## **CONSUMER PRICE INDEX**

**DECEMBER 2022** 

## Annual Inflation Rate +4.1%

#### ANNUAL INFLATION MOVES UP

Consumers paid 4.1 per cent more in December than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). This level of inflation was up 0.3 percentage points from the November 2022 annual inflation rate of 3.8 per cent.

Between November and December 2022, the average cost of goods and services in the CPI increased 0.2 per cent. The all-items index rose from 113.1 to 113.3. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$113.30.

#### YEAR-TO-YEAR ANALYSIS

#### Food

The Food sector continues to be the largest contributor to the twelve-month increase in the CPI (+10.3 per cent). The major contributors to the annual increase in the sector were the average cost of lettuce (+59.1 per cent), pasta (+57.3 per cent), eggs (+56.6 per cent) and cooking oil (+51.5 per cent). The largest year-to-year decreases were frozen spare ribs (-4.9 per cent), boneless pork loin (-2.5 per cent) and coffee (-2.1 per cent).

### **Transport & Foreign Travel**

In the twelve months to December 2022, the Transport & Foreign Travel sector increased 6.4 per cent. On average, annual increases were reported in the price of overseas accommodations (+25.9 per cent), airfares (+5.4 per cent), premium fuel (+6.7 per cent) and mixed fuel (+6.3 per cent).

# Education, Recreation, Entertainment & Reading

The Education, Recreation, Entertainment & Reading sector impacted the annual rate of inflation by 4.0 per cent. The average cost of pet care and upkeep (+4.0 per cent) and magazines (+2.2 per cent) increased.

### Health & Personal Care

The annual increase in the Health & Personal care sector was 3.3 per cent. On average, the price of self-prescribed medicines and household medical supplies rose 7.1 per cent while prescribed medications were up 0.5 per cent.

## Household Goods, Services & Supplies

Year-over-year, the Household Goods, Services and Supplies sector was up 4.3 per cent. The average cost of cellular telephone subscriptions (+2.8 per cent) and landline telephone access (+1.8 per cent) were the drivers behind the annual increase.

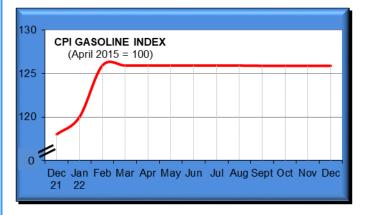


#### YEAR-TO-YEAR INFLATION RATES (April 2015 = 100)

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

#### Transport & Foreign Travel

The Transport & Foreign Travel sector increased 1.3 per cent in response to a rise in the average cost of overseas hotel accommodations (+28.6 per cent). In contrast, the average cost of airfares fell 5.3 per cent.



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

The Household Goods, Services & Supplies sector rose 0.5 per cent for the month. The average cost of cellular telephone subscriptions (+2.8 per cent) and landline telephone access (+1.8 per cent) increased.

## Education, Recreation, Entertainment & Reading

Despite the 0.4 per cent increase in the average cost of pet care and upkeep, the Education, Recreation, Entertainment & Reading sector was static in December.

#### Rent

The Rent sector inched up 0.1 per cent. The increase was attributed to the 0.1 per cent rise in the average rent for controlled properties.

#### **Clothing & Footwear**

The Clothing & Footwear sector was unchanged for the month.

#### **Fuel & Power**

There was no price movement in the Fuel & Power sector.

#### **Tobacco & Liquor**

The increase in the average cost of spirits (+0.7 per cent) was offset by the decrease of the average cost of beer (-0.1 per cent) and wines (-0.5 per cent). As a result, the Tobacco & Liquor sector was unchanged for the month.

#### Health & Personal Care

The Health & Personal Care sector decreased 0.1 per cent for the month. The average cost of at-home rapid antigen test decreased 1.2 per cent. In contrast, the average cost of prescribed medicines and toiletries, cosmetics and perfumes both rose 0.3 per cent.

#### Food

The Food sector was down 0.1 per cent. The average cost of frozen spare ribs (-15.3 per cent), boneless pork loin (-13.0 per cent) and apples (-5.6 per cent) decreased.



#### MONTH-OVER-MONTH INFLATION RATES (April 2015 = 100)

APRIL 2015 = 100

				Clothing	Tobacco	Fuel	Household Goods,	Transport	Education, Recreation,	Health &
	All Items	Food	Rent	& Footwear	Liquor	& Power	Services & Supplies	& Foreign Travel	Entertain.	Personal Care
2013 WEIGHT	1,000	115	267	25	31	39	116	130	147	130
ANNUAL AVERAGE INFLATION RATE (per cent)										
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
2020	Nil	+4.5	-1.8	+0.9	+2.3	-1.8	+0.3	-4.6	+1.1	+2.8
2021	+1.5	+0.4	-0.3	+1.0	-0.6	-5.0	+1.7	+6.4	+2.0	+2.3
2022	+4.0	+7.9	+0.3	+2.2	+0.4	+9.5	+2.9	+8.5	+4.4	+4.0
MONTHLY INFLATION RATE (per cent)										
2021										
Jan	+0.3	+0.1	+0.5	+0.5	+0.3	+1.0	Nil	+1.5	-0.1	Nil
Feb	+0.3	+0.3	Nil	Nil	-0.8	Nil	Nil	+2.2	+0.2	Nil
Mar	+0.4	+0.3	+0.2	Nil	Nil	Nil	Nil	+2.2	Nil	Nil
Apr	+0.3	Nil	Nil	-0.6	+0.1	+1.5	+0.3	+0.7	Nil	+1.1
May	+0.3	-0.1	-0.7	Nil	-0.1	+0.2	+0.3	+3.7	+0.1	Nil
Jun	-0.3	+0.5	-0.3	Nil	-1.3	-14.1	Nil	+0.8	+0.9	+0.7
Jul	+0.5	+0.1	+0.2	+1.1	+0.1	+2.8	Nil	+1.5	+0.1	Nil
Aug	Nil	+0.5	+0.6	Nil	+0.3	Nil	+0.1	-1.8	+0.1	Nil
Sept	+0.2	+0.3	-0.4	Nil	+0.2	Nil	Nil	+0.2	+1.2	Nil
Oct Nov	+0.6 +0.5	+0.2 +1.7	-0.4 +0.1	+0.3 Nil	Nil +2.3	+6.9 Nil	+0.5 Nil	+3.1 -1.1	+0.1 +0.4	-0.2 +1.5
Dec	-0.2	Nil	Nil	Nil	-0.3	+0.2	+0.1	-1.4	Nil	-0.1
2022										
Jan	Nil	+0.8	+0.1	-0.1	-0.1	-2.0	+0.2	-0.8	+0.1	+0.1
Feb	+0.4	+0.6	Nil	Nil	+0.1	Nil	+0.1	+2.2	+0.4	Nil
Mar	+0.4	+0.2	+0.1	Nil	-0.2	Nil	Nil	+0.7	+1.7	-0.1
Apr	+1.2	+0.4	+0.2	+0.2	-1.0	+9.2	+2.0	+1.7	Nil	+2.2
May	+0.5	+0.8	Nil	Nil	-0.1	+0.2	Nil	+3.2	+0.3	Nil
Jun	+0.6	+2.0	+0.1	Nil	-0.2	Nil	+0.1	+1.5	+0.2	+1.0
Jul	+0.4	+1.1	+0.1	+2.1	-0.1	+1.5	+0.1	+0.5	Nil	+0.1
Aug Sept	+0.2 +0.5	+1.0 +1.3	Nil +0.3	Nil Nil	+0.6 -0.1	Nil Nil	+0.5 +0.2	-0.9 +0.9	+0.4 +0.9	Nil Nil
Oct	-0.7	-0.1	+0.5 Nil	+1.6	+0.1	-4.1	+0.2	-4.6	+0.9	Nil
Nov	+0.4	+1.8	+0.1	Nil	-0.2	Nil	+0.1	+0.7	Nil	+0.1
Dec	+0.2	-0.1	+0.1	Nil	Nil	Nil	+0.5	+1.3	Nil	-0.1
ANNUAL INFLATION RATE (per cent)										
<u>Dec '22</u> Dec '21	+4.1	+10.3	+1.1	+3.9	-1.0	+4.9	+4.3	+6.4	+4.0	+3.3
				МО	NTHLY INI	DEX				
Dr- 104	100.0*	117.0	00.0	100.0	106 4	109 5*	105.0	102.0	112.6	110.0
Dec '21	108.8*	117.8	99.9	108.3	126.4	108.5*	105.8	102.0	113.6	119.0
Nov '22	113.1	130.0	100.9	112.5	125.1	113.8	109.7	107.1	118.2	123.0
Dec '22	113.3	129.9	101.0	112.5	125.1	113.8	110.3	108.5	118.2	122.9

\* This is not a revision to the official series but rather an indicative calculation of what it would look like if revisions were made.

SUMMARY STATISTICS								
	Мо	onthly		Quarterly				
Period	Index	Annual per cent Change	Period	Index	Annual per cent Change			
2021			2020					
Dec	108.6	+2.7	Q1	106.1	+0.8			
			Q2	105.8	+0.1			
2022			Q3	105.5	-0.8			
Jan	108.6	+2.5	Q4	105.7	Nil			
Feb	109.0	+2.5						
Mar	109.4	+2.5	2021					
Apr	110.7	+3.5	Q1	106.3	+0.2			
May	111.3	+3.7	Q2	107.1	+1.2			
June	112.0	+4.7	Q3	107.6	+2.0			
July	112.6	+4.5	Q4	108.6	+2.7			
Aug	112.8	+4.7						
Sept	113.4	+5.1	2022					
Oct	112.6	+3.8	Q1	109.0	+2.5			
Nov	113.1	+3.8	Q2	111.3	+3.9			
Dec	113.3	+4.1	Q3	112.9	+4.9			
			Q4	113.0	+4.1			

## **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: <u>https://www.gov.bm/bermuda-business-statistics</u>.

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

The price change between February 2020 and January 2020 is calculated as follows:

$$=\frac{\text{Feb }20 \text{ index } - \text{Jan }20 \text{ index}}{\text{Jan }20 \text{ index}} \times 100$$

 $=\frac{106.1-106.3}{106.3}\times100$ 

= -0.2%

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

The price change between March 2020 and March 2019 is calculated as follows:

$$=\frac{\text{Mar }20 \text{ index } -\text{Mar }19 \text{ index}}{\text{Mar }19 \text{ index}} \times 100$$

 $=\frac{105.9-105.6}{105.6}\times100$ 

#### C) Particular Period Price Change

The price change between February 2020 and March 2018 is calculated as follows:

$$= \frac{\text{Feb 20 index} - \text{Mar 18 index}}{\text{Mar 18 index}} \times 100$$

$$=\frac{106.1-104.3}{104.3}\times100$$

$$=1.7\%$$

# 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, is 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 period 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. An index number alone 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

	2019	2020	2021	2022	Dec 22
Bermuda	+1.0	Nil	+1.5	+4.0	+4.1
United States <sup>1</sup>	+1.8	+1.2	+4.7	+8.0	+6.5
Canada <sup>2</sup>	+1.9	+0.7	+3.4	+6.8	+6.3
United Kingdom <sup>3</sup>	+2.6	+1.5	+4.1	+11.6	+13.4

#### Sources:

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

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