CONSUMER PRICE INDEX

May 2020

INFLATION REBOUNDS

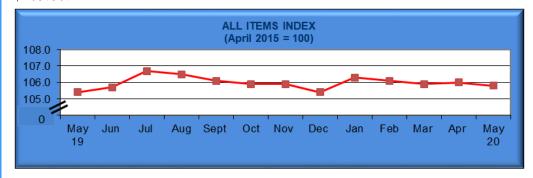
Consumers paid 0.4 per cent more in May 2020 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). The rate of inflation edged up 0.4 percentage points from the 0.0 per cent measured in April 2020.

Between April and May 2020, the average cost of goods and services in the CPI decreased 0.2 per cent. The all-items index dip from 106.0 to 105.8 in May. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$105.80.

YEAR-TO-YEAR ANALYSIS

The Food sector was the largest contributor to the twelve-month increase in the CPI. Notable year-over-year increases in this sector were chocolates & candies (+25.5 per cent), eggs (+25.1 per cent) and frozen broccoli spears (+22.7 per cent). As a result, the annual rate of price increase for this sector climbed 3.8 per cent.

In addition, the Health & Personal Care sector (+3.2 per cent) and the Education, Recreation, Entertainment & Reading sector (+0.4 per cent) impacted favorably on the annual rate of inflation.



Annual Inflation Rate 0.4%

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

SUMMARY STATISTICS							
	Мо	nthly			Quarterly		
Period	Index	Annual per cent Change		Period	Index	Annual per cent Change	
2019				2018			
May	105.4	+0.3		Q1	104.1	+1.8	
Jun	105.7	+0.7		Q2	105.0	+1.8	
Jul	106.7	+1.2		Q3	105.2	+1.2	
Aug	106.5	+1.5		Q4	105.0	+0.9	
Sept	106.1	+0.8					
Oct	105.9	+0.7		2019			
Nov	105.9	+0.9		Q1	105.3	+1.2	
Dec	105.4	+0.5		Q2	105.7	+0.7	
				Q3	106.4	+1.1	
2020				Q4	105.7	+0.7	
Jan	106.3	+1.0					
Feb	106.1	+0.9		2020			
Mar	105.9	+0.3		Q1	106.1	+0.8	
Apr	106.0	+0.0					
May	105.8	+0.4					

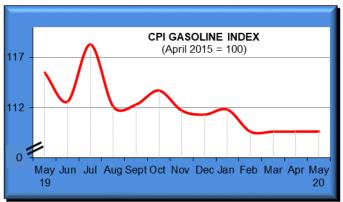
MONTH-TO-MONTH ANALYSIS

Food

The Food sector rose 0.7 per cent in May. Price changes occurred for fresh and frozen boneless pork lion (+10.8 per cent), condensed milk (+7.5 per cent) and fresh and frozen leg of lamb (+7.0 per cent).

Transport & Foreign Travel

The Transport & Foreign Travel sector was up 0.1 per cent for the month. The average price of the overseas hotels rose 1.2 per cent.



Education, Recreation, Entertainment & Reading

The Education, Recreation, Entertainment & Reading sector was flat in May. The average cost of health club membership (+1.4 per cent) was offset by the average cost of pet foods (-1.2 per cent).

Health & Personal Care

The Health & Personal Care sector was static for month.

Clothing & Footwear

No price movement were reported in the Clothing & Footwear sector for the month.

Fuel & Power

The Fuel & Power sector was unchanged.

Household Goods, Services & Supplies

The Household Goods, Services & Supplies sector was constant for the month. The average cost of washers & dryers (+1.3 per cent) was offset by the average cost of food wraps & trash bags (-1.5 per cent).

Tobacco & Liquor

The Tobacco & Liquor sector fell 0.5 per cent, as the average price of wines and cigarettes both decreased 1.3, respectively.

Rent

The Rent sector was down 0.9 per cent as the average cost of properties not subject to rent control slipped 2.0 per cent in May.

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/department/statistics.

A) Month-to-Month Price Change

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

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

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

=-0.1%

B) Year-to-Year Price Change

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

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

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

$$=1.8\%$$

C) Particular Period Price Change

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

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

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

$$= 2.0\%$$

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)				
2015	.4.5	.07	.0.0	.4.0	.4.0	0.0	.0.4	4.0	.00	.70
2015	+1.5 +1.5	+2.7 +1.9	+0.6 +1.0	+1.3 +0.4	+1.2 +5.1	-8.9 -3.3	+2.1 +1.6	-1.3 -2.2	+0.9 +3.3	+7.8 +4.5
2017	+1.9	+2.2	+0.1	+1.5	+7.8	+7.8	+0.5	+3.6	+2.0	+1.3
2018	+1.4	+2.1	+0.2	+1.5	+4.3	+5.8	-0.2	+0.3	+2.1	+3.1
2019	+1.0	+2.7	+0.9	+1.9	+3.8	+1.1	Nil	-3.0	+0.4	+3.4
MONTHLY (per cent)										
2018										
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 Sept	-0.5 +0.4	-0.3 +0.3	-0.4 Nil	Nil Nil	+0.2 +0.2	-1.4 +1.5	+0.2 +0.2	-2.3 +1.3	-0.1 +0.5	Nil Nil
Oct	-0.1	+0.3	+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
2019										
Jan	+0.2	+1.0	+0.5	+0.4	+0.3	Nil	+0.1	-0.7	+0.1	Nil
Feb Mar	Nil +0.4	-0.2 -0.1	+0.5 +0.9	Nil Nil	+0.2 +0.4	Nil Nil	+0.1 Nil	-0.9 +2.1	Nil -0.4	Nil -0.1
Apr	+0.4	-0.1	-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 Oct	-0.4 -0.2	+0.2 -0.1	-0.2 -0.9	Nil +0.5	+1.1 -0.3	Nil -4.2	Nil +0.1	-3.0 +0.8	+0.4 +0.1	Nil +0.4
Nov	-0.2 Nil	+0.1 +0.5	-0.9 -0.2	+0.5 Nil	-0.3 -0.7	-4.2 -2.7	+0.1 Nil	+0.8	+0.1 Nil	+0.4 Nil
Dec	-0.5	-0.1	Nil	Nil	+0.2	-1.5	-0.4	-2.8	Nil	Nil
2020 Jan	+0.9	+0.8	+0.9	Nil	-0.4	Nil	+0.3	+2.2	+0.1	Nil
Feb	-0.2	+0.8 Nil	-0.5	Nil	+0.8	Nil	+0.3	-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
May	-0.2	+0.7	-0.9	Nil	-0.5	Nil	Nil	+0.1	Nil	Nil
May '20	105.8	112.8	100.5	106.7	125.4	110.6	103.0	94.8	108.8	114.3
<u>May '20</u> May '19	+0.4	+3.8	-0.7	+1.2	+2.3	-1.6	+0.1	-3.4	+0.4	+3.2

TECHNICAL NOTE

Readers should note that some price data used to produce the CPI index was not collected in May 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.

Two of the nine sectors in April 2020 had missing prices which were imputed: Rent and Transport & Foreign Travel. Table 2 provides May 2020, April 2020 and May 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 - MAY 2020, APRIL 2020 & MAY 2019

Indicators	May 2020	April 2020	May 2019					
Number								
Total	2,643	3,245	2,643					
Number of Prices Collected	2,595	3,042	2,643					
Number of Prices Missing and Imputed	48	203	0					
Percentage Distribution								
Total	100	100	100					
Number of Prices Collected	98	94	100					
Number of Prices Missing and Imputed	2	6	0					

TABLE 2. OUTLETS AND PRICE COLLECTION METHODS METADATA - MAY 2020, APRIL 2020 AND MAY 2019

Indicators	May 2020	April 2020	May 2019	May 2020	April 2020	May 2019
		Number		Percenta	ige Distribut	ion
Outlets						
Total	76	73	76	100	100	100
Number of Outlets Available for Pricing	72	42	76	95	58	100
Number of Outlets Temporarily Closed	4	31	0	5	42	0
Price Collection Methods						
Total	74	46	74	100	100	100
Online	37	20	27	50	43	36
e-Mail	18	16	18	24	35	24
Telephone Calls	19	9	19	26	20	26
Facsimile	0	1	0	0	2	0
Personal Visit	0	0	10	0	0	14

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

	2016	2017	2018	2019	May 20
Bermuda	+1.5	+1.9	+1.4	+1.0	+0.4
United States ¹	+1.3	+2.1	+2.4	+1.8	+0.1
Canada ²	+1.4	+1.6	+2.3	+1.9	-0.4
United Kingdom ³	+1.8	+3.6	+3.3	+2.6	+1.0

Sources:

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

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