



# SINGAPORE CONSUMER PRICE INDEX (2009 = 100) JULY 2012

| (2009 = 100)   |                |                       |                                   |                               |  |  |  |
|--|----------------|-----------------------|-----------------------------------|-------------------------------|--|--|--|
| Group  | Weights<br>(%) | Jul 2012/<br>Jul 2011 | % Change<br>Jul 2012/<br>Jun 2012 | Jan-Jul 2012/<br>Jan-Jul 2011 |  |  |  |
| ALL ITEMS  | 100            | 4.0                   | 0.2                               | 4.9                           |  |  |  |
| Food   | 22             | 2.3                   | 0.2                               | 2.7                           |  |  |  |
| Clothing & Footwear  | 3              | 2.5                   | 2.9                               | 1.3                           |  |  |  |
| Housing  | 25             | 6.4                   | 0.2                               | 9.1                           |  |  |  |
| Transport  | 16             | 5.7                   | -0.2                              | 6.8                           |  |  |  |
| Communication  | 5              | 0.2                   | 0.1                               | -0.1                          |  |  |  |
| Education & Stationery   | 7              | 3.4                   | 0.1                               | 3.3                           |  |  |  |
| Health Care  | 6              | 5.1                   | 0.8                               | 4.1                           |  |  |  |
| Recreation & Others  | 16             | 1.3                   | 0.1                               | 2.0                           |  |  |  |
| All Items less Imputed Rentals<br>on Owner-Occupied Accommodation <sup>1</sup> | 84             | 3.0                   | 0.2                               | 3.8                           |  |  |  |
| All Items less Accommodation   | 80             | 3.0                   | 0.2                               | 3.6                           |  |  |  |
| MAS Core Inflation Measure   | 68             | 2.4                   | 0.2                               | 2.8                           |  |  |  |

#### TABLE 1 CONSUMER PRICE INDEX (2009 = 100)

<sup>1</sup> A significant share of the CPI Accommodation subgroup 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 homes are included separately under the CPI Accommodation subgroup. 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.

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#### TABLE 2 PERCENTAGE CHANGE IN CONSUMER PRICE INDEX AT GROUP AND SUB-GROUP LEVEL (2009 = 100)

| Group and Sub-group   |           | % Change   |                |              |  |
|---|-----------|------------|----------------|--------------|--|
|   | Weights   | Jul 2012 / | Jan-Jul 2012 / |              |  |
|   |           | Jul 2011   | Jun 2012       | Jan-Jul 2011 |  |
| ALL ITEMS   | 10,000    | 4.0        | 0.2            | 4.9          |  |
| FOOD  | 2,205     | 2.3        | 0.2            | 2.7          |  |
| Food excl prepared meals                                      | 851       | 2.7        | 0.3            | 2.7          |  |
| Rice & other cereals  | 165       | 1.5        | -0.1           | 2.2          |  |
| Meat & Poultry  | 141       | 1.9        | -              | 2.0          |  |
| Seafood   | 134       | 5.1        | 1.0            | 5.4          |  |
| Dairy Products & Eggs   | 99        | 4.6        | 1.0            | 4.3          |  |
| Cooking Oils & Fats   | 18        | 2.2        | 0.7            | 2.9          |  |
| Vegetables & vegetable products                               | 107       | 2.7        | 1.2            | 1.0          |  |
| Fruits  | 86        | 1.2        | -0.9           | 1.4          |  |
| Sugar, preserves & confectionery                              | 27        | 1.7        | -0.7           | 2.2          |  |
| Non-alcoholic beverages                                       | 42        | 2.2        | 0.4            | 2.4          |  |
| Other food  | 32        | 2.6        | -0.2           | 2.3          |  |
| Prepared Meals  | 1,354     | 2.1        | 0.2            | 2.6          |  |
| Hawker food (incl. food courts)                               | 915       | 1.7        | 0.1            | 2.3          |  |
| Fast food   | 76        | -0.4       | -              | 0.4          |  |
| Restaurant food   | 352       | 3.6        | 0.6            | 3.9          |  |
| Catered food  | 11        | 0.8        | 0.4            | 1.0          |  |
| CLOTHING & FOOTWEAR   | 341       | 2.5        | 2.9            | 1.3          |  |
| HOUSING   | 2,548     | 6.4        | 0.2            | 9.1          |  |
| Accommodation   | 2,002     | 7.8        | 0.5            | 10.1         |  |
| Fuel & utilities  | 357       | 3.0        | -1.5           | 8.7          |  |
| Household durables  | 189       | -1.5       | -0.1           | -1.7         |  |
| TRANSPORT   | 1,553     | 5.7        | -0.2           | 6.8          |  |
| Private road transport  | 1,166     | 5.9        | -0.2           | 7.3          |  |
| Public road transport   | 366       | 5.1        | -              | 5.2          |  |
| Other travel & transport                                      | 21        | 2.1        | -0.9           | 1.0          |  |
| COMMUNICATION   | 475       | 0.2        | 0.1            | -0.1         |  |
| EDUCATION & STATIONERY  | 735       | 3.4        | 0.1            | 3.3          |  |
| Tuition & other fees  | 598       | 4.2        | 0.1            | 4.1          |  |
| School textbooks & stationery                                 | 72        | -0.4       | 0.2            | -0.8         |  |
| Newspapers, magazines & other books                           | 65        | -          | 0.1            | -            |  |
| HEALTHCARE  | 586       | 5.1        | 0.8            | 4.1          |  |
| Medical treatment   | 352       | 7.1        | 1.0            | 5.6          |  |
| Dental treatment  | 48        | 3.7        | 0.6            | 3.6          |  |
| Proprietary medicine & supplies                               | 106       | 2.7        | 1.1            | 2.5          |  |
| Medical health insurance                                      | 80        | -          | -              | -            |  |
| RECREATION & OTHERS   | 1,557     | 1.3        | 0.1            | 2.0          |  |
| Recreation & entertainment                                    | 320       | 2.6        | 0.6            | 3.2          |  |
| Alcoholic drinks & tobacco                                    | 136       | 0.5        | -0.4           | 0.9          |  |
| Personal care   | 222       | -0.2       | 0.2            | 0.3          |  |
| Household services  | 250       | 2.2        | 1.0            | 4.3          |  |
| Non-durable household goods                                   | 71        | 1.9        | 0.6            | 1.3          |  |
| Personal effects<br>Hobbies & other miscellaneous expenditure | 78<br>480 | 0.4<br>0.9 | 1.5<br>-0.9    | -0.3<br>1.6  |  |
| ALL ITEMS LESS IMPUTED RENTALS ON                             |           |            |                |              |  |
| OWNER-OCCUPIED ACCOMMODATION                                  | 8,441     | 3.0        | 0.2            | 3.8          |  |
| ALL ITEMS LESS ACCOMMODATION                                  | 7,998     | 3.0        | 0.2            | 3.6          |  |
| MAS CORE INFLATION MEASURE                                    | 6,832     | 2.4        | 0.2            | 2.8          |  |

#### TABLE 2A CONSUMER PRICE INDEX AT GROUP AND SUB-GROUP LEVEL (2009 = 100)

| Group and Sub-group                       | Waighta | Index          |          |          |              |              |
|---|---------|----------------|----------|----------|--------------|--------------|
|   | Weights | Jul 2011       | Jun 2012 | Jul 2012 | Jan-Jul 2011 | Jan-Jul 2012 |
| ALL ITEMS                                 | 10,000  | 108.7          | 112.8    | 113.1    | 107.0        | 112.3        |
| FOOD                                      | 2,205   | 104.5          | 106.6    | 106.9    | 103.8        | 106.6        |
| Food excl prepared meals                  | 851     | 105.5          | 108.1    | 108.4    | 105.3        | 108.2        |
| Rice & other cereals                      | 165     | 104.1          | 105.8    | 105.7    | 103.4        | 105.6        |
| Meat & Poultry                            | 141     | 104.5          | 106.6    | 106.6    | 104.4        | 106.6        |
| Seafood                                   | 134     | 108.0          | 112.4    | 113.5    | 107.6        | 113.4        |
| Dairy Products & Eggs                     | 99      | 106.4          | 110.1    | 111.2    | 105.5        | 110.0        |
| Cooking Oils & Fats                       | 18      | 101.9          | 103.4    | 104.1    | 100.8        | 103.8        |
| Vegetables & vegetable products           | 107     | 108.0          | 109.6    | 110.9    | 109.5        | 110.7        |
| Fruits                                    | 86      | 104.6          | 106.8    | 105.9    | 105.0        | 106.5        |
| Sugar, preserves & confectionery          | 27      | 105.8          | 108.3    | 107.6    | 105.7        | 108.0        |
| Non-alcoholic beverages                   | 42      | 102.8          | 104.5    | 105.0    | 102.1        | 104.6        |
| Other food                                | 32      | 103.7          | 106.6    | 106.4    | 103.4        | 105.7        |
| Prepared Meals                            | 1,354   | 103.8          | 105.7    | 105.9    | 102.8        | 105.6        |
| Hawker food (incl. food courts)           | 915     | 103.7          | 105.4    | 105.5    | 102.8        | 105.2        |
| Fast food                                 | 76      | 102.6          | 102.1    | 102.2    | 101.9        | 102.4        |
| Restaurant food                           | 352     | 104.3          | 107.5    | 108.1    | 103.2        | 107.3        |
| Catered food                              | 11      | 101.5          | 102.0    | 102.4    | 101.0        | 102.0        |
| CLOTHING & FOOTWEAR                       | 341     | 99.4           | 99.0     | 101.9    | 100.0        | 101.4        |
| HOUSING                                   | 2,548   | 112.2          | 119.2    | 119.4    | 108.1        | 117.9        |
| Accommodation                             | 2,002   | 112.0          | 120.1    | 120.7    | 107.9        | 118.7        |
| Fuel & utilities                          | 357     | 120.7          | 126.3    | 124.4    | 114.8        | 124.8        |
| Household durables                        | 189     | 98.1           | 96.7     | 96.6     | 98.5         | 96.8         |
| TRANSPORT                                 | 1,553   | 124.3          | 131.6    | 131.4    | 121.6        | 129.8        |
| Private road transport                    | 1,166   | 132.1          | 140.1    | 139.8    | 128.5        | 137.8        |
| Public road transport                     | 366     | 100.7          | 105.7    | 105.7    | 100.5        | 105.7        |
| Other travel & transport                  | 21      | 106.3          | 109.5    | 108.5    | 107.4        | 108.5        |
| COMMUNICATION                             | 475     | 96.2           | 96.2     | 96.3     | 96.3         | 96.2         |
| EDUCATION & STATIONERY                    | 735     | 105.6          | 109.2    | 109.3    | 105.3        | 108.8        |
| Tuition & other fees                      | 598     | 106.8          | 111.2    | 111.3    | 106.3        | 110.7        |
| School textbooks & stationery             | 72      | 100.9          | 100.3    | 100.5    | 101.1        | 100.3        |
| Newspapers, magazines & other books       | 65      | 100.5          | 100.4    | 100.5    | 100.5        | 100.5        |
| HEALTHCARE                                | 586     | 104.3          | 108.7    | 109.7    | 103.9        | 108.2        |
| Medical treatment                         | 352     | 104.6          | 110.9    | 112.0    | 104.3        | 110.1        |
| Dental treatment                          | 48      | 107.1          | 110.4    | 111.1    | 106.3        | 110.0        |
| Proprietary medicine & supplies           | 106     | 104.9          | 106.6    | 107.8    | 104.0        | 106.6        |
| Medical health insurance                  | 80      | 100.9          | 101.0    | 101.0    | 100.9        | 101.0        |
| RECREATION & OTHERS                       | 1,557   | 102.5          | 103.7    | 103.8    | 101.8        | 103.9        |
| Recreation & entertainment                | 320     | 90.0           | 91.8     | 92.4     | 88.7         | 91.5         |
| Alcoholic drinks & tobacco                | 136     | 101.6          | 102.5    | 102.1    | 101.3        | 102.2        |
| Personal care                             | 222     | 101.8          | 101.3    | 101.5    | 101.3        | 101.6        |
| Household services                        | 250     | 114.6          | 116.1    | 117.2    | 111.1        | 115.9        |
| Non-durable household goods               | 71      | 102.6          | 103.9    | 104.5    | 102.4        | 103.8        |
| Personal effects                          | 78      | 100.4          | 99.4     | 100.8    | 100.8        | 100.5        |
| Hobbies & other miscellaneous expenditure | 480     | 105.4          | 107.4    | 106.4    | 106.2        | 107.9        |
| ALL ITEMS LESS IMPUTED RENTALS ON         | 0.444   | 400.0          |          | 444.0    | 400 7        | 440 -        |
| OWNER-OCCUPIED ACCOMMODATION              | 8,441   | 108.0<br>107.0 | 111.1    | 111.3    | 106.7        | 110.7        |
| ALL ITEMS LESS ACCOMMODATION              | 7,998   | 107.9          | 111.0    | 111.2    | 106.8        | 110.6        |
| MAS CORE INFLATION MEASURE                | 6,832   | 103.8          | 106.0    | 106.3    | 103.1        | 106.0        |

# **TECHNICAL NOTE**

# **Concept and Definition**

The consumer price index (CPI) is commonly used as a measure of consumer price inflation. It measures price changes in a fixed basket of consumption goods and services commonly purchased by the households over time. The selection of goods and services in the CPI basket as well as their weights are kept constant at the base period to ensure that any changes in the CPI reflect only price changes.

The weighting pattern for the 2009-based CPI was derived from the expenditure values collected from the Household Expenditure Survey (HES) conducted from October 2007 to September 2008. These expenditure values were updated to 2009, taking into account price changes between 2007/08 and 2009.

The CPI is compiled on a monthly basis. For longer periods, the CPI is derived by averaging the monthly indices. For example, the yearly CPI is derived by taking a simple average of the 12 months' indices for the year.

#### **Scope and Coverage**

The CPI covers only consumption expenditure incurred by resident households. It excludes non-consumption expenditures such as purchases of shares, houses, and other financial assets, income and property taxes etc. Resident households are defined as households headed by a Singapore citizen or permanent resident.

The 2009-based CPI basket covered a total of 6,500 brands.

#### Measurement of Changes in the Consumer Price Index

To calculate month-on-month change, the difference between the CPI for the specific month and that for the preceding month expressed in percentage term is used. This measures the change in average prices between the two months and serves as a useful short-term indicator of price movement.

To measure the year-on-year change, the CPI for the specific month is compared with that for the same month of preceding year. Likewise, 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.

#### Pricing Indicator for Rented and Owner-Occupied Accommodation Index

For the computation of the rented accommodation index, actual rental data for the entire rental market obtained from administrative sources are used. These rental data refer to the actual rental for all housing units, regardless of when the leases were signed, i.e. including new and renewed leases signed in the period and existing leases signed earlier. This reflects the actual consumption pattern of the population renting accommodation as households are paying rentals according to the contract signed, and not all are paying rental at the prevailing market rates of the period. For the computation of the owner-occupied accommodation index in the CPI, DOS adopts the rental equivalence method which measures the shelter cost in terms of the expected rental the owner would have to pay if he were a tenant of the premise. The pricing indicator for owner-occupied accommodation is the rental data for the entire rental market.

# Consumer Price Index for "All Items Less Accommodation" and "All Items Less Imputed Rentals on Owner-Occupied Accommodation"

Accommodation, one of the sub-groups in the Housing group, comprises "rented and owner-occupied accommodation", as well as "minor repairs & maintenance". A significant share of the Accommodation subgroup is "owner-occupied accommodation" cost which is computed based on the imputed rental concept under the rental equivalence method. It has no impact on the cash expenditure of most households in Singapore as they already own their homes. Besides the imputed rentals on owner-occupied accommodation, actual rentals paid on rented homes are included separately under the CPI Accommodation subgroup. In addition, under Minor repairs & maintenance, the rebates for service & conservancy charges (S&CC) which are given to households living in HDB flats in different periods of the year result in some volatility in the monthly CPI. Hence, "All Items less accommodation" are compiled as additional indicators.

# Monetary Authority of Singapore's Core Inflation Measure

The Monetary Authority of Singapore (MAS) monitors a core inflation measure that excludes the components of "Accommodation" and "Private Road Transport".

# Seasonally-adjusted Consumer Price Index

The data series on CPI and its major components are seasonally-adjusted using the X-12 procedure. Seasonal adjustment is the process of estimating and removing seasonal effects from a time series. Users interested in the underlying price trends could refer to the seasonally adjusted data series.