

## **CONSUMER PRICE INDEX**

September 2018

#### **INFLATION BOUNCES BACK**

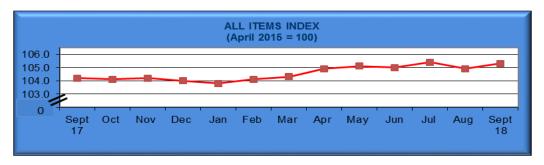
Consumers paid 1.1 per cent more in September 2018 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). The level of inflation increased 0.2 percentage points from the 0.9 per cent measured in August 2018.

Between August 2018 and September 2018, the average cost of goods and services in the CPI rose 0.4 per cent. The all-items index increased to 105.3 in September. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$105.30.

#### YEAR-TO-YEAR ANALYSIS

Fuelled by the average cost of health insurance premiums, the Health & Personal Care sector was the largest contributor to the year-over-year increase in September (+3.5 per cent).

The Education, Recreation, Entertainment & Reading sector and the Fuel & Power sector also contributed to the rise in the annual rate of inflation, as price shifts in these sectors were 1.9 per cent and 5.3 per cent, respectively.



Inflation Rate 1.1%

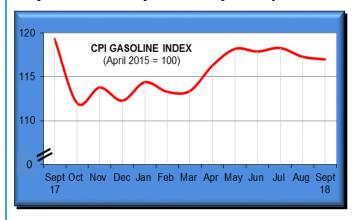
The compilation of the CPI involves the processing of several thousand price quotations. The Department of Statistics wishes to acknowledge the cooperation of the business community in supplying the required price data.

SUMMARY STATISTICS								
	Мо	nthly		Quarterly				
Period	Index	Annual per cent Change	Period	Index	Annual per cent Change			
2017			2016					
Sept	104.2	+1.5	Q1	100.2	+1.3			
Oct	104.1	+1.4	Q2	101.2	+1.0			
Nov	104.2	+2.0	Q3	102.2	+1.6			
Dec	104.0	+1.9	Q4	102.3	+1.8			
2018			2017					
Jan	103.8	+1.6	Q1	102.3	+2.1			
Feb	104.1	+2.0	Q2	103.1	+1.9			
Mar	104.3	+1.8	Q3	104.0	+1.8			
Apr	104.9	+2.0	Q4	104.1	+1.8			
May	105.1	+1.7						
Jun	105.0	+1.6	2018					
Jul	105.4	+1.4	Q1	104.1	+1.8			
Aug	104.9	+0.9	Q2	105.0	+1.8			
Sept	105.3	+1.1	Q3	105.2	+1.2			

#### MONTH-TO-MONTH ANALYSIS

## **Transport & Foreign Travel**

The Transport & Foreign Travel sector regained ground in September, increasing 1.3 per cent. The average cost of air fares and overseas hotels rose 5.0 per cent and 3.2 per cent, respectively.



# Education, Recreation, Entertainment & Reading

The Education, Recreation, Entertainment & Reading sector grew 0.5 per cent in September. The average cost of tuition fees for local schools and overseas colleges rose 3.2 per cent and 2.9 per cent, respectively.

#### **Fuel & Power**

Rebounding from the 1.4 per cent decline in August, the Fuel & Power sector posted a 1.5 per cent increase in September. The fuel adjustment clause climbed 4.7 per cent for the month.

#### Food

The Food sector advanced 0.3 per cent in September. Price increases were reported in the average cost of mayonnaise (+4.9 per cent), ice cream (+2.5 per cent) and bacon (+1.8 per cent).

## **Household Goods, Services & Supplies**

The Household Goods, Services & Supplies sector moved up 0.2 per cent in September. The average cost of childcare increased 3.2 per cent.

## **Tobacco & Liquor**

The Tobacco & Liquor sector increased 0.2 per cent in September. The average cost of wine edged up 0.5 per cent.

#### Rent

Following the 0.4 per cent decrease in August, the Rent sector reported no change in September.

## Clothing & Footwear

The Clothing & Footwear sector was static in September.

#### **Health & Personal Care**

The Health & Personal Care sector was unchanged for the month.

#### **COMPUTING PRICE INCREASES**

The Department of Statistics receives calls daily requesting the rate of inflation over specific periods of time. The following calculations are provided to guide users as to how to compute rates of price increases. The monthly index numbers can be obtained from our website www.gov.bm.

#### A) Month-to-Month Price Change

The price change between November and October, 2015 is calculated as Follows:

$$= \frac{\text{Nov } 15 \text{ index} - \text{Oct } 15 \text{ index}}{\text{Oct } 15 \text{ index}} \times 100$$

$$=\frac{100.5-100.6}{100.6}\times100$$

$$=-0.1\%$$

#### B) Year-to-Year Price Change

The price change between December 2015 and December, 2014 is calculated as follows:

$$= \frac{\text{Dec } 15 \text{ index} - \text{Dec } 14 \text{ index}}{\text{Dec } 14 \text{ index}} \times 100$$

$$=\frac{100.5-98.7}{98.7}\times100$$

$$=1.8\%$$

## C) Particular Period Price Change

The price change between April 2014 and January, 2016 is calculated as follows:

$$= \frac{\text{Jan 16 index - Apr 14 index}}{\text{Apr 14 index}} \times 100$$

$$=\frac{100.3-98.3}{98.3}\times100$$

$$=2.0\%$$

## BERMUDA CONSUMER PRICE INDEX

### **APRIL 2015 = 100**

	All Items	Food	Rent	Clothing & Footwear	Tobacco & Liquor	Fuel & Power	Household Goods, Services & Supplies	Transport & Foreign Travel	Education, Recreation, Entertain. & Reading	Health & Personal Care
2013 WEIGHT	1000	115	267	25	31	39	116	130	147	130
ANNUAL AVERAGE ( per cent)										
2013 2014 2015 2016 2017	+1.8 +2.0 +1.5 +1.5 +1.9	+3.0 +3.1 +2.7 +1.9 +2.2	-0.3 +0.8 +0.6 +1.0 +0.1	+0.1 +2.0 +1.3 +0.4 +1.5	+4.4 +2.4 +1.2 +5.1 +7.8	-1.9 -2.4 -8.9 -3.3 +7.8	+0.5 +0.8 +2.1 +1.6 +0.5	+1.4 +1.7 -1.3 -2.2 +3.6	+2.5 +1.9 +0.9 +3.3 +2.0	+8.3 +6.7 +7.8 +4.5 +1.3
MONTHLY ( per cent)										
2016 Sept Oct Nov Dec	+1.0 Nil -0.5 -0.1	+0.1 +0.1 -0.1 -1.3	Nil Nil Nil +0.1	Nil +0.3 +0.1 Nil	+0.1 Nil Nil -0.4	+6.0 -0.9 -2.3 -3.1	+0.1 +0.1 Nil Nil	+4.5 Nil -2.8 +1.3	+1.1 +0.1 -0.2 +0.1	Nil +0.1 Nil Nil
2017 Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	+0.1 -0.1 +0.4 +0.3 +0.4 Nil +0.6 +0.1 +0.2 -0.1 +0.1	+2.0 Nil +0.4 -1.1 +1.7 +0.6 +0.2 +0.1 -0.1 +0.1	Nil -0.8 +0.1 Nil Nil +0.1 Nil +0.1 Nil +0.1 Nil	+1.2 Nil Nil Nil Nil Nil +0.2 Nil Nil Nil Nil Nil	+0.8 -0.1 +0.1 +2.8 +4.7 Nil +0.7 Nil +0.1 +0.1 +0.1	-2.3 Nil +3.9 +0.5 +1.8 +3.3 +3.0 Nil +0.2 Nil -2.1 Nil	Nil Nil H0.1 -0.1 +0.2 +0.2 Nil +0.1 Nil Nil	-1.2 +0.8 +1.9 +1.9 Nil -1.2 +2.4 Nil +0.2 -1.4 +1.2	Nil -0.1 Nil +0.2 +0.1 -0.1 +0.2 +0.8 -0.2 +0.5 +0.1	Nil Nil +0.2 Nil Nil +0.5 Nil +0.5 Nil
2018 Jan Feb Mar Apr May Jun Jul Aug Sept	-0.2 +0.3 +0.2 +0.6 +0.2 -0.1 +0.4 -0.5 +0.4	+1.2 -0.7 +0.2 +0.3 +1.0 +0.2 +0.1 -0.3 +0.3	Nil Nil Nil Nil Nil Nil Nil -0.4 Nil	Nil Nil Nil +0.1 Nil Nil +2.5 Nil Nil	+0.3 Nil -0.2 +0.6 +0.2 +0.8 Nil +0.2 +0.2	-1.5 Nil Nil Nil +3.8 +1.4 +3.9 -1.4 +1.5	-0.1 +0.2 NiI -1.0 NiI NiI -0.1 +0.2 +0.2	-1.9 +2.6 +0.8 +1.4 -1.2 -1.8 +1.5 -2.3 +1.3	+0.1 -0.1 +0.5 +0.4 +0.4 -0.1 -0.1 -0.1 +0.5	Nil Nil +2.9 Nil Nil Nil Nil
Sept '18	105.3	107.2	101.2	105.0	119.0	114.0	103.0	101.7	108.5	108.3
Sept '18 Sept '17	+1.1	+1.8	Nil	+2.8	+2.4	+5.3	-0.4	-1.3	+1.9	+3.5

## WHAT IS THE CONSUMER PRICE INDEX?

The Consumer Price Index (CPI) is a statistical tool used for measuring changes in the general level of prices of consumer goods and services purchased by private households.

The index measures price movements of a given quality and quantity of goods and services. The mix of these consumer goods and services comprising the index, are figuratively thought of as a "shopping basket." In constructing this "shopping basket", the selected goods and services are organized first by commodity type. They are then divided into subcomponents and assigned to a major expenditure group. The Bermuda CPI is structured into nine expenditure groups or sectors:

- Food
- Rent
- Clothing & Footwear
- Tobacco & Liquor
- Fuel & Power
- Transport & Foreign Travel
- Household Goods, Services & Supplies
- Education, Recreation, Entertainment & Reading
- Health & Personal Care

#### **CONCEPTS AND DEFINITIONS**

#### **Base Period**

The time period which is used as a reference point for measuring the price change of goods and services. The base period for the Bermuda CPI is April 2015.

#### **Price Index Number**

A single figure that shows how a set of prices has changed over a specified period of time. An index number on its own means nothing. It must be compared with an index number from another period to have meaning. For example, a comparison of the index number 97.2 for January 2014 with 100.4 for January 2016, reveals that prices have increased by 3.3 percent.

#### **Laspeyres Equation**

The CPI is computed using this statistical equation. This formula calculates the total amount of money a household needs today to purchase the same basket of goods and services that it bought in the base period, April 2015.

#### **WEIGHTED AVERAGE**

A mathematical formula that takes into account the relative importance of an item's price change compared to the overall change in the sector or CPI.

#### Inflation

Inflation is the process of rising prices, resulting in diminishing purchasing power of a given sum of money.

### **Cost of Living Index**

Many individuals refer to the CPI as a cost-of-living index. The CPI is an index of pure price change only. A cost-of-living index reflects the changes in buying or consumption patterns that consumers would ordinarily make to adjust to any change in the price of a good or service.

## A COMPARISON OF RATES OF INFLATION (%) Selected Countries & Bermuda

	2014	2015	2016	2017	Sept 18
Bermuda	2.0	1.5	1.5	1.9	+1.1
United States <sup>1</sup>	8.0	0.7	2.1	2.1	+2.3
Canada <sup>2</sup>	2.0	1.1	1.4	1.6	+2.2
United Kingdom <sup>3</sup>	2.4	1.0	1.8	3.6	+3.3

#### Sources:

- 1. US Bureau of Labour Statistics
- 2. Statistics Canada
- 3. UK Office of National Statistics

Published by the Government of Bermuda November 2018

Department of Statistics Cedar Park Centre, 48 Cedar Avenue, Hamilton HM 11

P.O. Box HM 3015 Hamilton HM MX, Bermuda

Tel: (441) 297-7761, Fax: (441) 295-8390

Website: https://www.gov.bm/department/statistics