

## Consumer Price Developments in April 2012

### *Singapore's CPI-All Items inflation came in higher at 5.4% y-o-y in April 2012*

CPI-All Items inflation rose to 5.4% in April from 5.2% in March 2012. The increase primarily reflected the higher contribution from accommodation cost, which added 2.5% points to CPI-All Items inflation in April, up from 2.0% points in the preceding month.<sup>1</sup> Imputed rentals on owner-occupied accommodation (OOA) accounted for most of this, contributing 1.7% points to the overall inflation figure. There was also an increase in the cost of minor repairs & maintenance, mainly due to the low base in April 2011 when the government had disbursed a large quantum of rebates for service & conservancy charges (S&CC) for HDB households.<sup>2</sup>

Prices of other major categories in the CPI rose more moderately. The increase in private road transport cost eased from the 9.6% y-o-y in March, but remained firm at 8.2% in April given the elevated COE premiums.

Together, private road transport and accommodation costs accounted for more than two-thirds of CPI-All Items inflation in April.

Meanwhile, services and food inflation slowed slightly from 3.0% and 2.7% in March to 2.8% and 2.4% in April respectively.

### *CPI less imputed rentals on owner-occupied accommodation (OOA) rose by 4.4%*

Reflecting the disbursement of S&CC rebates in the same period a year ago, inflation as measured by CPI less imputed rentals on OOA (CPI-ex OOA) was higher at 4.4% compared to 4.1% in the preceding month.

### *MAS Core Inflation eased to 2.7% in April*

Excluding the costs of accommodation and private road transport, MAS Core Inflation edged down from 2.9% in March to 2.7% in April, led by lower services and food inflation.

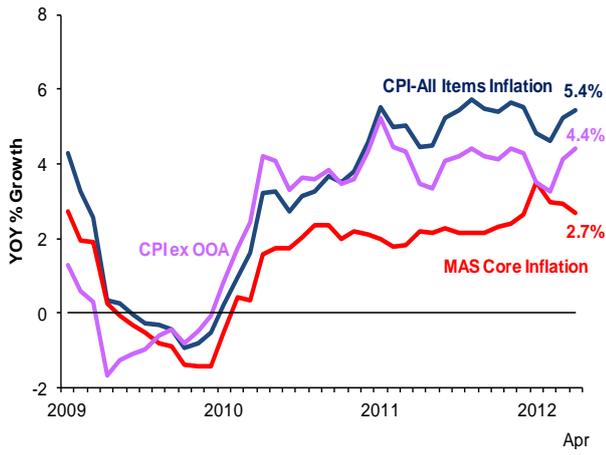
[Detailed CPI statistics can be found in the Department of Statistics' release on "Singapore Consumer Price Index for April 2012".<sup>3</sup>]

<sup>1</sup> The accommodation sub-group in the CPI comprises "rented accommodation", "imputed rentals on owner-occupied accommodation", "housing insurance premiums" and "minor repairs & maintenance".

<sup>2</sup> Apart from the usual disbursements in March, June, September and December, S&CC rebates were also handed out in April 2011 as part of the "Grow & Share" Package announced in Budget 2011. 1-, 2-, 3- and 4-room HDB households received 1-month S&CC rebates while 5-room and Executive/ Multi-generation HDB households received a 0.5-month rebate. No S&CC rebates were disbursed in April 2012.

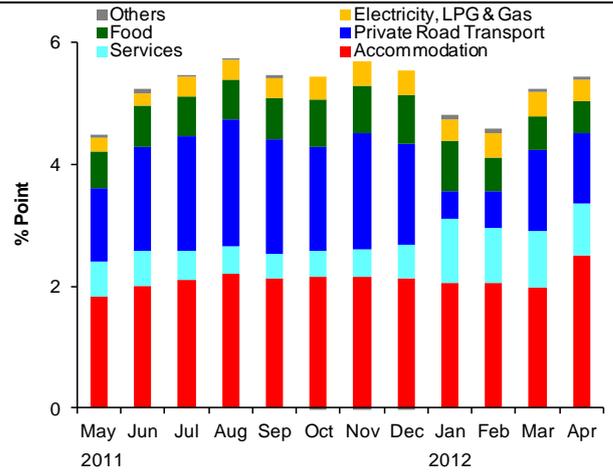
<sup>3</sup> <http://www.singstat.gov.sg/news/news/cpiapr2012.pdf>

### CPI-All Items, CPI-ex OOA and MAS Core Inflation



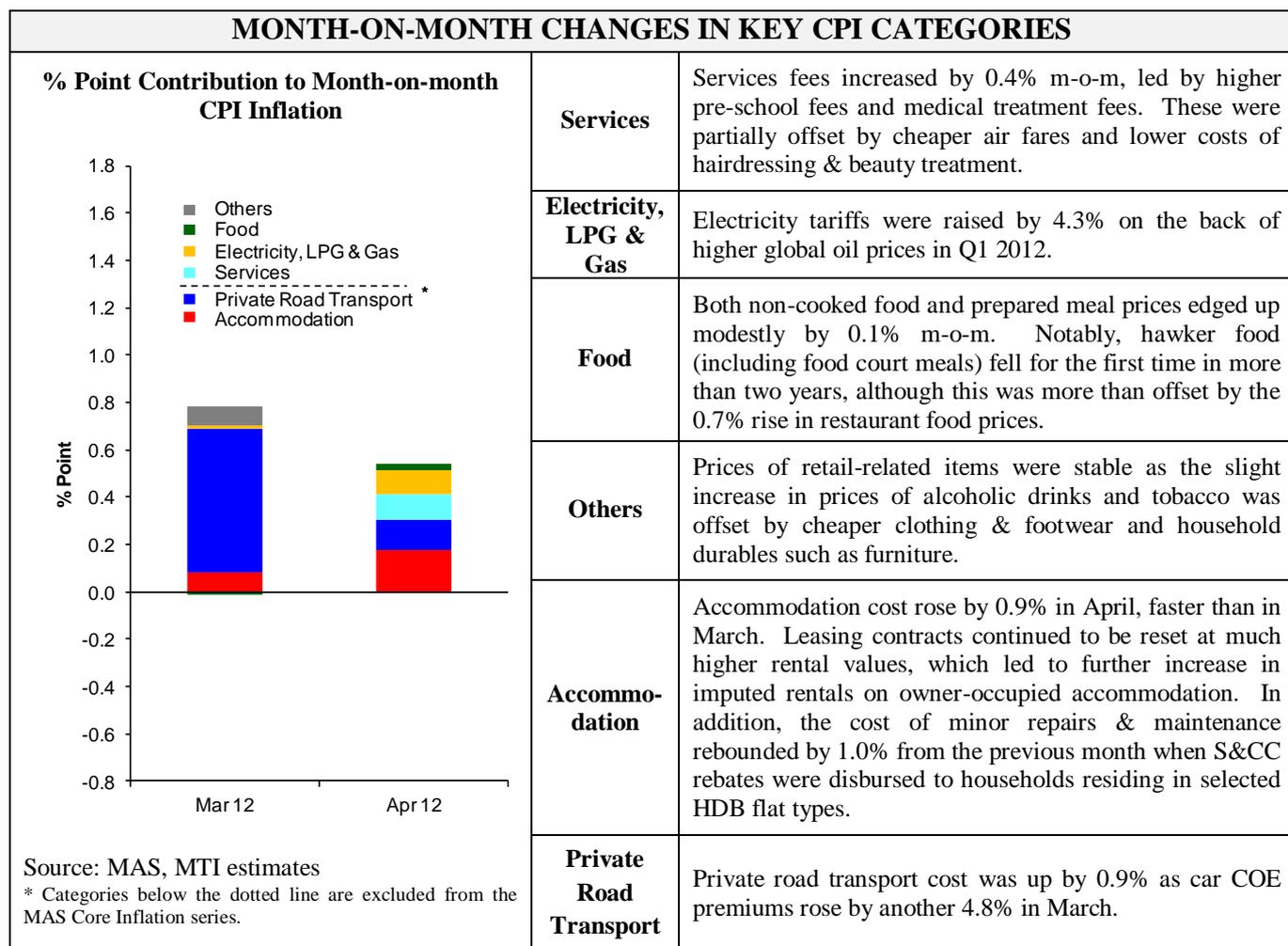
Source: Department of Statistics

### % Point Contribution to Year-on-year CPI-All Items Inflation



Source: MAS, MTI estimates

**On a month-on-month basis, CPI-All Items edged up by 0.5% in April 2012, after rising by 0.8% in the preceding month**



### Price Movements (m-o-m) for Selected CPI Sub-categories

Sub-categories With Largest Price Increases				Sub-categories with Price Declines or No Price Changes			
	Sub-Group	Weight (%)	M-o-m % Growth		Sub-Group	Weight (%)	M-o-m % Growth
↑	Fuel & utilities	3.57	2.5	↓	Vegetables & vegetable products	1.07	-0.6
↑	Medical treatment	3.52	0.9	↓	Personal care	2.22	-0.4
↑	Tuition & other Fees	5.98	0.9	↓	Non-alcoholic beverages	0.42	-0.3
↑	Dental treatment	0.48	0.9	↓	Other travel & transport*	0.21	-0.2
↑	Private road transport	11.66	0.9	↓	Dairy Products & Eggs	0.99	-0.1
↑	Accommodation	20.02	0.9	↓	Household durables	1.89	-0.1
↑	Seafood	1.34	0.7	↓	Hawker food (inclu. food courts)	9.15	-0.1
↑	Restaurant Food	3.52	0.7	-	Fast Food	0.76	-
↑	Cooking Oils & Fats	0.18	0.7	-	Catered Food	0.11	-
↑	Fruits	0.86	0.6	-	Newspaper, magazines & other books	0.65	-

\* The "other travel & transport" sub-group includes sea transport, air transport, etc.

## Outlook

*CPI-All Items inflation and MAS Core Inflation will likely remain elevated over the next few months, before easing gradually in H2 2012*

CPI-All Items inflation could average around 5% y-o-y in H1 2012 before easing gradually in H2. Accommodation cost will remain the largest contributor to CPI-All Items inflation this year as leasing contracts continue to be renewed at rentals that are considerably higher than those under existing contracts, especially in the HDB segment. Car prices could also increase if COE premiums rise further in response to the tight COE supply. In addition, wages and other costs will likely continue to pass through to consumer prices, albeit at a more moderate pace than that during early this year. MAS Core Inflation will remain close to 3% in the next few months before easing gradually thereafter.

For the year as a whole, CPI-All Items inflation is expected to be 3.5-4.5% while MAS Core Inflation will likely be in the range of 2.5-3.0%. Costs of accommodation and cars will together account for more than half of CPI-All Items inflation, while services and commodity-related items will each account for one-fifth.

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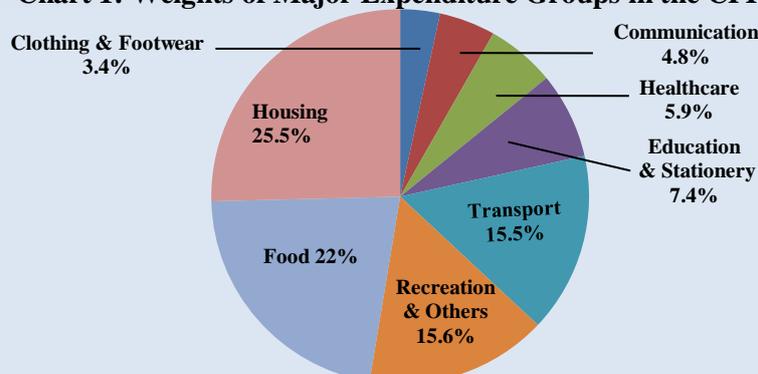
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## Box: A Closer Look at Recent Developments in Food Prices

### Weight of Food in the CPI

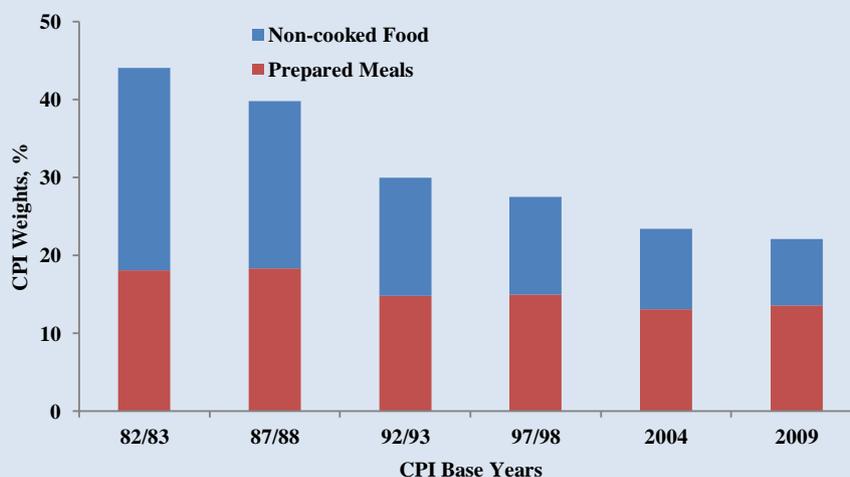
Food purchases make up a significant proportion of households' consumption expenditure. According to the Department of Statistics' Household Expenditure Survey (HES) in 2007-8, which covered 7,545 resident households, food accounts for close to \$1,000 out of the average monthly household expenditure of \$4,388.<sup>1</sup> Thus, food is one of the largest expenditure groups in the current Consumer Price Index (CPI). (Chart 1)

**Chart 1: Weights of Major Expenditure Groups in the CPI**



Notwithstanding its continued importance, the share of food in the CPI has been edging down over the years. (Chart 2) This is in line with the global trend which shows that consumers tend to devote a smaller share of their spending on essentials, including food, as the economy's per capita income grows. In addition, over the past few decades, resident households in Singapore increasingly spend more on prepared meals than non-cooked food items due to changes in lifestyle. In the 2009 based CPI, prepared meals has a weight of 13.5% compared to 8.5% for non-cooked food. In contrast, in the 1982/83 based CPI, the weight of prepared meals was 18.1%, lower than the 26.0% for non-cooked food.

**Chart 2: CPI Weights for Food Across CPI Base Years**



### Department of Statistics' Survey of Food Prices

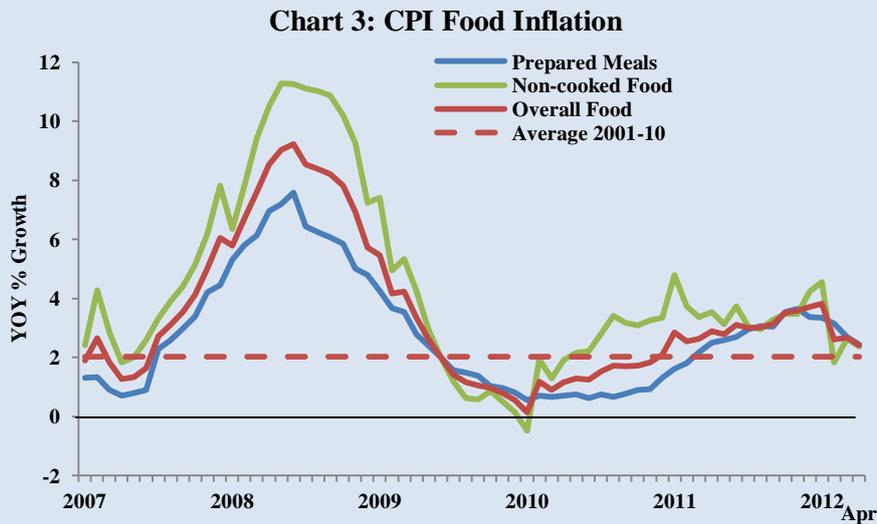
The price data used to compile the CPI food index is obtained from a large number of retailers commonly patronised by households. For instance, for non-cooked food, DOS collects price data for more than 1,000 types of "off-the-shelf" food items from major retailers, including wet markets, supermarkets and provision shops. Notably, price collections can be on a weekly basis for items of which prices are volatile (e.g. perishable food items). For prepared meals, such as hawker food, field interviewers from DOS personally visits popular hawker centres, coffee shops and food courts to collect prices of over 100 types of common hawker food.

<sup>1</sup> <http://www.singstat.gov.sg/pubn/hhld/hes2007.pdf>

At any point of time, some retailers that DOS surveys for a specific food item could have adjusted prices by varying extent while others could have held prices constant. The average price for this item is used for the compilation of the CPI. The average prices of all the individual food items (e.g. oranges and apples) are then aggregated according to their respective weights in the CPI basket to the next level, i.e. the sub-category (e.g. fruits) in the CPI.

### **Recent Food Price Movements**

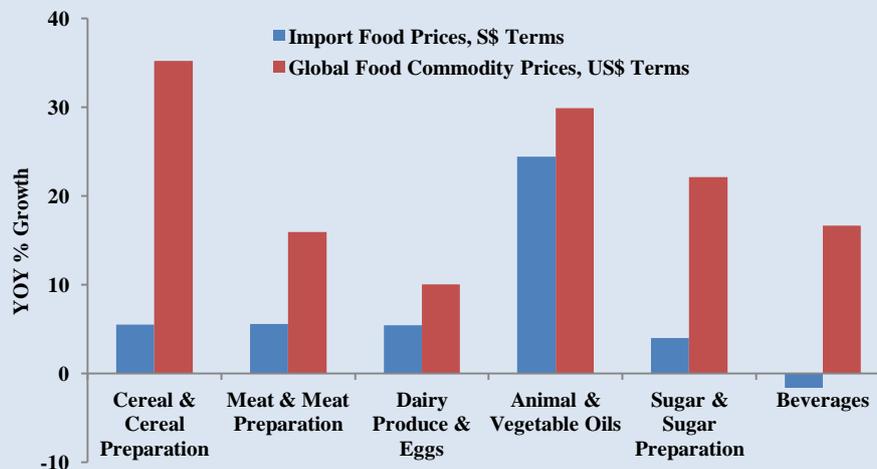
Since early 2011, domestic CPI food inflation has been above its historical average of 2.0%, with relatively strong price increases in both prepared meals and non-cooked food items. (Chart 3) Nevertheless, it has been on a downward trend this year, falling from 3.8% y-o-y in January to 2.4% in April. It averaged 2.9% in the first four months of 2012.



The recent increase in domestic food prices mainly reflected the sharp rise in global food commodity prices since the middle of 2010 as robust consumption demand from emerging economies came up against widespread supply disruptions caused by the La Nina weather phenomenon. Amid record-low stock-to-use ratios for various commodity classes, global food commodity prices, as measured by the UN FAO Food Price Index and denominated in US dollar, spiked by 18.1% in 2010 and another 22.8% in 2011 on average.

Compared to global prices, Singapore's import prices and domestic prices for a wide variety of food items rose by a smaller extent. (Chart 4) This could be attributed to several factors, including (a) the long-term contractual agreements that food importers have with their suppliers; (b) diversification of food import sources; and (c) the general appreciating trend of the Singapore dollar.

**Chart 4:  
Change in Global and Import Prices of Selected Food Categories, 2011**



## Dispersion of Food Prices

The CPI food inflation of 2.9% in Jan-Apr 2012 represents the weighted average price change for all food items in the CPI. However, within food, there is a wide dispersion in price changes among the different categories. (Table 1) For instance, in this period, prices of seafood, dairy products & eggs and restaurant food increased much more than the average food inflation while prices of vegetables and fast food rose much more moderately.

**Table 1:  
Key Food Categories in the CPI**

	<b>CPI weight, %</b>	<b>YOY % Price change, Jan-Apr 2012</b>
<b>Overall Food</b>	22.1	2.9
<b>Non-cooked Food</b>	8.5	2.8
<i>Seafood</i>	1.3	5.7
<i>Dairy Products &amp; Eggs</i>	1	4.5
<i>Cooking Oils &amp; Fats</i>	0.2	3.7
<i>Non-alcoholic Beverages</i>	0.4	3.0
<i>Sugar &amp; Confectionary</i>	0.3	2.4
<i>Rice &amp; Other Cereals</i>	1.7	2.3
<i>Other Food</i>	0.3	2.2
<i>Meat and Poultry</i>	1.4	2.2
<i>Fruits</i>	0.9	1.7
<i>Vegetables</i>	1.1	0.5
<b>Cooked Food</b>	13.5	2.9
<i>Restaurant Food</i>	3.5	4.0
<i>Hawker Food (incl. food courts)</i>	9.2	2.7
<i>Catered Food</i>	0.1	1.3
<i>Fast Food</i>	0.8	0.9

Further, utilising data from DOS' Monthly Digest of Statistics<sup>2</sup>, we can observe an even wider dispersion of price changes within specific food categories. For instance, price changes for vegetables in Q1 2012, compared to a year ago, ranged from -11.0% for broccoli to +25.0% for tomatoes. For fruits, while the prices of grapes and oranges fell, watermelon and papaya prices rose by more than 7% in Q1 2012. (Table 2)

<sup>2</sup> Average retail prices of selected items are available in the Monthly Digest of Statistics (MDS) published by DOS (<http://www.singstat.gov.sg/pubn/reference.html>). Data for April 2012 will be available in MDS in early June 2012.

**Table 2:  
YOY % Price Change of Selected Retail Food Items, Q1 2012**

<b>Rice &amp; Other Cereals</b>		<b>Meat &amp; Poultry</b>	
Ordinary White Bread	2.3	Chilled Mutton	4.6
Instant Noodles	1.8	Chilled Streaky Pork	3.6
Thai Rice 100% Fragrant	1.3	Chilled Beef	2.9
High Fibre Bread	0.0	Hen	1.9
Vitamin Enriched Bread	-2.3	Chilled Pork Rib Bones	1.5
<b>Dairy Produce &amp; Eggs</b>		Chilled Lean Pork	1.4
Condensed Milk	7.4	Chilled Chicken Wing	-0.4
Cheese	7.2	Duck	-0.7
Infant Milk Powder	6.3	Chicken Extract	-1.9
Fresh Milk	3.6	<b>Vegetables</b>	
Hen Eggs	1.0	Tomatoes	25.0
Ice-Cream	-3.1	Potatoes	4.2
<b>Seafood</b>		Small Mustard	3.4
Gold Banded Scad (Kuning)	14.1	Cabbage	2.2
Sea Bass	12.5	Spinach (Bayam)	2.2
Sea Bream (Kerisi)	12.3	Kale	1.2
Spanish Mackerel (Tenggiri)	8.6	Carrots	0.3
Cod Fish	8.2	Broccoli	-11.0
Small Prawns	8.2	<b>Fruits</b>	
Medium Prawns	8.0	Papaya	7.6
Flowery Grouper	8.0	Watermelon	7.4
White Pomfret	5.3	Apple	6.2
Squids	5.1	Pear	5.9
Golden Snapper	4.8	Banana (Emas)	1.1
Kurau (Cut)	2.9	Orange	-0.9
Fish Balls	2.5	Grapes	-2.9
Salmon	-2.6		
Large Prawns	-9.9		

Source: DOS, Monthly Digest of Statistics

### **Sum-up**

As households' consumption patterns differ, their food inflation experience would vary. In particular, individual households would have varying weights attached to particular food items and could face different experiences in terms of the changes in their actual cash outlay. The detailed level of disaggregation of food items, captured in the CPI on a monthly basis, provides a good indication of the range of price outcomes in the first few months of 2012.

## **Annex: Price Indicators**

### **CPI – All Items**

The CPI is commonly used as a measure of consumer price changes in the economy. It tracks the change in prices of a fixed basket of consumption goods and services commonly purchased by the general resident households over time.

The CPI covers only consumption expenditure incurred by resident households. It excludes non-consumption expenditures such as purchases of houses, shares and other financial assets, income and property taxes etc.

The CPI – All Items provides a comprehensive overview of the prices of consumer goods and services. Nevertheless, useful information can also be revealed by complementary CPI series derived by excluding specific items in the All Items basket. For example, two other CPI series reported on a monthly basis are the CPI less imputed rentals on owner-occupied accommodation and the MAS Core Inflation.<sup>4</sup>

### **CPI less imputed rentals on owner-occupied accommodation**

Accommodation, one of the sub-groups in the Housing category of the CPI, comprises “rented and owner-occupied accommodation”, as well as “minor repairs & maintenance”. A significant share of the Accommodation subgroup is “owner-occupied accommodation (OOA)” cost, which is meant to reflect the costs to homeowners of utilising the flow of services provided by their homes over an extended period of time. As the cost of using housing services is not directly observed for homeowners, it is proxied by market rentals.

Changes in the CPI imputed rentals on OOA, however, have no direct impact on the monthly cash expenditure of most households in Singapore as they already own their homes. Hence, the CPI less imputed rentals on OOA is compiled as an additional indicator to track households’ actual expenditures.

### **MAS Core Inflation**

The Monetary Authority of Singapore (MAS) monitors a core inflation measure that excludes the components of “Accommodation” and “Private Road Transport”. These items are excluded as they tend to be significantly influenced by supply-side administrative policies and are volatile. Core inflation is meant to capture the generalised and persistent price changes that are driven by underlying demand conditions. It thus provides useful information for monetary policy which has the objective of ensuring price stability in the medium term.

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<sup>4</sup> See DOS’ “Singapore Consumer Price Index for April 2012” (<http://www.singstat.gov.sg/news/news/cpiapr2012.pdf>) for further information on the various price indicators published. For a detailed review of MAS Core Inflation, refer to “A Review of the Core Inflation Measure for Singapore” ([www.mas.gov.sg/publications/staff\\_papers/MAS\\_Staff\\_Paper\\_No\\_51\\_Aug\\_2011.html](http://www.mas.gov.sg/publications/staff_papers/MAS_Staff_Paper_No_51_Aug_2011.html)).

**Table A.1**  
**Consumer Price Index**

	All Items	Food	Clothing & Footwear	Housing	Transport	Comms	Educa-tion & Stationery	Health Care	Recreation & Others	All-Items, S.A.
Weights	10000	2205	341	2548	1553	475	735	586	1557	10000
	YOY % Growth									Index (2009=100)
2011 Feb	5.0	2.6	1.3	5.8	15.2	-1.7	3.3	3.2	0.8	106.3
Mar	5.0	2.6	0.9	7.1	13.4	-2.4	3.3	2.9	1.1	106.7
Apr	4.5	2.9	0.6	5.1	11.7	-0.4	3.3	2.8	1.3	106.8
May	4.5	2.8	0.6	8.1	7.5	-0.3	3.2	2.6	1.2	107.4
Jun	5.2	3.1	0.9	8.8	10.4	-1.6	3.3	2.3	1.9	107.8
Jul	5.4	3.0	-0.6	9.5	11.5	-1.5	2.7	1.8	1.6	108.5
Aug	5.7	3.0	-0.4	9.9	12.5	-2.5	2.6	1.8	1.8	109.1
Sep	5.5	3.1	0.1	9.6	11.4	-2.7	2.6	2.0	1.6	109.2
Oct	5.4	3.5	-0.8	9.9	10.5	-1.7	2.3	1.8	1.3	109.4
Nov	5.7	3.6	-0.6	10.0	11.6	-1.8	2.2	2.2	1.3	110.1
Dec	5.5	3.7	0.1	9.9	10.0	-1.9	2.2	2.7	1.7	110.8
2012 Jan	4.8	3.8	1.2	9.5	3.5	-0.5	3.0	3.2	3.5	111.5
Feb	4.6	2.6	1.6	9.5	4.4	-0.4	2.9	3.6	2.6	111.2
Mar	5.2	2.7	1.2	9.1	8.6	-0.1	3.0	3.9	2.3	112.3
Apr	5.4	2.4	1.3	11.1	7.5	0.1	3.6	4.3	1.5	112.7

Source: Singapore Department of Statistics  
S.A.: Seasonally Adjusted

**Table A.2**  
**Selected Inflation Indicators**

	CPI	MAS Core Inflation	CPI Less Imputed Rental on OOA	Import Price Index	Non-fuel Primary Commodities	OPEC Oil Price
	YOY % GROWTH					
2011 Feb	5.0	1.8	4.4	4.1	38.0	37.4
Mar	5.0	1.8	4.3	5.2	30.8	42.3
Apr	4.5	2.2	3.5	4.9	26.2	43.8
May	4.5	2.1	3.4	4.4	28.1	47.7
Jun	5.2	2.3	4.1	4.1	30.5	49.4
Jul	5.4	2.2	4.2	4.3	29.2	54.0
Aug	5.7	2.2	4.4	3.4	19.4	43.4
Sep	5.5	2.1	4.2	5.9	12.9	44.2
Oct	5.4	2.3	4.1	7.2	-0.8	33.1
Nov	5.7	2.4	4.4	7.5	-5.7	32.9
Dec	5.5	2.6	4.3	5.2	-12.2	21.2
2012 Jan	4.8	3.5	3.5	5.0	-14.0	20.2
Feb	4.6	3.0	3.3	2.4	-14.8	17.2
Mar	5.2	2.9	4.1	2.3	-12.3	11.9
Apr	5.4	2.7	4.4	N.A.	-14.7	0.2

Source: Singapore Department of Statistics, IMF and Bloomberg  
N.A.: Not available