6 93.8 97.8 100.0 100.0 100.0 In the second probable are second probable as fruit 5 100.0 100.0 In the second probable are second probable as fruit 6 100.0 In the second probable are second probable as fruit 6 100.0 100 | Food & Live Animals           | 266                  | 95.3  | 98.7  | 101.3 | 100.0 | 101.3 | 104.9 | 103.5 |
| Fish, seafood & preparations 7 96.0 97.3 100.2 100.0 98.6 107.5 10 Cereals & cereal preparations 44 96.7 95.3 99.5 100.0 101.6 104.1 11 Vegetables & fruit 4 94.6 93.8 97.8 100.0 10 | Meat & meat preparations      | 22                   | 97.8  | 99.1  | 101.7 | 100.0 | 100.7 | 101.5 | 100.0 |
| Cereals & cereal preparations  | Dairy products & birds' eggs  | 58                   | 94.6  | 103.9 | 103.2 | 100.0 | 106.6 | 109.7 | 102.3 |
| Vegetables & fruit         4         94.6         93.8         97.8         100.0  | Fish, seafood & preparations  | 7                    | 96.0  | 97.3  | 100.2 | 100.0 | 98.6  | 107.5 | 109.0 |
| Sugar, sugar preparations & honey  | Cereals & cereal preparations | 44                   | 96.7  | 95.3  | 99.5  | 100.0 | 101.6 | 104.1 | 105.2 |
| honey  | Vegetables & fruit            | 4                    | 94.6  | 93.8  | 97.8  | 100.0 | 100.0 | 100.0 | 101.9 |
| Coffee, tea, cocoa, spices & manufactures 31 88.3 98.6 103.9 100.0 93.8 109.5 10.0 Animal feeding stuff (excl unmilled cereals) 9 104.8 100.8 97.9 100.0 97.7 103.6 10.0 Miscellaneous food preparations 89 97.8 99.0 100.4 100.0 101.2 101.6 10.0 Beverages & Tobacco 54 97.9 98.5 98.9 100.0 99.9 100.6 10.0 Beverages 27 97.5 98.5 97.3 100.0 99.4 100.5 10.0 Tobacco & manufactures 27 98.5 98.4 101.2 100.0 100.4 100.7 100.7 100.4 100.7 1 | Sugar, sugar preparations &   |                      |       |       |       |       |       |       |       |
| manufactures         31         88.3         98.6         103.9         100.0         93.8         109.5         109.5           Animal feeding stuff (excl unmilled cereals)         9         104.8         100.8         97.9         100.0         97.7         103.6         10           Miscellaneous food preparations         89         97.8         99.0         100.4         100.0         101.2         101.6         10           Beverages & Tobacco         54         97.9         98.5         98.9         100.0         99.9         100.6         10           Beverages & Tobacco & manufactures         27         97.5         98.5         97.3         100.0         99.4         100.5         10           Tobacco & manufactures         27         98.5         98.4         101.2         100.0         100.4         100.7         10           Crude Materials (excl fuels)         7         63.7         104.2         100.4         100.0         101.7         104.2         10           Cork & wood         1         92.9         93.3         97.1         100.0         115.0         117.4         1           Metalliferous ores & metal scrap         3         100.0         100.0         100.0 <td>honey</td> <td>2</td> <td>na</td> <td>na</td> <td>na</td> <td>100.0</td> <td>101.0</td> <td>109.6</td> <td>95.5</td>   | honey                         | 2                    | na    | na    | na    | 100.0 | 101.0 | 109.6 | 95.5  |
| Animal feeding stuff (excl unmilled cereals) 9 104.8 100.8 97.9 100.0 97.7 103.6 100.0 Miscellaneous food preparations 89 97.8 99.0 100.4 100.0 101.2 101.6 10.0 101.2 101.5 101.2 101.5 101.2 101 | Coffee, tea, cocoa, spices &  |                      |       |       |       |       |       |       |       |
| unmilled cereals)       9       104.8       100.8       97.9       100.0       97.7       103.6       100.6       100.6       100.0       100.0       101.2       101.6       100.0       101.2       101.6       100.0       101.2       101.6       100.0       100.0       101.2       101.6       100.0       100.0       101.2       101.6       100.0       100.0       101.2       101.6       100.0  | manufactures                  | 31                   | 88.3  | 98.6  | 103.9 | 100.0 | 93.8  | 109.5 | 106.2 |
| Miscellaneous food preparations       89       97.8       99.0       100.4       100.0       101.2       101.6       10.0         Beverages & Tobacco       54       97.9       98.5       98.9       100.0       99.9       100.6       10.0         Beverages ges action of the properties of t  | Animal feeding stuff (excl    |                      |       |       |       |       |       |       |       |
| preparations         89         97.8         99.0         100.4         100.0         101.2         101.6         1           Beverages & Tobacco         54         97.9         98.5         98.9         100.0         99.9         100.6         1           Beverages         27         97.5         98.5         97.3         100.0         99.4         100.5         1           Tobacco & manufactures         27         98.5         98.4         101.2         100.0         100.4         100.7         1           Crude Materials (excl fuels)         7         63.7         104.2         100.4         100.0         101.7         104.2         1           Cork & wood         1         92.9         93.3         97.1         100.0         115.0         117.4         1           Cork & wood         1         92.9         93.3         97.1         100.0         102.7         107.9         1           Metalliferous ores & metal scrap         3         100.0         100.0         100.0         100.0         98.5         98.5           Mineral Fuels, Lubricants & Related Materials         2,218         65.8         78.5         98.5         100.0         96.0         89.6  |                               | 9                    | 104.8 | 100.8 | 97.9  | 100.0 | 97.7  | 103.6 | 104.4 |
| Beverages & Tobacco 54 97.9 98.5 98.9 100.0 99.9 100.6 10 Beverages 27 97.5 98.5 97.3 100.0 99.4 100.5 10 Tobacco & manufactures 27 98.5 98.4 101.2 100.0 100.4 100.7 100.7 100.0 100.4 100.7 100.0 100.4 100.7 100.0 100.4 100.7 100.0 100.4 100.7 100.0 100.4 100.7 100.0 100.4 100.7 100.0 98.5 98.5 100.0 96.0 89.6 Petroleum & products & related Materials 2,187 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0 100.0 Animal & Vegetable Oils, Fats & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & vegetable ids, fats & September 20.5 100.0 100.5 | Miscellaneous food            |                      |       |       |       |       |       |       |       |
| Beverages 27 97.5 98.5 97.3 100.0 99.4 100.5 10 Tobacco & manufactures 27 98.5 98.4 101.2 100.0 100.4 100.7 100.7 100.0 Materials (excl fuels) 7 63.7 104.2 100.4 100.0 101.7 104.2 100.0 Crude Materials (excl fuels) 7 63.7 104.2 100.4 100.0 101.7 104.2 100.0 Crude fertilizers & minerals 3 55.9 106.4 101.5 100.0 102.7 107.9 100.0 Metalliferous ores & metal scrap 3 100.0 100.0 100.0 100.0 100.0 98.5 98.5 98.5 100.0 98.5 98.5 100.0 96.0 89.6 Petroleum & products & related Materials 2,187 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0 Animal & Vegetable Oils, Fats & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & vegetable oils, fats &   | preparations                  | 89                   | 97.8  | 99.0  | 100.4 | 100.0 | 101.2 | 101.6 | 103.1 |
| Tobacco & manufactures 27 98.5 98.4 101.2 100.0 100.4 100.7 100.7 100.0 Crude Materials (excl fuels) 7 63.7 104.2 100.4 100.0 101.7 104.2 100.0 Cork & wood 1 92.9 93.3 97.1 100.0 115.0 117.4 100.0 Crude fertilizers & minerals 3 55.9 106.4 101.5 100.0 102.7 107.9 100.0 Metalliferous ores & metal scrap 3 100.0 100.0 100.0 100.0 100.0 98.5 98.5 100.0 98.5 98.5 100.0 96.0 89.6 Petroleum & products & related Materials 2,187 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0 Animal & Vegetable Oils, Fats & Waxes 28 80.2 88.2 99.3 100.0 87.0 101.5 Animal & vegetable oils, fats &   | Beverages & Tobacco           | 54                   | 97.9  | 98.5  | 98.9  | 100.0 | 99.9  | 100.6 | 101.4 |
| Crude Materials (excl fuels)         7         63.7         104.2         100.4         100.0         101.7         104.2         100.2         100.0         101.7         104.2         100.0         100.0         115.0         117.4         11         110.0         115.0         117.4         11         110.0         115.0         117.4         11         110.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         98.5         98.5         98.5           Mineral Fuels, Lubricants & Related Materials         2,218         65.8         78.5         98.5         100.0         96.0         89.6           Petroleum & products & related materials         2,187         65.8         78.5         98.5         100.0         96.0         89.6           Gas         31         64.4         85.6         94.0         100.0         96.7         90.0           Animal & Vegetable Oils, Fats & Waxes         28         80.2         88.2         99.3         100.0         87.2         94.3           Fixed vegetable oils, fats &         16         81.7         90.0         100.5         100.0         87.0         101.5 <td>Beverages</td> <td>27</td> <td>97.5</td> <td>98.5</td> <td>97.3</td> <td>100.0</td> <td>99.4</td> <td>100.5</td> <td>101.7</td>  | Beverages                     | 27                   | 97.5  | 98.5  | 97.3  | 100.0 | 99.4  | 100.5 | 101.7 |
| Cork & wood         1         92.9         93.3         97.1         100.0         115.0         117.4         1           Crude fertilizers & minerals         3         55.9         106.4         101.5         100.0         102.7         107.9         1           Metalliferous ores & metal scrap         3         100.0         100.0         100.0         100.0         98.5         98.5           Mineral Fuels, Lubricants & Related Materials         2,218         65.8         78.5         98.5         100.0         96.0         89.6           Petroleum & products & related materials         2,187         65.8         78.5         98.5         100.0         96.0         89.6           Gas         31         64.4         85.6         94.0         100.0         96.7         90.0           Animal & Vegetable Oils, Fats & Waxes         28         80.2         88.2         99.3         100.0         87.2         94.3           Fixed vegetable oils, fats &         16         81.7         90.0         100.5         100.0         87.0         101.5  | Tobacco & manufactures        | 27                   | 98.5  | 98.4  | 101.2 | 100.0 | 100.4 | 100.7 | 101.2 |
| Crude fertilizers & minerals         3         55.9         106.4         101.5         100.0         102.7         107.9         107.9           Metalliferous ores & metal scrap         3         100.0         100.0         100.0         100.0         98.5         98.5         98.5           Mineral Fuels, Lubricants & Related Materials         2,218         65.8         78.5         98.5         100.0         96.0         89.6           Petroleum & products & related materials         2,187         65.8         78.5         98.5         100.0         96.0         89.6           Gas         31         64.4         85.6         94.0         100.0         96.7         90.0           Animal & Vegetable Oils, Fats & Waxes         28         80.2         88.2         99.3         100.0         87.2         94.3           Fixed vegetable oils, fats &         16         81.7         90.0         100.5         100.0         87.0         101.5  | Crude Materials (excl fuels)  | 7                    | 63.7  | 104.2 | 100.4 | 100.0 | 101.7 | 104.2 | 104.9 |
| Metalliferous ores & metal scrap       3       100.0       100.0       100.0       100.0       98.5       98.5         Mineral Fuels, Lubricants & Related Materials       2,218       65.8       78.5       98.5       100.0       96.0       89.6         Petroleum & products & related materials       2,187       65.8       78.5       98.5       100.0       96.0       89.6         Gas       31       64.4       85.6       94.0       100.0       96.7       90.0         Animal & Vegetable Oils, Fats & Waxes       28       80.2       88.2       99.3       100.0       87.2       94.3         Fixed vegetable fats & oils       16       81.7       90.0       100.5       100.0       87.0       101.5         Animal & vegetable oils, fats &  | Cork & wood                   | 1                    | 92.9  | 93.3  | 97.1  | 100.0 | 115.0 | 117.4 | 117.6 |
| metal scrap       3       100.0       100.0       100.0       100.0       98.5       98.5         Mineral Fuels, Lubricants & Related Materials       2,218       65.8       78.5       98.5       100.0       96.0       89.6         Petroleum & products & related materials       2,187       65.8       78.5       98.5       100.0       96.0       89.6         Gas       31       64.4       85.6       94.0       100.0       96.7       90.0         Animal & Vegetable Oils, Fats & Waxes       28       80.2       88.2       99.3       100.0       87.2       94.3         Fixed vegetable fats & oils       16       81.7       90.0       100.5       100.0       87.0       101.5         Animal & vegetable oils, fats &   |                               | 3                    | 55.9  | 106.4 | 101.5 | 100.0 | 102.7 | 107.9 | 109.3 |
| Related Materials       2,218       65.8       78.5       98.5       100.0       96.0       89.6         Petroleum & products & related materials       2,187       65.8       78.5       98.5       100.0       96.0       89.6         Gas       31       64.4       85.6       94.0       100.0       96.7       90.0         Animal & Vegetable Oils, Fats & Waxes       28       80.2       88.2       99.3       100.0       87.2       94.3         Fixed vegetable fats & oils       16       81.7       90.0       100.5       100.0       87.0       101.5         Animal & vegetable oils, fats &   |                               | 3                    | 100.0 | 100.0 | 100.0 | 100.0 | 98.5  | 98.5  | 98.5  |
| Petroleum & products & related materials 2,187 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0 Animal & Vegetable Oils,  Fats & Waxes 28 80.2 88.2 99.3 100.0 87.2 94.3 Fixed vegetable fats & oils 16 81.7 90.0 100.5 100.0 87.0 101.5 Animal & vegetable oils, fats &   | Mineral Fuels, Lubricants &   |                      |       |       |       |       |       |       |       |
| related materials 2,187 65.8 78.5 98.5 100.0 96.0 89.6 Gas 31 64.4 85.6 94.0 100.0 96.7 90.0  Animal & Vegetable Oils, Fats & Waxes 28 80.2 88.2 99.3 100.0 87.2 94.3 Fixed vegetable fats & oils 16 81.7 90.0 100.5 100.0 87.0 101.5 Animal & vegetable oils, fats &  | Related Materials             | 2,218                | 65.8  | 78.5  | 98.5  | 100.0 | 96.0  | 89.6  | 58.3  |
| Gas     31     64.4     85.6     94.0     100.0     96.7     90.0       Animal & Vegetable Oils,     Fats & Waxes     28     80.2     88.2     99.3     100.0     87.2     94.3       Fixed vegetable fats & oils     16     81.7     90.0     100.5     100.0     87.0     101.5       Animal & vegetable oils, fats &  | Petroleum & products &        |                      |       |       |       |       |       |       |       |
| Animal & Vegetable Oils,  Fats & Waxes 28 80.2 88.2 99.3 100.0 87.2 94.3  Fixed vegetable fats & oils 16 81.7 90.0 100.5 100.0 87.0 101.5  Animal & vegetable oils, fats &   | related materials             | 2,187                | 65.8  | 78.5  | 98.5  | 100.0 | 96.0  | 89.6  | 58.4  |
| Fats & Waxes       28       80.2       88.2       99.3       100.0       87.2       94.3         Fixed vegetable fats & oils       16       81.7       90.0       100.5       100.0       87.0       101.5         Animal & vegetable oils, fats &   | Gas                           | 31                   | 64.4  | 85.6  | 94.0  | 100.0 | 96.7  | 90.0  | 51.5  |
| Fixed vegetable fats & oils 16 81.7 90.0 100.5 100.0 87.0 101.5 Animal & vegetable oils, fats &  | Animal & Vegetable Oils,      |                      |       |       |       |       |       |       |       |
| Animal & vegetable oils, fats &  | Fats & Waxes                  | 28                   | 80.2  | 88.2  | 99.3  | 100.0 | 87.2  | 94.3  | 90.1  |
| waxes nes 12 na na 100.0 87.5 84.7   | _                             |                      | 81.7  | 90.0  | 100.5 | 100.0 | 87.0  | 101.5 | 99.4  |
|  | waxes nes                     | 12                   | na    | na    | na    | 100.0 | 87.5  | 84.7  | 78.0  |

<sup>1</sup> The weights for Singapore Manufactured Products Price Index are compiled based on the production value of the commodity item in 2011.

**22.6** SINGAPORE MANUFACTURED PRODUCTS PRICE INDEX (continued) (2012=100)

| Item  | Weights 1 | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|-----------|-------|-------|-------|-------|-------|-------|-------|
| Chemicals & Chemical Products                                   | 2,335     | 96.9  | 98.4  | 102.3 | 100.0 | 100.4 | 99.1  | 88.1  |
| Organic chemicals   | 1,402     | 98.1  | 97.3  | 102.8 | 100.0 | 99.9  | 97.0  | 82.0  |
| Inorganic chemicals   | 56        | 82.4  | 86.0  | 96.1  | 100.0 | 95.0  | 91.7  | 89.2  |
| Dyeing, tanning & colouring                                     |           |       |       |       |       |       |       |       |
| materials   | 33        | 94.0  | 96.5  | 99.8  | 100.0 | 97.2  | 96.7  | 94.7  |
| Medicinal & pharmaceutical                                      |           |       |       |       |       |       |       |       |
| products  | 157       | 98.1  | 104.6 | 99.3  | 100.0 | 100.3 | 101.0 | 104.0 |
| Essential oils & perfume; toilet                                |           |       |       |       |       |       |       |       |
| cleaning products   | 64        | 102.3 | 101.6 | 103.1 | 100.0 | 95.8  | 97.2  | 100.1 |
| Plastics in primary forms                                       | 323       | 92.4  | 100.0 | 105.1 | 100.0 | 104.2 | 107.1 | 91.8  |
| Plastics in non-primary forms                                   | 38        | 93.5  | 98.6  | 101.9 | 100.0 | 102.7 | 103.8 | 102.5 |
| Chemical materials & products nes                               | 262       | 104.7 | 98.7  | 98.4  | 100.0 | 101.0 | 101.3 | 100.5 |
| Manufactured Goods  | 439       | 98.0  | 98.6  | 102.1 | 100.0 | 99.6  | 98.9  | 98.0  |
| Leather manufactures nes  | 5         | 96.8  | 98.6  | 96.8  | 100.0 | 107.1 | 120.2 | 122.5 |
| Rubber manufactures nes   | 18        | 95.5  | 91.2  | 94.8  | 100.0 | 98.7  | 98.9  | 104.7 |
| Wood & cork manufactures (excl                                  |           |       |       |       |       |       |       |       |
| furniture)  | 8         | 99.7  | 99.7  | 99.7  | 100.0 | 99.6  | 100.1 | 100.9 |
| Paper manufactures  | 44        | 95.3  | 93.7  | 99.5  | 100.0 | 103.2 | 104.1 | 103.8 |
| Textile manufactures  | 10        | 125.4 | 126.9 | 110.6 | 100.0 | 100.0 | 100.0 | 101.6 |
| Non-metal mineral manufactures nes                              | 77        | 99.5  | 91.8  | 101.7 | 100.0 | 99.9  | 102.2 | 100.1 |
| Iron & steel  | 63        | 96.6  | 99.3  | 104.1 | 100.0 | 96.6  | 91.6  | 86.3  |
| Non-ferrous metals  | 31        | 80.9  | 97.5  | 107.9 | 100.0 | 97.8  | 95.9  | 92.9  |
| Manufactures of metals nes                                      | 183       | 99.2  | 100.8 | 101.9 | 100.0 | 99.8  | 98.6  | 99.1  |
| Machinery & Transport Equipment<br>Power-generating machinery & | 3,900     | 111.0 | 103.8 | 98.6  | 100.0 | 94.4  | 90.6  | 93.7  |
| equipment  Machinery specialized for particular                 | 33        | 89.5  | 90.0  | 96.5  | 100.0 | 94.5  | 91.5  | 94.6  |
| industries  | 376       | 118.3 | 109.1 | 100.7 | 100.0 | 97.3  | 93.9  | 94.6  |
| Metal working machinery   | 21        | 93.5  | 98.8  | 100.2 | 100.0 | 103.2 | 103.2 | 97.4  |
| General industrial machinery                                    | 167       | 99.9  | 99.8  | 99.0  | 100.0 | 98.9  | 99.7  | 100.7 |
| Office machines & data-processing                               | 10,       |       | ,,,,  | ,,,,  | 100.0 | , 0., | ,,,,  | 10017 |
| machines  | 1,143     | 118.4 | 110.5 | 100.9 | 100.0 | 87.4  | 79.7  | 82.8  |
| Telecommunication apparatus                                     | 49        | 105.4 | 87.3  | 98.4  | 100.0 | 101.3 | 99.9  | 102.5 |
| Electrical machinery apparatus nes,                             |           |       |       |       |       |       |       |       |
| electrical parts  | 2,076     | 109.1 | 103.3 | 96.9  | 100.0 | 97.1  | 94.6  | 98.4  |
| Road vehicles   | 35        | 109.0 | 98.8  | 99.2  | 100.0 | 101.7 | 108.2 | 111.4 |
| Miscellaneous Manufactured Articles                             | 753       | 103.7 | 102.3 | 102.2 | 100.0 | 98.8  | 96.4  | 93.8  |
| Furniture, bedding, mattresses, cushions & others               | 31        | 102.2 | 100.6 | 97.6  | 100.0 | 100.2 | 102.4 | 105.5 |
| Travel goods, handbags & similar containers                     | 1         | 90.2  | 89.1  | 92.7  | 100.0 | 103.7 | 110.5 | 115.8 |
| Articles of apparel & clothing accessories                      | 27        | 97.1  | 94.2  | 93.9  | 100.0 | 96.8  | 93.8  | 102.9 |
| Professional scientific & controlling instruments               | 327       | 105.3 | 101.9 | 100.8 | 100.0 | 98.4  | 97.9  | 94.5  |
| Photographic & optical goods nes;                               |           |       |       |       |       |       |       |       |
| watches & clocks  | 21        | 107.7 | 103.2 | 99.0  | 100.0 | 101.0 | 101.7 | 102.1 |
| Miscellaneous manufactured articles nes                         | 346       | 104.2 | 103.9 | 104.7 | 100.0 | 99.0  | 94.2  | 90.8  |

<sup>1</sup> The weights for Singapore Manufactured Products Price Index are compiled based on the production value of the commodity item in 2011.

**22.7** IMPORT PRICE INDEX (2012 = 100)

| Item                            | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---------------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|
| All Items                       | 10,000               | 95.0  | 95.7  | 100.3 | 100.0 | 97.2  | 94.5  | 82.5  |
| Food & Live Animals             | 215                  | 92.1  | 97.2  | 102.6 | 100.0 | 100.9 | 104.2 | 101.5 |
| Live animals                    | 9                    | 94.7  | 96.4  | 103.5 | 100.0 | 101.6 | 103.6 | 102.9 |
| Meat & meat preparations        | 26                   | 91.4  | 95.5  | 100.8 | 100.0 | 101.3 | 104.4 | 100.8 |
| Dairy products & birds' eggs    | 28                   | 89.1  | 101.3 | 106.8 | 100.0 | 111.5 | 121.5 | 98.0  |
| Fish, seafood & preparations    | 28                   | 98.8  | 101.1 | 102.0 | 100.0 | 99.1  | 101.5 | 104.5 |
| Cereals & cereal preparations   | 21                   | 97.9  | 97.1  | 102.5 | 100.0 | 102.3 | 100.7 | 98.6  |
| Vegetables & fruit              | 37                   | 90.7  | 92.6  | 101.6 | 100.0 | 105.2 | 108.5 | 111.1 |
| Sugar, sugar preparations &     |                      |       |       |       |       |       |       |       |
| honey                           | 12                   | 85.8  | 102.1 | 106.1 | 100.0 | 92.5  | 87.8  | 84.5  |
| Coffee, tea, cocoa, spices &    |                      |       |       |       |       |       |       |       |
| manufactures                    | 28                   | 82.5  | 89.4  | 100.4 | 100.0 | 96.5  | 105.0 | 109.2 |
| Animal feeding stuff (excl      |                      |       |       |       |       |       |       |       |
| unmilled cereals)               | 3                    | 108.9 | 103.5 | 93.3  | 100.0 | 101.6 | 105.1 | 102.2 |
| Miscellaneous food              |                      |       |       |       |       |       |       |       |
| preparations                    | 23                   | 98.8  | 105.8 | 103.4 | 100.0 | 90.6  | 90.5  | 89.2  |
| Beverages & Tobacco             | 86                   | 103.2 | 101.3 | 98.5  | 100.0 | 101.1 | 102.1 | 104.7 |
| Beverages                       | 66                   | 100.9 | 98.0  | 96.4  | 100.0 | 100.8 | 101.4 | 103.3 |
| Tobacco & manufactures          | 20                   | 108.7 | 108.9 | 103.3 | 100.0 | 102.1 | 104.4 | 109.2 |
| Crude Materials (excl fuels)    | 83                   | 86.7  | 96.5  | 106.2 | 100.0 | 95.7  | 93.4  | 88.0  |
| Hides, skins & furskins raw     | 1                    | 98.8  | 94.7  | 93.9  | 100.0 | 106.5 | 108.0 | 106.0 |
| Oil seeds & oleaginous fruits   | 1                    | 104.9 | 91.5  | 95.4  | 100.0 | 96.1  | 91.6  | 101.2 |
| Crude rubber                    | 17                   | 65.1  | 110.8 | 133.9 | 100.0 | 82.9  | 67.6  | 56.2  |
| Cork & wood                     | 5                    | 89.4  | 91.1  | 96.1  | 100.0 | 94.6  | 93.3  | 95.0  |
| Textile fibres & their wastes   | 3                    | 91.9  | 89.0  | 90.7  | 100.0 | 103.7 | 102.9 | 102.1 |
| Crude fertilizers & minerals    | 26                   | 100.5 | 94.7  | 98.1  | 100.0 | 99.6  | 99.9  | 94.7  |
| Metalliferous ores &            |                      |       |       |       |       |       |       |       |
| metal scrap                     | 21                   | 84.4  | 80.5  | 93.3  | 100.0 | 94.5  | 94.3  | 87.9  |
| Crude animal & vegetable        |                      |       |       |       |       |       |       |       |
| materials nes                   | 9                    | 99.1  | 100.9 | 100.1 | 100.0 | 107.9 | 116.4 | 115.7 |
| Mineral Fuels, Lubricants &     |                      |       |       |       |       |       |       |       |
| Related Materials               | 3,316                | 64.2  | 76.2  | 97.4  | 100.0 | 95.9  | 88.8  | 52.0  |
| Petroleum & products &          |                      |       |       |       |       |       |       |       |
| related materials               | 3,152                | 64.2  | 76.2  | 97.4  | 100.0 | 95.5  | 88.5  | 51.5  |
| Gas                             | 164                  | na    | na    | na    | 100.0 | 102.1 | 94.3  | 60.8  |
| Animal & Vegetable Oils,        |                      |       |       |       |       |       |       |       |
| Fats & Waxes                    | 37                   | 81.6  | 87.5  | 108.8 | 100.0 | 83.1  | 82.1  | 70.1  |
| Fixed vegetable fats & oils     | 36                   | 82.7  | 90.8  | 110.9 | 100.0 | 82.6  | 81.6  | 69.4  |
| Animal & vegetable oils, fats & | :                    |       |       |       |       |       |       |       |
| waxes nes                       | 1                    | 80.7  | 83.5  | 108.8 | 100.0 | 97.7  | 95.5  | 90.3  |

<sup>1</sup> The weights for the Import Price Index are compiled based on the value of the commodity item imported in 2012.

22.7 IMPORT PRICE INDEX (continued) (2012 = 100)

| Item  | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Chemicals & Chemical Products                                   | 694                  | 95.0  | 97.0  | 100.5 | 100.0 | 98.9  | 97.9  | 92.0  |
| Organic chemicals   | 188                  | 89.2  | 96.5  | 103.6 | 100.0 | 99.0  | 95.8  | 83.9  |
| Inorganic chemicals   | 34                   | 82.7  | 90.7  | 101.1 | 100.0 | 81.4  | 77.8  | 79.7  |
| Dyeing, tanning & colouring                                     |                      |       |       |       |       |       |       |       |
| materials   | 28                   | 101.3 | 97.7  | 97.5  | 100.0 | 92.5  | 90.9  | 88.3  |
| Medicinal & pharmaceutical                                      |                      |       |       |       |       |       |       |       |
| products  | 70                   | 97.4  | 97.5  | 97.3  | 100.0 | 96.6  | 94.2  | 88.8  |
| Essential oils & perfume; toilet                                |                      |       |       |       |       |       |       |       |
| cleaning products   | 75                   | 106.9 | 103.2 | 101.9 | 100.0 | 100.9 | 102.7 | 102.0 |
| Plastics in primary forms                                       | 147                  | 97.4  | 99.4  | 101.5 | 100.0 | 103.0 | 105.8 | 96.0  |
| Plastics in non-primary forms                                   | 31                   | 106.3 | 103.4 | 102.1 | 100.0 | 100.1 | 100.9 | 100.8 |
| Chemical materials & products nes                               | 121                  | 94.1  | 92.4  | 95.9  | 100.0 | 99.9  | 97.4  | 97.6  |
| Manufactured Goods  | 635                  | 99.8  | 101.3 | 104.4 | 100.0 | 97.2  | 97.7  | 94.2  |
| Rubber manufactures nes   | 32                   | 92.7  | 93.0  | 96.7  | 100.0 | 96.5  | 94.7  | 96.5  |
| Paper manufactures  | 50                   | 101.1 | 106.5 | 104.0 | 100.0 | 98.6  | 99.0  | 101.9 |
| Textile manufactures  | 31                   | 97.8  | 97.3  | 101.1 | 100.0 | 98.3  | 99.7  | 102.6 |
| Non-metal mineral manufactures nes                              | 83                   | 107.1 | 97.3  | 96.7  | 100.0 | 101.9 | 101.9 | 104.0 |
| Iron & steel  | 179                  | 106.4 | 104.0 | 107.3 | 100.0 | 95.6  | 96.8  | 89.9  |
| Non-ferrous metals  | 116                  | 87.2  | 106.3 | 115.2 | 100.0 | 94.0  | 93.9  | 81.8  |
| Manufactures of metals nes                                      | 144                  | 100.0 | 99.1  | 100.9 | 100.0 | 98.7  | 99.4  | 99.2  |
| Machinery & Transport Equipment                                 | 4,205                | 111.2 | 105.1 | 101.4 | 100.0 | 97.9  | 96.8  | 98.7  |
| Power-generating machinery &                                    |                      |       |       |       |       |       |       |       |
| equipment   | 298                  | 100.0 | 98.8  | 97.2  | 100.0 | 102.9 | 107.5 | 117.0 |
| Machinery specialized for particular                            |                      |       |       |       |       |       |       |       |
| industries  | 352                  | 107.5 | 105.5 | 102.4 | 100.0 | 96.4  | 94.6  | 94.7  |
| Metal working machinery   | 31                   | 103.2 | 100.8 | 100.5 | 100.0 | 94.9  | 92.8  | 92.9  |
| General industrial machinery                                    | 328                  | 104.8 | 102.5 | 100.9 | 100.0 | 99.3  | 100.1 | 99.9  |
| Office machines & data-processing                               |                      |       |       |       |       |       |       |       |
| machines  | 495                  | 106.7 | 101.8 | 100.7 | 100.0 | 98.2  | 98.5  | 101.4 |
| Telecommunication apparatus Electrical machinery apparatus nes, | 422                  | 129.7 | 128.4 | 113.5 | 100.0 | 92.3  | 80.8  | 78.4  |
| electrical parts  | 2,116                | 113.2 | 103.8 | 100.2 | 100.0 | 98.2  | 97.7  | 100.1 |
| Road vehicles   | 163                  | 103.0 | 99.5  | 100.1 | 100.0 | 97.9  | 101.1 | 99.0  |
| Miscellaneous Manufactured Articles                             | 729                  | 96.2  | 96.2  | 97.4  | 100.0 | 97.4  | 97.4  | 100.5 |
| Prefab building, sanitary plumbing,                             |                      |       |       |       |       |       |       |       |
| lighting nes  | 16                   | 94.3  | 95.3  | 97.3  | 100.0 | 100.4 | 101.2 | 103.0 |
| Furniture, bedding, mattresses,                                 |                      |       |       |       |       |       |       |       |
| cushions & others   | 25                   | 110.3 | 109.4 | 101.3 | 100.0 | 98.9  | 98.9  | 98.3  |
| Travel goods, handbags & similar                                |                      |       |       |       |       |       |       |       |
| containers  | 25                   | 97.4  | 97.1  | 95.9  | 100.0 | 103.0 | 110.1 | 114.9 |
| Articles of apparel & clothing                                  |                      |       |       |       |       |       |       |       |
| accessories   | 64                   | 98.5  | 95.3  | 96.6  | 100.0 | 102.7 | 104.6 | 106.5 |
| Footwear  | 16                   | 98.9  | 100.1 | 99.8  | 100.0 | 99.9  | 103.0 | 102.4 |
| Professional scientific & controlling                           |                      | 10:-  | 4000  | 400 = | 4000  | 400 - | 465.  |       |
| instruments   | 207                  | 104.2 | 103.8 | 100.5 | 100.0 | 100.7 | 102.1 | 111.2 |
| Photographic & optical goods nes;                               |                      | 0     |       | c= -  | 4000  | c     | c= -  |       |
| watches & clocks  | 99                   | 99.9  | 97.8  | 97.5  | 100.0 | 97.2  | 97.8  | 97.2  |
| Miscellaneous mfd articles nes                                  | 277                  | 87.0  | 89.1  | 95.0  | 100.0 | 92.7  | 90.3  | 91.1  |

 $<sup>1\</sup>quad \text{The weights for the Import Price Index are compiled based on the value of the commodity item imported in 2012}.$ 

**22.8** EXPORT PRICE INDEX (2012 = 100)

| Item  | Weights 1 | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---|-----------|-------|-------|-------|-------|-------|-------|-------|
| All Items   | 10,000    | 97.4  | 98.8  | 101.1 | 100.0 | 97.3  | 95.0  | 88.5  |
| Food & Live Animals   | 124       | 89.4  | 93.9  | 102.8 | 100.0 | 96.6  | 101.5 | 103.6 |
| Meat & meat preparations                                    | 2         | 113.8 | 104.1 | 112.1 | 100.0 | 103.8 | 104.5 | 106.5 |
| Dairy products & birds' eggs                                | 7         | 90.5  | 96.9  | 99.2  | 100.0 | 105.6 | 124.4 | 101.5 |
| Fish, seafood & preparations                                | 9         | 93.2  | 98.9  | 99.9  | 100.0 | 95.1  | 95.5  | 99.4  |
| Cereals & cereal preparations                               | 7         | 98.9  | 96.6  | 100.2 | 100.0 | 100.8 | 102.0 | 104.9 |
| Vegetables & fruit  | 8         | 81.0  | 85.1  | 127.7 | 100.0 | 92.6  | 121.4 | 133.0 |
| Sugar, sugar preparations &                                 |           |       |       |       |       |       |       |       |
| honey   | 6         | 82.4  | 102.7 | 106.1 | 100.0 | 90.1  | 88.7  | 88.3  |
| Coffee, tea, cocoa, spices &                                |           |       |       |       |       |       |       |       |
| manufactures  | 29        | 82.1  | 90.9  | 99.6  | 100.0 | 96.5  | 107.4 | 109.9 |
| Animal feeding stuff (excl                                  |           |       |       |       |       |       |       |       |
| unmilled cereals)   | 6         | 107.6 | 98.6  | 98.5  | 100.0 | 99.3  | 99.7  | 119.1 |
| Miscellaneous food preparations                             | 50        | 89.7  | 92.7  | 100.2 | 100.0 | 95.9  | 94.4  | 96.2  |
| Beverages & Tobacco   | 87        | 98.0  | 97.8  | 98.2  | 100.0 | 98.1  | 100.2 | 107.2 |
| Beverages   | 66        | 92.2  | 93.3  | 97.0  | 100.0 | 96.6  | 98.1  | 103.6 |
| Tobacco & manufactures                                      | 21        | 108.5 | 106.0 | 100.5 | 100.0 | 102.8 | 107.2 | 118.7 |
| Crude Materials (excl fuels)                                | 60        | 74.9  | 105.6 | 113.0 | 100.0 | 90.6  | 84.0  | 74.8  |
| Crude rubber  | 15        | 64.5  | 116.3 | 143.6 | 100.0 | 81.4  | 57.6  | 50.1  |
| Cork & wood   | 2         | 79.3  | 81.0  | 84.6  | 100.0 | 98.0  | 101.3 | 100.7 |
| Pulp and waste paper  | 6         | 73.5  | 108.5 | 121.5 | 100.0 | 92.6  | 95.1  | 97.9  |
| Textile fibres & their wastes                               | 3         | 81.3  | 88.3  | 89.7  | 100.0 | 109.3 | 94.4  | 95.0  |
| Metalliferous ores &  |           |       |       |       |       |       |       |       |
| metal scrap   | 29        | 80.8  | 105.6 | 110.2 | 100.0 | 91.0  | 89.4  | 74.6  |
| Crude animal & vegetable                                    |           |       |       |       |       |       |       |       |
| materials nes   | 5         | 108.7 | 104.4 | 98.7  | 100.0 | 99.8  | 103.3 | 99.0  |
| Mineral Fuels, Lubricants &                                 |           |       |       |       |       |       |       |       |
| Related Materials   | 2,605     | 63.2  | 76.3  | 97.8  | 100.0 | 94.6  | 88.6  | 56.3  |
| Petroleum & products &                                      |           |       |       |       |       |       |       |       |
| related materials   | 2,595     | 63.4  | 76.3  | 98.0  | 100.0 | 94.6  | 88.6  | 56.3  |
| Gas   | 10        | 54.2  | 70.5  | 80.7  | 100.0 | 94.5  | 83.7  | 52.2  |
| Animal & Vegetable Oils,                                    |           |       |       |       |       |       |       |       |
| Fats & waxes  | 8         | 94.2  | 95.9  | 107.2 | 100.0 | 93.2  | 90.4  | 84.6  |
| Animal oils & fats  | 1         | 92.2  | 92.1  | 95.7  | 100.0 | 107.7 | 104.1 | 99.7  |
| Fixed vegetable fats & oils Animal & vegetable oils, fats & | 5         | 98.0  | 95.9  | 109.6 | 100.0 | 90.1  | 86.7  | 80.4  |
|   |           |       |       |       |       |       |       |       |

<sup>1</sup> The weights for the Export Price Index are compiled based on the value of the commodity item exported in 2012.

22.8 EXPORT PRICE INDEX (continued) (2012 = 100)

|   | . 1                  |              | 1             | 1     | I     | 1            | I             |              |
|---|----------------------|--------------|---------------|-------|-------|--------------|---------------|--------------|
| Item  | Weights <sup>1</sup> | 2009         | 2010          | 2011  | 2012  | 2013         | 2014          | 2015         |
| Chamicals & Chamical Duade-t-                                   | 1.344                | 99.0         | 100.4         | 100.9 | 100.0 | 99.7         | 100.2         | 97.5         |
| Chemicals & Chemical Products                                   | 1,344<br>498         | 99.0<br>97.3 | 100.4<br>99.6 | 99.0  | 100.0 | 99.7<br>98.4 | 100.3<br>97.5 | 97.5<br>93.1 |
| Organic chemicals   |                      |              |               |       | 100.0 |              |               | 93.1         |
| Inorganic chemicals   | 13                   | 92.5         | 93.7          | 99.1  | 100.0 | 96.4         | 95.0          | 93.7         |
| Dyeing, tanning & colouring                                     | 22                   | 101.2        | 07.2          | 00.6  | 100.0 | 01.2         | 01.0          | 00.0         |
| materials   | 32                   | 101.2        | 97.2          | 98.6  | 100.0 | 91.3         | 91.8          | 90.0         |
| Medicinal & pharmaceutical                                      | 229                  | 110.1        | 105.2         | 101.1 | 100.0 | 07.2         | 00.6          | 100.1        |
| products  | 228                  | 110.1        | 105.3         | 101.1 | 100.0 | 97.2         | 99.6          | 100.1        |
| Essential oils & perfume; toilet                                | 107                  | 1066         | 100.0         | 102.0 | 100.0 | 104.0        | 105.0         | 105.7        |
| cleaning products   | 127                  | 106.6        | 102.2         | 102.9 | 100.0 | 104.9        | 105.0         | 105.7        |
| Plastics in primary forms                                       | 289                  | 97.7         | 103.1         | 106.0 | 100.0 | 102.4        | 104.5         | 95.5         |
| Plastics in non-primary forms                                   | 29                   | 79.7         | 81.6          | 98.4  | 100.0 | 99.7         | 101.0         | 101.8        |
| Chemical materials & products nes                               | 128                  | 98.9         | 99.0          | 99.6  | 100.0 | 99.9         | 101.5         | 107.7        |
| Manufactured Goods  | 381                  | 98.7         | 102.0         | 105.1 | 100.0 | 98.8         | 99.3          | 96.3         |
| Rubber manufactures nes   | 26                   | 101.7        | 99.1          | 99.1  | 100.0 | 99.2         | 98.9          | 98.4         |
| Wood & cork manufactures (excl                                  |                      |              |               |       |       |              |               |              |
| furniture)  | 2                    | 115.3        | 111.4         | 107.4 | 100.0 | 103.5        | 110.8         | 109.4        |
| Paper manufactures  | 40                   | 103.4        | 105.1         | 101.3 | 100.0 | 101.0        | 101.2         | 105.3        |
| Textile manufactures  | 20                   | 103.1        | 102.0         | 106.1 | 100.0 | 100.6        | 100.4         | 107.0        |
| Non-metal mineral manufactures nes                              | 31                   | 111.9        | 106.4         | 103.3 | 100.0 | 91.3         | 89.2          | 90.7         |
| Iron & steel  | 96                   | 102.1        | 101.7         | 104.1 | 100.0 | 99.9         | 99.4          | 95.1         |
| Non-ferrous metals  | 76                   | 81.6         | 102.0         | 115.8 | 100.0 | 97.7         | 100.2         | 85.0         |
| Manufactures of metals nes                                      | 90                   | 106.0        | 101.3         | 98.1  | 100.0 | 99.7         | 100.8         | 101.7        |
| Machinery & Transport Equipment<br>Power-generating machinery & | 4,595                | 113.5        | 108.8         | 102.3 | 100.0 | 98.3         | 96.9          | 101.2        |
| equipment   | 188                  | 99.8         | 99.8          | 99.0  | 100.0 | 100.7        | 101.4         | 105.2        |
| Machinery specialized for particular                            |                      |              |               |       |       |              |               |              |
| industries  | 397                  | 119.5        | 104.8         | 100.5 | 100.0 | 98.8         | 99.6          | 97.4         |
| Metal working machinery   | 28                   | 120.2        | 112.0         | 106.8 | 100.0 | 100.0        | 101.6         | 105.3        |
| General industrial machinery                                    | 243                  | 104.1        | 101.7         | 98.4  | 100.0 | 98.9         | 99.7          | 105.1        |
| Office machines & data-processing                               |                      |              |               |       |       |              |               |              |
| machines  | 680                  | 114.2        | 112.7         | 100.9 | 100.0 | 96.1         | 96.5          | 105.1        |
| Telecommunication apparatus                                     | 336                  | 127.2        | 116.9         | 107.6 | 100.0 | 96.0         | 90.6          | 89.3         |
| Electrical machinery apparatus nes,                             |                      |              |               |       |       |              |               |              |
| electrical parts  | 2,582                | 112.2        | 107.3         | 102.9 | 100.0 | 98.7         | 96.2          | 101.1        |
| Road vehicles   | 141                  | 106.9        | 102.2         | 98.2  | 100.0 | 101.7        | 106.6         | 109.5        |
|   |                      |              |               |       |       |              |               |              |

 $<sup>1 \</sup>quad \text{The weights for the Export Price Index are compiled based on the value of the commodity item exported in } 2012$ 

22.8 EXPORT PRICE INDEX (continued) (2012 = 100)

| Item                                  | Weights <sup>1</sup> | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|---------------------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|
| Miscellaneous Manufactured Articles   | 796                  | 106.2 | 103.2 | 99.8  | 100.0 | 96.0  | 93.6  | 97.8  |
| Prefab building, sanitary plumbing,   | 790                  | 100.2 | 103.2 | 99.0  | 100.0 | 90.0  | 93.0  | 97.0  |
| lighting nes                          | 6                    | 107.6 | 107.6 | 107.6 | 100.0 | 102.7 | 113.8 | 112.9 |
| Furniture, bedding, mattresses,       | O                    | 107.0 | 107.0 | 107.0 | 100.0 | 102.7 | 113.0 | 112.) |
| cushions & others                     | 5                    | 110.9 | 95.0  | 96.4  | 100.0 | 104.0 | 104.6 | 104.8 |
| Travel goods, handbags & similar      |                      |       | ,     |       |       |       |       |       |
| containers                            | 11                   | 107.6 | 106.7 | 98.3  | 100.0 | 108.1 | 117.3 | 123.0 |
| Articles of apparel & clothing        |                      |       |       |       |       |       |       |       |
| accessories                           | 33                   | 103.4 | 98.8  | 99.8  | 100.0 | 100.3 | 100.9 | 102.2 |
| Footwear                              | 8                    | 101.1 | 94.4  | 98.3  | 100.0 | 100.1 | 100.5 | 102.0 |
| Professional scientific & controlling |                      |       |       |       |       |       |       |       |
| instruments                           | 264                  | 105.3 | 102.4 | 99.4  | 100.0 | 98.7  | 97.4  | 104.8 |
| Photographic & optical goods nes;     |                      |       |       |       |       |       |       |       |
| watches & clocks                      | 86                   | 107.6 | 103.1 | 97.4  | 100.0 | 98.8  | 97.9  | 96.1  |
| Miscellaneous mfd articles nes        | 383                  | 106.9 | 104.9 | 100.7 | 100.0 | 92.5  | 88.1  | 91.9  |

<sup>1</sup> The weights for the Export Price Index are compiled based on the value of the commodity item exported in 2012.

## 22.9 CONSTRUCTION MATERIAL MARKET PRICES

| Material  | Unit              | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|---|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Cement in bulk<br>(Ordinary Portland Cement)    | \$/Tonne          | 103.23 | 89.14  | 93.78  | 100.87 | 100.23 | 97.93  | 92.97  |
| Steel Bars <sup>1</sup> (16-32 mm High Tensile) | \$/Tonne          | 765.80 | 833.41 | 931.26 | 887.13 | 766.90 | 653.90 | 501.40 |
| Granite <sup>2</sup> (20 mm Aggregate)          | \$/Tonne          | 19.68  | 19.63  | 21.58  | 21.26  | 20.61  | 22.45  | 19.71  |
| Concreting Sand <sup>2</sup>                    | \$/Tonne          | 29.95  | 28.19  | 25.96  | 24.10  | 22.99  | 23.25  | 22.68  |
| Ready Mixed Concrete <sup>3</sup>               | \$/m <sup>3</sup> | 104.73 | 95.44  | 108.99 | 110.23 | 106.85 | 111.15 | 99.47  |

Source: Building and Construction Authority

<sup>1</sup> Between January 2009 and December 2014, the market prices of steel bars are based on fixed price supply contracts with contract period of 6 months or less.

With effect from January 2015, the market prices of steel bars are based on fixed price supply contracts with contract period of 1 year or less.

<sup>2</sup> The prices of granite and concreting sand exclude delivery charges to concrete batching plants.

<sup>3</sup> For 2009, market prices were based on non-fixed price contracts.
With effect from 2010, market prices are based on contracts with non-fixed price,

fixed price and market retail price for "Grade 40 Pump".

### 22.10

### PRICE INDEX OF HOUSING & DEVELOPMENT BOARD RESALE FLATS

(1st Quarter 2009 = 100) (End of Period)

|                    | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Resale Price Index | 109.0 | 124.4 | 137.7 | 146.7 | 145.8 | 137.0 | 134.8 |

Source: Housing & Development Board

Note: The index is based on quarterly average resale price by date of registration. The index prior to 4Q 2014 was computed using stratification method, while that from 4Q 2014 is computed using stratified hedonic regression method.

Indices prior to 4Q 2014 have been rescaled to the new base period at 1Q 2009.

22.11 PRIVATE PROPERTY PRICE INDEX BY TYPE OF PROPERTY (End of Period)

| Type of Property                 | 2009  | 2010  | 2011   | 2012           | 2013   | 2014  | 2015  |
|----------------------------------|-------|-------|--------|----------------|--------|-------|-------|
|                                  |       |       | (1st Ç | uarter 2009 =  | = 100) |       |       |
| Residential <sup>1</sup>         | 118.4 | 139.2 | 147.4  | 151.5          | 153.2  | 147.0 | 141.6 |
| Landed                           | 118.6 | 155.1 | 171.0  | 177.0          | 177.1  | 167.6 | 160.8 |
| Non-Landed                       | 118.4 | 135.0 | 141.2  | 144.8          | 147.6  | 142.5 | 137.4 |
|                                  |       |       |        |                |        |       |       |
| Commercial <sup>2</sup>          | _     |       |        |                |        |       |       |
| Office Space                     | 92.0  | 109.4 | 124.5  | 126.2          | 132.8  | 138.8 | 138.6 |
| Retail Space                     | na    | na    | 121.4  | 123.8          | 129.5  | 130.7 | 129.6 |
|                                  |       |       | (4th ( | Quarter 2012 : | = 100) |       |       |
| Industrial <sup>3</sup>          | 50.5  | 62.5  | 79.5   | 100.0          | 103.2  | 106.8 | 105.0 |
| Multiple-User Factory 4          | 51.1  | 63.2  | 80.3   | 100.0          | 103.2  | 107.7 | 105.9 |
| Single-User Factory <sup>5</sup> | na    | 74.6  | 87.8   | 100.0          | 97.8   | 99.0  | 97.2  |

Source: Urban Redevelopment Authority

JTC Corporation (With effect from 4Q 2013, for data pertaining to industrial properties)

Notes: 1 Data are computed using stratified hedonic regression method. The sum of values of transactions from Q1 2014 to Q1 2015 is used as weights to compute the index.

<sup>2</sup> The weights used to compute the index are updated every quarter from 4Q 1998.

<sup>3</sup> Prior to 4Q 2014, the price index was computed based on transactions of multiple-user factories in the Central region and island-wide multiple-user warehouses, with weights updated every quarter using past 12 quarters' transaction values. With effect from 4Q 2014, the price index is computed based on island-wide transactions of multiple-user factories and single-user factories. The weights used are fixed using 2012 transaction values. The price index is also re-scaled to 100 at 4Q 2012.

<sup>&</sup>lt;sup>4</sup> Prior to 4Q 2014, the price index was computed based on transactions of multiple-user factories in the Central region. With effect from 4Q 2014, the scope of the price index is expanded to include transactions outside the Central region. The weights used are fixed using 2012 transaction values. The price index is also re-scaled to 100 at 4Q 2012.

<sup>5</sup> The price index is computed using fixed weights based on 2009 transaction values prior to 1Q 2013. With effect from 1Q 2013, the weights used are fixed using 2012 transaction values.

## 22.12 PRICE INDICES OF NON-LANDED PRIVATE RESIDENTIAL PROPERTIES BY LOCALITY AND COMPLETION STATUS <sup>1</sup>

(1st Quarter 2009 = 100) (End of Period)

|                                     | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Core Central Region <sup>2</sup>    | 117.2 | 133.9 | 139.2 | 140.3 | 137.6 | 131.9 | 128.6 |
| Rest of Central Region <sup>3</sup> | 124.1 | 145.9 | 152.5 | 155.0 | 154.8 | 146.6 | 140.3 |
| Outside Central Region              | 120.5 | 138.6 | 149.2 | 158.9 | 169.3 | 165.6 | 159.4 |

Source: Urban Redevelopment Authority

Note: Map of Central Region and areas in Core Central Region are available in the Urban Redevelopment Authority's website

## 22.13 COMMERCIAL PROPERTY RENTAL INDEX BY TYPE OF PROPERTY (4th Quarter 1998 = 100)

(End of Period)

| Type of Property | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|------------------|-------|-------|-------|-------|-------|-------|-------|
| Office Space     |       |       |       |       |       |       |       |
| Central Region   | 141.6 | 159.4 | 172.8 | 170.5 | 172.8 | 189.8 | 177.4 |
| Central Area     | 145.5 | 163.6 | 176.8 | 173.7 | 176.9 | 196.2 | 183.8 |
| Fringe Area      | 117.8 | 131.5 | 142.7 | 143.1 | 143.9 | 154.4 | 144.8 |
| Retail Space     |       |       |       |       |       |       |       |
| Central Region   | na    | na    | 118.9 | 118.3 | 117.3 | 118.4 | 113.5 |
| Central Area     | na    | na    | 121.6 | 120.3 | 119.3 | 120.8 | 115.2 |
| Fringe Area      | na    | na    | 108.9 | 109.8 | 110.5 | 111.8 | 108.8 |
|                  |       |       |       |       |       |       |       |

Source: Urban Redevelopment Authority

Note: Data refer to properties owned by the private sector.

The weights used to compute the index are updated every quarter from 4th Quarter 1998.

<sup>1</sup> Data are computed using stratified hedonic regression method.

The sum of values of transactions from Q1 2014 to Q1 2015 is used as weights to compute the index.

<sup>2</sup> Refer to Postal Districts 9, 10, 11, Downtown Core and Sentosa.

<sup>3</sup> Refer to Central Region outside postal districts 9, 10, 11, Downtown Core and Sentosa.

## 23



# Education

Singapore's education system aims to nurture every child by enabling students to discover their talents, realise their full potential, and develop a passion for lifelong learning. Multiple educational pathways cater to students with different strengths, interests and learning styles, developing each child to his full potential.

Bilingualism is a key feature of Singapore's education system. While the main medium of instruction in school is English, all students learn an official Mother Tongue Language.

## **Primary Education**

At the primary level, students go through a six-year course designed to give them a strong foundation. This includes developing language and numeracy skills, building character and nurturing sound values and good habits.

At the end of Primary 6, students take the Primary School Leaving Examination (PSLE), which assesses their suitability for secondary education and places them in the appropriate secondary school course that matches their learning pace, ability and inclinations. Students can also seek admission to a secondary school based on their achievements and talents across a diverse range of areas (such as art and sports) through the Direct School Admission exercise.

#### **Secondary Education**

At the secondary level, students undergo one of three core courses designed to match their learning abilities and interests.

## • Express Course

This is a four-year course leading to the Singapore-Cambridge General Certificate of Education (GCE) O-Level exam. Students learn English and Mother Tongue Languages<sup>1</sup>, as well as Mathematics, the Sciences and the Humanities.

#### • Normal (Academic) (N(A)) Course

This is a four-year course leading to the GCE N(A)-Level exam. Students learn a range of subjects similar to those in the Express courses. Those who do well at the N(A)-Level will qualify for an additional year to prepare for the O-Level exam, or progress to Higher Nitec courses at the Institute of Technical Education (ITE). Selected students may sit for the O-Level exam in some subjects at Secondary 4, or bypass the N(A)-Level exam and progress directly to Secondary 5 to take the O-Level exam. Since 2013, students who do very well at the N-Level have two "through-train" pathways to the polytechnics: (i) a one-year Polytechnic Foundation Programme (PFP) and (ii) a two-year Direct-Entry-Scheme to Polytechnic Programme (DPP).

## • Normal (Technical) (N(T)) Course

This is a four-year course leading to the GCE N(T)-Level exam. In this course, students learn English and Mother Tongue Languages, Mathematics and subjects with technical or practical emphases. Schools also offer Elective Modules, which cover a wide range of subjects including nursing, hospitality, digital animation and precision engineering.

While students may be initially placed in a particular course, depending on their ability to cope with the learning pace and style, there are opportunities for lateral

<sup>&</sup>lt;sup>1</sup> Students can opt to study Mother Tongue Languages at either the standard, higher or Syllabus B levels depending on their ability and eligibility.

transfers mid-stream. Students in the N(A) and N(T) courses may also take more academically-challenging subjects at upper secondary levels if they perform well in them. This flexibility was extended to lower secondary levels in 12 prototype schools in 2014.

As part of a diverse secondary school landscape to suit the needs of every child, students may also enrol in the following schools:

## Specialised Schools

NorthLight School, Assumption Pathway School, Crest Secondary School and Spectra Secondary School offer customised programmes for students who are inclined towards hands-on and practical learning, leading to a combination of academic and vocational qualifications.

Specialised Independent Schools, NUS High School of Mathematics and Sciences, School of Science and Technology, School of the Arts and Singapore Sports School develop students in areas such as mathematics, sciences, the arts and sports at a higher level.

#### • Integrated Programme

Some schools offer a six-year programme that caters to academically-strong students who prefer a more independent and less structured learning style. Students in this programme proceed to pre-university education without sitting for the O-Level exam. Given the strong academic aptitude of its students, the programme also stretches the potential of its students in non-academic aspects by engaging them in broader learning experiences beyond the academics. Students sit for the pre-university examinations at the end of six years.

## **Post-Secondary Education**

After Secondary 4 or Secondary 5, students may proceed to one of the following post-secondary institutions.

## • Junior Colleges / Centralised Institute

Students may apply for pre-university education at the junior colleges (two-year course) or centralised institute (three-year course), leading to the GCE A-Level exam. Students are required to take at least one contrasting subject i.e. take at least one subject from Mathematics and the Sciences, and at least one subject from the Humanities and the Arts.

## Polytechnics

Students who prefer a more applied education can apply for diploma courses at one of the five polytechnics. The polytechnics offer a wide range of courses and prepare students for careers in fields such as engineering, applied sciences and biotechnology, infocommunications, health sciences, business studies, accountancy, social sciences, mass communications and digital media. Polytechnic graduates who wish to further their studies may also be considered for admission to the universities based their diploma qualifications.

## • Institute of Technical Education (ITE)

Students with O- or N-Level certificates can opt for full-time courses at ITE. These courses lead to the National ITE Certificate (*Nitec*) or the Higher National ITE Certificate (*Higher Nitec*). Apart from full-time institutional training, students can also acquire skills certification through traineeship programmes conducted jointly by companies and ITE. In collaboration with overseas institutions, ITE also offers Technical Engineering Diploma (TED) programmes in niche areas as another pathway for skills upgrading. ITE's programmes prepare

their graduates to embark on careers in the fields for which they were trained. Those who are interested in furthering their education may apply to the polytechnics with their *Nitec* or *Higher Nitec* qualifications if they meet the minimum entry requirements.

#### • Arts Institutions

Students interested in the creative arts may enrol in programmes offered by the LASALLE College of the Arts or the Nanyang Academy of Fine Arts (NAFA). These institutions offer a range of publicly-funded degree and diploma programmes in the visual and performing arts, such as music, theatre, dance, interior design and fashion design.

#### Universities

Today, there are six publicly-funded universities.

## • National University of Singapore (NUS)

NUS is a research-intensive university with 16 faculties and schools, including Yong Siew Conservatory Toh of Music. For undergraduates, the University Scholars an inter-disciplinary Programme offers academic experience, while the Yale-NUS College offers a four-year liberal arts programme. NUS offers graduate programmes in various graduate schools, namely NUS Graduate School for Integrative Sciences and Engineering, Lee Kuan Yew School of Public Policy, Saw Swee Hock School of Public Health and Duke-NUS Graduate Medical School Singapore. In addition, NUS has many collaborative university partners to enrich their undergraduates' educational experience and student life. The institution also offers dual degree or joint programmes, research opportunities and student exchange programmes.

## • Nanyang Technological University (NTU)

NTU is a research-intensive university, with engineering as one of its key strengths. It is organised into four Colleges, and hosts five autonomous entities: the Chinese Heritage Centre, Earth Observatory of Singapore, National Institute of Education (which conducts professional training for teachers), Rajaratnam School of International Singapore Studies and Centre Environmental Life Sciences Engineering. NTU's Lee Kong Chian School of Medicine was established in collaboration with Imperial College London and admitted its first batch of medical students in 2013. NTU collaborates with many overseas institutions to offer dual degree or joint programmes, research opportunities and student exchange programmes.

## • Singapore Management University (SMU)

SMU is styled after the Wharton School of the University of Pennsylvania and undergraduate and postgraduate business and social science programmes at its core in six schools. SMU is known for its interactive pedagogy of seminar-style teaching in small class sizes. In addition to single degree programmes with a second major, an SMU undergraduate can earn a double degree from any of the six schools. SMU hosts a wide range of research activities focusing on the social sciences, as well as houses research institutes such as the Behavioural Sciences Institute

## • Singapore University of Technology & Design (SUTD)

SUTD was established in collaboration with the Massachusetts Institute of Technology (MIT) and Zhejiang University (ZJU). It is a top-tier research-intensive university focusing on technology-intensive design education in engineering and architecture, and seeks to leverage on its partner universities' strong tradition of engineering excellence and entrepreneurial spirit. SUTD also houses an International Design Centre (IDC) that conducts research on technologically-intensive The SUTD-SMU Dual Degree Programme in Technology and Management allows students to pursue an engineering degree from SUTD and a business management degree from SMU concurrently.

## • Singapore Institute of Technology (SIT)

SIT offers degree programmes in partnership with reputable overseas universities in key economic growth sectors such as engineering & applied sciences, health sciences, design, interactive digital media, education and hospitality. SIT has a unique tripartite model with overseas university partners and the five local polytechnics in offering polytechnic graduates degree-upgrading opportunities. SIT also offers its own applied degrees in sustainable infrastructure engineering, information & communications technology, and accountancy.

## • SIM University (UniSIM)

UniSIM provides a flexible university education for working professionals and adult learners that enables them to balance their career, family and studies. It began offering full-time applied degree programmes in 2014. In 2015, it will start to offer full-time programmes in accountancy, marketing, finance and human resource management. The

university has been offering part-time degree programmes since 2006.

#### **Continuing Education and Training**

Adult learners can undergo Continuing Education and Training (CET) in post-secondary education institutions. CET programmes aim to address manpower and skills gaps, so as to support industry development and job creation, facilitate education and career transition via various pathways, and enable the workforce to stay employable amidst rapid shifts in the economic landscape.

ITE offers adult learners part-time Nitec, Higher Nitec, Master Nitec, Specialist Nitec and ITE Skills Certificate courses. They are offered in six-month-long modules, giving adult learners the flexibility to sign up for training based on their needs. Adult learners can also undergo on-the-job (OJT) training at companies that are Certified OJT Centres by ITE. Working adults also have access to courses conducted by Approved Training Centres off-the-job. ITE conducts skills evaluation tests for public candidates, as well as instructional skills and related programmes for industry trainers. For adult learners who wish to undertake academic upgrading at the secondary level, ITE offers MOE-subsidised lessons for Secondary One Normal to N- and O-Levels under its General Education Programme.

The polytechnics offer working adults academic CET programmes at diploma and post-diploma level, covering areas such as engineering, environmental technology, chemical processes, pharmaceuticals, electronics, construction, aerospace, marine & offshore, logistics, business, accounting & finance, security, infocomm technology & digital media, early childhood education, healthcare, sports, retail and tourism.

- Part-time diploma courses are designed to be modular and more compact than full-time courses, to provide flexible and accessible upgrading for adults with working experience.
- Post-diploma courses cater to working professionals who are diploma or degree holders. They are modular, shorter in duration than diploma courses, and designed mostly for parttime study. These include: Advanced Diploma courses that cater to adults seeking to broaden and deepen their skills and knowledge in the field they are trained or practising in; Specialist Diploma courses that cater to adults seeking to deepen their skills and knowledge in a specialised area of their field; and Diploma (Conversion) courses that cater to adults seeking training in a different discipline so as to facilitate career switches.

The universities offer academic CET through part-time degree courses at both undergraduate and post-graduate levels. *NUS* and *NTU* are the two autonomous universities offering such courses, specifically in engineering. The NUS courses lead to the award of the Bachelor of Technology, while the NTU courses lead to the award of the Bachelor of Engineering. Both universities also offer part-time postgraduate courses for degree holders. *UniSIM*, offers a range of more than 60 part-time undergraduate and postgraduate courses in arts and social sciences, business, human development & social services, and science & technology.

#### 23.1 ENROLMENT IN EDUCATIONAL INSTITUTIONS

| [This table will be upo                       | lated by Octol | per 2016.] |         |         |         |         | Number  |
|---|----------------|------------|---------|---------|---------|---------|---------|
|   | 2008           | 2009       | 2010    | 2011    | 2012    | 2013    | 2014    |
| Total   | 704,117        | 704,719    | 698,544 | 688,935 | 680,265 | 670,287 | 664,256 |
| Primary Schools                               | 279,272        | 272,254    | 263,906 | 258,293 | 252,735 | 244,045 | 241,683 |
| Secondary Schools                             | 217,081        | 217,230    | 214,388 | 207,974 | 202,520 | 197,165 | 190,107 |
| Junior Colleges <sup>1</sup>                  | 32,579         | 32,110     | 32,420  | 32,296  | 32,087  | 32,165  | 31,613  |
| Institute of Technical Education <sup>2</sup> | 24,367         | 24,846     | 24,789  | 25,279  | 25,370  | 26,288  | 28,036  |
| Polytechnics <sup>3</sup>                     | 76,756         | 80,635     | 83,542  | 84,988  | 86,016  | 87,785  | 87,636  |
| National Institute of Education <sup>4</sup>  | 5,034          | 4,934      | 4,965   | 4,452   | 4,429   | 3,793   | 3,853   |
| Universities <sup>5</sup>                     | 69,028         | 72,710     | 74,534  | 75,653  | 77,108  | 79,046  | 81,328  |

Source: Ministry of Education, Institute of Technical Education, Singapore Polytechnic, Ngee Ann Polytechnic,

Temasek Polytechnic, Nanyang Polytechnic, Republic Polytechnic, National Institute of Education,

National University of Singapore, Nanyang Technological University, Singapore Management University,  $Sing apore\ Institute\ of\ Technology,\ Sing apore\ University\ of\ Technology\ and\ Design\ and\ SIM\ University.$ 

Note: Data for primary and secondary schools, junior colleges and universities exclude private schools or institutions.

- 1 Includes Centralised Institute.
- Refers to full-time peak student enrolment.
- Refers to students in full-time and part-time polytechnic diploma and advanced diploma courses offered by Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic. Students enrolled in Polytechnic Foundation Programme which was introduced in 2013 are excluded.
- Refers to students in full-time and part-time diploma, postgraduate diploma and higher degree courses.
- Refers to full-time and part-time undergraduate and postgraduate students in National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore Institute of Technology (from 2010), Singapore University of Technology and Design (from 2011) and full-time undergraduates in SIM University (from 2014).

## 23.2 STUDENTS AND TEACHERS IN EDUCATIONAL INSTITUTIONS, 2014

[This table will be updated by October 2016.]

Number

|                                  | Institut- |         | Students |         |        | Teachers |         |
|----------------------------------|-----------|---------|----------|---------|--------|----------|---------|
|                                  | ions      | Total   | Males    | Females | Total  | Males    | Females |
| Total                            | 384       | 664,256 | 344,879  | 319,377 | 48,376 | 19,442   | 28,934  |
| Primary Schools                  | 185       | 234,499 | 120,620  | 113,879 | 14,343 | 2,687    | 11,656  |
| Secondary Schools                | 154       | 170,410 | 86,395   | 84,015  | 13,544 | 4,747    | 8,797   |
| Mixed Levels <sup>1</sup>        | 16        | 37,587  | 20,349   | 17,238  | 2,946  | 1,119    | 1,827   |
| Junior Colleges <sup>2</sup>     | 14        | 20,907  | 9,637    | 11,270  | 2,065  | 834      | 1,231   |
| Institute of Technical Education | 3         | 28,036  | 17,787   | 10,249  | 1,843  | 1,201    | 642     |
| Polytechnics <sup>3</sup>        | 5         | 87,636  | 46,419   | 41,217  | 5,832  | 3,307    | 2,525   |
| National Institute of Education  | 1         | 3,853   | 1,227    | 2,626   | 368    | 191      | 177     |
| Universities <sup>4</sup>        | 6         | 81,328  | 42,445   | 38,883  | 7,435  | 5,356    | 2,079   |

Source: Ministry of Education, Institute of Technical Education, Singapore Polytechnic, Ngee Ann Polytechnic,
Temasek Polytechnic, Nanyang Polytechnic, Republic Polytechnic, National Institute of Education,
National University of Singapore, Nanyang Technological University, Singapore Management University,
Singapore Institute of Technology, Singapore University of Technology and Design and SIM University.

Note: Data for primary and secondary schools, junior colleges and universities exclude private schools or institutions.

Except for the Institute of Technical Education, data for institutions of higher learning include part-time students and teachers.

- 1 Refers to institutions that offer multiple educational levels, namely: primary & secondary (P1-S4/5) and secondary & junior college (S1-JC2).
- 2 Includes Centralised Institute.
- 3 Refers to Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic. Data for students exclude those enrolled in Polytechnic Foundation Programme which was introduced in 2013.
- 4 Refers to National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore Institute of Technology, Singapore University of Technology and Design and SIM University. Data for students in SIM

23.3 ENROLMENT IN GOVERNMENT AND GOVERNMENT-AIDED PRIMARY SCHOOLS BY LEVEL AND AGE

[This table will be updated by October 2016.]

|                |         |         |         |         |         |         | Number  |
|----------------|---------|---------|---------|---------|---------|---------|---------|
|                | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |
| Total          | 279,272 | 272,254 | 263,906 | 258,293 | 252,735 | 244,045 | 241,683 |
| Level          |         |         |         |         |         |         |         |
| Primary 1      | 42,880  | 42,489  | 39,595  | 39,295  | 39,582  | 40,168  | 40,927  |
| Primary 2      | 47,994  | 42,765  | 42,405  | 39,492  | 39,258  | 39,407  | 40,179  |
| Primary 3      | 45,019  | 48,218  | 43,022  | 42,542  | 39,610  | 39,273  | 39,440  |
| Primary 4      | 44,926  | 45,200  | 48,418  | 43,165  | 42,652  | 39,510  | 39,252  |
| Primary 5      | 48,307  | 44,789  | 45,141  | 48,281  | 43,042  | 42,384  | 39,277  |
| Primary 6      | 50,146  | 48,793  | 45,325  | 45,518  | 48,591  | 43,303  | 42,608  |
| Age (in years) |         |         |         |         |         |         |         |
| Under 7        | 41,548  | 41,272  | 38,634  | 38,640  | 38,952  | 39,576  | 40,444  |
| 7 & Under 8    | 47,538  | 42,147  | 41,785  | 38,944  | 38,975  | 39,157  | 39,879  |
| 8 & Under 9    | 44,138  | 47,851  | 42,395  | 41,833  | 39,020  | 38,968  | 39,131  |
| 9 & Under 10   | 44,158  | 44,274  | 47,990  | 42,440  | 41,901  | 38,973  | 38,953  |
| 10 & Under 11  | 48,006  | 44,189  | 44,376  | 48,045  | 42,436  | 41,743  | 38,840  |
| 11 & Under 12  | 49,360  | 47,917  | 44,094  | 44,211  | 47,889  | 42,167  | 41,505  |
| 12 & Under 13  | 2,854   | 3,138   | 3,204   | 2,917   | 2,620   | 2,601   | 2,217   |
| 13 & Under 14  | 1,248   | 1,040   | 1,062   | 1,021   | 781     | 741     | 654     |
| 14 & Over      | 422     | 426     | 366     | 242     | 161     | 119     | 60      |

Source: Ministry of Education

23.4 ENROLMENT IN GOVERNMENT, GOVERNMENT-AIDED, INDEPENDENT, SPECIALISED INDEPENDENT AND SPECIALISED SECONDARY SCHOOLS AND JUNIOR COLLEGES BY LEVEL AND AGE

| [This table will be updated by October 2016.] |         |         |         |         |         |         |         |  |  |
|---|---------|---------|---------|---------|---------|---------|---------|--|--|
|   | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |  |  |
| Total   | 249,660 | 249,340 | 246,808 | 240,270 | 234,607 | 229,330 | 221,720 |  |  |
| Level   |         |         |         |         |         |         |         |  |  |
| Secondary 1                                   | 50,214  | 50,083  | 48,670  | 45,213  | 45,198  | 48,094  | 42,969  |  |  |
| Special                                       | na      |  |  |
| Express                                       | 30,873  | 30,808  | 29,785  | 27,732  | 27,293  | 28,870  | 27,490  |  |  |
| Normal (Academic)                             | 12,811  | 12,489  | 12,394  | 11,436  | 11,848  | 12,747  | 9,873   |  |  |
| Normal (Technical)                            | 6,530   | 6,786   | 6,491   | 6,045   | 6,057   | 6,477   | 5,60    |  |  |
| Secondary 2                                   | 51,830  | 51,043  | 50,935  | 49,356  | 45,705  | 45,548  | 48,32   |  |  |
| Special                                       | 4,156   | na      | na      | na      | na      | na      | na      |  |  |
| Express                                       | 27,781  | 31,159  | 31,296  | 30,226  | 28,038  | 27,671  | 29,24   |  |  |
| Normal (Academic)                             | 12,879  | 13,445  | 12,978  | 12,882  | 11,825  | 12,132  | 12,97   |  |  |
| Normal (Technical)                            | 7,014   | 6,439   | 6,661   | 6,248   | 5,842   | 5,745   | 6,11    |  |  |
| Secondary 3                                   | 54,557  | 54,440  | 53,178  | 52,961  | 50,795  | 46,715  | 46,71   |  |  |
| Special                                       | 4,751   | 4,626   | na      | na      | na      | na      | na      |  |  |
| Express                                       | 28,456  | 28,959  | 32,933  | 32,869  | 31,387  | 28,897  | 28,61   |  |  |
| Normal (Academic)                             | 14,481  | 13,932  | 14,048  | 13,579  | 13,324  | 12,144  | 12,44   |  |  |
| Normal (Technical)                            | 6,869   | 6,923   | 6,197   | 6,513   | 6,084   | 5,674   | 5,64    |  |  |
| Secondary 4                                   | 50,919  | 52,186  | 52,073  | 51,263  | 51,325  | 49,190  | 45,18   |  |  |
| Special                                       | 4,629   | 4,535   | 4,053   | na      | na      | na      | na      |  |  |
| Express                                       | 26,648  | 27,488  | 28,356  | 31,984  | 32,011  | 30,585  | 28,29   |  |  |
| Normal (Academic)                             | 13,333  | 13,479  | 13,003  | 13,307  | 13,084  | 12,776  | 11,44   |  |  |
| Normal (Technical)                            | 6,309   | 6,684   | 6,661   | 5,972   | 6,230   | 5,829   | 5,44    |  |  |
| Secondary 5 Normal (Academic)                 | 9,561   | 9,478   | 9,532   | 9,181   | 9,497   | 7,618   | 6,91    |  |  |
| Junior College 1 / Pre-U 1                    | 16,836  | 16,739  | 16,898  | 16,746  | 16,727  | 16,890  | 15,93   |  |  |
| Junior College 2 / Pre-U 2                    | 15,423  | 15,014  | 15,165  | 15,203  | 15,023  | 14,973  | 15,38   |  |  |
| Pre-U 3                                       | 320     | 357     | 357     | 347     | 337     | 302     | 29      |  |  |
| Age (in years)                                |         |         |         |         |         |         |         |  |  |
| Under 12                                      | 9       | 13      | 8       | 8       | 4       | 2       |         |  |  |
| 12 & Under 13                                 | 46,657  | 46,363  | 45,011  | 41,321  | 41,635  | 45,170  | 39,91   |  |  |
| 13 & Under 14                                 | 49,432  | 48,673  | 48,563  | 47,236  | 43,466  | 43,450  | 47,05   |  |  |
| 14 & Under 15                                 | 50,632  | 50,686  | 49,740  | 49,819  | 48,216  | 44,159  | 44,16   |  |  |
| 15 & Under 16                                 | 50,923  | 51,816  | 51,604  | 50,726  | 50,415  | 48,542  | 44,42   |  |  |
| 16 & Under 17                                 | 28,284  | 28,949  | 28,836  | 28,274  | 28,366  | 26,209  | 24,83   |  |  |
| 17 & Under 18                                 | 18,938  | 17,557  | 17,916  | 17,915  | 17,658  | 17,220  | 16,77   |  |  |
| 18 & Under 19                                 | 3,676   | 4,027   | 3,787   | 3,772   | 3,704   | 3,598   | 3,57    |  |  |
| 19 & Under 20                                 | 966     | 1,070   | 1,119   | 998     | 947     | 855     | 83      |  |  |
| 20 & Over                                     | 143     | 186     | 224     | 201     | 196     | 125     | 14      |  |  |

Source: Ministry of Education

Note: The Special and Express streams were merged, starting from Secondary 1, 2008. Normal (Technical) includes students on ITE Skill Certificate (ISC) Courses.

23.5 ENROLMENT IN POLYTECHNIC DIPLOMA COURSES BY TYPE OF COURSE [This table will be updated by October 2016.]

|  |        |        |        |        | _      |        | Number |
|--|--------|--------|--------|--------|--------|--------|--------|
| Type of Course                         | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
| MALES                                  | 40,583 | 42,030 | 42,960 | 43,427 | 44,092 | 45,299 | 44,893 |
| Education                              | 18     | 29     | 36     | 50     | 54     | 79     | 69     |
| Applied Arts <sup>1</sup>              | 1,831  | 2,093  | 2,387  | 2,503  | 2,637  | 2,546  | 2,685  |
| Humanities & Social Sciences           | 340    | 469    | 625    | 843    | 966    | 1,053  | 1,092  |
| Mass Communication &                   |        |        |        |        |        |        |        |
| Information Science                    | 485    | 526    | 516    | 523    | 513    | 522    | 519    |
| Business & Administration <sup>2</sup> | 5,672  | 6,471  | 6,931  | 6,822  | 6,906  | 7,440  | 7,414  |
| Legal Studies                          | 137    | 133    | 156    | 176    | 211    | 221    | 223    |
| Science & Related Technologies         | 1,504  | 1,535  | 1,605  | 1,774  | 1,764  | 1,818  | 1,852  |
| Health Sciences                        | 1,433  | 1,645  | 1,869  | 1,868  | 1,880  | 1,812  | 1,830  |
| Information Technology                 | 7,054  | 6,932  | 6,758  | 6,880  | 7,048  | 7,263  | 7,085  |
| Architecture & Building <sup>3</sup>   | 792    | 828    | 951    | 817    | 903    | 986    | 1,010  |
| Engineering Sciences                   | 20,670 | 20,706 | 20,486 | 20,450 | 20,252 | 20,426 | 19,405 |
| Services <sup>4</sup>                  | 647    | 663    | 640    | 721    | 958    | 1,133  | 1,709  |
| EMALES                                 | 34,179 | 36,424 | 37,940 | 38,508 | 38,773 | 39,541 | 39,407 |
| Education                              | 529    | 600    | 737    | 815    | 886    | 966    | 960    |
| Applied Arts <sup>1</sup>              | 2,386  | 2,716  | 3,054  | 3,104  | 3,346  | 3,389  | 3,448  |
| Humanities & Social Sciences           | 572    | 743    | 850    | 1,109  | 1,248  | 1,284  | 1,307  |
| Mass Communication &                   |        |        |        |        |        |        |        |
| Information Science                    | 1,036  | 1,131  | 1,215  | 1,283  | 1,182  | 1,328  | 1,413  |
| Business & Administration <sup>2</sup> | 9,465  | 10,468 | 11,055 | 11,007 | 11,139 | 11,881 | 12,267 |
| Legal Studies                          | 233    | 238    | 245    | 276    | 340    | 331    | 312    |
| Science & Related Technologies         | 2,207  | 2,397  | 2,647  | 2,846  | 2,971  | 2,990  | 3,046  |
| Health Sciences                        | 5,087  | 5,549  | 5,860  | 5,879  | 5,621  | 5,468  | 5,219  |
| Information Technology                 | 5,024  | 5,100  | 5,002  | 4,963  | 4,823  | 4,541  | 4,226  |
| Architecture & Building <sup>3</sup>   | 982    | 991    | 1,067  | 1,063  | 1,185  | 1,310  | 1,329  |
| Engineering Sciences                   | 6,341  | 6,139  | 5,846  | 5,722  | 5,472  | 5,385  | 4,920  |
| Services <sup>4</sup>                  | 317    | 352    | 362    | 441    | 560    | 668    | 960    |

Source : Singapore Polytechnic Temasek Polytechnic Republic Polytechnic

Ngee Ann Polytechnic Nanyang Polytechnic Ministry of Education (from 2011)

 $Note:\ Prior\ to\ 2010,\ data\ are\ classified\ according\ to\ the\ Singapore\ Standard\ Educational\ Classification\ (SSEC)\ 2000.$ 

With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time polytechnic diploma courses.

Data include students who are concurrently enrolled in advanced diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation, Nautical Studies and Police Studies.

23.6 ENROLMENT IN UNIVERSITY FIRST DEGREE COURSES BY TYPE OF COURSE [This table will be updated by October 2016.]

| Type of Course                       | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>IALES</b>                         | 26,063 | 27,532 | 28,375 | 29,285 | 29,914 | 30,816 | 31,800 |
| Education                            | 301    | 406    | 465    | 468    | 420    | 317    | 258    |
| Applied Arts <sup>1</sup>            | 342    | 408    | 469    | 575    | 655    | 840    | 641    |
| Humanities & Social Sciences         | 2,701  | 2,993  | 3,121  | 3,242  | 3,327  | 3,547  | 3,750  |
| Mass Communication                   | 145    | 176    | 185    | 183    | 184    | 173    | 174    |
| Accountancy                          | 1,229  | 1,323  | 1,321  | 1,627  | 1,685  | 1,768  | 1,91   |
| Business & Administration            | 2,425  | 2,529  | 2,688  | 2,543  | 2,705  | 2,782  | 2,98   |
| Law                                  | 494    | 610    | 640    | 706    | 757    | 755    | 79     |
| Natural, Physical &                  |        |        |        |        |        |        |        |
| Mathematical Sciences                | 2,592  | 2,917  | 3,159  | 3,340  | 3,244  | 3,140  | 3,22   |
| Medicine                             | 670    | 682    | 685    | 681    | 695    | 725    | 78     |
| Dentistry                            | 70     | 77     | 76     | 79     | 81     | 83     | 8      |
| Health Sciences                      | 176    | 242    | 281    | 319    | 338    | 384    | 42     |
| Information Technology               | 1,775  | 1,966  | 2,178  | 2,341  | 2,442  | 2,519  | 2,80   |
| Architecture & Building <sup>2</sup> | 600    | 639    | 669    | 694    | 710    | 760    | 77     |
| Engineering Sciences                 | 12,447 | 12,461 | 12,326 | 12,289 | 12,437 | 12,671 | 12,89  |
| Services <sup>3</sup>                | 96     | 103    | 112    | 198    | 234    | 352    | 28     |
| EMALES                               | 26,535 | 27,826 | 28,742 | 28,951 | 29,968 | 30,874 | 32,06  |
| Education                            | 1,174  | 1,329  | 1,376  | 1,369  | 1,190  | 1,021  | 84     |
| Applied Arts <sup>1</sup>            | 503    | 549    | 607    | 625    | 749    | 875    | 93     |
| Humanities & Social Sciences         | 6,058  | 6,463  | 6,573  | 6,447  | 6,760  | 7,095  | 7,53   |
| Mass Communication                   | 543    | 516    | 490    | 490    | 494    | 529    | 55     |
| Accountancy                          | 1,910  | 1,871  | 1,882  | 2,244  | 2,316  | 2,274  | 2,45   |
| Business & Administration            | 3,423  | 3,457  | 3,738  | 3,237  | 3,368  | 3,406  | 3,59   |
| Law                                  | 649    | 711    | 783    | 742    | 717    | 736    | 71     |
| Natural, Physical &                  |        |        |        |        |        |        |        |
| Mathematical Sciences                | 4,227  | 4,457  | 4,481  | 4,482  | 4,588  | 4,713  | 4,92   |
| Medicine                             | 567    | 596    | 620    | 647    | 679    | 744    | 80     |
| Dentistry                            | 93     | 103    | 108    | 111    | 120    | 124    | 13     |
| Health Sciences                      | 711    | 800    | 783    | 820    | 902    | 1,025  | 1,07   |
| Information Technology               | 804    | 920    | 1,029  | 1,164  | 1,219  | 1,305  | 1,34   |
| Architecture & Building <sup>2</sup> | 973    | 1,032  | 1,117  | 1,163  | 1,119  | 1,123  | 1,21   |
| Engineering Sciences                 | 4,743  | 4,862  | 4,968  | 5,032  | 5,202  | 5,377  | 5,54   |
| Services <sup>3</sup>                | 157    | 160    | 187    | 378    | 545    | 527    | 39     |

Source: National University of Singapore

Nanyang Technological University Singapore Management University Ministry of Education (from 2011) Singapore Institute of Technology (from 2010)

Singapore University of Technology and Design (from 2012)

SIM University (from 2014)

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time first degree courses.

- 1 Includes Industrial Design.
- 2 Includes Real Estate.
- 3 Includes Maritime Studies.

23.7 GRADUATES FROM POLYTECHNIC DIPLOMA COURSES BY TYPE OF COURSE [This table will be updated by October 2016.]

|  |        |        |        |        |        |        | Number |
|--|--------|--------|--------|--------|--------|--------|--------|
| Type of Course                         | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
| MALES                                  | 10,659 | 11,375 | 11,595 | 12,455 | 12,819 | 13,213 | 13,602 |
| Education                              | 9      | 4      | 7      | 5      | 16     | 12     | 21     |
| Applied Arts <sup>1</sup>              | 382    | 428    | 489    | 573    | 704    | 783    | 725    |
| Humanities & Social Sciences           | 8      | 57     | 92     | 151    | 188    | 258    | 315    |
| Mass Communication &                   |        |        |        |        |        |        |        |
| Information Science                    | 117    | 132    | 156    | 163    | 201    | 175    | 162    |
| Business & Administration <sup>2</sup> | 1,108  | 1,446  | 1,662  | 2,080  | 2,098  | 2,118  | 2,306  |
| Legal Studies                          | 43     | 47     | 35     | 46     | 43     | 66     | 62     |
| Science & Related Technologies         | 409    | 452    | 407    | 446    | 546    | 547    | 555    |
| Health Sciences                        | 408    | 370    | 380    | 514    | 576    | 612    | 594    |
| Information Technology                 | 2,050  | 2,078  | 2,075  | 2,163  | 2,096  | 2,062  | 2,133  |
| Architecture & Building <sup>3</sup>   | 175    | 233    | 221    | 268    | 241    | 277    | 272    |
| Engineering Sciences                   | 5,728  | 5,908  | 5,826  | 5,816  | 5,870  | 5,938  | 5,990  |
| Services <sup>4</sup>                  | 222    | 220    | 245    | 230    | 240    | 365    | 467    |
| EMALES                                 | 9,682  | 9,784  | 10,619 | 11,314 | 12,011 | 12,189 | 12,354 |
| Education                              | 175    | 173    | 167    | 200    | 202    | 302    | 273    |
| Applied Arts <sup>1</sup>              | 582    | 576    | 703    | 770    | 855    | 963    | 995    |
| Humanities & Social Sciences           | 67     | 96     | 183    | 278    | 289    | 369    | 388    |
| Mass Communication &                   |        |        |        |        |        |        |        |
| Information Science                    | 318    | 303    | 325    | 348    | 452    | 463    | 393    |
| Business & Administration <sup>2</sup> | 2,341  | 2,597  | 3,034  | 3,364  | 3,462  | 3,490  | 3,598  |
| Legal Studies                          | 78     | 67     | 90     | 68     | 90     | 126    | 87     |
| Science & Related Technologies         | 568    | 592    | 663    | 732    | 845    | 922    | 931    |
| Health Sciences                        | 1,432  | 1,447  | 1,619  | 1,678  | 1,971  | 1,868  | 1,843  |
| Information Technology                 | 1,720  | 1,525  | 1,493  | 1,610  | 1,589  | 1,513  | 1,488  |
| Architecture & Building <sup>3</sup>   | 293    | 308    | 318    | 297    | 271    | 353    | 435    |
| Engineering Sciences                   | 2,035  | 2,008  | 1,917  | 1,861  | 1,856  | 1,672  | 1,656  |
| Services <sup>4</sup>                  | 73     | 92     | 107    | 108    | 129    | 148    | 267    |

Source: Singapore Polytechnic Temasek Polytechnic Republic Polytechnic

Ngee Ann Polytechnic Nanyang Polytechnic Ministry of Education (from 2011)

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000.

With effect from 2010, data are classified according to SSEC 2010. Covers full-time and part-time polytechnic diploma courses.

Data refer to academic year.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation, Nautical Studies and Police Studies.

GRADUATES FROM UNIVERSITY FIRST DEGREE COURSES BY TYPE OF COURSE [This table will be updated by October 2016.]

|                                      |       |       |       | I     |       |       | Number |
|--------------------------------------|-------|-------|-------|-------|-------|-------|--------|
| Type of Course                       | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014   |
| MALES                                | 5,736 | 6,004 | 6,496 | 6,428 | 6,736 | 7,785 | 7,756  |
| Education                            | 53    | 67    | 67    | 103   | 116   | 167   | 124    |
| Applied Arts <sup>1</sup>            | 31    | 47    | 84    | 84    | 102   | 172   | 165    |
| Humanities & Social Sciences         | 478   | 547   | 703   | 708   | 737   | 818   | 803    |
| Mass Communication                   | 32    | 36    | 30    | 41    | 37    | 62    | 44     |
| Accountancy                          | 295   | 346   | 380   | 332   | 447   | 399   | 473    |
| Business & Administration            | 505   | 630   | 674   | 633   | 572   | 693   | 631    |
| Law                                  | 94    | 92    | 139   | 121   | 140   | 189   | 180    |
| Natural, Physical &                  |       |       |       |       |       |       |        |
| Mathematical Sciences                | 469   | 574   | 568   | 619   | 837   | 870   | 786    |
| Medicine                             | 131   | 122   | 134   | 136   | 129   | 134   | 134    |
| Dentistry                            | 18    | 12    | 16    | 16    | 21    | 21    | 15     |
| Health Sciences                      | 10    | 22    | 39    | 42    | 61    | 95    | 124    |
| Information Technology               | 308   | 370   | 419   | 388   | 484   | 542   | 708    |
| Architecture & Building <sup>2</sup> | 148   | 135   | 97    | 121   | 155   | 143   | 146    |
| Engineering Sciences                 | 3,150 | 2,991 | 3,117 | 3,060 | 2,870 | 3,346 | 3,288  |
| Services <sup>3</sup>                | 14    | 13    | 29    | 24    | 28    | 134   | 135    |
| TEMALES                              | 6,036 | 6,254 | 6,300 | 7,281 | 7,114 | 8,170 | 7,620  |
| Education                            | 172   | 281   | 262   | 303   | 526   | 422   | 401    |
| Applied Arts <sup>1</sup>            | 50    | 88    | 121   | 132   | 139   | 164   | 229    |
| Humanities & Social Sciences         | 1,203 | 1,423 | 1,474 | 1,772 | 1,494 | 1,766 | 1,619  |
| Mass Communication                   | 132   | 128   | 147   | 133   | 133   | 100   | 114    |
| Accountancy                          | 536   | 596   | 554   | 507   | 589   | 688   | 649    |
| Business & Administration            | 960   | 857   | 859   | 944   | 825   | 897   | 846    |
| Law                                  | 115   | 118   | 90    | 208   | 207   | 179   | 176    |
| Natural, Physical &                  |       |       |       |       |       |       |        |
| Mathematical Sciences                | 796   | 946   | 1,091 | 1,217 | 1,074 | 1,257 | 1,103  |
| Medicine                             | 96    | 97    | 94    | 119   | 123   | 124   | 127    |
| Dentistry                            | 17    | 19    | 25    | 26    | 21    | 27    | 30     |
| Health Sciences                      | 77    | 107   | 196   | 213   | 218   | 296   | 309    |
| Information Technology               | 210   | 162   | 154   | 195   | 280   | 250   | 289    |
| Architecture & Building <sup>2</sup> | 243   | 179   | 178   | 247   | 241   | 258   | 258    |
| Engineering Sciences                 | 1,386 | 1,217 | 1,020 | 1,215 | 1,210 | 1,344 | 1,251  |
| Services <sup>3</sup>                | 43    | 36    | 35    | 50    | 34    | 398   | 219    |

Source : National University of Singapore Nanyang Technological University Singapore Management University
Singapore Institute of Technology (from 2012)

Ministry of Education (from 20

 $Note: Prior \ to \ 2010, \ data \ are \ classified \ according \ to \ the \ Singapore \ Standard \ Educational \ Classification \ (SSEC) \ 2000.$  With effect from 2010, \ data \ are \ classified \ according \ to \ SSEC \ 2010.

Covers full-time and part-time first degree courses.

Data refer to academic year.

- 1 Includes Industrial Design.
- 2 Includes Real Estate.
- 3 Includes Maritime Studies.

## 23.9 ENROLMENT IN POLYTECHNIC ADVANCED DIPLOMA COURSES BY TYPE OF COURSE

| [This table wil                        | l be updated l | y October 2 | 016.] |       |       |       | Number |
|--|----------------|-------------|-------|-------|-------|-------|--------|
| Type of Course                         | 2008           | 2009        | 2010  | 2011  | 2012  | 2013  | 2014   |
| Total                                  | 2,044          | 2,242       | 2,642 | 3,053 | 3,151 | 2,945 | 3,336  |
| Education                              | 114            | 177         | 82    | 186   | 239   | 376   | 281    |
| Applied Arts <sup>1</sup>              | 34             | 38          | 92    | 51    | 78    | 22    | 48     |
| Humanities & Social Sciences           | 57             | 57          | 105   | 94    | 128   | 105   | 121    |
| Business & Administration <sup>2</sup> | 468            | 525         | 633   | 521   | 533   | 472   | 491    |
| Science & Related Technologies         | 137            | 151         | 202   | 180   | 148   | 118   | 197    |
| Health Sciences                        | 535            | 565         | 646   | 1,133 | 1,203 | 1,120 | 1,120  |
| Information Technology                 | 171            | 206         | 302   | 313   | 288   | 415   | 572    |
| Architecture & Building <sup>3</sup>   | 22             | 45          | 36    | 35    | 42    | 37    | 62     |
| Engineering Sciences                   | 449            | 424         | 492   | 482   | 427   | 222   | 439    |
| Services <sup>4</sup>                  | 57             | 54          | 52    | 58    | 65    | 58    | 5      |

Source : Singapore Polytechnic Temasek Polytechnic Republic Polytechnic Nanyang Polytechnic

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

Includes students who are concurrently enrolled in diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation and Police Studies.

## 23.10 ENROLMENT IN HIGHER DEGREE COURSES BY TYPE OF COURSE <sup>1</sup>

| [This table wi                         | ll be updated l | by October 2 | 016.]  |        |        |        | Number |
|--|-----------------|--------------|--------|--------|--------|--------|--------|
| Type of Course                         | 2008            | 2009         | 2010   | 2011   | 2012   | 2013   | 2014   |
| Total                                  | 18,719          | 19,483       | 19,566 | 19,289 | 19,040 | 19,137 | 19,198 |
| Education                              | 1,620           | 1,520        | 1,549  | 1,351  | 1,266  | 1,273  | 1,229  |
| Humanities & Social Sciences           | 1,876           | 2,017        | 1,977  | 1,869  | 1,957  | 2,085  | 2,133  |
| Mass Communication                     | 434             | 392          | 380    | 358    | 381    | 348    | 364    |
| Business & Administration <sup>2</sup> | 2,805           | 2,826        | 2,808  | 2,809  | 2,746  | 2,997  | 3,014  |
| Law                                    | 341             | 239          | 244    | 299    | 305    | 289    | 275    |
| Natural, Physical &                    |                 |              |        |        |        |        |        |
| Mathematical Sciences                  | 2,145           | 2,490        | 2,741  | 2,793  | 2,764  | 2,398  | 2,317  |
| Health Sciences <sup>3</sup>           | 1,156           | 1,141        | 1,199  | 1,493  | 1,447  | 1,495  | 1,562  |
| Information Technology                 | 1,499           | 1,585        | 1,537  | 1,380  | 1,273  | 1,384  | 1,626  |
| Architecture & Building 4              | 500             | 545          | 581    | 588    | 590    | 489    | 466    |
| Engineering Sciences                   | 6,106           | 6,492        | 6,354  | 6,151  | 6,119  | 6,229  | 6,059  |
| Services                               | 204             | 212          | 190    | 191    | 179    | 105    | 104    |
| Others                                 | 33              | 24           | 6      | 7      | 13     | 12     | 27     |

Source : National University of Singapore Singapore Management University Singapore University of Technology Nanyang Technological University National Institute of Education and Design (from 2011)

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore, Nanyang Technological University, Singapore Management University and Singapore University of Technology and Design, and higher degree courses offered by National Institute of Education.

- 1 With effect from 2013, there are courses whose main field of study is not elsewhere classifiable.
- 2 Includes Accountancy.
- 3 Includes Medicine, Dentistry, Pharmacy and Nursing.
- 4 Includes Real Estate.

23.11 GRADUATES FROM POLYTECHNIC ADVANCED DIPLOMA COURSES BY TYPE OF COURSE

| [This table                            | will be updated l | by October 2 | 016.] |       |       |       | Number |
|--|-------------------|--------------|-------|-------|-------|-------|--------|
| Type of Course                         | 2008              | 2009         | 2010  | 2011  | 2012  | 2013  | 2014   |
| Total                                  | 1,152             | 1,765        | 1,766 | 2,258 | 2,063 | 2,012 | 1,610  |
| Education                              | 17                | 103          | 140   | 177   | 152   | 215   | 123    |
| Applied Arts <sup>1</sup>              | 15                | 17           | 19    | 51    | 43    | 16    | 12     |
| Humanities & Social Sciences           | 2                 | 25           | 24    | 60    | 66    | 56    | 50     |
| Business & Administration <sup>2</sup> | 285               | 317          | 436   | 389   | 427   | 251   | 209    |
| Science & Related Technologies         | 65                | 86           | 86    | 170   | 147   | 81    | 63     |
| Health Sciences                        | 250               | 521          | 509   | 631   | 653   | 773   | 640    |
| Information Technology                 | 133               | 241          | 224   | 281   | 141   | 158   | 245    |
| Architecture & Building <sup>3</sup>   | -                 | 17           | 3     | 30    | 28    | 41    | 38     |
| Engineering Sciences                   | 360               | 383          | 273   | 419   | 353   | 370   | 225    |
| Services <sup>4</sup>                  | 25                | 55           | 52    | 50    | 53    | 51    | 5      |
|  |                   |              |       |       |       |       |        |

Source : Singapore Polytechnic Temasek Polytechnic Republic Polytechnic Ngee Ann Polytechnic Nanyang Polytechnic

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

- 1 Includes Digital Media Design and Media Production.
- 2 Includes Accountancy.
- 3 Includes Real Estate.
- 4 Includes Maritime Transportation and Police Studies.

23.12 GRADUATES FROM HIGHER DEGREE COURSES BY TYPE OF COURSE 1

| [This table w                          | ill be updated b | y October 20 | 016.] |       |       |       | Number |
|--|------------------|--------------|-------|-------|-------|-------|--------|
| Type of Course                         | 2008             | 2009         | 2010  | 2011  | 2012  | 2013  | 2014   |
| Total                                  | 5,935            | 6,371        | 6,794 | 6,977 | 7,186 | 7,514 | 7,824  |
| Education                              | 276              | 423          | 543   | 561   | 459   | 561   | 531    |
| Humanities & Social Sciences           | 546              | 604          | 677   | 731   | 732   | 739   | 855    |
| Mass Communication                     | 175              | 204          | 182   | 189   | 196   | 210   | 193    |
| Business & Administration <sup>2</sup> | 1,216            | 1,313        | 1,426 | 1,452 | 1,518 | 1,561 | 1,738  |
| Law                                    | 238              | 287          | 168   | 168   | 207   | 189   | 173    |
| Natural, Physical &                    |                  |              |       |       |       |       |        |
| Mathematical Sciences                  | 337              | 366          | 383   | 484   | 567   | 558   | 629    |
| Health Sciences <sup>3</sup>           | 477              | 364          | 508   | 469   | 633   | 732   | 730    |
| Information Technology                 | 435              | 608          | 694   | 706   | 580   | 613   | 682    |
| Architecture & Building <sup>4</sup>   | 292              | 267          | 263   | 307   | 306   | 252   | 266    |
| Engineering Sciences                   | 1,797            | 1,821        | 1,836 | 1,797 | 1,896 | 1,989 | 1,947  |
| Services                               | 116              | 92           | 107   | 106   | 92    | 83    | 66     |
| Others                                 | 30               | 22           | 7     | 7     | -     | 3     | 4      |

Source: National University of Singapore Singapore Management University Singapore University of Technology
Nanyang Technological University National Institute of Education and Design (from 2013)

Note: Prior to 2010, data are classified according to the Singapore Standard Educational Classification (SSEC) 2000. With effect from 2010, data are classified according to SSEC 2010.

Covers full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore,

Nanyang Technological University, Singapore Management University and Singapore University of Technology and Design, and higher degree courses offered by National Institute of Education.

- 1 With effect from 2013, there are courses whose main field of study is not elsewhere classifiable.
- 2 Includes Accountancy.
- 3 Includes Medicine, Dentistry, Pharmacy and Nursing.
- 4 Includes Real Estate.

## 23.13 INTAKE OF STUDENTS/TRAINEES UNDER THE FULL-TIME INSTITUTIONAL TRAINING AND TRAINEESHIP PROGRAMMES AND STUDENTS/TRAINEES WHO COMPLETED THE PROGRAMMES, 2014

[This table will be updated by October 2016.]

Number

| Type of Training/Level                         | Intake | of Students/T | rainees | Students/Trainees who Completed the Programmes <sup>1</sup> |       |         |
|--|--------|---------------|---------|---|-------|---------|
| Type of Training/Level                         | Total  | Males         | Females | Total   | Males | Females |
| Total  | 15,074 | 9,298         | 5,776   | 11,398  | 7,387 | 4,011   |
| Engineering                                    |        |               |         |   |       |         |
| Diploma  | 59     | 55            | 4       | 46  | 42    | 4       |
| Higher National ITE Certificate (Higher Nitec) | 2,431  | 1,923         | 508     | 1,820   | 1,491 | 329     |
| National ITE Certificate (Nitec)               | 4,932  | 3,973         | 959     | 4,019   | 3,354 | 665     |
| Info-Communications Technology                 |        |               |         |   |       |         |
| Higher National ITE Certificate (Higher Nitec) | 838    | 563           | 275     | 523   | 361   | 162     |
| National ITE Certificate (Nitec)               | 1,217  | 811           | 406     | 1,129   | 738   | 391     |
| Business & Services                            |        |               |         |   |       |         |
| Diploma  | 20     | 12            | 8       | 15  | 8     | 7       |
| Higher National ITE Certificate (Higher Nitec) | 2,344  | 849           | 1,495   | 2,017   | 767   | 1,250   |
| National ITE Certificate (Nitec)               | 3,233  | 1,112         | 2,121   | 1,829   | 626   | 1,203   |

Source: Institute of Technical Education

Note: The Full-time Institutional Training and Traineeship Programmes are offered to school leavers with GCE 'O' and 'N' level qualifications.

<sup>1</sup> Refers to the number of students/trainees who graduated from Full-Time Institutional Training and Traineeship Programmes.

23.14 TRAINING PLACES TAKEN UP UNDER THE SKILLS TRAINING AND CONTINUING ACADEMIC EDUCATION PROGRAMMES AND PERSONS WHO COMPLETED THE PROGRAMMES, 2014

[This table will be updated by October 2016.]

Number

| Type of Training/Level                             | Traini | ing Places Tal | ken Up  | Persons who Completed the Programmes <sup>1</sup> |       |         |
|--|--------|----------------|---------|---|-------|---------|
|  | Total  | Males          | Females | Total   | Males | Females |
| Total  | 12,079 | 8,288          | 3,791   | 5,211   | 3,795 | 1,416   |
| Skills Training Programme <sup>2</sup> Engineering |        |                |         |   |       |         |
| Higher National ITE Certificate (Higher Nitec)     | 1,548  | 1,418          | 130     | 195   | 181   | 14      |
| National ITE Certificate (Nitec)                   | 2,675  | 2,448          | 227     | 571   | 489   | 82      |
| ITE Skills Certificate (ISC)                       | 2,693  | 2,607          | 86      | 2,526   | 2,446 | 80      |
| Info-Communications Technology                     |        |                |         |   |       |         |
| Higher National ITE Certificate (Higher Nitec)     | 121    | 103            | 18      | 24  | 20    | 4       |
| National ITE Certificate (Nitec)                   | 197    | 121            | 76      | 14  | 8     | 6       |
| Business & Services                                |        |                |         |   |       |         |
| Higher National ITE Certificate (Higher Nitec)     | 989    | 240            | 749     | 105   | 30    | 75      |
| National ITE Certificate (Nitec)                   | 1,306  | 217            | 1,089   | 343   | 62    | 281     |
| ITE Skills Certificate (ISC)                       | 675    | 296            | 379     | 503   | 167   | 336     |
| Continuing Academic Education Programme            |        |                |         |   |       |         |
| Continuing Education (Secondary 1-5)               | 1,875  | 838            | 1,037   | 930   | 392   | 538     |

Source : Institute of Technical Education

<sup>1</sup> Data refer to number of persons who graduated or completed the Skills Training and Continuing Academic Education programmes.

<sup>2</sup> Most of the Skills Training programmes are offered in modules of 6 months' duration. A person may attend more than one module a year.

<sup>3</sup> Includes short courses and customised courses that do not lead to formal skill certification; and courses that are offered to secondary school students.

23.15 GOVERNMENT EXPENDITURE ON EDUCATION

[This table will be updated by October 2016.]

|  |           |           |           |            |            | Γ          | Thousand Dollars |
|--|-----------|-----------|-----------|------------|------------|------------|------------------|
|  | FY2008    | FY2009    | FY2010    | FY2011     | FY2012     | FY2013     | FY2014           |
| Total  | 8,229,694 | 8,685,056 | 9,875,445 | 10,740,250 | 10,496,911 | 11,638,313 | 11,719,562       |
| Recurrent Expenditure                            | 7,476,521 | 7,837,909 | 8,998,709 | 9,697,793  | 9,637,312  | 10,664,868 | 10,855,000       |
| Primary Schools                                  | 1,553,535 | 1,573,321 | 1,839,190 | 1,820,988  | 1,946,159  | 2,185,580  | 2,308,386        |
| Secondary Schools & Junior Colleges <sup>1</sup> | 2,175,783 | 2,235,912 | 2,568,469 | 2,517,230  | 2,680,062  | 2,912,565  | 3,046,039        |
| Institute of Technical Education                 | 281,262   | 262,509   | 328,067   | 346,106    | 351,658    | 376,896    | 425,028          |
| Tertiary   | 2,865,478 | 3,072,091 | 3,554,419 | 4,274,059  | 3,846,318  | 4,367,236  | 4,178,896        |
| Universities <sup>2</sup>                        | 1,808,987 | 2,014,807 | 2,305,921 | 2,973,812  | 2,536,971  | 2,969,921  | 2,731,600        |
| National Institute of Education                  | 110,378   | 112,474   | 123,625   | 119,266    | 113,312    | 99,668     | 94,875           |
| Polytechnics <sup>3</sup>                        | 946,113   | 944,810   | 1,124,873 | 1,180,981  | 1,196,035  | 1,297,647  | 1,352,421        |
| Others <sup>4</sup>                              | 600,463   | 694,076   | 708,564   | 739,410    | 813,115    | 822,591    | 896651           |
| Development Expenditure                          | 753,173   | 847,147   | 876,736   | 1,042,457  | 859,599    | 973,445    | 864,562          |

Source: Ministry of Education

Note: Data refer to the financial year which begins in April and ends in March of the following year.

<sup>1</sup> Includes Centralised Institute.

<sup>2</sup> Refers to National University of Singapore, Nanyang Technological University, Singapore Management University, SIM University, Singapore University of Technology and Design and Singapore Institute of Technology (wef FY2009).

<sup>3</sup> Refers to Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic, Nanyang Polytechnic and Republic Polytechnic.

<sup>4</sup> Includes MOE Headquarters, Institute of Southeast Asian Studies, Science Centre Board, Special Education, Nanyang Academy of Fine Arts, LASALLE College of the Arts and Singapore Examinations and Assessment Board.

**23.16** GOVERNMENT RECURRENT EXPENDITURE ON EDUCATION PER STUDENT [This table will be updated by October 2016.]

|   |        |        |        |        |        |        | Dollars |
|---|--------|--------|--------|--------|--------|--------|---------|
|   | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | FY2014  |
| Primary Schools                               | 5,397  | 5,537  | 6,624  | 6,712  | 7,396  | 8,549  | 9,304   |
| Secondary Schools <sup>1</sup>                | 7,551  | 7,736  | 9,008  | 9,022  | 9,940  | 11,434 | 12,421  |
| Junior Colleges <sup>2</sup>                  | 11,094 | 10,772 | 12,331 | 11,830 | 12,806 | 13,942 | 14,894  |
| Institute of Technical Education <sup>3</sup> | 11,106 | 10,129 | 11,839 | 11,898 | 11,837 | 12,491 | 12,646  |
| Polytechnics <sup>4</sup>                     | 13,479 | 12,598 | 14,552 | 14,687 | 14,487 | 15,304 | 15,695  |
| Universities <sup>5</sup>                     | 19,664 | 18,868 | 20,630 | 20,505 | 20,777 | 21,870 | 21,779  |
|   |        |        |        |        |        |        |         |

Source : Ministry of Education

Note: Data refer to the financial year which begins in April and ends in March of the following year.

<sup>1</sup> Excludes Independent Schools.

<sup>2</sup> Includes Centralised Institute.

<sup>3</sup> Refers to publicly-funded full-time Nitec/Higher Nitec courses offered by the Institute of Technical Education (ITE).

Publicly-funded full-time diploma courses offered by ITE are included under "Polytechnics" from FY2012 onwards.

<sup>4</sup> Refers to publicly-funded full-time diploma courses offered by Singapore Polytechnic, Ngee Ann Polytechnic, Temasek

## 



The Ministry of Health (MOH) is committed to promoting good health, providing good healthcare services and encouraging medical excellence.

Through MOH, the Government manages the public healthcare system to ensure that quality and affordable basic medical services are available to all Singaporeans. Financing schemes including subsidies, Medisave savings and insurance help to ensure affordability of healthcare. There will also be more investment in facilities healthcare and information infrastructure to enhance the accessibility and continuum of care. At the same time, MOH will continue to encourage the adoption of a healthy lifestyle and encourage individuals to take charge of their own health for quality and healthier lives. Safety nets are provided to ensure that no Singaporean is denied access to healthcare because of financial difficulty.

#### **Public Healthcare Services**

Singapore's public healthcare establishments provide a full range of acute services ranging from primary care at the polyclinics to secondary and tertiary care at hospitals and national centres. There are eight acute hospitals, eight national specialty centres and eighteen polyclinics.

## **Statutory Boards**

Two statutory boards under MOH were established on 1 April 2001.

The Health Promotion Board (HPB) aims to empower Singaporeans to attain optimal health, increase the quality and years of healthy life, and reduce illness, disability and premature death. As the key agency overseeing national health promotion and disease prevention programmes, HPB spearheads programmes reaching out to the healthy, the at-risk and the unhealthy across all stages of life. Health promotion programmes include education and environmental changes to improve Singaporeans' diet, mental health,

level of physical activity and general health literacy. HPB also promotes tobacco control, healthy ageing and, health screening.

The Health Sciences Authority (HSA) is a multidisciplinary scientific and regulatory agency that serves three key functions to protect and advance national health and safety. It is the national regulator for drugs, innovative therapeutics, medical devices and health-related products, ensuring they are well-regulated to high standards of safety, quality and efficacy. As the national blood service, it secures the nation's blood supply by ensuring a safe and adequate blood supply for public and private hospitals. It is also the provider of national expertise in forensic medicine, forensic science and analytical chemistry testing to serve the administration of justice and safeguard public health.

#### **Public Health**

Statistics on immunisation are collected by the National Immunisation Registry in HPB from various healthcare institutions, including polyclinics, general practitioners and hospitals. Data on patient attendances at primary healthcare clinics are obtained from the Polyclinic Patient Management System.

## **Hospital Statistics**

Data on government hospital beds, patient admissions and outpatient attendances are obtained from administrative records and the computerised patient registration systems of the hospitals. For private hospitals, the data are compiled from special returns prescribed by MOH and from the MediClaim System.

#### **Medical Personnel**

Data on registered healthcare personnel refer to the number of doctors, dentists, pharmacists, nurses and midwives, optometrists and opticians, allied health professionals, as well as traditional Chinese medicine practitioners registered respectively

## 24 HEALTH (cont'd)

under the Medical Registration Act (Chapter 174), the Dental Registration Act (Chapter 76), the Pharmacists Registration Act (Chapter 230), the Nurses and Midwives Act (Chapter 209), the Optometrists and Opticians Act (Chapter 213A), Allied Health Professions Act (Chapter 6B) and the Traditional Chinese Medicine Practitioners Act (Chapter 333A). Manpower registers are maintained by the respective professional bodies and the statistics pertaining to these healthcare personnel are derived from the registers.

24.1 HOSPITALS AND PUBLIC SECTOR CLINICS

|   |        |        |        |        |        |        | Numb   |
|---|--------|--------|--------|--------|--------|--------|--------|
|   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Hospitals                                 | 29     | 30     | 30     | 31     | 31     | 31     | 33     |
| Public Sector <sup>1</sup>                | 14     | 15     | 15     | 15     | 15     | 15     | 16     |
| Private Sector <sup>2</sup>               | 15     | 15     | 15     | 16     | 16     | 16     | 17     |
| Hospital Beds                             | 11,564 | 11,421 | 11,394 | 11,853 | 12,035 | 12,505 | 13,490 |
| Acute Care                                | 8,289  | 8,249  | 8,304  | 8,725  | 8,939  | 9,262  | 9,844  |
| Extended Care                             | 3,275  | 3,172  | 3,090  | 3,128  | 3,096  | 3,243  | 3,646  |
| Public Sector <sup>1</sup>                | 8,456  | 8,881  | 8,935  | 9,180  | 9,387  | 9,602  | 10,078 |
| Acute Care                                | 6,416  | 6,871  | 6,925  | 7,170  | 7,377  | 7,652  | 8,128  |
| Extended Care                             | 2,040  | 2,010  | 2,010  | 2,010  | 2,010  | 1,950  | 1,950  |
| Private Sector <sup>2</sup>               | 3,108  | 2,540  | 2,459  | 2,673  | 2,648  | 2,903  | 3,412  |
| Acute Care                                | 1,873  | 1,378  | 1,379  | 1,555  | 1,562  | 1,610  | 1,716  |
| Extended Care                             | 1,235  | 1,162  | 1,080  | 1,118  | 1,086  | 1,293  | 1,696  |
| Polyclinics                               | 18     | 18     | 18     | 18     | 18     | 18     | 18     |
| Public Sector Dental Clinics <sup>3</sup> | 239    | 239    | 240    | 239    | 235    | 247    | 246    |
| Pharmacies                                | 211    | 226    | 249    | 245    | 247    | 253    | 232    |
| Public Sector                             | 58     | 58     | 56     | 50     | 51     | 63     | 62     |
| Private Sector                            | 153    | 168    | 193    | 195    | 196    | 190    | 170    |

Source : Ministry of Health

With effect from 2012, data include Mount Elizabeth Novena Hospital and Fortis Colorectal Hospital

Kwong Wai Shiu Hospital officially ceased operation as a licensed Community Hospital on 29 Feb 2012

With effect from Dec 2014, data include Farrer Park Hospital.

With effect from 2015, data include Jurong Community Hospital and Yishun Community Hospital

<sup>1</sup> Includes specialty centres.

With effect from 2010, data include Khoo Teck Puat Hospital.

With effect from 2015, data include Ng Teng Fong General Hospital.

<sup>2</sup> Includes community hospitals and chronic sick hospitals.

Ren Ci Hospital & Medicare Centre (Hougang) ceased operations wef 24 Dec 2014.

<sup>3</sup> Excludes National Dental Centre (reflected as a specialty centre) and includes dental clinics in schools.

## 24.2 HOSPITAL ADMISSIONS AND PUBLIC SECTOR OUTPATIENT ATTENDANCES

| 2015        | 2014                                     |  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|
|             | 2014                                     | 2013   | 2012   | 2011   | 2010   | 2009   |  |
| 4 519,545   | 507,814                                  | 491,027  | 476,094                                      | 463,799                                      | 444,757                                      | 430,573                                      | Hospital Admissions <sup>1</sup>   |
| *           | 381,711                                  | 373,021  | 362,458                                      | 357,026                                      | 343,332                                      | 332,595                                      | Public Sector Hospitals <sup>2</sup>   |
| 130,586     | 126,103                                  | 118,006  | 113,636                                      | 106,773                                      | 101,425                                      | 97,978                                       | Private Sector Hospitals <sup>3</sup>  |
|             |  |  |  |  |  | 3  | Public Sector Outpatient Attendances   |
| 9 4,658,110 | 4,534,319                                | 4,436,621                                      | 4,353,385                                    | 4,234,139                                    | 4,023,686                                    | 3,886,310                                    | Specialist Outpatient Clinics <sup>4</sup> Accident & Emergency  |
| 1 965,426   | 968,371                                  | 1,006,800                                      | 985,289                                      | 934,485                                      | 858,781                                      | 821,304                                      | Departments  |
| 4 4,874,697 | 4,648,374                                | 4,623,623                                      | 4,614,038                                    | 4,502,043                                    | 4,314,496                                    | 4,157,903                                    | Polyclinics  |
| 0 996,779   | 966,240                                  | 943,971  | 893,058                                      | 875,802                                      | 862,874                                      | 838,815                                      | Dental Clinics <sup>5</sup>  |
| 4 293,107   | 272,914                                  | 262,381  | 246,313                                      | 238,071                                      | 229,638                                      | 218,284                                      | Day Surgeries  |
| 1<br>7<br>4 | 4,534,31<br>968,33<br>4,648,33<br>966,24 | 4,436,621<br>1,006,800<br>4,623,623<br>943,971 | 4,353,385<br>985,289<br>4,614,038<br>893,058 | 4,234,139<br>934,485<br>4,502,043<br>875,802 | 4,023,686<br>858,781<br>4,314,496<br>862,874 | 3,886,310<br>821,304<br>4,157,903<br>838,815 | Public Sector Outpatient Attendances Specialist Outpatient Clinics <sup>4</sup> Accident & Emergency Departments Polyclinics |

Source : Ministry of Health

Note: Data exclude Jurong Medical Centre.

- 1 Refers to inpatient discharges for all hospitals.
- 2 Includes specialty centres.
- 3 Includes community hospitals and chronic sick hospitals.

With effect from July 2012, data include Mount Elizabeth Novena Hospital.

With effect from August 2012, data include Fortis Colorectal Hospital.

With effect from 15 Dec 2014, data include Farrer Park Hospital.

With effect from 2015, data include Jurong Community Hospital and Yishun Community Hospital

- 4 Excludes staff attendances.
- 5 Includes dental services in hospitals, polyclinics, school dental clinics, National Dental Centre, and dental clinics at Alexandra Hospital and Tan Tock Seng Hospital.

With effect from March 2010, data include dental clinic at Khoo Teck Puat Hospital.

With effect from 30 Jun 2015, data include dental clinic at Ng Teng Fong General Hospital.

24.3 HOSPITAL ADMISSION 1 RATE BY SEX AND AGE

|                          |       |       |       |       |       | Per 1,000 resi | dent populati |
|--------------------------|-------|-------|-------|-------|-------|----------------|---------------|
|                          | 2009  | 2010  | 2011  | 2012  | 2013  | 2014           | 2015          |
| Public Sector Hospitals  |       |       |       |       |       |                |               |
| Male                     | 80.9  | 83.8  | 86.9  | 89.2  | 92.0  | 94.8           | 94.8          |
| Age Group (Years)        |       |       |       |       |       |                |               |
| 0 - 14                   | 67.1  | 70.5  | 74.8  | 78.2  | 80.5  | 85.1           | 84.6          |
| 15 - 64                  | 59.9  | 60.9  | 62.2  | 62.2  | 64.0  | 64.0           | 62.4          |
| 65 & Above               | 307.9 | 324.8 | 330.9 | 332.2 | 327.9 | 332.4          | 328.5         |
| Female                   | 75.9  | 77.8  | 81.3  | 87.4  | 89.2  | 91.1           | 90.6          |
| Age Group (Years)        |       |       |       |       |       |                |               |
| 0 - 14                   | 55.4  | 57.4  | 62.6  | 65.4  | 66.1  | 71.3           | 72.3          |
| 15 - 64                  | 54.7  | 55.4  | 56.2  | 62.6  | 63.0  | 63.2           | 61.9          |
| 65 & Above               | 271.7 | 278.4 | 291.3 | 287.4 | 287.1 | 284.1          | 275.6         |
| Private Sector Hospitals |       |       |       |       |       |                |               |
| Male                     | 13.4  | 13.9  | 14.5  | 15.5  | 16.5  | 17.8           | 18.1          |
| Age Group (Years)        |       |       |       |       |       |                |               |
| 0 - 14                   | 32.8  | 33.7  | 37.0  | 40.5  | 40.0  | 41.7           | 42.6          |
| 15 - 64                  | 6.6   | 7.0   | 7.3   | 7.9   | 9.3   | 10.6           | 11.3          |
| 65 & Above               | 31.3  | 33.0  | 32.1  | 30.3  | 31.4  | 31.7           | 27.3          |
| Female                   | 23.8  | 24.0  | 25.1  | 29.9  | 29.7  | 31.5           | 30.5          |
| Age Group (Years)        |       |       |       |       |       |                |               |
| 0 - 14                   | 29.5  | 30.5  | 33.1  | 36.1  | 36.2  | 38.3           | 38.6          |
| 15 - 64                  | 20.9  | 21.0  | 21.9  | 28.0  | 27.6  | 29.6           | 29.5          |
| 65 & Above               | 34.9  | 35.8  | 35.9  | 34.1  | 34.1  | 34.0           | 27.1          |

Source : Ministry of Health

<sup>1</sup> Excludes admission for normal deliveries and legalised abortions.

24.4 REGISTERED HEALTH PERSONNEL (End of Period)

|                                       | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                                       | 2007   | 2010   | 2011   | 2012   | 2013   | 2014   | 2013   |
| Doctors <sup>1</sup>                  | 8,323  | 9,030  | 9,646  | 10,225 | 10,953 | 11,733 | 12,459 |
| Public                                | 4,610  | 5,180  | 5,621  | 6,131  | 6,661  | 7,330  | 7,909  |
| Private                               | 3,123  | 3,310  | 3,449  | 3,515  | 3,678  | 3,790  | 3,914  |
| Not in active practice                | 590    | 540    | 576    | 579    | 614    | 613    | 636    |
| Specialists                           | 3,180  | 3,374  | 3,635  | 3,867  | 4,124  | 4,485  | 4,788  |
| Public                                | 1,855  | 1,996  | 2,165  | 2,342  | 2,511  | 2,829  | 3,052  |
| Private                               | 1,082  | 1,151  | 1,229  | 1,293  | 1,351  | 1,411  | 1,470  |
| Not in active practice                | 243    | 227    | 241    | 232    | 262    | 245    | 266    |
| Non-Specialists                       | 5,143  | 5,656  | 6,011  | 6,358  | 6,829  | 7,248  | 7,67   |
| Public                                | 2,755  | 3,184  | 3,456  | 3,789  | 4,150  | 4,501  | 4,85   |
| Private                               | 2,041  | 2,159  | 2,220  | 2,222  | 2,327  | 2,379  | 2,444  |
| Not in active practice                | 347    | 313    | 335    | 347    | 352    | 368    | 370    |
| Donations                             | 1.521  | 1.570  | 1.611  | 1,600  | 1 921  | 1.005  | 2.06   |
| Dentists                              | 1,531  | 1,579  | 1,611  | 1,699  | 1,821  | 1,905  | 2,060  |
| Public                                | 320    | 354    | 318    | 357    | 396    | 444    | 449    |
| Private                               | 1,043  | 1,059  | 1,160  | 1,215  | 1,411  | 1,435  | 1,54   |
| Not in active practice                | 168    | 166    | 133    | 127    | 14     | 26     | 7      |
| Dental Specialists                    | 256    | 286    | 285    | 303    | 309    | 313    | 324    |
| Public                                | 74     | 87     | 77     | 86     | 88     | 96     | 10     |
| Private                               | 180    | 185    | 199    | 203    | 219    | 216    | 21:    |
| Not in active practice                | 2      | 14     | 9      | 14     | 2      | 1      | ,      |
| General Dental Practitioners          | 1,275  | 1,293  | 1,326  | 1,396  | 1,512  | 1,592  | 1,73   |
| Public                                | 246    | 267    | 241    | 271    | 308    | 348    | 34     |
| Private                               | 863    | 874    | 961    | 1,012  | 1,192  | 1,219  | 1,32   |
| Not in active practice                | 166    | 152    | 124    | 113    | 12     | 25     | 6.     |
| Oral Health Therapists <sup>2</sup>   | 264    | 290    | 312    | 337    | 364    | 377    | 40     |
| Public                                | 214    | 212    | 222    | 228    | 216    | 220    | 22     |
| Private                               | 40     | 64     | 77     | 88     | 129    | 128    | 144    |
| Not in active practice                | 10     | 14     | 13     | 21     | 19     | 29     | 2      |
| Pharmacists                           | 1,658  | 1,814  | 2,013  | 2,172  | 2,376  | 2,563  | 2,75   |
| Public                                | 630    | 712    | 842    | 934    | 1,082  | 1,179  | 1,30   |
| Private                               | 890    | 931    | 978    | 1,048  | 1,104  | 1,174  | 1,22   |
| Not in active practice                | 138    | 171    | 193    | 190    | 190    | 210    | 22     |
| Registered Nurses                     | 19,733 | 21,575 | 23,598 | 25,971 | 27,556 | 28,864 | 29,89  |
| Public                                | 11,534 | 12,994 | 14,494 | 15,916 | 16,738 | 17,667 | 18,56  |
| Private                               | 4,831  | 5,140  | 5,661  | 6,321  | 6,716  | 6,863  | 7,35   |
| Not in active practice                | 3,368  | 3,441  | 3,443  | 3,734  | 4,102  | 4,334  | 3,97   |
| Enrolled Nurses                       | 6,765  | 7,478  | 7,869  | 8,274  | 8,273  | 8,528  | 8,93   |
| Public                                | 4,043  | 4,525  | 4,661  | 4,995  | 4,890  | 5,006  | 5,30   |
| Private                               | 1,561  | 1,757  | 1,979  | 2,027  | 2,049  | 2,078  | 2,37   |
| Not in active practice                | 1,161  | 1,196  | 1,229  | 1,252  | 1,334  | 1,444  | 1,24   |
| Registered Midwives                   | 294    | 287    | 282    | 262    | 246    | 226    | 180    |
| Public                                | 98     | 94     | 95     | 89     | 79     | 71     | 7      |
| Private                               | 71     | 68     | 69     | 65     | 61     | 61     | 5      |
| Not in active practice                | 125    | 125    | 118    | 108    | 106    | 94     | 5      |
| Advanced Practice Nurses <sup>3</sup> | 37     | 48     | 78     | 88     | 117    | 145    | 172    |
| Public                                | 35     | 46     | 74     | 82     | 110    | 137    | 16     |
| Private                               | 2      | 2      | 4      | 5      | 5      | 8      | :      |
| Not in active practice                | 0      | 0      | 0      | 1      | 2      | 0      | •      |

(continued on the next page)

Source : Ministry of Health

Note: Registered health personnel in the public sector refer to Government, Government Restructured Hospitals, Statutory Boards and University personnel.

<sup>1</sup> Includes doctors registered under Temporary Registration for service provision from 2010 onwards.

<sup>2</sup> Registration of Oral Health Therapists started in 2008.

<sup>3</sup> Advanced Practice Nurses are subset of Registered Nurses.

24.4 REGISTERED HEALTH PERSONNEL (continued)
(End of Period)

|   |       |       |       |       |       |       | Numbe |
|---|-------|-------|-------|-------|-------|-------|-------|
|   | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
| Optometrists and Opticians <sup>4</sup> | 2,324 | 2,419 | 2,441 | 2,478 | 2,461 | 2,610 | 2,624 |
| Public                                  | 86    | 113   | 133   | 155   | 159   | 159   | 156   |
| Private                                 | 2,170 | 2,237 | 2,198 | 2,124 | 2,210 | 2,337 | 2,345 |
| Not in active practice                  | 68    | 69    | 110   | 199   | 92    | 114   | 123   |
| Occupational Therapists <sup>5</sup>    | na    | na    | na    | na    | na    | 905   | 967   |
| Public                                  | na    | na    | na    | na    | na    | 776   | 793   |
| Private                                 | na    | na    | na    | na    | na    | 128   | 134   |
| Not in active practice                  | na    | na    | na    | na    | na    | 1     | 40    |
| Physiotherapists <sup>5</sup>           | na    | na    | na    | na    | na    | 1,394 | 1,550 |
| Public                                  | na    | na    | na    | na    | na    | 1,099 | 1,145 |
| Private                                 | na    | na    | na    | na    | na    | 293   | 339   |
| Not in active practice                  | na    | na    | na    | na    | na    | 2     | 66    |
| Speech therapists <sup>5</sup>          | na    | na    | na    | na    | na    | 400   | 474   |
| Public                                  | na    | na    | na    | na    | na    | 287   | 324   |
| Private                                 | na    | na    | na    | na    | na    | 113   | 132   |
| Not in active practice                  | na    | na    | na    | na    | na    | 0     | 18    |
| Traditional Chinese Medicine            | 2,203 | 2,322 | 2,444 | 2,538 | 2,629 | 2,740 | 2,808 |
| (TCM) Physicians <sup>6</sup>           |       |       |       |       |       |       |       |
| In Active practice                      | 1,932 | 1,974 | 2,054 | 2,133 | 2,155 | 2,199 | 2,217 |
| Not in Active Practice                  | 271   | 348   | 390   | 405   | 474   | 541   | 591   |
| Acupuncturists <sup>7</sup>             | 218   | 218   | 235   | 235   | 244   | 240   | 249   |
| In Active practice                      | 172   | 173   | 174   | 174   | 147   | 153   | 152   |
| Not in Active Practice                  | 46    | 45    | 61    | 61    | 97    | 87    | 97    |

Source : Ministry of Health

Note: Registered health personnel in the public sector refer to Government, Government Restructured Hospitals, Statutory Boards and University personnel.

<sup>4</sup> Refers to those who were officially registered with the enactment of Optometrists and Opticians Act in 2008.

<sup>5</sup> Registration of Allied Health professionals (Physiotherapists, Occupational Therapists, Speech Therapists) started in 2013.

<sup>6</sup> Registration of TCM physicians started in 2002.

<sup>7</sup> Registration of Acupuncturists started in 2001. Data refer to those registered only as Acupuncturists.

24.5 VISITS TO PUBLIC SECTOR DENTAL CLINICS

|                            |         |         |         |         |         |         | Number  |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|
|                            | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Dental Clinics             | 838,815 | 862,874 | 875,802 | 893,058 | 943,971 | 966,240 | 996,779 |
| School                     | 457,214 | 448,362 | 436,566 | 438,133 | 455,475 | 449,372 | 456,931 |
| Hospital <sup>1</sup>      | 120,298 | 129,771 | 147,979 | 171,623 | 190,442 | 196,151 | 198,800 |
| Polyclinic Dental Services | 99,407  | 123,265 | 144,220 | 135,113 | 149,177 | 158,990 | 167,960 |
| National Dental Centre     | 161,896 | 161,476 | 147,037 | 148,189 | 148,877 | 161,727 | 173,088 |

Source : Ministry of Health

24.6 NOTIFICATIONS OF SPECIFIC NOTIFIABLE DISEASES

|                            |        |        |        |        |        |        | Numbe  |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|
|                            | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Dengue/DHF                 | 4,497  | 5,363  | 5,330  | 4,632  | 22,170 | 18,326 | 11,297 |
| Malaria                    | 170    | 192    | 149    | 143    | 111    | 62     | 47     |
| Enteric fever <sup>1</sup> | 97     | 120    | 104    | 141    | 107    | 77     | 76     |
| Viral Hepatitis            | 253    | 256    | 241    | 275    | 202    | 194    | 212    |
| Cholera                    | 4      | 4      | 2      | 2      | 2      | 2      | 3      |
| Poliomyelitis              | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Diphtheria                 | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Viral Encephalitis         | 43     | 33     | 29     | 27     | 38     | 37     | 30     |
| Legionellosis              | 22     | 25     | 21     | 31     | 24     | 37     | 17     |
| Hand, Foot & Mouth Disease | 17,278 | 30,878 | 20,287 | 37,276 | 31,779 | 22,171 | 28,216 |
| Nipah Virus Infection      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| SARS                       | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Tuberculosis               | 2,517  | 2,791  | 3,032  | 3,210  | 2,801  | 2,741  | 2,721  |
| Leprosy                    | 8      | 12     | 11     | 14     | 8      | 4      | 3      |

Source : Ministry of Health

Note: No cases of plague, smallpox and yellow fever were reported during the period

Includes dental services in hospitals, polyclinics, school dental clinics, National Dental Centre, and dental clinics at Alexandra Hospital and Tan Tock Seng Hospital.
 With effect from March 2010, data include dental clinic at Khoo Teck Puat Hospital.
 With effect from 30 June 2015, data include dental clinic at Ng Teng Fong General Hospital.

<sup>1</sup> Refers to typhoid and paratyphoid.

24.7 IMMUNISATION 1 BY PUBLIC AND PRIVATE SECTORS

|               |        |        |        |        |        |        | No of Childre |
|---------------|--------|--------|--------|--------|--------|--------|---------------|
|               | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015          |
| BCG           |        |        |        |        |        |        |               |
| National      | 35,256 | 33,454 | 31,362 | 29,480 | 30,488 | 32,624 | 30,623        |
| Public        | 15,173 | 13,963 | 13,190 | 12,255 | 12,527 | 12,952 | 12,501        |
| Private       | 20,083 | 19,491 | 18,172 | 17,225 | 17,961 | 19,672 | 18,122        |
| Diphtheria    |        |        |        |        |        |        |               |
| National      | 33,976 | 32,523 | 29,981 | 28,485 | 29,471 | 31,618 | 30,388        |
| Public        | 18,028 | 14,541 | 16,097 | 15,268 | 15,890 | 17,299 | 19,901        |
| Private       | 15,948 | 17,982 | 13,884 | 13,217 | 13,581 | 14,319 | 10,487        |
| Poliomyelitis |        |        |        |        |        |        |               |
| National      | 33,963 | 32,496 | 31,455 | 28,476 | 29,459 | 31,596 | 29,720        |
| Public        | 18,021 | 16,921 | 16,921 | 15,262 | 15,882 | 17,295 | 19,624        |
| Private       | 15,942 | 15,575 | 14,534 | 13,214 | 13,577 | 14,301 | 10,096        |
| Hepatitis B   |        |        |        |        |        |        |               |
| National      | 33,659 | 31,186 | 30,026 | 28,464 | 29,418 | 31,585 | 29,677        |
| Public        | 17,933 | 16,750 | 16,118 | 15,238 | 15,815 | 17,220 | 19,471        |
| Private       | 15,726 | 14,436 | 13,908 | 13,226 | 13,603 | 14,365 | 10,206        |
| Measles       |        |        |        |        |        |        |               |
| National      | 33,553 | 32,165 | 29,737 | 28,072 | 28,975 | 31,259 | 29,331        |
| Public        | 18,072 | 16,958 | 16,104 | 15,165 | 15,935 | 17,567 | 19,502        |
| Private       | 15,481 | 15,207 | 13,633 | 12,907 | 13,040 | 13,692 | 9,829         |

Source : Health Promotion Board

24.8 IMMUNISATION 1 COVERAGE FOR CHILDREN AT 2 YEARS OF AGE

|               |      |      |      |      |      |      | Per Cent |
|---------------|------|------|------|------|------|------|----------|
|               | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015     |
| BCG           | 99   | 99   | 100  | 99   | 99   | 99   | 99       |
| Diphtheria    | 97   | 96   | 96   | 97   | 97   | 96   | 98       |
| Poliomyelitis | 97   | 96   | 96   | 97   | 97   | 96   | 96       |
| Hepatitis B   | 96   | 96   | 96   | 97   | 97   | 96   | 96       |
| Measles       | 95   | 95   | 95   | 95   | 95   | 95   | 95       |

Source : Health Promotion Board

<sup>1</sup> Refers to immunisation given to children who are Singapore citizens or permanent residents.

 $<sup>1 \</sup>quad \text{Refers to immunisation given to children who are Singapore citizens and permanent residents}.\\$ 

## 24.9 VACCINATION AND IMMUNISATION OF SCHOOL CHILDREN

|   |      |      |      |      |      | Th   | nousand Doses |
|---|------|------|------|------|------|------|---------------|
|   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015          |
| Diphtheria Tetanus <sup>1</sup>         | 48.7 | 48.7 | 50.8 | 44.2 | 43.2 | 41.7 | 41.7          |
| Poliomyelitis Immunisation <sup>2</sup> | 92.1 | 89.3 | 92.0 | 85.8 | 85.9 | 47.4 | 45.0          |
| Measles, Mumps and Rubella <sup>3</sup> | 89.9 | 86.6 | 88.5 | 41.7 | 39.1 | 35.7 | 29.2          |

Source: Health Promotion Board

<sup>1</sup> Booster doses were given to Primary 5 students.

<sup>2</sup> Booster doses were given to Primary 1 and Primary 5 students.
With effect from Jan 2014, School Health Service ceased to give polio vaccination for Primary 1 students due to a change in the National Childhood Immunisation Schedule.

<sup>3</sup> Vaccinations were given to Primary 1 students.

## 24.10 STUDENT MEDICAL CHECK-UP

|       |                                |  |   |   |   | Thousand  |
|-------|--------------------------------|--|---|---|---|---|
| 2009  | 2010                           | 2011   | 2012  | 2013  | 2014  | 2015  |
|       |                                |  |   |   |   |   |
| 448.0 | 435.9                          | 429.5  | 422.2   | 414.9   | 407.5   | 400.9   |
|       |                                |  |   |   |   |   |
| 42.1  | 39.4                           | 39.0   | 39.6  | 40.4  | 40.7  | 40.3  |
|       |                                |  |   |   |   |   |
| 44.8  | 45.2                           | 48.4   | 43.4  | 42.8  | 39.8  | 39.6  |
|       |                                |  |   |   |   |   |
| 360.1 | 350.1                          | 340.8  | 338.1   | 328.7   | 323.9   | 317.8   |
| 1.0   | 1.2                            | 1.3  | 1.1   | 3.0   | 3.1   | 3.2   |
|       | 448.0<br>42.1<br>44.8<br>360.1 | 448.0 435.9<br>42.1 39.4<br>44.8 45.2<br>360.1 350.1 | 448.0     435.9     429.5       42.1     39.4     39.0       44.8     45.2     48.4       360.1     350.1     340.8 | 448.0     435.9     429.5     422.2       42.1     39.4     39.0     39.6       44.8     45.2     48.4     43.4       360.1     350.1     340.8     338.1 | 448.0     435.9     429.5     422.2     414.9       42.1     39.4     39.0     39.6     40.4       44.8     45.2     48.4     43.4     42.8       360.1     350.1     340.8     338.1     328.7 | 448.0       435.9       429.5       422.2       414.9       407.5         42.1       39.4       39.0       39.6       40.4       40.7         44.8       45.2       48.4       43.4       42.8       39.8         360.1       350.1       340.8       338.1       328.7       323.9 |

Source: Health Promotion Board

<sup>1</sup> Refers to screening for Primary 2, 3, 4 and 6, as well as Secondary 1, 2, 4 and Secondary 3 students with health problems.

 $<sup>2\</sup>quad Refers \ to \ general \ medical \ examination \ done \ for \ students \ in \ educational \ levels \ other \ than \ Primary \ 1 \ and \ Primary \ 5.$ 

24.11 COMMON HEALTH PROBLEMS OF STUDENTS EXAMINED

|                               | 2009                        | 2010  | 2011  | 2012  | 2013  | 2014  | 2015 |  |  |  |
|-------------------------------|-----------------------------|-------|-------|-------|-------|-------|------|--|--|--|
|                               | Per 10,000 Males Examined   |       |       |       |       |       |      |  |  |  |
| ncidence of:                  |                             |       |       |       |       |       |      |  |  |  |
| Defective Vision <sup>1</sup> | 5,368                       | 5,349 | 5,339 | 5,297 | 5,271 | 5,178 | 5,17 |  |  |  |
| Obesity <sup>2</sup>          | 2,233                       | -,,-  | -,    | -,    | -,    | -,-,- | -,   |  |  |  |
| Primary 1 and equivalent      |                             |       |       |       |       |       |      |  |  |  |
| age groups                    | 1,212                       | 1,218 | 1,269 | 1,121 | 1,199 | 1,089 | 1,08 |  |  |  |
| Primary 5 and equivalent      | -,                          | -,    | -,    | -,    | -,,-  | -,    | -,   |  |  |  |
| age groups                    | 1,787                       | 1,748 | 1,853 | 1,557 | 1,590 | 1,593 | 1,52 |  |  |  |
|                               |                             |       |       |       |       |       |      |  |  |  |
|                               | Per 10,000 Females Examined |       |       |       |       |       |      |  |  |  |
| ncidence of :                 |                             |       |       |       |       |       |      |  |  |  |
| Defective Vision <sup>1</sup> | 5,775                       | 5,762 | 5,747 | 5,688 | 5,663 | 5,586 | 5,56 |  |  |  |
| Obesity <sup>2</sup>          |                             |       |       |       |       |       |      |  |  |  |
| Primary 1 and equivalent      |                             |       |       |       |       |       |      |  |  |  |
| age groups                    | 1,080                       | 1,059 | 1,126 | 921   | 979   | 929   | 91   |  |  |  |
| Primary 5 and equivalent      |                             |       |       |       |       |       |      |  |  |  |
| age groups                    | 1,210                       | 1,197 | 1,250 | 1,191 | 1,232 | 1,217 | 1,18 |  |  |  |

Source : Health Promotion Board

<sup>1</sup> Discontinued screening for Secondary 3 & Secondary 5 students with effect from 1 January 2006.

<sup>2</sup> Body Mass Index percentile replaced Nutritional Status in the calculation of overweight/obesity since July 2010. The reporting started in 2012.

# 25



# Haw And Hawkers Food **Establishments**

Hawker stalls and retail food establishments are licensed by the National Environment Agency (NEA). Food factories are licensed by the Agri-Food & Veterinary Authority (AVA). Both agencies ensure that food sold in Singapore is safe for consumption.

#### Licensed Hawkers

Licensed hawkers refer to hawkers who are issued with the licence by NEA to operate stalls in wet markets and hawker centres, as well as itinerant street hawkers.

### **Licensed Food Establishments**

Licensed food establishments are grouped under five separate categories, namely, food shops, food stalls, food factories, supermarkets and private markets.

Businesses that require a food shop licence include restaurants, cake shops, eating houses, coffeeshops, food courts, pubs, bars, market produce shops, food caterers, and mobile food wagons.

food stall refers compartmentalised unit housed in a food shop, such as coffeeshop, eating house, food court, or canteen.

Food factories refer to AVA licensed food processing establishments where food is manufactured, processed, prepared or packed for the purpose of distribution to wholesalers retailers. These food processing establishments include noodles and pasta manufacturers, bakery and flour confectionery manufacturers, meat and fish processing establishments, slaughterhouses, etc. Cold stores used for the storage of meat and/or fish products are also licensed by AVA.

Supermarkets refer to air-conditioned retail markets that sell meat, fish, fruit, vegetable, poultry, egg or other article of food (cooked or uncooked) and other household items. They are operated on a self-service basis.

Private markets refer to markets (including any stalls therein) licensed to private operators for the sale of meat, fish, fruit, vegetable, poultry, egg or other article of food (cooked or uncooked).

25.1 LICENSED HAWKERS UNDER NATIONAL ENVIRONMENT AGENCY (End of Period)

|                               |        |        |        |        |        |        | Number |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                               | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total Licences Issued         | 14,296 | 14,470 | 14,305 | 14,165 | 14,227 | 14,466 | 14,055 |
| Type of Premises              |        |        |        |        |        |        |        |
| Market/Food Centre            | 13,410 | 13,624 | 13,508 | 13,410 | 13,537 | 13,828 | 13,440 |
| Street 1                      | 886    | 846    | 797    | 755    | 690    | 638    | 615    |
| Type of Goods Sold            |        |        |        |        |        |        |        |
| Market Produce                | 5,796  | 5,879  | 5,763  | 5,694  | 5,706  | 5,857  | 5,612  |
| Cooked Food                   | 5,747  | 5,842  | 5,855  | 5,831  | 5,939  | 6,049  | 5,943  |
| Piece & Sundries <sup>2</sup> | 2,753  | 2,749  | 2,687  | 2,640  | 2,582  | 2,560  | 2,500  |

Source : National Environment Agency

Note: Data include MEWR and HDB Markets/Hawker Centres.

Private markets/food centres of other Statutory Boards are excluded.

<sup>1</sup> Refers to street hawkers, who sell ice-cream, as well as not easily perishable food items and goods.

<sup>2</sup> Includes items sold by street hawkers.

25.2 LICENSED FOOD ESTABLISHMENTS (End of Period)

|                              |        |        |        |        |        |        | Number |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|
|                              | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Total                        | 29,063 | 29,509 | 30,291 | 30,691 | 31,267 | 32,166 | 33,074 |
| Food Shops <sup>1</sup>      | 13,517 | 13,828 | 14,377 | 14,642 | 15,307 | 15,875 | 16,490 |
| Food Stalls <sup>2</sup>     | 13,644 | 13,686 | 13,829 | 13,889 | 13,776 | 13,979 | 14,179 |
| Food Factories <sup>3</sup>  | 1,275  | 1,348  | 1,408  | 1,476  | 1,482  | 1,548  | 1,618  |
| Supermarkets <sup>4</sup>    | 320    | 344    | 367    | 398    | 422    | 441    | 469    |
| Private Markets <sup>5</sup> | 307    | 303    | 310    | 286    | 280    | 323    | 318    |

Source: National Environment Agency (NEA)

Agri-Food & Veterinary Authority of Singapore

With effect from 2014, hawker centres under JTC Corporation are licensed by NEA as food shops.

With effect from 2014, licensed hawker stalls under JTC Corporation are licensed by NEA as food stalls.

<sup>1</sup> Refers to establishments which are licensed to retail food.

<sup>2</sup> Refers to smaller compartmentalised units which are housed within a food shop.

<sup>3</sup> Refers to food processing establishments where food is manufactured, processed, prepared or packed for the purpose of distribution to wholesalers and retailers.

<sup>4</sup> Refers to larger stores / premises that sell fresh food such as meat, fish, vegetables and other prepacked foods.

<sup>5</sup> Refers to private shops and stalls that sell fresh food such as meat, fish, vegetables and other prepacked foods.

# 26



# Community Services

The Ministry of Social and Family Development (MSF) aims to nurture resilient individuals, strong families and a caring society. MSF oversees policies on social assistance, social services, family, child care and child development, seniors, disability, as well as management of problem gambling. In addition to its developmental and supporting role, MSF directly administers services which include the protection of children and rehabilitation of youth delinquents, registration of civil marriages, licensing of child care centres and public education on family matters. MSF also oversees regulatory functions under the various legislations such as the Maintenance of Parents Act and the Mental Capacity Act. To address social needs, MSF works closely with its partners in the sector, which include Voluntary Welfare (VWOs). Community Organisations Development Councils (CDCs), major funders such as the Singapore Totalisator Board (or Tote Board), corporate entities as well as the public.

The Ministry of Culture, Community and Youth (MCCY) seeks to inspire Singaporeans through the arts and sports, strengthen community bonds, and promote volunteerism and philanthropy. Since its inception in November 2012, MCCY has been actively engaging the arts, heritage, sports, communities and youth sectors. The Ministry aims to bring into sharper focus the efforts to build a more cohesive and vibrant society, and to deepen a sense of identity and belonging to the nation. MCCY works with its stakeholders to create an environment where Singaporeans can pursue their aspirations for a better quality of life and together, build a gracious and caring society we are proud to call home.

### People's Association

The People's Association (PA) is a statutory board set up on 1 July 1960 to promote racial harmony and social cohesion.

The PA also connects the people and the Government through consultation and feedback.

PA achieves its mission through a wide range of programmes offered by its network of about 1,900 Grassroots Organisations (GROs) and five Community Development Councils. The PA grassroots network comprises the Citizens' Consultative Committees, Community Club Management Residents' Committees. Committees. Neighbourhood Committees. Community Sports Clubs, Community Emergency and Engagement Committees, Women's Executive Committees, Youth Executive Committees, Senior Citizens' Executive Committees, Malay Executive Committees, Activity Indian Activity Executive Committees, Teens Network Club Management Committees and Area Sub-Committees.

### **Community Development Councils**

Development The Community Councils (CDCs) were set up in 1997 under PA to "Assist the Needy, Bond the People and Connect the Community" (in short, the "ABC" mission) to strengthen community bonding and social cohesion and to foster the community spirit of self-help and mutual support. Guided by the mission, the CDCs develop and implement programmes that identify existing and emerging needs in the community, and work closely with public, private and people (3P) partners to develop and implement sustainable programmes that promote caring for environment, elderly and vulnerable, volunteerism, self-reliance and upward social mobility.

Through the 3P partnership, the CDCs aim to rally the community to strengthen social infrastructure, build social resilience and social capital, and promote the culture of giving back so as to build a "Great Home and a Caring Community" and a "Cohesive and Compassionate Nation".

#### Volunteers

"Volunteers" refer to individuals who provide services in community and welfare programmes without receiving full market rates of remuneration or allowances.

### **Child Care Centres and Kindergartens**

The Early Childhood Development Agency (ECDA) serves as the regulatory and developmental authority for the early childhood sector in Singapore, overseeing all aspects of children's development below the age of 7 years in kindergartens and child care centres. It is jointly overseen by the Ministry of Education (MOE) and MSF.

Child care centres provide child care services for children aged 18 months to 6 years. Some centres also provide infant care services for infants aged 2 months to 18 months. Centres may offer regular full-day, half-day and flexible programmes to cater to the different needs of parents and children.

Kindergartens provide pre-school developmental programmes for children from 3 to 6 years of age. Most kindergartens run two sessions a day, with each session ranging from 3 to 4 hours, 5 days a week.

In 2015, there were 1,243 child care centres and 492 kindergartens in Singapore, located in HDB void decks, community spaces and workplaces to provide parents with ease of access and choices in meeting the early childhood needs of their children.

### **Student Care Centres**

Student Care Centres provide care and supervision to school-going children in the Primary to lower Secondary levels outside school hours. There are currently over 400 student care centres that administer the Student Care Fee Assistance (SCFA) scheme

in the community and in schools to support lower income families in accessing the service.

MSF works with MOE in the development of student care centres within primary school premises.

#### ComCare **Short-to-Medium Term** Assistance

ComCare Short-to-Medium Term Assistance is available to low-income families and individuals who are temporarily unable to work (e.g. due to illness, caregiving responsibilities), those earning a low income and those who are unemployed and need temporary financial support while they seek employment. A Social Assistance officer will work with the family to develop a plan of action to improve their circumstances. The package of assistance provided may include cash allowance, as well as assistance for rent, utilities, and Service and Conservancy Charges.

### **ComCare Long Term Assistance**

ComCare Long Term Assistance (also known as the Public Assistance, or PA scheme) provides long-term help to those who are unable to work due to old age, illness or disability, have limited or no means of income, and have little or no family support. Besides a monthly cash allowance, beneficiaries receive free medical treatment in polyclinics and government or restructured hospitals as well as assistance for other needs such as recurrent healthcare consumables and one-off purchase or replacement of assistive equipment and essential household items. They may be referred to community-based agencies for supplementary aid, for example, home help, befriending, and enrolment at day care centres to support their living in the community.

### **Student Care Fee Assistance**

ComCare provides monthly subsidies for children from eligible families to attend student care centres while their parents are at work. These subsidies are available to children attending student care centres registered with MSF, including special student care centres for students with special needs. The families are also given a Start Up Grant to offset the initial costs of placing their child in the centre.

### Family Service Centres

Family Service Centres (FSCs) play a key role in building strong and stable families in Singapore. FSCs are community-based social work entities that serve low income and vulnerable individuals and families, through social work intervention, to help them achieve independence, stability and resilience. FSCs are staffed by social service practitioners providing an integrated practice of casework, group work and community work to meet the diverse and complex needs of clients. There are currently 46 FSCs serving more than 30,000 families a year island-wide.

### Services for Senior Citizens

The Ministry of Health (MOH) undertakes the planning, and development of aged care services for senior citizens. With the transfer of the social aged care services from MSF to MOH, MOH now looks after both the health and social aspects of aged care services, ranging from home and community-based services to residential care services. MOH's focus is to enhance the accessibility, quality and affordability of aged care services. New initiatives include the development of Active Ageing Hubs which provide active ageing services as well as integrated care services across the health and social care continuum.

As Secretariat to the Ministerial Committee on Ageing, the Ageing Planning Office (APO) in MOH also works with government, private and public agencies to plan and develop initiatives to help Singaporeans age successfully as part of the Action Plan for Successful Ageing. This includes working with the PA, the Council for Third Age (C3A), the Health Promotion Board (HPB) and various agencies to promote active and healthy ageing.

MSF oversees the provision of social support for low-income vulnerable seniors without family support. To better reach out to and support vulnerable seniors to stay engaged in the community and receive coordinated care, MSF has organised its community-based social services into networks within each Housing and Development Board (HDB) town. Each town is supported by a range of services comprising Senior Activity Centres, case management teams, assisted living options, and volunteer services.

26.1 GRASSROOTS ORGANISATIONS (End of Period)

|   |      |      |      |      |      |      | Number |
|---|------|------|------|------|------|------|--------|
|   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015   |
| Community Development<br>Councils             | 5    | 5    | 5    | 5    | 5    | 5    | 5      |
| Citizens' Consultative<br>Committees (CCCs)   | 84   | 84   | 87   | 87   | 87   | 87   | 89     |
| CCC-Area Sub Committees                       | 45   | 43   | 39   | 38   | 39   | 41   | 41     |
| Community Club  Management Committees         | 105  | 105  | 106  | 106  | 107  | 107  | 108    |
| Residents' Committees                         | 557  | 556  | 564  | 571  | 574  | 582  | 600    |
| Neighbourhood Committees                      | 110  | 115  | 121  | 134  | 149  | 161  | 174    |
| Malay Activity Executive<br>Committees        | 97   | 97   | 97   | 97   | 99   | 98   | 98     |
| Indian Activity Executive<br>Committees       | 94   | 94   | 94   | 94   | 95   | 94   | 94     |
| Senior Citizens' Executive<br>Committees      | 327  | 321  | 314  | 309  | 295  | 292  | 286    |
| Youth Executive Committees                    | 99   | 99   | 99   | 100  | 101  | 102  | 102    |
| Women's Executive<br>Committees               | 104  | 104  | 104  | 104  | 105  | 104  | 105    |
| Community Emergency and Engagement Committees | 84   | 84   | 86   | 86   | 87   | 87   | 87     |
| Community Sports Clubs <sup>1</sup>           | 84   | 84   | 86   | 86   | 86   | 86   | 87     |
| T-Net Club Management<br>Committees           | 8    | 8    | 8    | 8    | 8    | 8    | 8      |
| Building Fund Committees                      | 27   | 28   | 38   | 44   | 50   | 53   | 53     |

Source : People's Association (PA)

<sup>1</sup> Constitutency Sports Clubs has been renamed to Community Sports Clubs in 2011.

26.2 VOLUNTEERS (End of Period)

|  |        |        |        |                 |        |        | Num    |
|--|--------|--------|--------|-----------------|--------|--------|--------|
|  | 2009   | 2010   | 2011   | 2012            | 2013   | 2014   | 2015   |
|  |        |        | Co     | ommunity Ser    | vice   |        |        |
| Total (Volunteers)                         | 41,547 | 42,778 | 44,515 | 44,616          | 46,884 | 48,486 | 49,445 |
| Community Development Councils             | 307    | 309    | 299    | 298             | 298    | 291    | 284    |
| CCCs / CCC-Area Sub Committees             | 4,555  | 4,617  | 4,762  | 4,796           | 4,999  | 5,153  | 5,280  |
| Community Club Management                  |        |        |        |                 |        |        |        |
| Committees                                 | 3,540  | 3,631  | 3,713  | 3,723           | 3,789  | 3,804  | 3,807  |
| Residents' Committees (RC) <sup>1</sup>    | 12,783 | 13,137 | 13,978 | 14,008          | 14,955 | 15,372 | 15,945 |
| Neighbourhood Committees                   | 1,864  | 2,047  | 2,324  | 2,593           | 2,908  | 3,224  | 3,454  |
| Malay Activity Executive Committees        | 1,759  | 1,787  | 1,886  | 1,885           | 1,988  | 1,947  | 1,978  |
| Indian Activity Executive Committees       | 1,573  | 1,681  | 1,788  | 1,733           | 1,838  | 1,882  | 1,873  |
| Senior Citizens' Executive Committees      | 5,716  | 5,767  | 5,815  | 5,718           | 5,600  | 5,633  | 5,535  |
| Youth Executive Committees                 | 2,253  | 2,456  | 2,305  | 2,392           | 2,462  | 2,689  | 2,503  |
| Women's Executive Committees               | 2,234  | 2,313  | 2,399  | 2,344           | 2,466  | 2,538  | 2,550  |
| Community Emergency and                    |        |        |        |                 |        |        |        |
| Engagement Committees                      | 2,325  | 2,319  | 2,240  | 2,160           | 2,105  | 2,131  | 2,146  |
| Community Sports Clubs <sup>2</sup>        | 2,041  | 2,046  | 2,160  | 2,073           | 2,147  | 2,137  | 2,214  |
| Γ-Net Club Management Committees           | 105    | 146    | 147    | 140             | 147    | 161    | 163    |
| Building Fund Committees                   | 492    | 522    | 699    | 753             | 887    | 925    | 919    |
| Constituency Grassroots Member Scheme      | na     | na     | na     | na              | 295    | 599    | 794    |
|  |        |        | 1      | Welfare Service | ce     |        |        |
| Total (Volunteers)                         | 911    | 887    | 936    | 874             | 823    | 837    | 955    |
| Welfare Service Boards/Committees          | 15     | 15     | 15     | 15              | 17     | 17     | 18     |
| Volunteer Probation Officers               | 321    | 319    | 321    | 284             | 229    | 223    | 253    |
| Volunteers in MSF Youth Homes <sup>3</sup> | 304    | 295    | 315    | 256             | 258    | 238    | 238    |
| Enable-A-Family (EAF) Volunteer            |        |        |        |                 |        |        |        |
| Scheme                                     | 73     | 58     | 58     | 76              | 76     | 77     | 89     |
| Foster Parents <sup>4</sup>                | 198    | 200    | 227    | 243             | 243    | 282    | 35     |

Source: Ministry of Social and Family Development (MSF)

People's Association (PA)

Note: CCCs = Citizens' Consultative Committees

The PA introduced the Grassroots Member Scheme in 2013.

Grassroots members can be appointed at the constituency level and to any grassroots organisations.

- 1 RC Block Representatives are included.
- 2 Constituency Sports Clubs has been renamed to Community Sports Clubs in 2011.
- 3 Excludes institutions that are no longer part of the MSF Youth Homes.
- 4 Refers to the number of foster families under MSF's Fostering Scheme.

26.3 NUMBER, CAPACITY AND ENROLMENT IN CHILD CARE CENTRES

|                                       |        |        |        |        |         |         | Number  |
|---------------------------------------|--------|--------|--------|--------|---------|---------|---------|
|                                       | 2009   | 2010   | 2011   | 2012   | 2013    | 2014    | 2015    |
| Number of Child Care Centres          | 777    | 855    | 944    | 1,002  | 1,077   | 1,148   | 1,243   |
| Child care centres which also         |        |        |        |        |         |         |         |
| provide infant care services 1        | 147    | 198    | 253    | 285    | 324     | 361     | 418     |
| Capacity in Child Care Centres        | 65,006 | 75,738 | 84,665 | 91,387 | 100,388 | 109,856 | 121,698 |
| Total Enrolment in Child Care Centres | 59,911 | 66,193 | 73,547 | 79,679 | 86,124  | 92,932  | 99,175  |
| Full-Day Programme                    | 48,598 | 55,422 | 62,649 | 69,075 | 75,986  | 82,872  | 89,855  |
| Anchor Operators <sup>2</sup>         | 7,248  | 9,513  | 12,812 | 15,879 | 19,076  | 23,668  | 28,219  |
| Voluntary Welfare Organisations       | 9,668  | 9,953  | 10,309 | 10,514 | 10,793  | 10,058  | 9,945   |
| Private <sup>3</sup>                  | 31,682 | 35,956 | 39,528 | 42,682 | 46,117  | 49,146  | 51,691  |
| Half-Day Programme                    | 8,917  | 8,509  | 8,811  | 8,504  | 7,940   | 7,230   | 6,912   |
| Flexicare Programme                   | 2,396  | 2,262  | 2,087  | 2,100  | 2,198   | 2,830   | 2,408   |

Source: Early Childhood Development Agency (with effect from Apr 2013)

Ministry of Social and Family Development (between Nov 2012 to Mar 2013)

Ministry of Community Development, Youth and Sports (prior to Nov 2012)

Note: Annual data reported are presented as at October each year as it is when enrolment in child care centres peaks for the year, which is taken into account in the planning of child care capacity.

26.4 NUMBER AND ENROLMENT IN KINDERGARTENS

|   |        |        |        |        |        |        | Number |
|---|--------|--------|--------|--------|--------|--------|--------|
|   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
| Number of Kindergartens                   | 493    | 493    | 495    | 504    | 498    | 503    | 492    |
| Total Enrolment in Kindergartens          | 74,831 | 68,720 | 67,652 | 67,734 | 68,057 | 68,999 | 66,331 |
| Anchor Operators <sup>1</sup>             | 41,714 | 37,506 | 37,372 | 36,447 | 35,015 | 33,302 | 30,142 |
| Voluntary Welfare Organisations           | 22,203 | 20,769 | 20,155 | 20,657 | 21,398 | 24,282 | 23,899 |
| Private                                   | 10,914 | 10,445 | 10,125 | 10,586 | 11,589 | 11,173 | 11,290 |
| Government / Statutory Board <sup>2</sup> | na     | na     | na     | 44     | 55     | 242    | 1,000  |

Source: Early Childhood Development Agency

<sup>1</sup> Infant care services cater for children aged 2 to 18 months.

<sup>2</sup> Refers to operators appointed by the Early Childhood Development Agency under the Anchor Operator Scheme. They include PAP Community Foundation, My First Skool, MY World Preschool, Skool4Kidz, and E-Bridge Pre-school.

<sup>3</sup> With effect from 2013, Workplace figures which were reported separately are subsumed under the Private category.

<sup>1</sup> Refers to operators appointed by the Early Childhood Development Agency under the Anchor Operator Scheme. They include PAP Community Foundation, My First Skool, MY World Preschool, Skool4Kidz, and E-Bridge Pre-school

<sup>2</sup> Refers to MOE Kindergartens and Preschool Learning Academy at Temasek Polytechnic.

26.5 COMCARE SCHEMES (End of Period)

|   |       |       |       |        |        | 1      | Number of cases |
|---|-------|-------|-------|--------|--------|--------|-----------------|
|   | 2009  | 2010  | 2011  | 2012   | 2013   | 2014   | 2015            |
| ComCare Long Term Assistance <sup>1</sup> (also known as Public Assistance) | 2,920 | 2,929 | 3,034 | 3,047  | 3,164  | 3,421  | 3,832           |
| ComCare Short-to-Medium Term<br>Assistance <sup>1,2</sup>                   | 5,997 | 4,595 | 6,571 | 10,432 | 12,535 | 15,763 | 15,164          |
| Student Care Fee Assistance <sup>3</sup>                                    | 5,295 | 2,598 | 2,549 | 3,797  | 5,030  | 5,723  | 7,192           |

Source: Ministry of Social and Family Development (MSF)

<sup>1</sup> Refers to the number of active households under the Scheme.

<sup>2</sup> ComCare Short-to-Medium Term Assistance comprises schemes that were previously known as Work Support Programme and ComCare Transitions.

<sup>3</sup> Refers to the number of active individual beneficiaries under the Scheme.

Data prior to 2010 are estimated figures.

26.6 SENIOR ACTIVITY CENTRES

|   | 2011   | 2012   | 2013   | 2014   | 2015   |
|---|--------|--------|--------|--------|--------|
| Number of Senior Activity Centres                             | 43     | 52     | 53     | 59     | 61     |
| Number of Seniors having access to<br>Senior Activity Centres | 23,000 | 25,531 | 27,546 | 28,995 | 28,415 |

Source: Ministry of Social and Family Development

Notes: Senior Activity Centres are drop-in centres which provide social and recreational activities for seniors.

Data refer to the Government's financial year which begins in April of the current year

and ends in March of the following year.

26.7 RESIDENTS IN OLD FOLKS' HOMES BY TYPE OF ORGANISATION AND SEX (End of Period)

|                                       |       |       |       |        |        |        | Number |
|---------------------------------------|-------|-------|-------|--------|--------|--------|--------|
|                                       | 2009  | 2010  | 2011  | 2012   | 2013   | 2014   | 2015   |
| Total                                 | 9,521 | 9,755 | 9,904 | 10,016 | 10,410 | 10,547 | 11,926 |
| Males                                 | 4,468 | 4,603 | 4,765 | 4,848  | 5,130  | 5,198  | 6,020  |
| Females                               | 5,053 | 5,152 | 5,139 | 5,168  | 5,280  | 5,349  | 5,906  |
| Government Welfare Homes <sup>1</sup> | 1,108 | 1,173 | 1,189 | 1,221  | 1,147  | 1,146  | 1,251  |
| Males                                 | 865   | 923   | 938   | 963    | 885    | 875    | 980    |
| Females                               | 243   | 250   | 251   | 258    | 262    | 271    | 271    |
| Sheltered Homes                       | 700   | 670   | 697   | 689    | 698    | 685    | 673    |
| Males                                 | 325   | 330   | 343   | 341    | 354    | 350    | 338    |
| Females                               | 375   | 340   | 354   | 348    | 344    | 335    | 335    |
| Voluntary Nursing Homes               | 4,974 | 5,033 | 4,979 | 4,978  | 5,295  | 5,418  | 6,846  |
| Males                                 | 2,145 | 2,173 | 2,142 | 2,155  | 2,386  | 2,475  | 3,290  |
| Females                               | 2,829 | 2,860 | 2,837 | 2,823  | 2,909  | 2,943  | 3,556  |
| Commercial Nursing Homes              | 2,739 | 2,879 | 3,039 | 3,128  | 3,270  | 3,298  | 3,156  |
| Males                                 | 1,133 | 1,177 | 1,342 | 1,389  | 1,505  | 1,498  | 1,412  |
| Females                               | 1,606 | 1,702 | 1,697 | 1,739  | 1,765  | 1,800  | 1,744  |

Source: Government Welfare Homes and Sheltered Homes

<sup>-</sup> Ministry of Social and Family Development (with effect from Nov 2012)

<sup>-</sup> Ministry of Community Development, Youth and Sports (prior to Nov 2012)

Voluntary Nursing Homes and Commercial Nursing Homes - Ministry of Health

<sup>1</sup> Data include only those aged 60 years and above.

### 26.8 FAMILY SERVICE CENTRES

|                          | Unit   | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Casework and Counselling | Cases  | 24,036 | 24,983 | 26,386 | 28,695 | 31,074 | 32,844 | 28,486 |
| Information and Referral | Number | 40,207 | 36,941 | 38,655 | 36,091 | 38,054 | 40,707 | 37,036 |

Source: Ministry of Social and Family Development

Note: Data refer to the Government's financial year which begins in April of the current year and ends in March of the following year.

## 27



# Culture and Recreation

Singapore aims to be a vibrant city of the arts, culture and media, and a sporting and learning nation, so as to provide a better quality of life for all.

#### Cinema

Data on cinema attendances are compiled by the Singapore Department of Statistics from returns submitted by cinema organisations. Prior to April 1994, they were obtained from the Singapore Customs. Total attendances are based on the number of tickets sold.

### Library

The National Library Board (NLB) aims to nurture the learning needs of a Knowledgeable Society, where all Singaporeans are Readers for Life and are actively engaged in Learning Communities. NLB has a membership of around 2.3 million. In addition to the National Library, there are 26 public libraries located conveniently across Singapore. This consists of 13 libraries located in shopping malls, 10 stand-alone public libraries and 3 regional libraries. NLB also manages 12 libraries belonging to government agencies, schools and institutions.

NLB has a physical collection totalling 7.9 million books, serials and special materials. More than 7.2 million items are in the lending collection.

The reference collection offered by the Lee Kong Chian Reference Library (LKCRL) at the National Library Building consists of over 690,000 items covering social sciences and humanities, arts, science and technology, business and management.

The lending collection offered by NLB's public libraries comprises fiction and non-fiction genres, with more than 2.9 million and 4.3 million books respectively. The number of loans from this collection is over 31 million.

NLB also provides library users with on-site and remote access to a digital library at www.nlb.gov.sg. Its eResources site offers more than 4 million copies of eBooks, over 70 databases with more than 4,000 titles of electronic newspapers in 60 languages, and approximately 40,000 music tracks.

### **Sports**

As the national sports agency, Sport Singapore recognises the value of sport to transform the nation, by advancing the national priorities of developing our people and bonding our communities.

In line with Vision 2030: Live Better Through Sport recommendations, Sport Singapore uses sport to create greater sporting opportunities and access, more inclusivity and integration as well as broader development of capabilities. Sport Singapore works with a vast network of public-private-people sector partners to enable individuals to live better through sport.

Sport Singapore provides a wide range of facilities under its Sports Facilities Master Plan for people to engage in sports at affordable rates. including swimming complexes, sports halls, stadiums, gymnasiums. Through ActiveSG, the national movement for sport, Sport Singapore also creates opportunities and provides innovative programming so that Singaporeans of all ages and abilities can participate and excel in sports as athletes, coaches, officials, volunteers or fans.

### **Lifeskills and Lifestyle Courses and Interest Groups**

The People's Association (PA) and its grassroots network promote friendship and trust amongst residents of all races and backgrounds through its wide range of community activities and courses pertaining to arts and lifestyle, education and lifeskills,

performing arts and sports. These are held at Community Clubs, Residents' Committee Water Venture Centres and Centres, community spaces. The PA also encourages the formation of interest groups so that residents can continue to deepen their friendships through the pursuit of common interests.

### The Arts

The Ministry of Culture, Community and Youth (MCCY)'s publication "Singapore Cultural Statistics" provides data on performing and visual arts activities. Data on performing arts activities are based on information from ticketing agencies (e.g. SISTIC and APACTIX), National Arts Council (NAC), The Esplanade Company Limited and People's Association. Data on visual arts activities are based on information gathered from newspapers, websites and gallery guides.

### **Definitions**

Performing arts: Refer to folk, traditional, classical, contemporary and popular forms of dance, music and theatre performances. Community arts and cultural events such as cultural festivals and district arts festivals are included.

Visual arts: Refer to public exhibitions of abstract or representational art objects such as paintings, prints, sculpture, pottery, ceramics, creative photography, installation art and multi-media art. Applied arts like film, video, graphic design, fashion design, jewellery design and handicrafts are excluded.

27.1 CINEMAS, SEATING CAPACITY AND ATTENDANCES (End of Period)

|                             | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| Cinemas (Number of Screens) | 176    | 167    | 186    | 187    | 207    | 220    | 231    |
| Seating Capacity ('000)     | 37     | 33     | 36     | 35     | 38     | 38     | 40     |
| Attendances ('000)          | 19,643 | 20,317 | 22,125 | 21,166 | 22,090 | 21,562 | 21,900 |

NATIONAL LIBRARY MEMBERSHIP, BOOK COLLECTIONS AND LOAN OF LIBRARY MATERIALS

|   |          |          |          |          |          |          | Thousand |
|---|----------|----------|----------|----------|----------|----------|----------|
|   | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
| Membership <sup>1</sup>                         | 2,024.6  | 2,043.2  | 2,056.0  | 2,109.0  | 2,213.5  | 2,259.8  | 2,315.9  |
| Persons Aged 13 years and Over                  | 1,715.3  | 1,741.5  | 1,750.6  | 1,815.6  | 1,932.9  | 1,989.0  | 2,052.1  |
| Children Under 13 Years                         | 309.3    | 301.7    | 305.4    | 293.4    | 280.5    | 270.8    | 263.8    |
| Total Physical Collections <sup>2</sup>         | 7,880.1  | 8,446.7  | 8,657.7  | 8,303.0  | 8,090.7  | 8,726.2  | 7,899.8  |
| English   | 5,137.1  | 5,563.1  | 5,649.0  | 5,398.7  | 5,266.5  | 5,676.9  | 5,038.5  |
| Chinese   | 1,584.2  | 1,653.3  | 1,761.4  | 1,642.5  | 1,569.0  | 1,716.8  | 1,599.4  |
| Malay   | 504.1    | 529.9    | 522.1    | 506.3    | 491.3    | 520.1    | 480.1    |
| Tamil   | 317.3    | 335.9    | 340.2    | 333.9    | 325.2    | 350.9    | 331.9    |
| Special Materials                               | 337.4    | 364.5    | 384.9    | 421.6    | 438.7    | 461.5    | 449.9    |
| Total eBooks Collections <sup>3</sup>           | 903.7    | 1,218.7  | 2,338.3  | 3,155.6  | 3,225.6  | 3,522.0  | 4,145.1  |
| English   | 788.0    | 1,103.0  | 2,219.2  | 3,033.6  | 3,096.0  | 3,390.9  | 4,009.8  |
| Chinese   | 114.6    | 114.6    | 117.4    | 120.2    | 127.2    | 128.2    | 132.5    |
| Malay   | 1.1      | 1.1      | 1.5      | 1.5      | 2.1      | 2.5      | 2.5      |
| Tamil   | 0.0      | 0.0      | 0.2      | 0.3      | 0.3      | 0.3      | 0.3      |
| Loan of Physical Library Materials <sup>4</sup> | 31,474.0 | 33,150.2 | 36,504.2 | 38,082.6 | 35,537.4 | 34,034.7 | 31,824.4 |
| Persons Aged 13 Years and Over                  | 23,163.5 | 21,785.4 | 26,310.4 | 26,802.9 | 25,606.8 | 22,411.0 | 20,868.8 |
| Children Under 13 Years                         | 8,310.5  | 11,364.8 | 10,193.8 | 11,279.7 | 9,930.5  | 11,623.8 | 10,955.6 |
| eBook Usage <sup>5</sup>                        | 2,759.0  | 3,485.9  | 4,406.2  | 7,483.7  | 10,611.7 | 10,758.4 | 11,504.3 |

Source: National Library Board

<sup>1</sup> Includes membership from public libraries only and excludes members who have no library transactions in the past 5 years.

<sup>2</sup> Includes books, serials and special materials (namely, Art Print, Compact disc, Compact disc interactive, Computer File, CD-ROMs, DVD, VCD, Filmstrip, Kit, Map, Microfiche, Microfilm, Music score, Recorded disc, Talking books, Tape recording, Tape slide, Videocassette, Videodisc and Laserdisc, braille, game, motion picture, wall chart, picture collection, ephemera and manuscript).

<sup>3</sup> Refers to the total number of eBooks copies made available on e-resources website such as Apabi, Overdrive and Tumblebooks.

<sup>4</sup> Includes loans of physical books, magazines and AV materials (such as Video Tapes, VCDs, CDs, CD-Roms, DVDs and music scores) borrowed from public libraries only.

<sup>5</sup> Includes different types of usage such as loans, page views, downloads and checkouts.

### 27.3 VISITORS TO PLACES OF INTEREST

| 2015<br>349.6<br>774.6<br>903.4 |
|---------------------------------|
| 774.6                           |
| 774.6                           |
|                                 |
| 903.4                           |
|                                 |
| 152.7                           |
| 475.7                           |
| 270.0                           |
| 1,046.0                         |
| 810.1                           |
| 1,159.0                         |
| 843.1                           |
| 1,833.4                         |
| 939.5                           |
| 8,514.5                         |
| 19,500.0                        |
|                                 |

Source: National Heritage Board

Science Centre Singapore Singapore Zoological Gardens

Singapore Discovery Centre

Singapore Art Museum (wef Jan 2014)

Jurong Gardens Pte Ltd

River Safari

Jurong BirdPark Pte Ltd

Night Safari

Sentosa Development Corporation

Gardens by the Bay

- 1 Visitorship to the museums is counted using an automatic tracking system, a device which is fixed at entrance to the museums. All visitors who access the museum premises are captured in the count, regardless of whether the entries are based on paid admissions or those not requiring payment
- 2 Includes visitors to Asian Civilisations Museum at Empress Place Building
- 3 Includes visitors to 8Q Singapore Art Museum.
- 4 Refers to the financial year which begins in April of the current year and ends in March of the following year
- 5 River Safari was officially opened on 3 April 2013.
- 6 Gardens by the Bay was officially opened on 29 June 2012.
- 7 From April 2009, Southern Island arrivals have been excluded from Sentosa visitorship

27.4 UTILISATION OF SPORTS FACILITIES

|                           |           |           |           |           |           |           | Numbe     |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                           | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      |
| Attendances               |           |           |           |           |           |           |           |
| Swimming pool             | 7,574,853 | 7,163,669 | 6,939,334 | 7,034,166 | 6,724,546 | 6,870,183 | 6,898,517 |
| Gymnasium                 | 1,817,431 | 1,823,321 | 1,984,865 | 2,298,340 | 2,523,844 | 2,562,218 | 2,554,524 |
| Bookings                  |           |           |           |           |           |           |           |
| Total                     | 710,915   | 699,973   | 836,591   | 933,687   | 933,589   | 1,041,967 | 1,162,779 |
| Badminton <sup>1</sup>    | 401,770   | 401,390   | 472,852   | 538,381   | 526,660   | 579,431   | 638,485   |
| Tennis                    | 132,245   | 115,900   | 129,244   | 141,621   | 133,227   | 161,888   | 168,182   |
| Table-tennis <sup>1</sup> | 66,747    | 61,081    | 72,710    | 86,706    | 84,104    | 96,274    | 105,218   |
| Basketball 1              | 12,794    | 19,726    | 27,977    | 27,646    | 39,362    | 41,883    | 34,661    |
| Squash                    | 27,187    | 25,119    | 32,902    | 34,479    | 37,610    | 41,742    | 54,973    |
| Soccer                    | 18,833    | 19,687    | 24,122    | 29,487    | 27,944    | 29,074    | 28,470    |
| Volleyball 1              | 12,096    | 9,895     | 13,116    | 14,182    | 13,988    | 21,188    | 29,418    |
| Netball                   | 8,585     | 6,728     | 6,702     | 7,549     | 7,651     | 7,339     | 9,427     |
| Hockey                    | 4,013     | 3,748     | 4,449     | 4,800     | 5,345     | 5,268     | 6,601     |
| Rugby                     | 497       | 444       | 401       | 608       | 533       | 399       | 521       |
| Athletics                 | 1,325     | 509       | 411       | 324       | 277       | 642       | 2,358     |
| Others <sup>2</sup>       | 24,823    | 35,746    | 51,705    | 47,904    | 56,888    | 56,839    | 84,465    |

Source : Sport Singapore

Note: Refers to sports facilities provided by Sport Singapore.

Prior to Apr 2014, Sport Singapore was known as the Singapore Sports Council.

<sup>1</sup> Refers to bookings of sports hall facilities managed by Sport Singapore.

<sup>2</sup> Refers to other bookings at sports hall facilities managed by Sport Singapore, eg fencing, floorball etc.

27.5 INTEREST GROUPS IN COMMUNITY CLUBS AND RESIDENTS' COMMITTEES (End of Period)

|  | Т                 | Т      | T                     | T       | Nun     |  |  |  |
|--|-------------------|--------|-----------------------|---------|---------|--|--|--|
| Type of Interest Groups                | 2011              | 2012   | 2013                  | 2014    | 2015    |  |  |  |
|  |                   |        | nber of Interest Grou |         |         |  |  |  |
| Sports                                 | 2,507             | 2,810  | 2,856                 | 3,820   | 3,999   |  |  |  |
| Adventure                              | 20                | 25     | 32                    | 40      | 43      |  |  |  |
| Ball Games                             | 545               | 573    | 557                   | 651     | 656     |  |  |  |
| Health & Fitness                       | 833               | 931    | 958                   | 1,099   | 1,114   |  |  |  |
| Hobby                                  | na                | na     | na                    | 294     | 315     |  |  |  |
| Lifestyle                              | na                | na     | na                    | 77      | 136     |  |  |  |
| Martial Arts                           | 734               | 858    | 860                   | 974     | 981     |  |  |  |
| Mind Games                             | na                | na     | na                    | 121     | 129     |  |  |  |
| Precision Sports                       | 26                | 27     | 24                    | 26      | 29      |  |  |  |
| Racket Games                           | 248               | 277    | 274                   | 324     | 338     |  |  |  |
| Recreational Sports <sup>1</sup>       | 35                | 51     | 82                    | 133     | 173     |  |  |  |
| Water Sports                           | 66                | 68     | 69                    | 81      | 85      |  |  |  |
| Performing Arts                        | 1,733             | 1,888  | 1,999                 | 2,406   | 2,495   |  |  |  |
| Band                                   | 50                | 52     | 53                    | 73      | 74      |  |  |  |
| Culture Appreciation Club <sup>2</sup> | 102               | 114    | 117                   | 61      | 6       |  |  |  |
| Dance                                  | 531               | 623    | 680                   | 906     | 963     |  |  |  |
| Music                                  | 158               | 169    | 238                   | 294     | 300     |  |  |  |
| Theatre                                | 113               | 107    | 104                   | 137     | 140     |  |  |  |
| Vocal                                  | 779               | 823    | 807                   | 935     | 952     |  |  |  |
|  | Number of Members |        |                       |         |         |  |  |  |
| Sports                                 | 82,774            | 98,395 | 100,924               | 127,981 | 132,967 |  |  |  |
| Adventure                              | 198               | 312    | 407                   | 603     | 686     |  |  |  |
| Ball Games                             | 4,898             | 6,196  | 6,014                 | 8,626   | 9,05    |  |  |  |
| Health & Fitness                       | 61,775            | 73,231 | 75,024                | 84,369  | 85,444  |  |  |  |
| Hobby                                  | na                | na     | na                    | 4,499   | 4,98    |  |  |  |
| Lifestyle                              | na                | na     | na                    | 2,061   | 3,19    |  |  |  |
| Martial Arts                           | 10,867            | 13,993 | 14,655                | 18,621  | 18,91   |  |  |  |
| Mind Games                             | na                | na     | na                    | 1,682   | 1,913   |  |  |  |
| Precision Sports                       | 451               | 346    | 340                   | 558     | 590     |  |  |  |
| Racket Games                           | 2,305             | 2,825  | 2,810                 | 4,313   | 4,80    |  |  |  |
| Recreational Sports <sup>1</sup>       | 360               | 688    | 993                   | 1,712   | 2,249   |  |  |  |
| Water Sports                           | 1,920             | 804    | 681                   | 937     | 1,132   |  |  |  |
| Performing Arts                        | 16,706            | 22,898 | 24,767                | 36,766  | 39,666  |  |  |  |
| Band                                   | 386               | 482    | 472                   | 872     | 973     |  |  |  |
| Culture Appreciation Club <sup>2</sup> | 819               | 1,161  | 1,078                 | 701     | 745     |  |  |  |
| Dance                                  | 5,519             | 8,905  | 10,004                | 16,090  | 18,035  |  |  |  |
| Music                                  | 1,703             | 1,987  | 2,569                 | 3,932   | 4,078   |  |  |  |
| Theatre                                | 1,319             | 1,250  | 1,057                 | 1,928   | 2,012   |  |  |  |
|  | 6,960             | 9,113  | 9,587                 | 13,243  | 13,823  |  |  |  |

Source : People's Association (PA)

<sup>1</sup> Sports has been renamed to Recreational Sports.

<sup>2</sup> With effect from 2014, some interest groups and members that were previously classified under Culture Appreciation Club have been re-classified into other categories.

27.6 SPORTS AND PERFORMING ARTS COURSES CONDUCTED BY COMMUNITY CLUBS, RESIDENTS' COMMITTEES AND PA WATER-VENTURE

|                            |              |         |         |         |         |         | Numbe   |  |
|----------------------------|--------------|---------|---------|---------|---------|---------|---------|--|
| Type of Course             | 2009         | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |  |
|                            |              |         |         | Classes |         |         |         |  |
| Sports                     | 12,604       | 13,957  | 14,654  | 14,310  | 12,667  | 14,648  | 15,674  |  |
| Ball Games                 | 511          | 572     | 591     | 411     | 318     | 349     | 415     |  |
| Board / Intellectual Games | 24           | 106     | 42      | 41      | 115     | 96      | 103     |  |
| Keep Fit                   | 5,658        | 6,029   | 5,793   | 5,496   | 5,940   | 7,437   | 7,814   |  |
| Martial Arts               | 4,579        | 4,976   | 4,793   | 4,220   | 3,408   | 3,939   | 4,533   |  |
| Performing Sports          | 848          | 674     | 618     | 518     | 448     | 529     | 530     |  |
| Water Sports               | 984          | 1,600   | 2,817   | 3,624   | 2,438   | 2,298   | 2,279   |  |
| Performing Arts            | 20,172       | 20,385  | 20,433  | 19,578  | 17,269  | 19,039  | 19,316  |  |
| Dance                      | 8,628        | 8,910   | 9,022   | 9,055   | 8,507   | 9,634   | 9,776   |  |
| Drama <sup>1</sup>         | 440          | 272     | 250     | 207     | 173     | 214     | 242     |  |
| Music                      | 7,668        | 7,748   | 7,439   | 7,015   | 6,162   | 6,304   | 6,376   |  |
| Vocal                      | 3,436        | 3,455   | 3,722   | 3,301   | 2,427   | 2,887   | 2,922   |  |
|                            | Participants |         |         |         |         |         |         |  |
| Sports                     | 210,686      | 231,361 | 224,675 | 211,700 | 196,102 | 228,279 | 246,264 |  |
| Ball Games                 | 6,351        | 7,138   | 7,184   | 4,080   | 3,331   | 3,378   | 4,343   |  |
| Board / Intellectual Games | 335          | 1,466   | 388     | 449     | 1,175   | 657     | 1,041   |  |
| Keep Fit                   | 97,495       | 108,022 | 96,835  | 89,943  | 104,921 | 129,772 | 137,832 |  |
| Martial Arts               | 78,871       | 86,256  | 83,495  | 76,226  | 62,804  | 70,444  | 77,608  |  |
| Performing Sports          | 9,879        | 7,542   | 7,480   | 5,514   | 4,114   | 5,125   | 5,446   |  |
| Water Sports               | 17,755       | 20,937  | 29,293  | 35,488  | 19,757  | 18,903  | 19,994  |  |
| Performing Arts            | 188,919      | 190,143 | 190,625 | 176,849 | 150,262 | 163,777 | 167,317 |  |
| Dance                      | 103,843      | 108,474 | 107,581 | 104,412 | 92,793  | 100,456 | 101,748 |  |
| Drama <sup>1</sup>         | 4,754        | 4,022   | 3,598   | 2,951   | 2,665   | 3,010   | 3,042   |  |
| Music                      | 25,849       | 25,527  | 25,847  | 22,263  | 18,212  | 18,283  | 20,344  |  |
| Vocal                      | 54,473       | 52,120  | 53,599  | 47,223  | 36,592  | 42,028  | 42,183  |  |

Source : People's Association (PA)

<sup>1</sup> Excludes playgroup.

27.7 THE ARTS

|                                   |           |           |           |           |           | Number    |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Art Form                          | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |
| Performing Arts                   |           |           |           |           |           | _         |
| Ticketed Performances             | 2,295     | 2,267     | 3,416     | 3,497     | 3,006     | 3,256     |
| Ticketed Attendances <sup>1</sup> | 1,169,352 | 1,577,737 | 2,311,313 | 2,062,124 | 1,897,162 | 1,876,922 |
| Visual Arts Exhibitions           |           |           |           |           |           |           |
| Number                            | 915       | 999       | 858       | 675       | 559       | 973       |
| Days                              | 21,479    | 26,266    | 22,867    | 17,883    | 16,115    | 31,678    |

Source: National Arts Council (NAC)

<sup>1</sup> Refers to attendance at performing arts events that require a ticket for entry. Includes tickets sold and complimentary tickets issued

# 28



# Miscellaneous

### **Water Supply**

As the national water agency, PUB is responsible for the collection, production, distribution and reclamation of water in Singapore. To ensure sustainability of Singapore's water supply, efforts are taken to diversify the supply sources and manage demand.

Currently, Singapore's water supply is diversified through the four National Taps, namely, water from local catchments, imported water from Johor, NEWater and desalinated water. Potable water is supplied to all parts of Singapore and treated to a quality well within the World Health Organisation's Guidelines for Drinking Water Quality. On water demand management, PUB works with the community and various sectors to adopt water conservation measures, such as promoting good water habits and improving efficient use of water.

### **Electricity**

The Energy Market Authority (EMA) was formed in April 2001 to ensure a reliable and secure energy supply and promote effective competition in the electricity and gas industries.

Currently, there are 14 power generation companies in the electricity market. 8 of them generate electricity using mainly natural gas:

- Keppel Merlimau Cogen Pte Ltd
- PacificLight Power Pte Ltd
- Sembcorp Cogen Pte Ltd
- Senoko Energy Pte Ltd
- TP Utilities Pte Ltd
- Tuas Power Generation Pte Ltd and
- YTL PowerSeraya Pte Ltd
- Tuaspring Pte Ltd.

The National Environment Agency (NEA), Keppel Seghers Tuas Waste-To-Energy Plant Pte Ltd and Senoko Waste-To-Energy Pte Ltd operate incineration plants and sell the electricity generated from these plants. Shell Eastern Petroleum Pte Ltd and ExxonMobil Asia Pacific Pte Ltd generate electricity mainly for their own use. The remaining company Singapore Refining Company Pte Ltd plans to start generating electricity by first half of 2017.

The power generation companies bid to sell electricity every half hour through the National Electricity Market of Singapore (NEMS), a real-time electricity trading pool operated and administered by the Energy Market Company.

As at end December 2015, there was 56.9 MWp (megawatt-peak) of grid-connected solar photovoltaic capacity. The total licensed power generation capacity was 13,590 MW. The total amount of electricity produced was 50,297 GWh and peak demand was 6,960 MW.

Since 2001, EMA has progressively opened the electricity retail market to increase competition. This provides consumers with more choices in buying electricity from retailers, instead of buying solely from SP Services Ltd at the regulated tariff.

Today, contestable consumers – commercial and industrial consumers with average monthly electricity consumption of at least 2,000 kWh – can opt to buy electricity from electricity retailers offering different prices and services, or from SP Services at the regulated tariff. They can choose to aggregate their electricity usage across different locations in Singapore to meet the prevailing threshold.

There are currently 14 licensed electricity retailers competing to sell electricity to contestable consumers, namely:

- Best Electricity Supply Pte Ltd
- Buri Energy Pte Ltd
- CPvT Energy Asia Pte Ltd
- Diamond Energy Supply Pte Ltd
- Hyflux Energy Pte Ltd
- Keppel Electric Pte Ltd
- PacificLight Energy Pte Ltd
- SembCorp Power Pte Ltd

- Senoko Energy Supply Pte Ltd
- Seraya Energy Pte Ltd
- Sun Electric Power Pte Ltd
- Sunseap Energy Pte Ltd
- Tong Teik Pte Ltd and
- Tuas Power Supply Pte Ltd.

### **Piped Gas Industry**

Currently, the gas industry in Singapore consists of two separate gas networks - the town gas network and the natural gas network.

The town gas network serves about 59% of households in Singapore and is used mainly for cooking and water heating by domestic and commercial customers. Total town gas sold in 2015 was 1,696 million kWh.

Natural gas is used mainly for power generation. In 2015, natural gas contributed to about 95% of the total electricity generated.

To diversify our sources of energy and meet rising demand for energy, Singapore began importing Liquefied Natural Gas (LNG) with the start of commercial operations at the LNG terminal in May 2013. The terminal currently has a throughput capacity of 6 million tonnes per annum.

### **Waste Management**

Over the last four decades, Singapore has seen an increase in the amount of solid waste generated.

Waste generated in Singapore is broadly classified into two categories. They are:

(a) Domestic waste: Collected from residential premises, markets, food retail outlets, schools and trade premises; and

(b) Non-domestic waste: Collected from commercial and industrial premises.

With limited land resources available for waste disposal, the National Environment Agency (NEA) has adopted the following strategies to manage the growth in solid waste generation:

- (a) Minimise and segregate waste at source:
- (b) Develop cost-effective collection, recycling and disposal systems;
- (c) Build a resource-efficient society; and
- (d) Maximise lifespan of landfill

Today, Singapore has in place an integrated solid waste management system. Waste that is not segregated at source for recycling is collected and sent to disposal facilities. Incinerable waste is disposed of safely at waste-to-energy plants, while non-incinerable waste and ash residue from the incineration process are disposed of at the offshore Semakau Landfill.

### **Fire Occurrences**

The mission of the Singapore Civil Defence Force (SCDF) is to protect and save lives and property for a safe and secure Singapore. SCDF compiles data on fire occurrences.

### **Definitions**

Residential buildings: Refer to all buildings, either permanent or temporary, used for residential purposes only, such as bungalows, private and public housing, semi-detached and terrace houses. They do not include boarding houses, hostels and hotels.

Non-residential buildings: Refer to all buildings, either permanent or temporary, used for other than residential purposes, such as commercial, industrial, manufacturing, public services, storage, sales and services.

Non-building structures: Refer to all properties or structures other than buildings, such as aircraft, bridges, canals, discarded materials, electrical cables, vegetation, vehicles and vessels.

### **Criminal offences**

Singapore's crime statistics are compiled from offences reported to the police during the reference period and not at the time the offences were actually committed.

### **Bankruptcy Applications, Orders Made and Discharges**

A bankruptcy application is filed with the High Court by the creditor or the debtor himself.

Upon hearing the bankruptcy application, the High Court may make a bankruptcy order declaring the individual a bankrupt.

A bankruptcy discharge refers to the conclusion of the bankruptcy of an individual. The individual is no longer subject to the restrictions and disabilities of a bankrupt after his discharge.

28.1 WATER SALES

 $million \; m^3 \, / \, year$ 2010 2011 2012 2013 2014 2009 2015 Sales of Potable Water 468.0 476.1 478.4 490.9 498.6 506.3 514.7 Domestic 277.8 281.0 281.3 284.4 286.7 291.2 297.1 Non-domestic 190.1 195.1 197.2 206.5 217.6 211.9 215.1 Sales of NEWater 72.0 102.4 111.4 96.4 114.1 117.1 124.8 Sales of Industrial Water 21.9 24.5 23.1 25.3 27.6 27.6 25.0

Source Ministry of the Environment and Water Resources PUB, Singapore's national water agency

28.2 ELECTRICITY GENERATION AND CONSUMPTION

|                                       | Gigawatt Hour |          |          |          |          |          |          |  |
|---------------------------------------|---------------|----------|----------|----------|----------|----------|----------|--|
|                                       | 2009          | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |  |
| Electricity Generation <sup>1</sup>   | 41,813.3      | 45,360.5 | 46,000.1 | 46,971.2 | 47,963.3 | 49,310.0 | 50,271.5 |  |
| Electricity Consumption <sup>2</sup>  | 38,822.9      | 42,251.8 | 43,007.2 | 44,200.6 | 44,948.7 | 46,402.9 | 47,513.8 |  |
| Industrial-related                    | 15,570.2      | 17,662.5 | 18,077.4 | 18,572.4 | 18,842.7 | 19,753.2 | 20,088.0 |  |
| Manufacturing                         | 14,544.1      | 16,452.8 | 16,756.6 | 17,116.7 | 17,241.9 | 17,993.7 | 18,279.7 |  |
| Construction                          | 308.3         | 337.8    | 363.0    | 443.7    | 490.5    | 527.1    | 531.0    |  |
| Utilities                             | 691.9         | 843.4    | 928.5    | 978.9    | 1,074.8  | 1,198.0  | 1,235.1  |  |
| Other Industrial-related              | 25.9          | 28.5     | 29.3     | 33.1     | 35.5     | 34.4     | 42.2     |  |
| Commerce and Service-related          | 14,800.1      | 15,469.7 | 15,876.3 | 16,366.1 | 16,718.6 | 17,046.6 | 17,481.0 |  |
| Wholesale and Retail Trade            | 1,821.4       | 1,923.0  | 1,898.8  | 1,909.4  | 1,967.1  | 2,020.5  | 2,107.4  |  |
| Accommodation and Food Services       | 1,169.2       | 1,219.6  | 1,251.4  | 1,275.1  | 1,326.6  | 1,332.3  | 1,350.2  |  |
| Information and Communications        | 866.0         | 925.5    | 988.6    | 1,084.4  | 1,149.1  | 1,294.5  | 1,426.7  |  |
| Financial and Insurance Activities    | 1,865.4       | 1,927.0  | 2,003.2  | 2,204.2  | 2,257.9  | 2,574.1  | 2,718.1  |  |
| Real Estate Activities                | 4,050.8       | 4,346.2  | 4,454.7  | 4,522.6  | 4,532.4  | 4,485.7  | 4,454.6  |  |
| Professional, Scientific & Technical, |               |          |          |          |          |          |          |  |
| Administration & Support Activities   | 778.4         | 885.8    | 934.1    | 930.8    | 932.7    | 681.0    | 713.7    |  |
| Other Commerce and Service-related    | 4,248.8       | 4,242.7  | 4,345.5  | 4,439.6  | 4,552.8  | 4,658.5  | 4,710.3  |  |
| Transport-related                     | 1,607.8       | 2,098.7  | 2,224.2  | 2,328.6  | 2,369.1  | 2,441.0  | 2,444.8  |  |
| Households                            | 6,430.8       | 6,636.0  | 6,482.7  | 6,629.5  | 6,754.9  | 6,924.4  | 7,220.9  |  |
| Others                                | 414.0         | 384.9    | 346.6    | 304.0    | 263.4    | 237.7    | 279.1    |  |

Source: Energy Market Authority

Note: Data on industries are classified according to the Singapore Standard Industrial Classification 2015.

<sup>1</sup> Data reflect the gross generation in the system.

<sup>2</sup> Refers to the total electricity consumption by end users, including (embedded) consumption by autoproducers.

28.3 GAS SALES

|   | 2009      | 2010      | 2011      | 2012      | 2013      | 2014     | 2015     |
|---|-----------|-----------|-----------|-----------|-----------|----------|----------|
| Piped Gas Sales (Town Gas)<br>(million units) | 1,461.4   | 1,535.2   | 1,599.4   | 1,641.3   | 1,662.7   | 1,666.2  | 1,695.4  |
| Domestic                                      | 629.5     | 627.6     | 642.2     | 663.6     | 671.2     | 687.9    | 711.7    |
| Non-Domestic                                  | 831.9     | 907.6     | 957.2     | 977.7     | 991.6     | 978.4    | 983.9    |
| Liquefied Petroleum Gas Sales (net tonnes)    | 111,547.2 | 113,653.1 | 104,582.0 | 103,610.5 | 105,601.5 | 95,396.9 | 96,820.3 |

Source: Liquefied Petroleum Gas Sales - Singapore Department of Statistics

Piped Gas Sales - City Gas Pte Ltd One unit is equivalent to one kilowatt hour.

28.4 WASTE DISPOSED OF AND RECYCLED

|                   |      |      |      |      |      | 1    | Million Tonnes |
|-------------------|------|------|------|------|------|------|----------------|
|                   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015           |
| Waste Disposed of | 2.63 | 2.76 | 2.86 | 2.93 | 3.02 | 3.04 | 3.02           |
| Domestic          | 1.52 | 1.60 | 1.64 | 1.65 | 1.70 | 1.74 | 1.73           |
| Non-domestic      | 1.11 | 1.16 | 1.22 | 1.28 | 1.32 | 1.30 | 1.29           |
| Waste Recycled    | 3.49 | 3.76 | 4.04 | 4.34 | 4.83 | 4.47 | 4.65           |
|                   |      |      |      |      |      |      |                |

Source: Ministry of the Environment and Water Resources

National Environment Agency

Note: Data exclude metals recovered from incineration bottom ash in a new metal recovery facility commissioned in 2015.

28.5 FIRE OCCURRENCES

|                         |       |       |       |       |       |       | Number |
|-------------------------|-------|-------|-------|-------|-------|-------|--------|
| Type of Property        | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015   |
| Total                   | 5,236 | 4,600 | 4,470 | 4,485 | 4,136 | 4,724 | 4,604  |
| Building                | 4,195 | 3,857 | 3,819 | 3,766 | 3,485 | 3,453 | 3,403  |
| Residential             | 3,544 | 3,267 | 3,254 | 3,184 | 2,952 | 2,888 | 2,898  |
| Non-residential         | 651   | 590   | 565   | 582   | 533   | 565   | 505    |
| Non-Building Structures | 1,041 | 743   | 651   | 719   | 651   | 1,271 | 1,201  |

Source: Singapore Civil Defence Force

28.6 CRIME CASES RECORDED

| Type of Offence                                | 2009                   | 2010   | 2011   | 2012           | 2013    | 2014   | 2015   |  |
|--|------------------------|--------|--------|----------------|---------|--------|--------|--|
|  |                        |        | Numbe  | er of Cases Re | ecorded |        |        |  |
| Overall Crime                                  | 33,186                 | 33,152 | 31,508 | 31,015         | 29,984  | 32,315 | 33,608 |  |
| Crimes Against Persons                         | 3,907                  | 4,177  | 3,969  | 3,824          | 3,822   | 4,269  | 4,130  |  |
| Violent / Serious Property Crimes <sup>1</sup> | 751                    | 567    | 443    | 389            | 418     | 535    | 299    |  |
| Housebreaking and Related                      |                        |        |        |                |         |        |        |  |
| Crimes   | 1,025                  | 896    | 706    | 598            | 543     | 360    | 333    |  |
| Theft and Related Crimes                       | 20,445                 | 19,560 | 18,314 | 18,476         | 17,075  | 16,722 | 15,645 |  |
| Commercial Crimes                              | 3,359                  | 3,804  | 3,880  | 3,507          | 3,947   | 5,687  | 8,329  |  |
| Miscellaneous Crimes                           | 3,699                  | 4,148  | 4,196  | 4,221          | 4,179   | 4,742  | 4,872  |  |
|  | Per 100,000 population |        |        |                |         |        |        |  |
| Overall Crime Rate                             | 665                    | 653    | 608    | 584            | 555     | 591    | 607    |  |
| Crimes Against Persons                         | 78                     | 82     | 77     | 72             | 71      | 78     | 75     |  |
| Violent / Serious Property Crimes <sup>1</sup> | 15                     | 11     | 9      | 7              | 8       | 10     | 5      |  |
| Housebreaking and Related                      |                        |        |        |                |         |        |        |  |
| Crimes   | 21                     | 18     | 14     | 11             | 10      | 7      | 6      |  |
| Theft and Related Crimes                       | 410                    | 385    | 353    | 348            | 316     | 306    | 283    |  |
| Commercial Crimes                              | 67                     | 75     | 75     | 66             | 73      | 104    | 150    |  |
| Miscellaneous Crimes                           | 74                     | 82     | 81     | 79             | 77      | 87     | 88     |  |

Source : Police Intelligence Department

28.7 NUMBER OF BANKRUPTCY APPLICATIONS, ORDERS MADE AND DISCHARGES

|                             | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Applications For Bankruptcy | 2,754 | 2,202 | 2,314 | 3,019 | 2,824 | 2,587 | 2,612 |
| Bankruptcy Orders Made      | 2,058 | 1,537 | 1,527 | 1,748 | 1,992 | 1,758 | 1,776 |
| Bankruptcy Discharges       | 3,056 | 2,252 | 1,391 | 1,881 | 2,584 | 3,546 | 3,499 |

Source: Public Trustee's Office

<sup>1</sup> Refers to crimes which involve the taking of money or property by force or means of threat against the victims.

These include crimes where physical violence may not necessarily be involved e.g. cyber-extortion cases.

### SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES

#### **Statistics Singapore Website**

The *Statistics Singapore Website* was launched by the Singapore Department of Statistics (DOS) in January 1995. Internet users can access the website by connecting to:

### http://www.singstat.gov.sg/

Key Singapore statistics are available via the following sections:

Statistics

which provides access to the latest statistical findings of DOS as well as statistics compiled by Research and Statistics Units (RSUs) in ministries and statutory boards.

News

which provides a listing of the news released by DOS and RSUs.

• Publications

which presents the latest editions of DOS' publications, papers and articles.

• Browse by Themes

which presents official statistics compiled by DOS and RSUs in the various ministries and statutory boards according to themes. Within each theme, relevant statistics and related press releases, publications and references are provided.

Statistical resources are available via:

• Publication and Papers

which lists the latest editions of publications released by DOS according to statistical domains at http://www.singstat.gov.sg/publications/publications-and-papers. All softcopy DOS publications are available for free downloading. Statistical tables of DOS publications in Excel format are also available.

Advance Release Calendar

which provides a six months ahead advance release calendar of key statistical indicators.

The website also provides a convenient gateway to international statistical websites under the "Methodologies & Standards" section:

• Guide to International Statistics

which provides hyperlinks to international databases and classifications, as well as websites of international bodies and other national statistical offices.

• IMF Dissemination Standards Bulletin Board

which provides metadata about Singapore's key indicators in the real, fiscal, financial and external sectors, including dissemination practices and information about pre-release access of current indicators.

### SingStat Express

SingStat Express is a personalised data delivery service which sends the latest press releases, notices of publication, newsletter, occasional and information papers to subscribers via email. SMS alert service is also available to local users. Subscription details are available from the Statistics Singapore Website (http://www.singstat.gov.sg/express).

### SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES (cont'd)

### **Really Simple Syndication**

Really Simple Syndication (RSS) is an easy way to stay updated on the latest statistical news released via the Statistics Singapore Website. The SingStat RSS feed delivers statistical news highlights and hyperlinks to the source documents whenever the updates are posted. More information is available at http://www.singstat.gov.sg/services/really-simple-syndication-(rss).

### SingStat Mobile App

SingStat Mobile App provides users with ready access to the latest key Singapore official statistics through their mobile devices while on the go. Users may visualize data for the latest periods with some 200 charts of commonly used statistics from 27 data categories. The app is available for downloading in iOS and Android devices. More information is available at http://www.singstat.gov.sg/services/singstat-mobile-app

#### SingStat Table Builder

The *SingStat Table Builder* contains statistical data series on the Singapore economy and population for users to create customised data tables, plot graphs and charts and export them in different file formats. Explore data trends with this e-service at http://www.singstat.gov.sg/tablebuilder.

### E-survey

The *E-survey* enables business organisations to complete and submit their survey forms through the internet. Using secured encryption protocols, the *E-survey* ensures that the information transmitted through the net is secured and protected. The system features online helps and validation checks to assist respondents in completing their survey forms. With the *E-survey*, respondents do away with the tedious paper work and manual tasks of mailing or faxing their survey returns to the Department.

### Statistical Enquiries and Feedback

If you have any statistical enquiries or comment or suggestions on our statistical publications and electronic services, you are welcomed to:

E-mail us at info@singstat.gov.sg

Fax to us at (65) 6332-7689

Call us at 1800-3238118\* (local callers)

(65) 6332-7738 (overseas callers)

\* Calls from mobile telephone lines to 1800 local toll free number may be subject to mobile airtime charges as imposed by the relevant mobile service provider.

### READERSHIP SURVEY

We appreciate your views on the Yearbook of Statistics. Kindly spend a few minutes of your time to answer the following questions, and return the form to the address provided below. Alternatively, you may complete the form online through

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