

CONSUMER PRICE INDEX

SEPTEMBER 2022

Annual Inflation Rate +5.1%

ANNUAL INFLATION UP

Consumers paid 5.1 per cent more in September than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). This level of inflation increased 0.4 percentage points from the August 2022 annual inflation rate of 4.7 per cent.

Between August 2022 and September 2022, the average cost of goods and services in the CPI increased 0.5 per cent. The all-items index rose from 112.8 to 113.4. This means that the basket of goods and services that cost \$100.00 in April 2015 now costs \$113.40.

YEAR-TO-YEAR ANALYSIS

The Food sector was the largest contributor to the yearover-year change in the CPI, rising 10.6 per cent. The major contributors to the annual increase in the sector were the average cost of fruit juices (+24.4 per cent), ice cream (+21.1 per cent), frozen entries (+20.9 per cent) and bread (+19.4 per cent).

The Transport & Foreign Travel sector influenced the twelve-month increase at 9.9 per cent. On average, annual increases were reported in the price of overseas hotel accommodations (+55.1 per cent), airfares (+18.5 per cent), premium fuel (+5.5 per cent) and mixed fuel (+5.2 per cent).

The Education, Recreation, Entertainment & Reading sector impacted the annual rate of inflation by 4.4 per cent. The average cost of tuition fees for local and overseas schools increased 2.6 per cent and 2.2 per cent, respectively. In addition, the cost of recreational lessons rose 2.2 per cent annually.

Year-over-year, the Fuel and Power sector increased 15.2 per cent. Compared to September 2021, the fuel adjustment cost for 700 residential kilowatts hours of electricity rose 49.2 per cent.

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		
2021			2020				
Sept	107.7	+2.2	Q1	106.1	+0.8		
Oct	108.3	+2.5	Q2	105.8	+0.1		
Nov	108.8	+2.8	Q3	105.5	-0.8		
Dec	108.6	+2.7	Q4	105.7	Nil		
			2021				
2022			Q1	106.3	+0.2		
Jan	108.6	+2.5	Q2	107.1	+1.2		
Feb	109.0	+2.5	Q3	107.6	+2.0		
Mar	109.4	+2.5	Q4	108.6	+2.7		
Apr	110.7	+3.5					
May	111.3	+3.7	2022				
June	112.0	+4.7	Q1	109.0	+2.5		
July	112.6	+4.5	Q2	111.3	+3.9		
Aug	112.8	+4.7	Q3	112.9	+4.9*		
Sept	113.4	+5.1					
*A typographical error was found on February 22, 2023, reported initially as +4.7.							

A typographical error was found on February 22, 2023, reported initially as +4.7.

MONTH-TO-MONTH ANALYSIS

Food

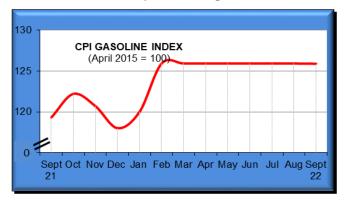
The Food sector grew 1.3 per cent. Price changes were reported in the average cost of ice cream (+17.4 per cent), red grapes (+16.8 per cent) and lettuce (+12.8 per cent).

Education, Recreation, Entertainment & Reading

The Education, Recreation, Entertainment & Reading sector rose 0.9 per cent. The average cost of local and overseas school tuition increased 2.6 per cent and 2.2 per cent, respectively. Additionally, the average cost of pet supplies and upkeep rose 2.0 per cent.

Transport & Foreign Travel

Following the 0.9 per cent decline in August, the Transport & Foreign Travel sector rebounded to 0.9 per cent in September. The rise was attributed to the increase in the average cost of overseas hotel accommodations (+5.5 per cent), airfares (+3.2 per cent) and new motorcycles (+2.0 per cent).



Rent

The Rent sector was up 0.3 per cent for the month. The average cost of properties not subject to rent control increased 0.4 per cent. No price movement was reported in the average cost of home contents insurance.

Household Goods, Services & Supplies

The Household Goods, Services & Supplies sector rose 0.2 per cent for the month. Price increases were reported in the average cost of china, flatware & pot sets (+10.1 per cent), detergents and bleaches (+4.1 per cent) and cleaning materials (+3.4 per cent).

Tobacco & Liquor

The Tobacco & Liquor sector dipped 0.1 per cent as the average price of wines decreased 1.3 per cent. In contrast, the average cost of beer (+1.1 per cent) and spirits (+0.8 per cent) rose for the month.

Fuel & Power

The Fuel & Power sector was unchanged in September.

Clothing & Footwear

The Clothing & Footwear sector reported no price movement for the month.

Health & Personal Care

The Health & Personal Care sector was static for the month. The increase in the average cost of toiletries, cosmetics and perfumes (+0.4 per cent) was offset partially by the decline in the average cost of self-prescribed medicines and household medical supplies (-0.2 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/bermuda-business-statistics.

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:

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

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

=0.3%

C) Particular Period Price Change

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

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

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

=1.7%

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
WEIGHT				ANINIIIAI	AVEDAGE	/ man aant				
				ANNUAL	AVERAGE	(per cent				
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
2020 2021	Nil +1.5	+4.5 +0.4	-1.8 -0.3	+0.9 +1.0	+2.3 -0.6	-1.8 -5.0	+0.3 +1.7	-4.6 +6.4	+1.1 +2.0	+2.8 +2.3
			0.0		0.0	0.0		10.1	12.0	12.0
				MOM	NTHLY (pe	cent)				
2020										
Aug	+0.6	+0.5	+0.3	Nil	+0.3	Nil	+0.1	+0.2	+1.7	+0.8
Sept	-0.4	+0.3	-1.3	Nil	+0.9	Nil	+0.1	-1.3	+0.1	Nil
Oct	+0.3	+0.1	+1.2	+0.2	-0.6	Nil	+0.3	+0.1	+0.1	Nil
Nov	+0.1	-0.2	-0.2	Nil	+0.1	Nil	+0.2	+1.5	-0.2	Nil
Dec	-0.1	-0.3	+0.5	Nil	-0.6	Nil	+0.7	-2.2	-0.1	Nil
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 Apr	+0.4 +0.3	+0.3 Nil	+0.2 Nil	Nil -0.6	Nil +0.1	Nil +1.5	Nil +0.3	+2.2 +0.7	Nil Nil	Nil +1.1
May	+0.3	-0.1	-0.7	-0.0 Nil	-0.1	+0.2	+0.3	+3.7	+0.1	TI.I 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	T1.7 Nil	Nil	Nil	-0.3	+0.2	+0.1	-1.1 -1.4	+0.4 Nil	-0.1
	0.2	14		14	0.0	10.2	10.1		1411	0.1
2022	N.C.	.0.0	.0.4	0.4	0.4	0.0	.00	0.0	.0.4	.0.4
Jan Feb	Nil +0.4	+0.8 +0.6	+0.1 Nil	-0.1 Nil	-0.1 +0.1	-2.0 Nil	+0.2 +0.1	-0.8 +2.2	+0.1 +0. 4	+0.1 Nil
Mar	+0.4	+0.0	+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	+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	Nil Nil
Sept	+0.5	+1.3							+0.9	Nil
Sept '21	107.9*	115.6	100.2	108.0	124.0	103.0*	105.2	101.5	113.1	117.5
Aug '22	112.8	126.1	100.5	110.7	125.2	118.7	108.9	110.5	117.1	122.9
Sept '22	113.4	127.8	100.8	110.7	125.1	118.7	109.1	111.5	118.1	122.9
<u>Sept '22</u> Sept '21	+5.1	+10.6	+0.6	+2.5	+0.9	+15.2	+3.7	+9.9	+4.4	+4.6

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

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

	2018	2019	2020	2021	Sept 22
Bermuda	+1.4	+1.0	Nil	+1.5	+5.1
United States ¹	+2.4	+1.8	+1.2	+4.7	+8.2
Canada ²	+2.3	+1.9	+0.7	+3.4	+6.9
United Kingdom ³	+3.3	+2.6	+1.5	+4.1	+12.6

Sources:

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

November 2022

Department of Statistics Cedar Park Centre, 48 Cedar Avenue, Hamilton HM 11

P.O. Box HM 3015 Hamilton HM MX, Bermuda

Tel: (441) 297-7761, Fax: (441) 295-8390

Website: https://www.gov.bm/department/statistics

