



## **CAYMAN ISLANDS' CONSUMER PRICE REPORT: 2010 ANNUAL INFLATION** (Date: February 9, 2011)

### **Consumer Price Index (CPI) Increased by 0.3% in 2010**

This report is a consolidated report of the average CPI in 2010 and the December 2010 CPI. It also reflects changes in the 2009 estimates as a result of a slight modification in the specification of the CPI basket<sup>1</sup>.

#### **Average CPI in 2010**

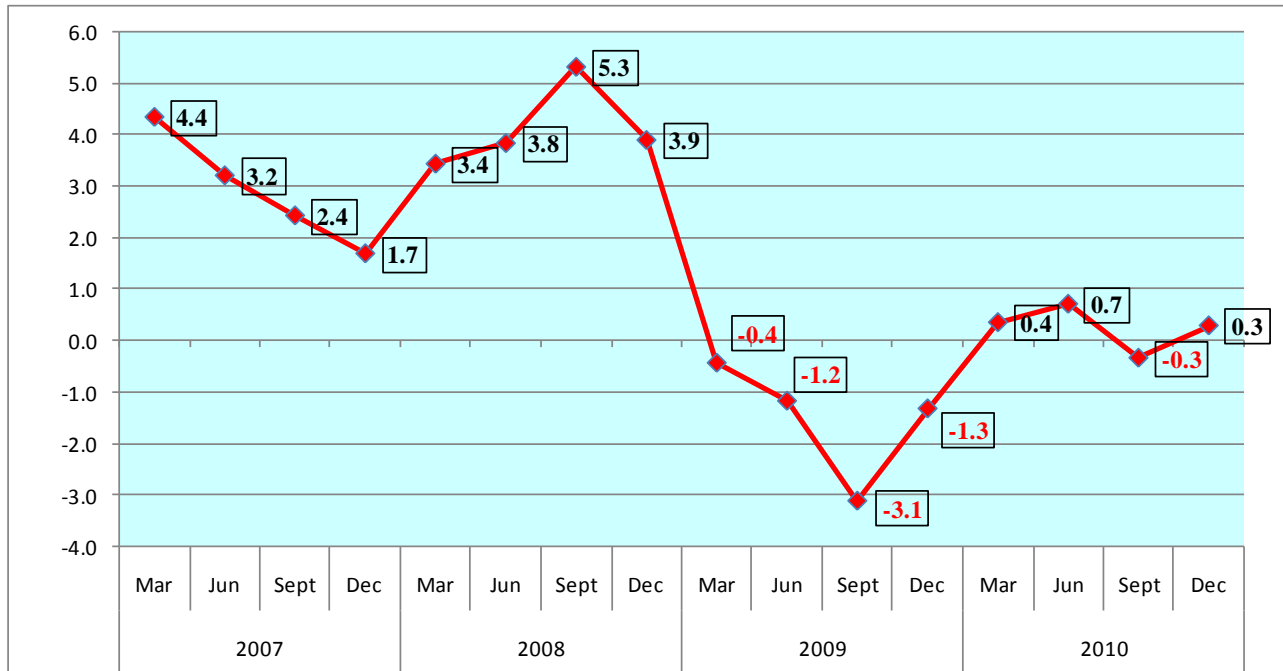
The average CPI in 2010 stood at 98.9, increasing by 0.3% from the average CPI in 2009. Underlying this increase were upward changes in all major categories, except housing and utilities and clothing and footwear which fell slightly by 4.0 % and 0.2% respectively:

- Transportation, 8.1%;
- Restaurant and hotels, 5.1%;
- Alcohol and tobacco, 3.7%;
- Food and non-alcoholic beverages, 3.0%;
- Communication, 2.1%;
- Miscellaneous goods and services, 1.6%;
- Education, 1.7%;
- Health, 1.2%
- Recreation and culture, 1.2% and
- Household equipment, 0.6%.

The 0.3% average inflation in 2010 was generated amidst an unstable trend throughout 2010: from 0.4% in March 2010, the inflation rate inched up to 0.7% in June, but fell to -0.3% in September and bounced back to 0.3% in December. All four periods have higher CPIs than those recorded in 2009. The average inflation in 2010 is also higher than in 2009 (-1.5%).

<sup>1</sup> The slight change in the basket was due to the exclusion of a variety from the product “packaged snack food.” This affected the weights of the items in the basket that led to slight adjustments to the previously published indices. Other minor adjustments to the indices were due to changes in prices for tobacco, education and recreation and culture items.

**Figure 1: Inflation Rates**  
(% Change in CPI of Current Quarter Over Same Quarter A Year Ago)



### December 2010 Consumer Price Index

**Annual changes.** The CPI stood at 98.5 in December 2010, up by 0.3 percent in comparison to December 2009. The upward movement was due to the following:

- **Alcohol and tobacco:** this price index increased by 9.8%, mainly due to an increase in tobacco prices associated with the increase in duties effective January 2010.
- **Transport:** this price index rose by 9.2% in December 2010 compared to December 2009, as the average price of fuel and lubricants increased by 25.2%.
- **Miscellaneous goods and services:** this went up by 3.8%, emanating mainly from increases for other services such as legal consultation fees and passport fees, and for personal effects. These increases were partially offset by a decrease in the average cost of basic banking services.
- **Restaurants and Hotels:** this price index increased by 3.7%, due to higher accommodation services (6.9%).
- **Recreation and Culture:** this price index moved up by 3.2%, due to increases in all sub-categories (except audio-visual, photographic and information processing equipment, and newspapers, books and stationery). The increases were led by recreational and cultural services (4.9%) such as cinema fees (7.5%) and enlargement of photos (6.3%).

- **Food and non alcoholic beverage:** the price index for food items increased by 3.4%. All groups in this category showed increases except for bread and cereals (-3.9%), coffee, tea and cocoa (-2.5%) and fish and seafood (-2.1%). The increase was led by vegetables (11.6%), mineral water, soft drinks, fruit and vegetable juices (5.6%) and meat and meat products (5.3%).
- **Education:** this index rose by 1.8% which originated mainly from a 2.9% increase in the average price of pre-primary and primary education coupled with a 1.7% increase in the average cost of secondary education.
- **Clothing and footwear:** this increased by 1.3% as the average price of footwear went up by 10.7%. However, there was a 0.3% decrease in the average cost of clothing.
- **Household equipment:** the price index went up by 1.1% led by a 5.2% rise in the average cost of household textiles which includes beddings, blinds, towels and linens.
- **Health:** this increased by 0.7% as the average price of medical products, appliances and equipment rose by 4.6%.

On the other hand, the following posted declines in December 2010 compared to December 2009:

- **Housing and utilities:** the overall housing price index, which accounts for almost 2/5 of the entire CPI basket, was registered at 89.2. This is 4.9% below the level in December 2009 on account of an 11.2% fall in the average price of actual rentals for housing coupled with a 9.4% decrease in owner-occupied estimated rentals. However, the average cost of electricity, gas and other fuels was 13.8% higher than in December 2009.
- **Communication:** this price index declined by 0.6% as all sub-categories showed declines led by telephone and telefax equipment (-6.9%).

**Quarterly changes.** The CPI in December 2010 increased by 0.1% from September 2010 due to the following:

- **Transport:** this price index rose by 1.3% in December 2010 compared to September 2010, as the average price of fuel and lubricants which increased by 0.9%.
- **Miscellaneous goods and services:** This index inched up by 0.6% mainly due to increases in the average cost of social protection such as day nursery fees (12.5%), and personal effects such as handbags (0.2%).
- **Housing and utilities:** the index of this category moved by 0.1% as the index for electricity, gas and other fuels rose by 5.7%. However, the average cost of owner-occupied rentals decreased anew by 2.0%. Meanwhile, this is the first quarter that the index for actual rentals was unchanged.

The following major categories decreased in December 2010 compared to September 2010:

- **Communication:** this price index declined by 0.8% as most sub-categories showed declines led by postal services (-2.0%). However, the average cost of telephone and telefax equipment was stable.
- **Food and non-alcoholic beverages:** the price index decreased by 0.6%. However, there were increases for milk, cheese and eggs (2.5%), mineral water, soft drinks, fruit and vegetable juices (1.7%), food not elsewhere classified (0.4%), bread and cereals (0.3%) and fish and seafood (0.1%). The decrease was led by fruits (-10.4%) and meat and meat products (-1.1%).
- **Alcohol and tobacco:** this price index decreased by 0.5% on account of a 0.9% decrease in the average cost of alcohol.
- **Recreation and culture:** this price index moved down by 0.3%, due to recreational and cultural services (-0.7%).
- **Household equipment:** the price index fell by 0.2%, as the average cost of household appliances dropped by 8.1%.
- **Restaurants and hotels:** this price index declined by 0.1% as accommodation services registered a negative movement of 12.4%.

Meanwhile, the **education** index was stable as school fees remained unchanged from the previous quarter. Similarly, the CPIs of **clothing and footwear** and **health** were unchanged from September 2010.

**Table 1: Quarterly Consumer Price Index and Inflation Rates**

**JUNE 2008 = 100**

Year	Quarter Ending	INDEX	Percentage change in CPI:	
			3 months ago	1 year ago
2001	March	80.3	0.5	1.8
	June	80.5	0.2	1.8
	September	79.9	-0.7	0.3
	December	80.5	0.8	0.8
2002	March	82.0	1.9	2.1
	June	82.0	0.0	1.9
	September	82.3	0.4	3.0
	December	82.9	0.7	3.0
2003	March	82.2	-0.8	0.2
	June	82.5	0.4	0.6
	September	82.9	0.5	0.7
	December	83.4	0.6	0.6
2004	March	83.2	-0.2	1.2
	June	84.2	1.2	2.1
	September	85.7	1.8	3.4
	December	92.7	8.2	11.2
2005	March	92.7	0.0	11.4
	June	92.5	-0.2	9.9
	September	93.1	0.6	8.6
	December	92.7	-0.4	0.0
2006	March	91.9	-0.9	-0.9
	June	93.3	1.5	0.9
	September	94.4	1.2	1.4
	December	94.2	-0.2	1.6
2007	March	95.9	1.8	4.4
	June	96.3	0.4	3.2
	September	96.7	0.4	2.4
	December	95.8	-0.9	1.7
2008	March	99.2	3.5	3.4
	June	100.0	0.8	3.8
	September	101.8	1.8	5.3
	December	99.5	-2.3	3.9
2009	March	98.8	-0.8	-0.4
	June	98.8	0.1	-1.2
	September	98.7	-0.2	-3.1
	December	98.2	-0.5	-1.3
2010	March	99.1	0.9	0.4
	June	99.5	0.4	0.7
	September	98.4	-1.1	-0.3
	December	<b>98.5</b>	<b>0.1</b>	<b>0.3</b>

**Table 2**  
**CAYMAN ISLANDS CONSUMER PRICE INDEX**  
**ANNUAL AVERAGES 1995 TO 2010**  
**(June 2008 = 100)**

YEAR	INDEX	Percentage change from a year ago
1995	66.7	
1996	68.4	2.5
1997	70.3	2.7
1998	72.4	3.0
1999	77.3	6.9
2000	79.4	2.7
2001	80.3	1.1
2002	82.3	2.5
2003	82.8	0.5
2004	86.5	4.5
2005	92.8	7.3
2006	93.5	0.8
2007	96.2	2.9
2008	100.1	4.1
2009	98.6	-1.5
2010	98.9	<b>0.3</b>

TABLE 3: CONSUMER PRICE INDICES AND INFLATION BY DIVISIONS AND GROUPS - FOURTH QUARTER 2010							
Major Group	Weight	Index			Percentage Change		
		Dec-10	Sept-10	Dec-09	3 months Ago	1 year ago	
<b>All Divisions - All items</b>	<b>1000.0</b>	<b>98.5</b>	<b>98.4</b>	<b>98.2</b>	<b>0.1</b>	<b>0.3</b>	
<b>01 Food &amp; Non Alcoholic Beverage</b>	<b>79.6</b>	<b>108.6</b>	<b>109.3</b>	<b>105.1</b>	<b>-0.6</b>	<b>3.4</b>	
Bread & cereals	9.9	108.2	107.8	112.6	0.3	-3.9	
Meat & meat products	10.4	110.7	111.9	105.1	-1.1	5.3	
Fish & seafood	4.2	101.8	101.7	103.9	0.1	-2.1	
Milk, cheese & egg	8.3	106.8	104.2	102.1	2.5	4.6	
Oils & fats	2.0	99.1	99.9	98.5	-0.7	0.7	
Fruit	6.7	114.9	128.3	111.7	-10.4	2.9	
Vegetables	8.6	116.3	116.6	104.2	-0.3	11.6	
Sugars, jam, honey, chocolate & confectionery	5.5	110.0	110.8	107.8	-0.7	2.0	
Food products n.e.c.	5.6	104.9	104.5	103.7	0.4	1.2	
Coffee, tea & cocoa	1.6	99.9	100.7	102.5	-0.8	-2.5	
Mineral water, soft drinks, fruit & vegetable juices	16.9	106.5	104.7	100.9	1.7	5.6	
<b>02 Alcohol and Tobacco</b>	<b>6.5</b>	<b>115.1</b>	<b>115.6</b>	<b>104.7</b>	<b>-0.5</b>	<b>9.8</b>	
Alcohol	5.6	107.6	108.5	103.0	-0.9	4.5	
Tobacco	0.9	163.5	161.9	116.2	1.0	40.7	
<b>03 Clothing and Footwear</b>	<b>34.3</b>	<b>101.1</b>	<b>101.1</b>	<b>99.9</b>	<b>0.0</b>	<b>1.3</b>	
Clothing	29.5	99.7	99.5	100.0	0.2	-0.3	
Footwear	4.8	109.8	111.1	99.2	-1.2	10.7	
<b>04 Housing and Utilities</b>	<b>394.4</b>	<b>89.2</b>	<b>89.1</b>	<b>93.8</b>	<b>0.1</b>	<b>-4.9</b>	
Actual rentals for housing	78.7	78.7	78.7	88.7	0.0	-11.2	
Imputed rentals for housing	223.4	86.2	87.9	95.1	-2.0	-9.4	
Maintenance and repair of dwelling	28.5	114.7	110.8	104.1	3.6	10.3	
Water supply and miscellaneous services	16.4	102.1	99.0	96.6	3.1	5.7	
Electricity, gas and other fuels	47.3	101.4	95.9	89.1	5.7	13.8	
<b>05 Household Equipment</b>	<b>56.4</b>	<b>101.7</b>	<b>101.8</b>	<b>100.5</b>	<b>-0.2</b>	<b>1.1</b>	
Furniture and furnishings	5.7	102.6	102.6	99.7	0.0	2.9	
Household textiles	1.1	103.9	103.6	98.7	0.3	5.2	
Household appliances	2.8	105.7	115.0	101.0	-8.1	4.7	
Glassware, tableware and household utensils	2.8	105.7	105.7	101.3	0.0	4.3	
Tools and equipment for house and garden	1.5	91.2	91.5	88.5	-0.3	3.0	
Goods and services for routine household maintenance	42.4	101.4	100.9	101.1	0.4	0.3	
<b>06 Health</b>	<b>24.2</b>	<b>97.8</b>	<b>97.8</b>	<b>97.1</b>	<b>0.0</b>	<b>0.7</b>	
Medical products, appliances and equipment	5.0	108.3	106.8	103.5	1.4	4.6	
Outpatient services	17.9	94.2	94.6	94.6	-0.5	-0.5	
Hospital services	1.4	106.5	106.5	106.0	0.0	0.5	
<b>07 Transport</b>	<b>96.1</b>	<b>101.8</b>	<b>100.5</b>	<b>93.2</b>	<b>1.3</b>	<b>9.2</b>	
Purchase of vehicles	6.1	102.3	103.0	103.5	-0.7	-1.2	
Operations of personal transport equipment	57.4	103.4	102.3	92.2	1.0	12.1	
Transport services	32.6	98.8	96.7	93.1	2.2	6.2	
<b>08 Communication</b>	<b>69.7</b>	<b>102.1</b>	<b>102.9</b>	<b>102.7</b>	<b>-0.8</b>	<b>-0.6</b>	
Postal services	0.5	92.9	94.8	93.7	-2.0	-0.8	
Telephone & telefax equipment	0.3	93.1	93.1	100.0	0.0	-6.9	
Telephone & telefax services	68.9	102.2	103.0	102.8	-0.8	-0.6	
<b>09 Recreation and Culture</b>	<b>40.5</b>	<b>99.7</b>	<b>100.1</b>	<b>96.7</b>	<b>-0.3</b>	<b>3.2</b>	
Audio-visual, photographic and information processing equipment	4.2	80.2	80.0	81.2	0.3	-1.2	
Other major durables for recreation and culture	3.4	99.5	99.5	99.0	0.0	0.6	
Other recreational items and equipment, gardens and pets	10.5	110.5	110.5	105.7	0.0	4.6	
Recreational & cultural services	17.6	99.8	100.5	95.1	-0.7	4.9	
Newspapers, books and stationery	4.8	93.4	93.4	94.6	0.0	-1.3	
<b>10 Education</b>	<b>27.9</b>	<b>105.4</b>	<b>105.4</b>	<b>103.5</b>	<b>0.0</b>	<b>1.8</b>	
Pre-primary and primary education	16.1	107.7	107.7	104.7	0.0	2.9	
Secondary education	2.4	111.2	111.2	109.3	0.0	1.7	
Tertiary education	9.4	100.0	100.0	100.0	0.0	0.0	
<b>11 Restaurants and Hotels</b>	<b>40.2</b>	<b>113.3</b>	<b>113.4</b>	<b>109.2</b>	<b>-0.1</b>	<b>3.7</b>	
Catering Services	33.8	117.3	115.1	113.6	2.0	3.3	
Accommodation Services	6.4	91.8	104.8	85.9	-12.4	6.9	
<b>12 Miscellaneous Goods and Services</b>	<b>130.2</b>	<b>107.1</b>	<b>106.4</b>	<b>103.1</b>	<b>0.7</b>	<b>3.9</b>	
Personal care	26.5	107.0	106.2	105.9	0.8	1.1	
Personal effects n.e.c.	7.7	106.3	101.8	101.2	4.4	5.0	
Social protection	8.4	103.2	100.0	100.0	3.2	3.2	
Insurance	74.8	107.1	106.7	103.5	0.4	3.4	
Financial services n.e.c.	0.5	91.8	91.8	100.0	0.0	-8.2	
Other services n.e.c.	12.2	110.5	110.5	98.0	0.0	12.7	

**Table 4: Consumer Price Index, Averages by Major Groups**

(JUNE 2008 = 100)

PERIOD / DIVISION	Food & Non-alcoholic beverages	Alcoholic Beverages & Tobacco	Clothing & Footwear	Housing and Utilities	Household Equipment	Health	Transport	Communication	Recreation & Culture	Education	Restaurants & Hotels	Miscellaneous Goods & Services	ALL ITEMS
<b>WEIGHT</b>	79.6	6.5	34.3	394.4	56.4	24.2	96.1	69.7	40.5	27.9	40.2	130.2	1000
<b>2009</b>													
MARCH	105.9	104.4	102.4	96.2	101.8	95.6	89.3	98.4	98.3	101.8	108.8	104.1	98.8
JUNE	106.9	104.6	102.4	95.2	101.6	96.3	90.8	101.6	98.5	102.0	107.1	104.3	98.8
SEPTEMBER	105.6	104.1	100.3	94.9	100.9	97.2	92.7	99.5	97.6	103.5	109.7	104.5	98.7
DECEMBER	105.1	104.7	99.9	93.8	100.5	97.1	93.2	102.7	96.7	103.5	109.2	103.1	98.2
<b>ANNUAL AVERAGE 2009</b>	105.9	104.5	101.2	95.0	101.2	96.6	91.5	100.5	97.7	102.7	108.7	104.0	98.6
<b>2010</b>													
MARCH	107.5	98.1	99.8	93.5	100.8	97.4	96.1	102.8	98.1	103.5	116.4	104.1	99.1
JUNE	110.6	103.5	102.1	93.1	102.9	97.7	97.4	102.7	97.5	103.5	113.6	105.0	99.5
SEPTEMBER	109.3	115.6	101.1	89.1	101.8	97.8	100.5	102.9	100.1	105.4	113.4	106.4	98.4
DECEMBER	108.6	115.1	101.1	89.2	101.7	97.8	101.8	102.1	99.7	105.4	113.3	107.0	98.5
<b>% CHANGE PREV YEAR</b>	3.4	9.8	1.3	-4.9	1.1	0.7	9.2	-0.6	3.2	1.8	3.7	3.8	0.3
<b>% CHANGE PREV QTR</b>	-0.6	-0.5	0.0	0.1	-0.2	0.0	1.3	-0.8	-0.3	0.0	-0.1	0.6	0.1
<b>ANNUAL AVERAGE 2010</b>	109.0	108.1	101.0	91.2	101.8	97.7	98.9	102.6	98.9	104.5	114.2	105.6	98.9
<b>% CHANGE PREV YEAR ANNUAL AVERAGE</b>	3.0	3.5	-0.2	-4.0	0.6	1.2	8.1	2.1	1.2	1.7	5.1	1.6	0.3



## NOTES ON THE INDEX COMPILATION

### 1. CPI Revision

This report includes revisions in the CPI estimates as follows:

#### Revised Indices June 2009 - Sept 2010

Year	Quarter Ending	INDEX	
		Previous	Revised
2009	June	98.7	98.8
	September	98.9	98.7
	December	98.9	98.2
2010	March	99.3	99.1
	June	99.9	99.5
	September	98.7	98.4

The slight change in the basket was due to the exclusion of a variety from the product “packaged snack food.” This affected the weights of the items in the basket that led to slight adjustments to the previously published indices. Other minor adjustments to the indices were due to changes in prices for tobacco, education and recreation and culture items.

### 2. Data collection

This report uses the 2008 CPI basket based on the results of the 2007 Survey of Living Conditions/Household Budget Survey (HBS) as updated in June 2008. The goods and services in the basket are classified into twelve (12) divisions using the United Nations’ Classification of Individual Consumption According to Purpose (COICOP). In all, there are 1,393 items (7th-digit COICOP level) included in the basket collected from 147 providers/outlets in Grand Cayman, classified as follows:

#### Number of Items in the 2008 CPI Basket

Division		
1	Food and non-alcoholic beverages	477
2	Alcoholic beverages and tobacco	56
3	Clothing and footwear	137
4	Housing, utilities and fuels	67
5	Furnishings, household equipment and routine household maintenance.	191
6	Health	47
7	Transport	71
8	Communication	41
9	Recreation and Culture	65
10	Education	15
11	Restaurants and hotels	130
12	Miscellaneous goods and services	96

**Total**

**1,393**

ESO also adopted new collection periods and price averaging methodologies in accordance with updated international standards and as advised by the Caribbean Technical Assistance Centre (CARTAC). Beginning in the fourth quarter of 2009, price data for all items are collected every second month of the quarter (whereas they were previously collected every third month). Prices of selected items that are vulnerable to monthly changes such as vegetables and fruits, fish and meat, and gas are now also collected on a monthly basis. Prices across outlets are averaged using the geometric mean formula to reduce the impact of extreme or outlier prices (please see below).

### 3. CPI formula

The CPI is computed using Lowe’s formula. The Lowe indices is one of the widest and popular class of price indices which is obtained by defining the index as the percentage change, between the periods compared, in the total cost of purchasing a given set of quantities, generally described as a “basket”.<sup>2</sup> The Lowe index, P<sub>Lo</sub>, is defined as follows<sup>3</sup>:

$$P_{Lo} = \frac{\sum_{i=1}^n p_i^t q_i}{\sum_{i=1}^n p_i^0 q_i}$$

Where n = number of products in the basket with prices p<sub>i</sub> and quantities q<sub>i</sub>  
 0 = base period  
 t = later period being compared

#### Geometric mean

The price p = [p<sub>1</sub>, p<sub>2</sub>, . . . , p<sub>n</sub>] for each item from different outlets is the average of prices of the outlets using geometric mean or the formula:

$$p = \left( \prod_{i=1}^n p_i \right)^{1/n} = \sqrt[n]{p_1, p_2, \dots, p_n}$$

**Inflation:** this refers to the percentage change in the Consumer Price Index from one period to another. Typically, this period would be a year or a quarter.

**Annual Inflation Rate:** the percentage change of the CPI in the quarter under review over the CPI of the same quarter a year ago. This is also known as **year-on-year inflation rate**.

**Quarterly Inflation Rate:** the percentage change of the CPI in the quarter under review over the immediate previous quarter. This is also known as **quarter-on-quarter inflation rate**.

<sup>2</sup> ILO (2004, p. 2). Consumer price index manual

<sup>3</sup> Ibid, p.3