

# **CONSUMER PRICE INDEX**

October 2013

# **INFLATION SLIGHTLY FALLS**

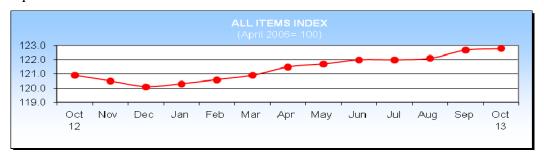
Consumers paid 1.6 per cent more in October 2013 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). The rate of inflation decreased 0.2 percentage points from the 1.8 per cent recorded in September 2013.

Between September and October 2013, the average cost of goods and services in the Consumer Price Index increased 0.1 per cent. The all-items index increased to 122.8 in October. This means that the basket of goods and services that cost \$100.00 in April 2006 now cost \$122.80.

#### YEAR-TO-YEAR ANALYSIS

The Health & Personal Care sector had the strongest impact on the twelve-month increase in the Consumer Price Index. The total cost of the Health & Personal Care basket increased 7.6 per cent year-over-year. Health insurance premiums and dental care services increased 9.8 per cent and 9.0 per cent, respectively.

The Food and Education, Recreation & Reading sectors also had a significant impact on the annual rate of inflation, as price shifts in these sectors were 2.5 per cent and 2.1 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.

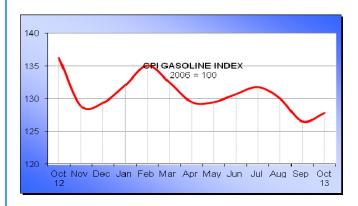
SUMMARY STATISTICS								
Monthly				Quarterly				
Period	Index	Annual per cent Change	Period	Index	Annual per cent Change			
2012			2011					
Oct	120.9	+1.7	Q1	115.0	+2.6			
Nov	120.5	+1.9	Q2	116.5	+2.6			
Dec	120.1	+1.9	Q3	117.4	+2.6			
			Q4	118.3	+3.0			
2013								
Jan	120.3	+1.9	2012					
Feb	120.6	+2.1	Q1	118.2	+2.8			
Mar	120.9	+2.1	Q2	119.6	+2.7			
Apr	121.5	+1.7	Q3	120.3	+2.5			
May	121.7	+1.7	Q4	120.5	+1.8			
Jun	122.0	+1.9						
Jul	122.0	+1.8	2013					
Aug	122.1	+1.3	Q1	120.6	+2.0			
Sep	122.7	+1.8	Q2	121.7	+1.8			
Oct	122.8	+1.6	Q3	122.3	+1.7			

**DEPARTMENT OF STATISTICS** 

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

# **Transport & Vehicles**

The Transport & Vehicle sector increased 0.5 per cent in October, following a 2.2 per cent increase in September. The increase was largely attributed to a 1.1 per cent hike in the average cost of premium fuel. In addition, airfares increased by 2.9 per cent.



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

The Health and Personal Care sector rose 0.4 per cent in October. The cost of dental and optometry services increased 9.0 per cent and 1.0 per cent, respectively.

#### Clothing & Footwear

The Clothing & Footwear sector climbed 1.0 per cent in October. The average cost of accessories such as jewellery and handbags increased by 4.5 per cent.

# **Household Goods, Services & Communications**

The Household Goods, Services & Communications sector increased 0.1 per cent in October after falling 0.1 per cent in September. The average cost of household supply products rose by 1.0 per cent.

#### Rent

The Rent sector rose 0.1 per cent in October, following no change in September. Average rental prices for rent-controlled properties increased by 0.1 per cent.

# **Tobacco & Liquor**

The Tobacco & Liquor sector was unchanged in October following the 0.1 per cent decrease in September.

# **Education, Recreation & Reading**

The Education, Recreation & Reading sector slipped 0.1 per cent in September. Pet cost and up-keep decreased 1.2 per cent. In contrast, boat fuel costs rose by 1.1 per cent.

#### Food

Food prices in grocery stores declined 0.1 per cent in October compared to a 0.2 per cent rise in September. Leading price decreases were reported for: fresh wahoo (-3.7 per cent), frozen corn on the cob (-2.7 per cent) and fresh and frozen stewing beef cubes (-2.2 per cent).

#### **Fuel & Power**

The Fuel & Power sector fell 0.8 per cent in October following a 0.8 increase in September. The fuel adjustment rate decreased 2.6 per cent.

#### COMPUTING PRICE INCREASES

The Department of Statistics receives numerous 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 <a href="https://www.statistics.gov.bm">www.statistics.gov.bm</a>.

#### a) Month-to-Month Price Change

The price change between November and December, 2012 is calculated as Follows:

$$= \frac{\text{Dec } 12 \text{ index } - \text{Nov } 12 \text{ index}}{\text{Nov } 12 \text{ index}} \times 100$$

$$= \frac{120.1 - 120.5}{120.5} \times 100$$

$$= -0.3\%$$

#### b) Year-to-Year Price Change

The price change between December 2011 and December, 2012 is calculated as follows:

$$= \frac{\text{Dec } 12 \text{ index } - \text{Dec } 11 \text{ index}}{\text{Dec } 11 \text{ index}} \times 100$$

$$=\frac{120.1-117.9}{117.9}\times100$$

$$=1.9\%$$

#### c) Particular Period Price Change

The price change between February 2010 and January, 2013 is calculated as follows:

$$= \frac{\text{Jan } 13 \text{ index } - \text{Feb } 10 \text{ index}}{\text{Feb } 10 \text{ index}} \times 100$$

$$=\frac{120.3-111.7}{111.7}\times100$$

$$=7.7\%$$

# BERMUDA CONSUMER PRICE INDEX

# **APRIL 2006 = 100**

	All Items	Food	Rent	Clothing & Footwear	Tobacco & Liquor	Fuel & Power	Household Goods, Services & Communica- tions	Transport & Vehicles	Education, Recreation & Reading	Health & Personal Care
2004 WEIGHT	1000	146	325	37	20	30	140	139	71	92
ANNUA	L AVERAGE	( per cent)								
2008	+4.8	+5.6	+2.4	+2.7	+9.3	+31.8	+2.6	+3.9	+5.1	+6.6
2009	+1.8	+5.4	+1.9	+3.0	+5.9	-6.3	+0.7	-4.3	+5.3	+6.7
2010	+2.4	+3.0	+1.3	+2.4	+1.9	-0.8	+1.6	+1.8	+2.5	+8.1
2011	+2.7	+2.3	+1.1	+5.7	+3.1	+11.3	+2.0	+0.6	+2.6	+7.5
2012	+2.4	+3.5	+0.2	+4.3	+2.5	+9.3	+1.0	+1.6	+2.7	+6.6
MONTH	LY ( per cent	)								
<b>2011</b> Oct	<b>1</b> 0 E	+0.4	+0.1	<b>1</b> 16	+0.2	TU 6	+0.1	+1.5	0.4	+0.1
Nov	+0.5 -0.6	+0.4	+0.1 Nil	+4.6 Nil	+0.2 +0.1	+0.6 +0.1	+0.1 +0.1	+1.5 -4.9	-0.1 +0.1	+0.1 Nil
Dec	-0.0 -0.2	-1.4	-0.1	Nil	+0.1	Nil	-0.1	-4.9 +0.5	+0.1	0.2
2012										
Jan	+0.1	+1.6	Nil	Nil	-0.1	Nil	+0.1	-1.7	Nil	Nil
Feb	+0.1	-0.2	+0.1	Nil	+0.4	Nil	+0.1	+1.0	-0.1	Nil
Mar	+0.2	+0.9	+0.1	Nil	+0.2	Nil	+0.1	+0.4	-0.1	+0.1
Apr	+0.9	Nil	+0.1	+1.5	+0.7	Nil	Nil	+1.3	+0.2	+5.6
May	+0.2	+0.5	-0.1	+0.2	-0.1	Nil	Nil	+1.1	+0.2	Nil
Jun	Nil	+0.2	+0.2	Nil	+0.4	+5.3	-0.7	-1.8	+0.3	+0.1
Jul	+0.1	+0.2	-0.1	-1.8	+0.5	+2.4	+0.2	-0.5	Nil	-0.1
Aug	+0.6	+0.6	+0.3	Nil	+0.1	-1.8	+0.1	+4.1	-0.1	+0.1
Sep	Nil	+0.1	-0.2	Nil	+0.2	Nil	+0.3	-1.0	+2.1	+0.3
Oct	+0.3	+0.4	Nil	-2.0	+0.3	-1.9	+0.2	+1.3	+0.3	+1.5
Nov	-0.4	-0.4	+0.1	Nil	Nil	-7.8	Nil	Nil	+0.1	+0.1
Dec	-0.3	-1.0	Nil	Nil	+0.1	+2.9	Nil	-2.0	Nil	-0.1
2013	.00	.00	0.4	.4.4	.0.5	4.4	.0.4	4.0	.00	N I I I
Jan Feb	+0.2 +0.2	+2.3 Nil	-0.1 +0.1	+1.1 Nil	+0.5 -0.2	-1.4 +1.4	+0.1 Nil	-1.2 +1.3	+0.2 Nil	Nil Nil
Mar	+0.2	+0.4	+0.1 -0.5	Nil	-∪.∠ Nil	+1.4 +2.8	Nil	+1.3 +1.4	Nil	+0.1
Apr	+0.2	+0.4	-0.3	+0.8	+1.7	Nil	Nil	-1. <del>4</del>	Nil	+6.3
May	+0.1	-0.4	Nil	Nil	+2.0	-2.7	+0.1	+1.2	Nil	+0.7
Jun	+0.3	+0.1	Nil	Nil	+0.4	+1.8	-0.1	+1.6	-0.1	+0.1
Jul	Nil	+0.3	+0.2	+0.2	+0.1	Nil	+0.1	-1.8	-0.1	+0.1
Aug	+0.1	+0.8	+0.1	Nil	+0.1	+0.9	+0.4	-0.5	+0.1	Nil
Sep	+0.4	+0.2	Nil	Nil	-0.1	+0.8	-0.1	+2.2	+1.6	Nil
Oct	+0.1	-0.1	+0.1	+1.0	Nil	-0.8	+0.1	+0.5	-0.1	+0.4
Oct '13	122.8	130.9	110.7	121.7	134.9	158.2	111.5	111.2	131.4	165.5
Oct'13	+1.6	+2.5 <sup>R</sup>	-0.3 <sup>R</sup>	+3.1 <sup>R</sup>	+4.6 <sup>R</sup>	-2.6 <sup>R</sup>	+0.5 <sup>R</sup>	+0.7 <sup>R</sup>	+1.7 <sup>R</sup>	+7.6
Oct'12	- 1.0	- 2.0	0.0	- 0.1	1.0	2.0	- 0.0	- 411	- 111	- 7.10

# 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 & Vehicles
- Household Goods, Services & Communications
- Education, Recreation & 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 2006.

#### **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 79.1 for January 1998 with 82.9 for January 2000, reveals that prices have increased by 4.8 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 2006.

#### **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 Consumer Price Index (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

	2009	2010	2011	2012	Sep 13
Bermuda	1.8	2.4	2.7	2.4	+1.6
United States <sup>1</sup>	2.7	1.5	3.0	1.7	+1.0
Canada <sup>2</sup>	0.3	1.8	2.9	1.5	+0.7
United Kingdom <sup>3</sup>	-0.5	4.6	5.2	3.2	+2.6

#### Sources

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

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