

# **CONSUMER PRICE INDEX**

December 2016

# **INFLATION FALLS**

Consumers paid 1.6 per cent more in December 2016 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). The level of inflation decreased 0.1 percentage points from the 1.7 per cent measured in November 2016.

Between November 2016 and December 2016, the average cost of goods and services in the CPI decreased 0.1 per cent. The all-items index dropped to 102.1 in December. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$102.10.

#### YEAR-TO-YEAR ANALYSIS

The Transport & Foreign Travel sector was the largest contributor to the year-over-year change for the second consecutive month. This sector decreased 1.2 per cent, led by an 11.8 per cent drop in the average cost in air fares.

In contrast, the Tobacco & Liquor sector and the Education, Recreation, Entertainment & Reading sector rose 5.6 per cent and 4.0 per cent, respectively.



Inflation Rate 1.6%

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.

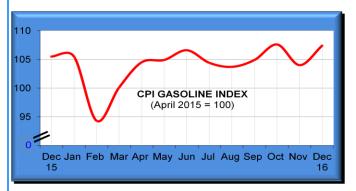
SUMMARY STATISTICS								
	Мо	onthly		Quarterly				
Period	Annual per cent Change		Period	Index	Annual per cent Change			
2015			2015					
Dec	100.5	+1.8	Q1	98.9	+1.5			
			Q2	100.2	+1.7			
2016			Q3	100.6	+1.5			
Jan	100.3	+1.7	Q4	100.5	+1.2			
Feb	100.2	+1.3						
Mar	100.1	+1.0	2016					
Apr	101.1	+1.1	Q1	100.2	+1.3			
May	100.9	+1.1	Q2	101.2	+1.0			
Jun	101.5	+0.8	Q3	102.2	+1.6			
Jul	102.2	+1.6	Q4	102.3	+1.8			
Aug	101.7	+1.3						
Sep	102.7	+2.0						
Oct	102.7	+2.1						
Nov	102.2	+1.7						
Dec	102.1	+1.6						

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## **MONTH-TO-MONTH ANALYSIS**

# **Transport & Foreign Travel**

The Transport & Foreign Travel sector rebounded from a 2.8 per cent decrease in November, as it increased 1.3 per cent in December. The average cost of automotive fuel and cycle fuel increased 3.3 per cent and 3.2 per cent, respectively. Additionally, travellers were subject to a 1.7 per cent rise in the cost of airfares.



# Education, Recreation, Entertainment & Reading

The Education, Recreation, Entertainment & Reading sector rose 0.1 per cent in December following a 0.2 per cent decrease in November. The cost of premium fuel increased 3.3 per cent.

#### Rent

The Rent sector edged up 0.1 per cent in December, following three consecutive months with no price movement. The cost of rental units subject to rent control increased by less than 0.1 percent.

# **Household Goods, Services & Supplies**

The Household Goods, Services & Supplies sector was static for the second consecutive month. The average cost of detergents & bleaches increased by 1.1 per cent but this was offset by a decrease of 0.5 per cent in the average cost of cleaning materials.

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

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

## Clothing & Footwear

The Clothing & Footwear sector was static in December.

# **Tobacco & Liquor**

The Tobacco & Liquor sector fell 0.4 per cent in December. The average cost of spirits, which were on special, fell 1.1 per cent during the holiday period.

#### **Fuel & Power**

The Fuel & Power sector declined for the third consecutive month, falling 3.1 per cent in December. The fuel adjustment rate decreased 9.5 per cent month-over-month.

#### Food

The Food sector continued to decline, dropping 1.3 per cent in December. Key price contributors to the decrease were cookies (-7.7 per cent), non-alcoholic beverages (-7.3 per cent) and fresh and frozen lamb (-4.0 per cent).

#### 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:

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

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

$$=2.0\%$$

# 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 cen	it)			
2012	+2.4	+3.5	+0.2	+4.3	+2.5	+9.3	+1.0	+1.6	+2.7	+6.6
2013 2014	+1.8	+3.0	-0.3	+0.1	+4.4	-1.9	+0.5	+1.4	+2.5	+8.3
2014	+2.0 +1.5	+3.1 +2.7	+0.8 +0.6	+2.0 +1.3	+2.4 +1.2	-2.4 -8.9	+0.8 +2.1	+1.7 -1.3	+1.9 +0.9	+6.7 +7.8
2016	+1.5	+1.9	+1.0	+0.4	+5.1	-3.3	+1.6	-2.2	+3.3	+4.5
				MON	NTHLY ( pei	cent)				
2014										
Dec	-0.5	-0.7	Nil	Nil	-0.1	-9.0	Nil	Nil	-0.1	-0.1
2015										
Jan	Nil	1.3	+0.1	+0.2	+0.3	-2.5	+0.4	-1.7	Nil	+0.1
Feb	+0.2	+0.2	Nil	Nil	+0.1	Nil	Nil	+1.9	-0.6	Nil
Mar	+0.2	+0.3	+0.1	Nil	+0.1	+1.3	Nil . o. a	+0.7	-0.1	Nil . c. r
Apr May	+1.0 -0.2	Nil +0.4	+0.2 +0.1	+0.5 Nil	+0.4 Nil	Nil -2.6	+0.1 Nil	+0.4 -1.0	+0.1 Nil	+6.5 Nil
Jun	+0.8	+0.4	Nil	Nil	Nil	-2.6 Nil	Nil	+5.9	+0.3	Nil
Jul	-0.1	+0.1	Nil	+0.7	Nil	+4.0	+2.1	-3.6	-0.1	Nil
Aug	-0.2	+0.3	+0.1	Nil	+0.1	Nil	Nil	-1.6	-0.2	+0.1
Sep	+0.3	-0.1	Nil	Nil	+0.2	Nil	+0.3	+0.9	+0.9	-0.1
Oct	-0.1	+0.2	+0.1	Nil	Nil	-1.3	Nil	-1.2	+0.2	+0.5
Nov	-0.1	-0.5	Nil	Nil	Nil	-1.3	Nil	+0.1	Nil	Nil
Dec	Nil	-0.2	+0.1	Nil	+0.3	-2.0	Nil	+0.4	+0.1	Nil
2016										
Jan	-0.2	+1.2	-0.1	+0.1	+0.4	-3.7	+0.1	-1.6	Nil	Nil
Feb	-0.1	+0.6	+0.1	Nil	+1.1	Nil	Nil	-1.4	-0.3	+0.1
Mar Apr	-0.1 +0.9	-0.1 +0.3	Nil Nil	Nil -0.5	Nil +2.0	-0.8 -2.6	+0.1 Nil	-0.7 +0.8	+0.2 +2.7	Nil +3.2
Арг Мау	+0.9 -0.1	+0.3 -0.3	+0.1	-0.5 Nil	+2.0 +1.5	-2.6 -5.0	Nil	+0.8 -0.3	+2.7 +0.5	+3.∠ Nil
Jun	+0.5	+0.2	Nil	Nil	+0.8	+10.4	Nil	+1.0	Nil	-0.1
Jul	+0.8	+0.3	+1.0	+0.1	Nil	+4.3	+0.1	+2.5	-0.2	Nil
Aug	-0.5	+0.1	+0.1	Nil	Nil	Nil	Nil	-4.3	Nil	Nil
Sep	+1.0	+0.1	Nil	Nil	+0.1	+6.0	+0.1	+4.5	+1.1	Nil
Oct	Nil	+0.1	Nil	+0.3	Nil	-0.9	+0.1	Nil	+0.1	+0.1
Nov	-0.5	-0.1	Nil	+0.1 Nil	Nil 0.4	-2.3	Nil Nii	-2.8	-0.2	Nil
Dec	-0.1	-1.3	+0.1		-0.4	-3.1	Nil	+1.3	+0.1	Nil
Dec '16	102.1	101.4	101.7	100.8	106.2	98.0	102.9	98.4	105.2	103.8
Dec '16 Dec '15	+1.6	+1.1	+1.3	+0.1	+5.6	+1.3	+0.5	-1.2	+4.0	+3.3

# 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

	2013	2014	2015	2016	Dec 16
Bermuda	1.8	2.0	1.5	1.5	+1.6
United States <sup>1</sup>	1.5	8.0	0.7	2.1	+2.1
Canada <sup>2</sup>	0.9	2.0	1.1	1.4	+1.5
United Kingdom <sup>3</sup>	3.0	2.4	1.0r	1.8	+2.5

#### Sources:

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

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