

Technical Notes

Brief Explanation of the CPI

The Consumer Price Index (CPI) is a measure of the average change in prices over time of goods and services purchased by households. The basis of goods and services included in the CPI market basket is subsequently the basis for analysis of consumer spending from the Household Income & Expenditure Survey (HIES) carried out by the Bureau of Statistics in 2006. The bureau is mandated to publish monthly CPIs.

The CPIs are based on prices of food, clothing, beverages, fuels, transportation fares, household supplies and other goods and services that people buy for day-to-day living. Prices are collected each month across the island from 6 retail establishments, and other service providers associated within the CPI market basket. Prices of most goods and services are obtained through personal visits by Statistics staff and additional publications such as the Fuel Watch and public notices that reflect the goods and services within the CPI market basket. In calculating the index, price changes for the various items in each location are averaged together with weights that represent their importance. Local data are then combined to obtain a national average.

The index measures price change from a designated reference date. For the CPI, the reference base is 2008= 100.00. An increase of 16.5 percent from the reference base, for example, is shown as 116.5. This change also can be expressed in dollars as follows: the price of a base-period market basket of goods and services in the CPI has risen from \$10 in 2008 to \$11.65. For further details, contact the government operator at 557 3133 and ask for the Bureau of Statistics or extension 255.

Calculating index changes

Movements of the indexes from one month to another usually are expressed as percent changes, rather than changes in index points, because index point changes are affected by the level of the index in relation to its base period, whereas percent changes are not. The example shown in the box on this page illustrates the computation of index point and percent changes.

Percent changes within the CPI publication reflects for (1) monthly, (2) annual and (3) historical trends since base period are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the current rate were maintained for the 3 periods specified in the latter.

Index point change		Visual calculation
CPI	202.416 (a)	(b) - (a) = (c)
Less previous index	201.8 (b)	
Equals index point change	0.616 (c)	
Percent change		
Index point difference	0.616	(c) ÷ (b) = (e)
Divided by the previous index	201.8 (d)	
Equals	0.003 (e)	
Results multiplied by one hundred	0.003 x 100	(e) x 100 = (f)
Equals percent change	0.3 (f)	