



## INFLATION FLATTENS

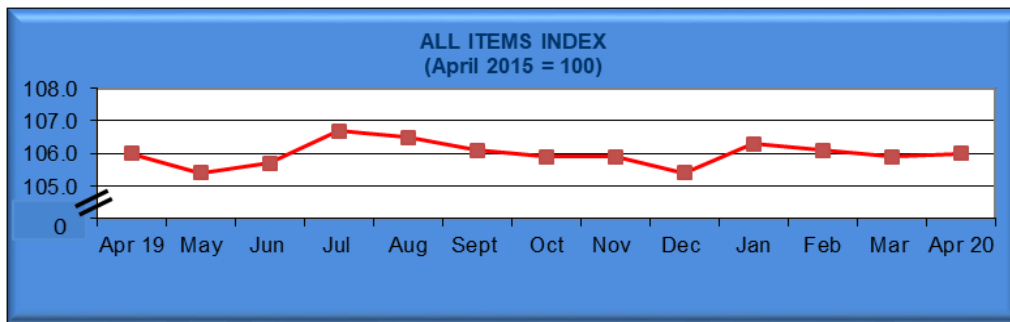
Consumers paid the same as they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). April 2020 marks the first period of no inflation since December 1974.

Between March and April 2020, the average cost of goods and services in the CPI increased 0.1 per cent. The all-items index increased from 105.9 to 106.0 in April. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$106.00.

## YEAR-TO-YEAR ANALYSIS

The Health & Personal Care sector continues to be the largest contributor to the CPI. The cost of the Health & Personal Care basket increased 3.2 per cent.

In addition, the Transport & Foreign Travel sector (-5.0 per cent) and the Rent sector (-1.8 per cent) impacted strongly on the annual rate of inflation.



**Annual Inflation Rate 0.0%**

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					
Period	Monthly		Period	Quarterly	
	Index	Annual per cent Change		Index	Annual per cent Change
<b>2019</b>			<b>2018</b>		
Apr	106.0	+1.0	Q1	104.1	+1.8
May	105.4	+0.3	Q2	105.0	+1.8
Jun	105.7	+0.7	Q3	105.2	+1.2
Jul	106.7	+1.2	Q4	105.0	+0.9
Aug	106.5	+1.5	<b>2019</b>		
Sept	106.1	+0.8	Q1	105.3	+1.2
Oct	105.9	+0.7	Q2	105.7	+0.7
Nov	105.9	+0.9	Q3	106.4	+1.1
Dec	105.4	+0.5	Q4	105.7	+0.7
<b>2020</b>			<b>2020</b>		
Jan	106.3	+1.0	Q1	106.1	+0.8
Feb	106.1	+0.9			
Mar	105.9	+0.3			
Apr	106.0	+0.0			

**MONTH-TO-MONTH ANALYSIS**

**Tobacco & Liquor**

The Tobacco & Liquor sector rose 0.8 per cent, as the average price of wine and beer increased 17.2 per cent and 0.9 per cent, respectively.

**Health & Personal Care**

The Health & Personal Care sector increased 1.2 per cent in April. The average cost of health insurance climbed 1.7 per cent.

**Food**

On average, food prices rose 0.8 per cent for the month. Among the items contributing to the rise were frozen spare ribs (+10.2 per cent), fresh & frozen stewing beef (+6.6 per cent) and pineapples (+5.6 per cent).

**Education, Recreation, Entertainment & Reading**

The Education, Recreation, Entertainment & Reading sector edged up 0.1 per cent. The average cost of pet foods increased 2.7 per cent.

**Clothing & Footwear**

The Clothing & Footwear sector advanced 0.5 per cent in April. On average, the price of women’s dress suits and underwear increased 12.5 per cent and 2.8 per cent, respectively.

**Household Goods, Services & Supplies**

The Household Goods, Services & Supplies sector was up 0.1 per cent. The average cost of food wraps & trash bags (+1.5 per cent) and detergents & bleaches (+1.3 per cent) were the main drivers behind the increase in this sector.

**Fuel & Power**

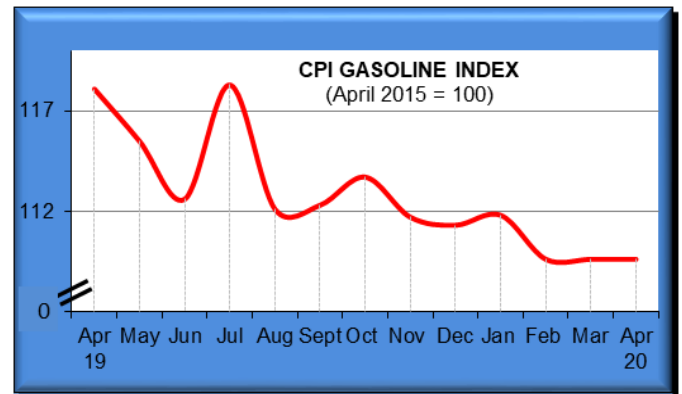
The Fuel & Power sector was unchanged.

**Rent**

The Rent sector declined 0.3 per cent in April. The average cost of properties not subject to rent control dipped 0.7 per cent.

**Transport & Foreign Travel**

The Transport & Foreign Travel sector was down 1.7 per cent for the month. The average price of the airfares fell 8.3 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: <https://www.gov.bm/departments/statistics>.

**A) Month-to-Month Price Change**

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

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

$$= \frac{100.5 - 100.6}{100.6} \times 100$$

$$= -0.1\%$$

**B) Year-to-Year Price Change**

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

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

$$= \frac{100.5 - 98.7}{98.7} \times 100$$

$$= 1.8\%$$

**C) Particular Period Price Change**

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

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

$$= \frac{100.3 - 98.3}{98.3} \times 100$$

$$= 2.0\%$$

# 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, & Reading	Health & Personal Care
<b>2013 WEIGHT</b>	1000	115	267	25	31	39	116	130	147	130
<b>ANNUAL AVERAGE ( per cent)</b>										
<b>2015</b>	+1.5	+2.7	+0.6	+1.3	+1.2	-8.9	+2.1	-1.3	+0.9	+7.8
<b>2016</b>	+1.5	+1.9	+1.0	+0.4	+5.1	-3.3	+1.6	-2.2	+3.3	+4.5
<b>2017</b>	+1.9	+2.2	+0.1	+1.5	+7.8	+7.8	+0.5	+3.6	+2.0	+1.3
<b>2018</b>	+1.4	+2.1	+0.2	+1.5	+4.3	+5.8	-0.2	+0.3	+2.1	+3.1
<b>2019</b>	+1.0	+2.7	+0.9	+1.9	+3.8	+1.1	Nil	-3.0	+0.4	+3.4
<b>MONTHLY ( per cent)</b>										
<b>2018</b>										
Jan	-0.2	+1.2	Nil	Nil	+0.3	-1.5	-0.1	-1.9	+0.1	Nil
Feb	+0.3	-0.7	Nil	Nil	Nil	Nil	+0.2	+2.6	-0.1	Nil
Mar	+0.2	+0.2	Nil	Nil	-0.2	Nil	Nil	+0.8	+0.5	Nil
Apr	+0.6	+0.3	Nil	+0.1	+0.6	Nil	-1.0	+1.4	+0.4	+2.9
May	+0.2	+1.0	Nil	Nil	+0.2	+3.8	Nil	-1.2	+0.4	Nil
Jun	-0.1	+0.2	Nil	Nil	+0.8	+1.4	Nil	-1.8	-0.1	Nil
Jul	+0.4	+0.1	Nil	+2.5	Nil	+3.9	-0.1	+1.5	-0.1	Nil
Aug	-0.5	-0.3	-0.4	Nil	+0.2	-1.4	+0.2	-2.3	-0.1	Nil
Sept	+0.4	+0.3	Nil	Nil	+0.2	+1.5	+0.2	+1.3	+0.5	Nil
Oct	-0.1	+0.4	+0.1	-0.1	-0.1	Nil	-0.1	-1.0	Nil	Nil
Nov	-0.2	-0.1	+0.1	Nil	Nil	-0.6	Nil	-1.5	-0.1	Nil
Dec	-0.1	+0.3	Nil	Nil	+0.3	-1.8	Nil	-0.3	Nil	Nil
<b>2019</b>										
Jan	+0.2	+1.0	+0.5	+0.4	+0.3	Nil	+0.1	-0.7	+0.1	Nil
Feb	Nil	-0.2	+0.5	Nil	+0.2	Nil	+0.1	-0.9	Nil	Nil
Mar	+0.4	-0.1	+0.9	Nil	+0.4	Nil	Nil	+2.1	-0.4	-0.1
Apr	+0.4	-0.2	-0.1	Nil	+1.0	Nil	Nil	+0.4	+0.1	+2.3
May	-0.6	+0.3	-2.0	Nil	+0.8	+1.0	-0.2	-1.6	+0.1	Nil
Jun	+0.3	+1.0	-0.4	Nil	+1.1	+0.8	Nil	+0.7	-0.2	+1.4
Jul	+0.9	+0.4	+2.1	+0.2	-0.6	Nil	Nil	+2.7	+0.2	+0.1
Aug	-0.2	-0.1	+0.2	Nil	+0.2	Nil	+0.1	-1.7	-0.3	Nil
Sept	-0.4	+0.2	-0.2	Nil	+1.1	Nil	Nil	-3.0	+0.4	Nil
Oct	-0.2	-0.1	-0.9	+0.5	-0.3	-4.2	+0.1	+0.8	+0.1	+0.4
Nov	Nil	+0.5	-0.2	Nil	-0.7	-2.7	Nil	+0.9	Nil	Nil
Dec	-0.5	-0.1	Nil	Nil	+0.2	-1.5	-0.4	-2.8	Nil	Nil
<b>2020</b>										
Jan	+0.9	+0.8	+0.9	Nil	-0.4	+6.4	+0.3	+2.2	+0.1	Nil
Feb	-0.2	Nil	-0.5	Nil	+0.8	Nil	+0.1	-0.7	Nil	Nil
Mar	-0.2	-0.3	-0.4	Nil	+0.6	Nil	Nil	-0.6	-0.1	Nil
Apr	+0.1	+0.8	-0.3	+0.5	+0.8	Nil	+0.1	-1.7	+0.1	+1.2
<b>Apr '20</b>	<b>106.0</b>	<b>112.0</b>	<b>101.5</b>	<b>106.7</b>	<b>126.0</b>	<b>110.6</b>	<b>103.1</b>	<b>94.7</b>	<b>108.8</b>	<b>114.3</b>
<b>Apr '20</b>	<b>+0.0</b>	<b>+3.4</b>	<b>-1.8</b>	<b>+1.3</b>	<b>+3.6</b>	<b>-0.6</b>	<b>Nil</b>	<b>-5.0</b>	<b>+0.5</b>	<b>+3.2</b>

**TECHNICAL NOTE**

Readers should note that some price data used to produce the CPI index was not collected in April 2020 due to some unavailable goods and services, non-response from open stores and the temporary store closures caused by the Coronavirus (COVID-19) pandemic (Table 1). As a result of COVID-19, in-person field collection was suspended and, where possible, prices were collected via alternative methods such as online and email. Six of the nine sectors in April 2020 had missing prices

which were imputed: Rent, Clothing & Footwear, Household Goods, Services & Supplies, Transport & Foreign Travel, Education, Recreation, Entertainment & Reading and Health & Personal Care. Table 2 provides April 2020, March 2020 and April 2019 outlets and price collection methods metadata for comparison. All missing prices were imputed by targeted mean imputation and the carry forward method.

**TABLE 1. PRICES METADATA TABLE - APRIL 2020, MARCH 2020 & APRIL 2019**

Indicators	April 2020	March 2020	April 2019
<b>Number</b>			
Total	3,245	2,695	3,245
Number of Prices Collected	3,042	2,676	3,245
Number of Prices Missing and Imputed	203	19	0
<b>Percentage Distribution</b>			
Total	100	100	100
Number of Prices Collected	94	99	100
Number of Prices Missing and Imputed	6	1	0

**TABLE 2. OUTLETS AND PRICE COLLECTION METHODS METADATA - APRIL 2020, MARCH 2020 AND APRIL 2019<sup>1</sup>**

Indicators	April 2020	March 2020	April 2019	April 2020	March 2020	April 2019
	Number			Percentage Distribution		
<b>Outlets</b>						
Total	73	65	73	100	100	100
Number of Outlets Available for Pricing	42	65	73	58	100	100
Number of Outlets Temporarily Closed	31	0	0	42	0	0
<b>Price Collection Methods</b>						
Total	46	60	89	100	100	100
Online	20	28	37	43	47	41
e-Mail	16	8	16	35	13	18
Telephone Calls	9	12	15	20	20	17
Facsimile	1	2	6	2	3	7
Personal Visit	0	10	15	0	17	17

<sup>1</sup> Total may not add to 100 due to rounding.

## 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 sub-components 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

	2016	2017	2018	2019	Apr 20
<b>Bermuda</b>	+1.5	+1.9	+1.4	+1.0	+0.0
<b>United States<sup>1</sup></b>	+1.3	+2.1	+2.4	+1.8	+0.3
<b>Canada<sup>2</sup></b>	+1.4	+1.6	+2.3	+1.9	-0.2
<b>United Kingdom<sup>3</sup></b>	+1.8	+3.6	+3.3	+2.6	+1.5

### Sources:

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

August 2020

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