

Explanatory Notes on FSM Consumer Price Index data

Brief Description of the FSM Consumer Price Index:

The Consumer Price Index (CPI) measures quarterly changes in prices of a 'basket' of goods and services, which are representative of purchases by private households in the FSM. This 'basket' covers a wide range of goods and services, arranged in the following seven groups: Food; Beverages and Tobacco; Clothing and Footwear; Housing; Fuel, Light and Water; Services; and Miscellaneous

The FSM CPI measures price changes over time. It does not measure difference in price levels between groups or sub-groups. The base period for the FSM index is 1999. The base for all indices is the average price for four (4) quarters of year 1999, which equals 100.

Weighting of the CPI 'Basket'

The weighting is based on the results from the 1998 Household Income and Expenditure Survey (HIES). The weights on expenditure groups are displayed in the CPI tables appearing in the subsequent pages. The sum of all the seven weighted groups is equal to 100. Each weight for a certain expenditure group represents the percentage of consumer expenditure on that expenditure group in 1998. For example, the weight for the food group in the FSM is 45.49 percent; consequently, about 45 percent of the household expenditure in the FSM is used for food purchases.

Prices

Prices of goods and services included in the CPI are collected quarterly in the middle month of each quarter, from a representative range of retail outlets.

Domestic and Imported Price Indexes

These sub-indexes can give an indication of factors driving CPI price changes. The import index includes only items that are imported, such as canned foods, fuels, rice, motor vehicles. On the other hand, the domestic index includes items and services that are locally produced and have a local component, such as fresh fish, local produce, bakery goods, taxi fares and electricity.

Note, however, that the prices for domestic items may be determined by prices of imported items. For example, if price of fuel, an imported commodity, should increase this will cause an upward movement in the import CPI index, because a higher fuel price causes an increase in price for taxi fares and electricity, both of which are reflected in the domestic index.

In the FSM, like other countries in the Pacific, imported items and services dominate household consumption, resulting in a weight of 74.6 percent. In other words, imported

items represent almost 75% percent of the overall consumer spending, while domestic items makes up only a quarter of consumer spending at 25 percent.

Chuuk State: Estimation for 1999-2001

The CPI for Chuuk is based on prices collected from Chuuk State from 2002 onwards. The 1999-2001 indexes for Chuuk were estimated as follows:

a) 1999-2001 prices collected in Chuuk were carefully reviewed for quality. Fifty eight percent of the price series (by weight) were judged to be of good quality and were retained.

b) The remaining forty two percent were replaced by estimates. The estimates used weighted indexes from the other 3 states, to extrapolate backwards from the Chuuk price levels for the first quarter 2002. This gave estimated prices for each collection item in Chuuk.

c) An adjustment was made to prices prior to the fourth quarter of 2000, to allow for the Chuuk State sales tax increase from 3 to 5 percent, which became effective in October 2000.

d) These results were combined with the item-weighting pattern for Chuuk State to calculate the estimated Chuuk index.

In other words, the Chuuk index for 1999-2000, uses a combination of actual prices collected in Chuuk and estimates based on price changes from the other 3 FSM states. The weighting pattern is for household consumption in Chuuk State.

Analysis of CPI Changes:

Movements in index numbers from one period to another can be expressed in index points or as percentage changes. The following example illustrates the method of calculating changes in index points and percentage changes between any two periods. It is simply a difference between the current quarter index and the previous quarter index. The difference is divided into the current quarter's index to generate the percent change between those two periods.

For example:

Reference Periods: 2nd Quarter 2003 – 2nd Quarter 2002

Change in Index : $102.33 - 102.45 = -0.13$

Change in Percent : $-0.13 / 102.33 = -0.00127$

$$0.00127 * 100 = -0.12$$

The FSM CPI Bulletin includes the following:

Table	Title	Description
1	Annual Inflation	Summarizes inflation rates by state as per Table 2.
2	Annual inflation rate	Derived from percent change between the current year and one year ago. For example, annual inflation rate for 4th Quarter 2002 is derived from the percentage change between CPI Index for 4th Quarter 2002 and CPI Index for 4th Quarter 2001.
3	Twelve-month Average CPI Inflation Rate	Calculates a percent change between the average CPI index of a 9-month period of the current year and of the previous year. For example, from March to December of the current year average CPI Index and of the previous year produce the 12-month average CPI inflation rate. March to December Quarter 2002 = percentage change between Average CPI index for March to December 2002 and Average CPI index for March to December 2001.
4	CPI Index	Expresses the index with base year of 1999 = 100. For instance, if CPI for December Quarter 2002 equals 102.2, prices have increased by 2.2 percent since 1999.
5	Contributions to Annual Inflation	Shows group contribution to the FSM Annual CPI inflation rate of price changes in each State and expenditure category. For example, if the contribution for the Food Group is 2.0 and the total CPI is 3.5. Consequently, the price increases in the Food category contributed 2.0 of total 3.5 percent annual inflation rate. Non-food items contributed the remaining 1.5 points. The sum of all contributions equals the FSM Annual CPI inflation rate, as per Table 2.