



# Consumer Price Index, **Third Quarter, 2013**

(Base year 2007)

Detailed by:

- Expenditure groups

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## **Introduction**

The Consumer Price Index (CPI) is an important statistical indicator for the purposes of planning and research in various disciplines. Statistics centers and agencies in different countries consistently compile these indices, which depend on the prices of a basket of goods and services consumed by the household sector. The figures thus calculated constitute a time series that provides a measure of changes in the cost of living over time.

Therefore Statistics Centre - Abu Dhabi has always taken interest in collecting the prices of those goods and services on a regular basis and publishes the indicators derived from this data, following the methodologies adopted internationally in this field.

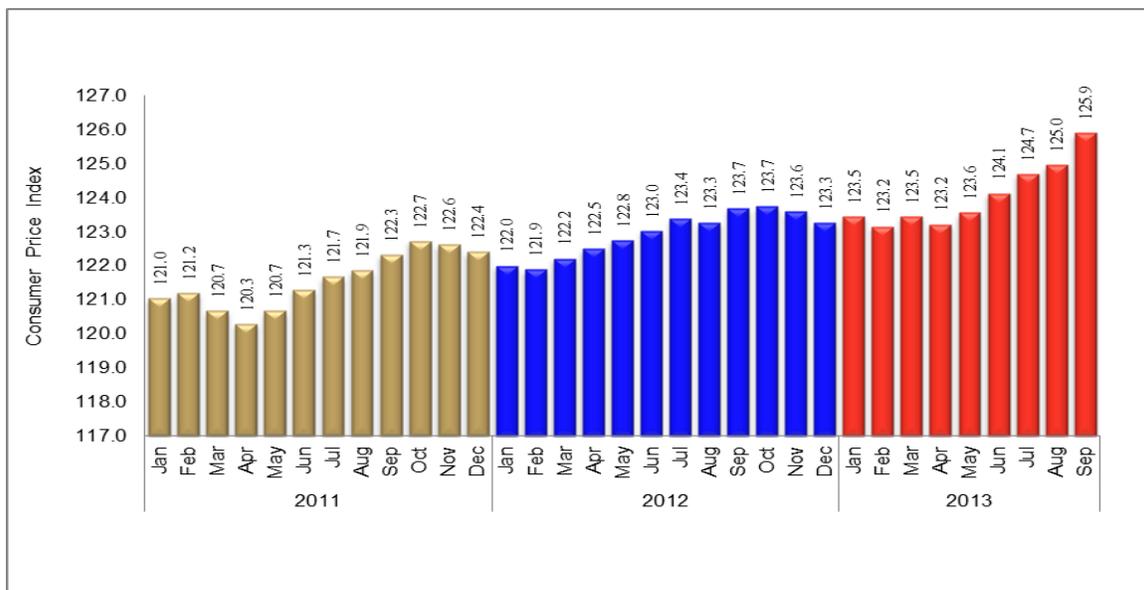
To represent all regions of the Emirate, the selected sample of items included in the Consumer Price Index basket uses actual data from the 2007/ 2008 Household Income and Expenditure Survey. The sample of outlets were selected in such a way to represent points of purchase for a large base of consumers all over the Emirate of Abu Dhabi, taking into account the geographical distribution of sources within the Emirate.

## Key Points

This report provides an analysis of the results of the CPI for the month of September 2013 with the base year 2007. The main findings of this analysis are outlined below:

- The average inflation rate in consumer prices for the first nine months of 2013 was 1.1%, compared with the same period of 2012, as shown by the increase in the average CPI from 122.8 points to 124.1 points.
- The CPI increased by 1.8% in September 2013, compared with the same period of 2012, as shown by the increase in the CPI from 123.7 points in September 2012 to 125.9 points in September 2013.
- The CPI increased by 0.8% in September 2013 compared with August 2013.
- From Q3 2012 to Q3 2013, average consumer prices rose by 1.4%. as shown by the increase in the CPI to 125.2 points during the third quarter of 2013, up from 123.4 points during the same period of 2012.
- Consumer prices for Q2 2013 compared with Q1 2013 increased by 0.2%.

**Figure (1): CPI for the months of 2011, 2012, 2013**



Source: Statistics Centre- Abu Dhabi

## Consumer Price Index (CPI) for the Month of September, 2013 (2007=100)

### A. Percentage changes in the CPI

During the first nine months of 2013, the average consumer prices rose by 1.1% with the CPI at 124.1 points, compared with 122.8 points for the same period of 2012. This rise in prices reflects the net change in the consumer basket prices (resulting from upward and downward movements) during the reference period.

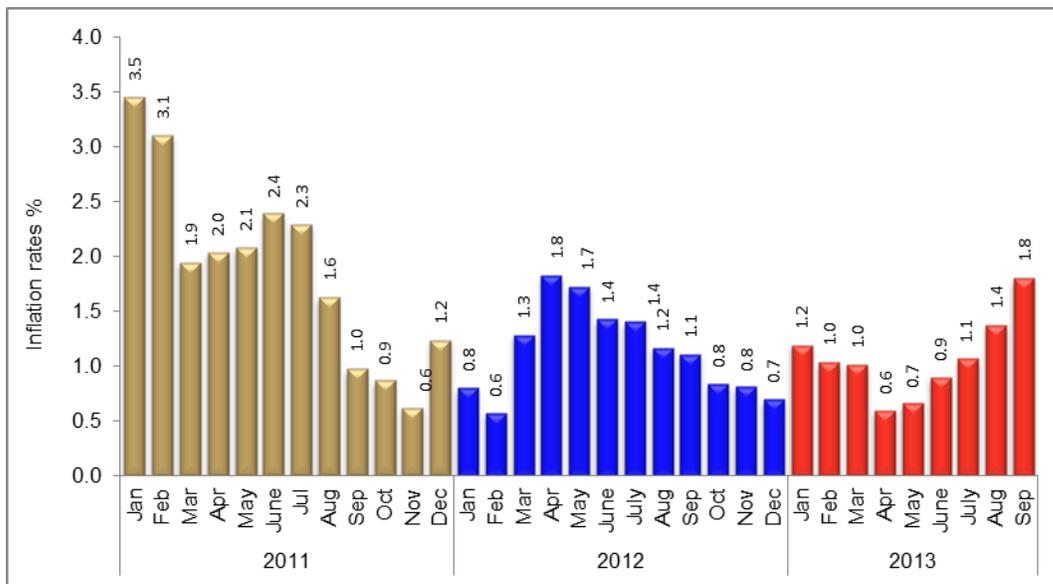
Figure (2) shows the annual inflation rates for the months of 2011, 2012 and 2013. These rates reflect the price movement of goods and services during the recent years.

**Table (1): Consumer price index**

Year	Aug	Sep	Q2	Q3	Jan-Sep
CPI					
2012	123.3	123.7	122.8	123.4	122.8
2013	125.0	125.9	123.6	125.2	124.1
— % —					
Relative change	1.4	1.8	0.7	1.4	1.1

Source: Statistics Centre - Abu Dhabi

**Figure (2): Annual inflation rates for the months of 2011, 2012 and 2013**



Source: Statistics Centre – Abu Dhabi

## B. Average CPI for the first nine months of 2013 compared with the same period of 2012

Table (2) shows the twelve major expenditure groups, as per the Classification of Individual Consumption according to Purpose (COICOP), and the weight or relative importance of each one of the main expenditure groups. The weight of any group is the households' expenditure on that group as a proportion of total expenditure on all groups. The table also shows the relative change, which is the percentage rate of change in the prices of any given group for the first nine months of 2013 compared with the same period of 2012. The percentage contribution reflects the expenditure group's contribution to the overall change in the prices of all groups, which is 1.1%.

**Table (2): Major expenditure groups by weights, relative change and contribution for the first nine months of 2013**

Main expenditure groups	Weight	Relative change	Contribution
		— % —	
Food and non-alcoholic beverages	16.1	1.1	19.4
Alcoholic beverages and tobacco	0.3	9.5	2.4
Clothing and footwear	9.8	2.4	17.8
Housing, water, electricity, gas and other fuels	37.9	-0.4	-15.4
Furnishings, household equipment and routine household maintenance	4.8	2.7	12.2
Health	0.8	1.4	1.0
Transport	9.7	3.0	27.5
Communication	7.7	-0.1	-0.4
Recreation and culture	2.4	0.1	0.2
Education	2.6	3.1	10.1
Restaurants and hotels	3.4	5.3	20.5
Miscellaneous goods and services	4.6	1.1	4.8
Total	100	-	100

Source: Statistics Centre - Abu Dhabi

The above table shows the “Transport” group, accounting for 27.5% of the increase. This contribution resulted from an increase of 3.0% in the prices of this group.

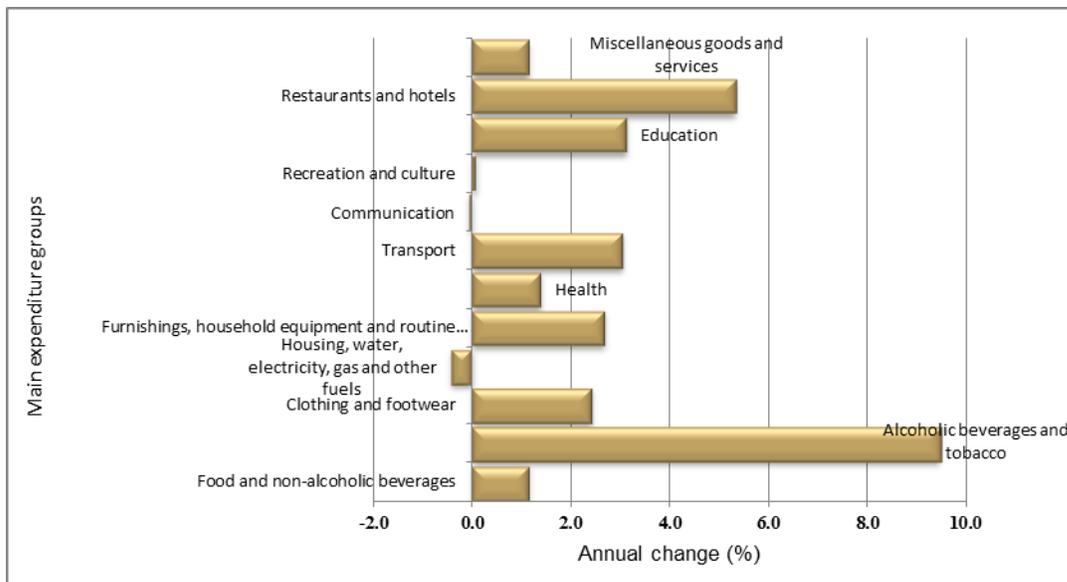
The second highest contributor to the overall increase in the CPI over the reference period was the “Restaurants and hotels” group which accounted for 20.5% of the overall increase. The prices of the group increased by 5.3% during the reference period.

The prices of “Furnishings, household equipment and routine household maintenance” rose by 2.7%. This group contributed 12.2% of the total increase achieved by all groups.

Prices of the "Food and non-alcoholic beverages" group which accounted for the largest rise in the index contributed 19.4% to the change. The prices of most subgroups included in the “Food and non-alcoholic beverages” have increased. The prices of “Vegetables” increased by 5.5%, “Fruit” by 4.4%, “Coffee, tea and cocoa” by 5.4%”, “Food products n.e.c.” by 4.8%” and “Oil and fats” by 1.7%.

Among the main groups that slowed down the rise in consumer prices during the reference period, was the "Housing, water, electricity, gas and other fuels" group which contributed -15.4%.The prices of this group decreased by 0.4%.

**Figure (2): Annual change in CPI for the main groups (first nine months of 2013 compared with the same period of 2012)**



Source: Statistics Centre - Abu Dhabi

## C. CPI for the third quarter of 2013

**Table (3): Weights, relative change and contribution of expenditure groups to the overall change in CPI, Q3 2013 compared with Q3 2012.**

Main expenditure Groups	Weight	Relative change	Contribution
		— % —	
Food and non-alcoholic beverages	16.1	2.7	34.7
Alcoholic beverages and tobacco	0.3	8.5	1.6
Clothing and footwear	9.8	2.6	14.6
Housing, water, electricity, gas and other fuels	37.9	0.1	3.5
Furnishings, household equipment and routine household maintenance	4.8	2.0	6.9
Health	0.8	0.7	0.4
Transport	9.7	3.3	22.4
Communication	7.7	-0.2	-0.7
Recreation and culture	2.4	-0.4	-0.6
Education	2.6	3.3	8.1
Restaurants and hotels	3.4	2.4	7.3
Miscellaneous goods and services	4.6	0.6	1.8
Total	100	-	100

Source: Statistics Centre - Abu Dhabi

Relative change is based on the unrounded CPI

- The average rise in consumer prices for the second quarter of 2013 was 1.4%, compared with the same period of 2012.
- The " Food and non-alcoholic beverages" group, group which accounted for the largest rise in the index during the third quarter 2013 compared with the same period of 2012, contributed 34.7% to the change. The prices of "Fish and seafood" increased by 13.2%, "Vegetables" increased by 6.6%, "Fruit" by 3.4%,

“Coffee, tea and cocoa” by 6.4%”, “Food products n.e.c.” by 5.1%” and “Oil and fats” by 1.8%.

- The next highest group contributor to the overall increase in the CPI over the third quarter of 2013 was the "Transport" group which accounted for 22.7% of the rise in the index, due to increases in the prices of most of the subgroups. Prices for this group increased by 3.3%.
- The "Clothing and footwear" group accounted for 14.7% of the increase in the CPI, while prices for this group increased by 2.6%.
- Consumer prices for Q3 2013 compared with Q2 2013 increased by 1.3%. The most significant individual increases came from prices for the “Food and non-alcoholic beverages” group which increased by 4.6%, and the “Restaurants and hotels” group which increased by 1.6%.

#### D. CPI of September 2013

##### 1. Comparing the CPI of September 2013 with the CPI of September 2012

The average consumer prices increased by 1.8% in September 2013 compared with September 2012, with the CPI at 125.9 points in September 2013, up from 123.7 points in September 2012. This increase in prices was due to the net movement (increases and decreases) of consumer prices during the reference period.

The most significant groups, which experienced increases in prices during September 2013 compared with September 2012, were “Alcoholic beverages and tobacco” (8.5%), “Transport” (3.6%) and “Food and non-alcoholic beverages” (3.8%). Over the same period, the “Recreation and culture” group decreased by 0.8%.

**Table (3): Main expenditure group by weight, relative change and contribution, September 2013 compared with September 2012**

Main expenditure Groups	Weight	Relative change	Contribution
		— % —	
Food and non-alcoholic beverages	16.1	3.8	38.0
Alcoholic beverages and tobacco	0.3	8.5	1.3

Clothing and footwear	9.8	4.0	17.8
Housing, water, electricity, gas and other fuels	37.9	0.6	11.8
Furnishings, household equipment and routine household maintenance	4.8	-0.1	-0.2
Health	0.8	0.7	0.3
Transport	9.7	3.6	19.1
Communication	7.7	-0.2	-0.5
Recreation and culture	2.4	-0.8	-0.9
Education	2.6	3.9	7.5
Restaurants and hotels	3.4	2.4	5.7
Miscellaneous goods and services	4.6	0.2	0.6
Total	100	-	100

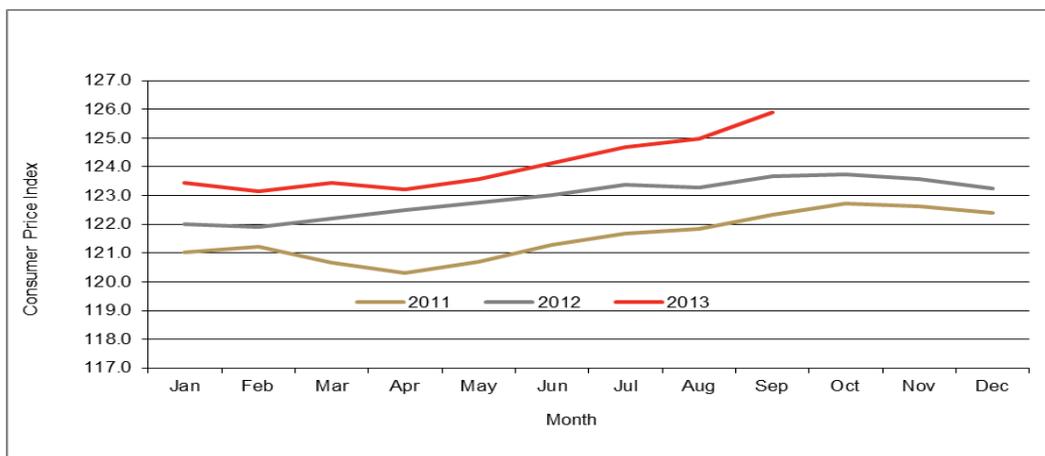
Source: Statistics Centre - Abu Dhabi

## 2. Comparing the CPI of September 2013 with the CPI of August 2013

The average consumer prices increased by 0.8% in September 2013 compared with August 2013. This overall increase in prices between the two months reflects the net movement (increases and decreases) of consumer prices during the periods compared.

The most significant groups, which experienced increases in prices during September 2013 compared with August 2013, were “Education” with 3.9% “Clothing and footwear” with 2.0% and “Food and non-alcoholic beverages” with a 1.1% increase,

**Figure (4): Consumer price index for the months of 2011, 2012 and 2013**



Source: Statistics Centre - Abu Dhabi

**Next release:**

The CPI for October 2013 will be released on 10 November 2013. For more information on prices and other official statistics, please visit the SCAD website at <http://www.scad.ae>

## **CPI Methodology**

### **Introduction**

Statistics Centre- Abu Dhabi is the sole official body responsible for calculating and publishing the Consumer Price Index (CPI) within the Emirate of Abu Dhabi. The Centre updated the CPI base year to 2007 for both prices and weights. weights that are used in the new CPI were calculated using the results derived from the Household Income and Expenditure Survey 2007/2008, which was carried out in the Emirate of Abu Dhabi. The methodology used in calculating the CPI follows best international recommendations and practices in this field.

### **What is the Consumer Price Index?**

The CPI is a tool that measures the rate of change in the prices of a basket of goods and services between two time periods. The period against which prices are compared is known as the base period and the period under review is known as the comparison period.

### **Importance of the Consumer Price Index**

The CPI provides monthly estimates on the rate of change in the prices of a consumer price basket in the Emirate of Abu Dhabi. Some of the significant uses of the CPI are:

- The CPI is used as an important economic indicator to calculate inflation rates.
- The Inflation rate is a key statistic for economic policy making and is used for the purpose of adjusting payments (such as rents).
- Salaries and wages are being adjusted by international entities and big corporations based on the change taking place in the CPI.
- The CPI is used as a deflator while producing national accounts at constant prices.

### **Updating the Consumer Price Index**

The Consumer Price Index weights are updated on a regular basis once the necessary data becomes available. Usually the update takes place after releasing the results of the Household Income and Expenditure Survey, which is carried out periodically about every five years. Updating weights of goods and services of the CPI basket ensure that these weights represent as close as possible the current consumption pattern of households. The last CPI update in the Emirate of Abu Dhabi took place in 2007-2008, where 2007 was regarded as the new CPI base year for both weights and prices.

## 1. CPI Compilation

The CPI is calculated using the Laspeyres method 
$$CPI_L = \sum \frac{P_{1i}}{P_{0i}} \times W_{0i}$$

Prices of goods and services of the CPI basket are collected periodically, except for vegetables, fruits, meat, fish and chicken groups which are collected on a weekly basis due to the continuous change that occur in its prices. Rentals prices are collected quarterly, while education fee prices are collected semi- annually.

The current CPI uses 2007 as the base year in Abu Dhabi region. The current CPI basket consists of 334 goods and services, while the consumer basket contains 760 goods and services. The new CPI included the CPI of residential units occupied by their owners; this was done by adding the weight of this item to the weight of the rented residential units followed by calculation of a single index for all rented units.

The average item price is calculated “on the main group level” using the geometric mean of elementary aggregates. The price ratio is calculated by dividing the comparison price by the base price, while the new price is calculated by multiplying by the base price.

To calculate the CPI on the sub- group level, the new weight of all goods and services of the sub-group should be added and then divided by the base price of the same group. The CPI of the main groups and the general CPI are calculated using the same method.

## 2. Weights

The Consumer Price Index is a weight average of the change in the price of goods and services of the CPI basket. The weight of the good or service reflects its relative importance. The weight of good (C) is calculated by dividing the total expenditure of the households on the good (C) by the total expenditure of households on all goods and services.

The relative importance<sup>1</sup> of goods and services were calculated based on the results of the 2007/2008 Household Income and Expenditure Survey. Goods and services with a weight of 0.002 per cent or more were included in the CPI basket of goods and services.

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<sup>1</sup> Relative importance of a given good or the weight of the good is the total expenditure of households on the good divided by the total expenditure of all households on that good

Goods with weights below this value were distributed proportionally among the other goods in the same group.

### 3. CPI basket and Consumer basket

After calculating weights and identifying goods and services representing the CPI, the 334 goods and services in the consumer basket was identified. Each item in the CPI basket is represented by one good or service or more, therefore the consumer basket is larger than the CPI basket. The CPI basket includes 760 goods and services.

### 4. Classifications used in the CPI

The Classification of Individual Consumption according to Purpose (COICOP) is used in the construction of the CPI. The COICOP is a United Nations classification, which is used for statistical purposes. Based on the COICOP, goods and services of the CPI basket were classified into the main 12 groups, 34 subgroups (Nine digits) and 63 subgroups (three digits). The following table shows the main groups (one digit) and their weights:

COICOP Classification	Main Expenditure Groups	Weight
	Total	100.0
1	Food and non-alcoholic beverages	16.1
2	Alcoholic beverages and tobacco	0.3
3	Clothing and footwear	9.8
4	Housing, water, electricity, gas and other fuels	37.9
5	Furnishings, household equipment and routine household maintenance	4.8
6	Health	0.8
7	Transport	9.7
8	Communication	7.7
9	Recreation and culture	2.4
10	Education	2.6
11	Restaurants and hotels	3.4
12	Miscellaneous goods and services	4.6

## **5. Sources of Goods and Services**

Sources used for the collection of price data were determined through field visits conducted by a team from SCAD's Price Indices Section. The team updates SCAD on a regular basis if any source closes down or relocates premises. While choosing a source, it has been taken into consideration that it should represent a large segment of consumers in the Emirates of Abu Dhabi. Price data are currently collected from 180 sources.

## **6. Collection of Price Data**

Price data collection is a crucial stage that requires a significant amount of time and effort. The collection of price data is conducted by a group of employees who are well trained. To ensure the accuracy of the collected prices, the price of a sample of goods and services are reviewed through field visits. Each group of prices is collected differently, some is collected weekly, and others are collected monthly and quarterly.

In order to develop the price collection mechanism and cope with the latest IT trends, SCAD developed a comprehensive system that aims at calculating CPI using tablets.

The system aims at:

- Implementation of all CPI stages
- Provision of electronic programs and tools required for the price data collection (field collection) and transfer of data to the tablets, in addition to receiving data and transfer to the prices database.
- Ability to examine data accuracy and integration at all stages of the system, including preparation of the goods and services basket, the field work and calculating the index.
- Ability to calculate the CPI for any region of the Emirate (according to the geographical scope).
- Ability to deal with special situations that September arise during data collection or CPI calculation such as disappearance of goods, resources, and changes in the goods.
- Determining goods and services basket of the base year with the relative weights of the groups, in addition to calculating the prices of goods and services of the base year.
- Assisting data collectors while editing data by connecting the current data base with the previous one.

## **7. Publishing**

SCAD publishes the CPI and prices of consumer goods and service on a monthly basis, Nine days after the end of the month. SCAD also publish annual CPI results and inflation rates. The CPI can also be provided on CDs upon request.

## **8. How to read the CPI**

The CPI reflects the rate of the change in the prices of a specified goods and services basket between two time periods, the base period and the comparison period. For example, if the price of the goods and services basket during a specified base period is AED 100, and the CPI of the comparison period was 105.0, this means that prices of goods and services increased by about 5%.

In order to measure the change in the prices of the current period and the previous period, the current CPI should be divided by the previous CPI, then multiply the result by (100) and then subtract 100.