GOVERNMENT OF BERMUDA
The Cabinet Office
**Department of Statistics**

# CONSUMER PRICE INDEX

## INFLATION STABILIZES

Consumers paid 1.2 per cent more in July 2009 than they did a year ago for the basket of goods and services included in the Consumer Price Index (CPI). This was unchanged from the inflation level reached in June 2009

Between June 2009 and July 2009, the average cost of goods and services in the Consumer Price Index rose 0.5 per cent. The all-items index increased from 110.5 to 111.1 index points. This means that the basket of goods and services that cost $100.00 in April 2006 now cost $111.10.

## YEAR-TO-YEAR ANALYSIS

**Food prices - greatest impact on inflation**

The Food sector continued to be the largest contributor to the twelve-month increase in the Consumer Price Index. On average, the cost of food items increased 4.9 per cent year-over-year.

The Health & Personal Care, and Rent sectors also impacted strongly on the annual rate of inflation, as price shifts in these sectors were 6.5 per cent and 1.6 per cent, respectively.



**ALL ITEMS INDEX**
(April 2006 = 100)
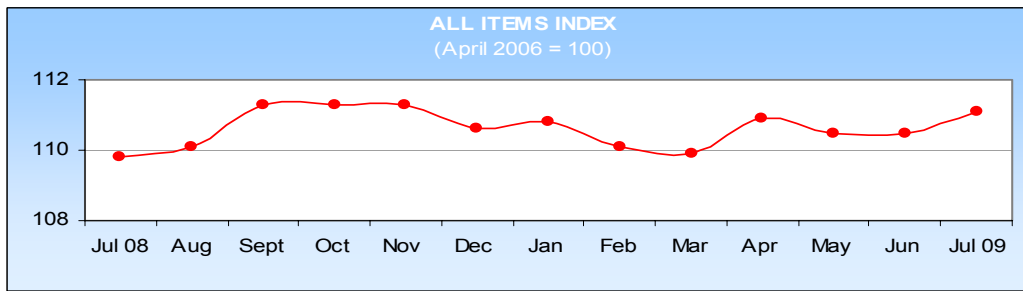
## Inflation Rate 1.2 %

**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** |
| **2008** | | | | **2007** | | |
| July | 109.8 | +4.7 | | Q1 | 102.1 | +3.2 |
| Aug | 110.1 | +5.0 | | Q2 | 103.9 | +3.9 |
| Sept | 111.3 | +5.9 | | Q3 | 105.0 | +4.0 |
| Oct | 111.3 | +5.6 | | Q4 | 105.5 | +4.2 |
| Nov | 111.3 | +5.2 | | | | |
| Dec | 110.5 | +4.9 | | **2008** | | |
| | | | | Q1 | 106.0 | +3.8 |
| **2009** | | | | Q2 | 108.9 | +4.8 |
| Jan | 110.8 | +5.2 | | Q3 | 110.4 | +5.1 |
| Feb | 110.2 | +4.4 | | Q4 | 111.0 | +5.2 |
| Mar | 109.9 | +2.7 | | | | |
| Apr | 110.6 | +1.9 | | **2009** | | |
| May | 110.5 | +1.4 | | Q1 | 110.3 | +4.1 |
| Jun | 110.5 | +1.2 | | Q2 | 110.5 | +1.5 |
| Jul | 111.1 | +1.2 | | | | |

## MONTH-TO-MONTH ANALYSIS

### Transport & Vehicles

The Transport & Vehicles sector accelerated 4.4 per cent in July. Higher repair and maintenance costs for cars and cycles of 3.2 per cent and 19.6 per cent respectively, were the driving force behind the growth. Prices for overseas travel also rose substantially (14.0 per cent) for the month.



**CPI GASOLINE INDEX**
2006 = 100
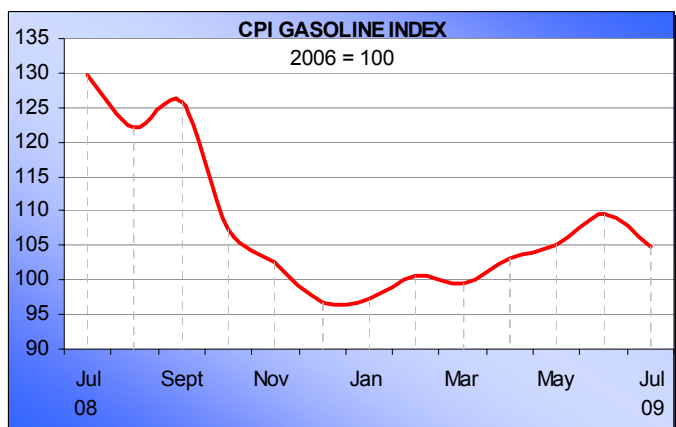
### Household Goods, Services & Communications

The Household Goods, Services & Communications sector rose 1.0 per cent for the month as the cost of funeral services rose by 11.0 per cent. Additionally, the average cost of wedding services rose 37.9 per cent.

### Clothing & Footwear

The Clothing & Footwear sector climbed 0.9 per cent. Lower prices for men's clothing (-2.0 per cent) were offset by higher prices for women's clothing (+5.9 per cent) and children's clothing (+0.9 per cent).

### Education, Recreation & Reading

The Education, Recreation & Reading sector edged up 0.3 per cent in July, because of a 4.8 per cent increase in pet care costs.

### Tobacco & Liquor

The Tobacco & Liquor sector rose 0.5 per cent reflecting increases in the average price of wines (+1.0 per cent) and spirits (+1.4 per cent).

### Health & Personal Care

The Health & Personal Care sector remained unchanged in July.

### Rent

The Rent sector dipped 0.1 per cent. The decrease was attributed to a 0.4 per cent fall in the average rent for non-controlled properties. Rent prices for units subject to rent control advanced 0.3 per cent for the month.

### Food

The food sector eased back 0.3 per cent in July. Notable price changes were; hamburger rolls (-3.3 per cent), frozen spare ribs (-10.4 per cent), and red grapes (-9.2 per cent).

### Fuel & Power

The Fuel & Power sector slumped 3.6 per cent for the month as the fuel adjustment clause slipped from $12.50 in June to $11.50 in July.

## 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 www.statistics.gov.bm.

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

The price change between November and December, 2007 is calculated as follows:

$$= \frac{\text{Dec 07 index number - Nov 07 index number}}{\text{Nov 07 index number}} \times 100$$

$$= \frac{105.3 - 105.8}{105.8} \times 100$$

$$= -0.5\%$$

### b) Year-to-Year Price Change (annual rate of inflation)

The price change between December, 2006 and December, 2007 is calculated as follows:

$$= \frac{\text{Dec 07 index number - Dec 06 index number}}{\text{Dec 06 index number}} \times 100$$

$$= \frac{105.3 - 101.6}{101.6} \times 100$$

$$= 3.6\%$$

# 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 |

### ANNUAL AVERAGE ( per cent)

| | All Items | Food | Rent | Clothing & Footwear | Tobacco & Liquor | Fuel & Power | Household Goods | Transport & Vehicles | Education, Recreation | Health & Personal Care |
|---|---|---|---|---|---|---|---|---|---|---|
| **2003** | +3.2 | +2.0 | +1.8 | +1.9 | +1.4 | +4.8 | +2.2 | +4.5 | +5.8 | +7.0 |
| **2004** | +3.6 | +2.5 | +2.2 | +1.9 | +5.2 | +1.9 | +1.6 | +4.0 | +6.2 | +9.1 |
| **2005** | +3.1 | +3.0 | +2.8 | +2.1 | +2.6 | +5.6 | +1.4 | +5.1 | +5.1 | +2.4 |
| **2006** | +3.1 | +2.0 | +3.9 | +3.3 | +2.1 | +9.5 | +1.4 | +1.2 | +3.8 | +5.7 |
| **2007** | +3.8 | +3.5 | +2.6 | +0.2 | +1.9 | +5.5 | +2.2 | +6.6 | +4.8 | +6.8 |
| **2008** | +4.8 | +5.6 | +2.4 | +2.7 | +9.3 | +31.8 | +2.6 | +3.9 | +5.1 | +6.6 |

### MONTHLY ( per cent)

| | All Items | Food | Rent | Clothing & Footwear | Tobacco & Liquor | Fuel & Power | Household Goods | Transport & Vehicles | Education, Recreation | Health & Personal Care |
|---|---|---|---|---|---|---|---|---|---|---|
| **2007** | | | | | | | | | | |
| June | +0.6 | +1.1 | +0.1 | Nil | +0.1 | +4.5 | +0.4 | +1.0 | +0.3 | +0.2 |
| July | +0.3 | -0.2 | +0.2 | +2.3 | Nil | +1.9 | +0.1 | +0.9 | Nil | Nil |
| Aug | Nil | -0.2 | +0.1 | Nil | +0.4 | +4.6 | Nil | -2.1 | +0.4 | +0.1 |
| Sept | +0.2 | +0.6 | +0.3 | Nil | +0.1 | +1.5 | +0.3 | -1.7 | +2.4 | Nil |
| Oct | +0.3 | +0.4 | +0.1 | -4.9 | +0.1 | Nil | +0.1 | +1.9 | Nil | +0.5 |
| Nov | +0.4 | +0.1 | +0.2 | +0.2 | +0.5 | +1.5 | -0.1 | +1.5 | +0.2 | +0.1 |
| Dec | -0.5 | -0.7 | +0.2 | Nil | +1.1 | +4.6 | Nil | -4.5 | +0.1 | Nil |
| **2008** | | | | | | | | | | |
| Jan | +0.1 | +1.5 | +0.2 | -0.6 | +1.0 | +0.1 | +0.1 | -1.3 | -0.1 | -0.1 |
| Feb | +0.2 | +0.4 | +0.2 | Nil | -0.2 | +2.8 | +0.1 | -0.2 | -0.1 | Nil |
| Mar | +1.3 | +0.5 | +0.2 | Nil | +2.8 | +1.2 | Nil | +7.6 | +0.8 | +0.1 |
| Apr | +1.5 | +1.0 | +0.4 | +7.3 | +2.9 | Nil | +1.0 | +2.5 | +0.1 | +5.1 |
| May | +0.3 | -0.1 | +0.3 | Nil | +1.1 | +2.0 | -0.1 | +0.4 | +0.3 | +0.2 |
| June | +0.3 | +1.5 | +0.1 | Nil | +0.4 | +0.4 | +0.5 | -0.5 | Nil | +0.4 |
| July | +0.5 | Nil | +0.3 | -0.2 | Nil | +8.9 | +0.7 | Nil | +0.2 | +0.1 |
| Aug | +0.3 | +1.0 | +0.3 | Nil | +0.5 | Nil | +0.6 | -0.4 | Nil | +0.1 |
| Sept | +1.1 | +0.4 | +0.1 | Nil | +0.5 | +14.0 | +0.3 | -0.1 | +4.4 | +0.3 |
| Oct | Nil | +2.0 | +0.2 | +1.1 | +0.2 | Nil | +0.1 | -3.4 | +0.6 | +0.6 |
| Nov | Nil | +0.4 | +0.2 | Nil | +0.9 | -0.1 | +0.1 | -1.1 | +0.5 | Nil |
| Dec | -0.7 | +0.1 | +0.3 | Nil | 0.5 | -3.5 | -2.7 | -2.7 | +0.2 | Nil |
| **2009** | | | | | | | | | | |
| Jan | +0.3 | +0.9 | +0.2 | -1.2 | +0.5 | -2.1 | +0.3 | +1.5 | +0.2 | Nil |
| Feb | -0.5 | +0.3 | +0.2 | Nil | +0.3 | -10.1 | +0.2 | -1.4 | -0.4 | Nil |
| Mar | -0.3 | -0.3 | +0.2 | Nil | +0.1 | -5.3 | +0.1 | -1.3 | +0.2 | +0.3 |
| Apr | +0.7 | Nil | +0.1 | +1.7 | +0.3 | -0.1 | +0.5 | +1.6 | +0.4 | +2.8 |
| May | -0.2 | +0.3 | +0.1 | Nil | +0.1 | Nil | +0.2 | -3.4 | -0.6 | +2.1 |
| Jun | +0.1 | -0.1 | -0.1 | Nil | +0.3 | Nil | +Nil | +0.3 | +0.7 | +0.2 |
| Jul | +0.5 | -0.3 | -0.1 | +0.9 | +0.5 | -3.6 | +1.0 | +4.4 | +0.3 | Nil |
| **Jul '09** | **111.1** | **114.9** | **107.9** | **107.7** | **118.7** | **127.0** | **106.3** | **104.8** | **117.2** | **122.1** |
| $\frac{\text{Jul'09}}{\text{Jul'08}}$ | **+1.2** | **+4.9** | **+1.6** | **+2.6** | **+4.7** | **-12.0** | **+0.6** | **-6.1** | **+6.4** | **+6.5** |

## 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 & 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 ( PER CENT)
### Selected Countries & Bermuda

|  | 2005 | 2006 | 2007 | 2008 | Jul 09 |
|---|---|---|---|---|---|
| **Bermuda** | 3.1 | 3.1 | 3.8 | 4.8 | +1.2 |
| **United States**[1] | 3.4 | 3.2 | 2.8 | 3.8 | -0.2 |
| **Canada**[2] | 2.2 | 2.0 | 2.2 | 2.3 | -0.9 |
| **United Kingdom**[3] | 2.1 | 2.3 | 2.3 | 3.6 | -1.4 |

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