

- (ii) Food items with prices which are inherently volatile since their supply largely depends on weather and harvest conditions, namely fruits and vegetables. They represent 8.8 percent of the CPI basket.

## Q. How do other central banks construct their measures of core inflation based on the exclusion method?

A. Most central banks, particularly those that adopt inflation targeting as a monetary policy regime, construct their own core inflation measures to monitor underlying inflationary pressures. See the table below.

## The Core Inflation Measure

Core Measures Used by Other Central Banks 1/		
Central Bank	Core Measure	Weight 3/
Bank of Canada	CPI excluding the eight most volatile components (fruit, vegetables, gasoline, fuel oil, natural gas, mortgage interest, inter-city transportation and tobacco products) as well as the effect of changes in indirect taxes on the remaining components.	84%
Bank of Thailand	CPI excluding the most volatile components of headline inflation, including rice and cereal products, meats, fruits and vegetables, electricity and gasoline.	75%
Central Bank of Chile	CPI excluding fuels, fresh fruit and vegetables, fresh meat, fish, regulated utilities, indexed prices and financial services.	73%
Central Bank of Egypt	CPI excluding most volatile items namely fruits & vegetables and regulated prices.	72%
Czech National Bank 2/	CPI excluding net rent for rental flats, electricity, gas, medicine and health care output, passenger railway transportation, telecommunications services – telephone, municipal mass transportation, parking services, tax services, water and sewage, heating for households, bus transportation, post office, telegraph, gas propane-butane, household waste disposal, housing-related services for rental flats, housing-related services for co-operative flats, supplementary educational services (student fares), health insurance, mandatory insurance of motor vehicles, registration of two-cylinder motor vehicle holder, radio and TV fees, signature authentication, divorce application fee, dog ownership fee, postal order C and building permit issue.	82%
European Central Bank	CPI excluding energy and unprocessed food.	83%
Federal Reserve Bank	CPI excluding food and energy. Additional measures used for analysis but not fully covered by the press include CPI excluding medical care and CPI excluding shelter.	78%
National Bank of Poland	CPI excluding regulated prices, namely those of alcoholic beverages and tobacco products, energy, fuel, transport services, postal and telecommunications services, and various forms of insurance.	67%
Reserve Bank of Australia	CPI excluding fruits, vegetables and petrol.	90%
South African Reserve Bank	CPI excluding interest rates on mortgage bonds.	88%

Source: The respective central bank's website.

1/ Most central banks use more than one core measure.

2/ This inflation measure was abandoned by the CNB in 2001 upon the convergence of regulated prices with competitive levels as a result of gradual price deregulation.

3/ Rounded to the first whole number.



### **Q. What is meant by the consumer price index (CPI)?**

**A.** It is a price index, published by the Central Agency for Public Mobilization and Statistics (CAPMAS) every month on [www.capmas.gov.eg](http://www.capmas.gov.eg), capturing weighted price movements of consumer goods and services which constitute a representative "consumption basket" purchased by households. The weights in the basket reflect the relative importance of the goods and services in the household consumption basket based on the Household Expenditure Survey, which is carried out by CAPMAS every five years. This index is commonly referred to as the headline CPI.

### **Q. What is meant by headline CPI inflation?**

**A.** It is a general increase in the price level of consumer goods and services contained in the household consumption basket over time. While the annual inflation rate captures the inflation story over the whole year, the monthly inflation rate contains the most recent developments.

### **Q. What is meant by core CPI inflation? And how is it different from the headline CPI inflation?**

**A.** Core CPI is a variant of the headline CPI that excludes the impact of temporary price shocks on inflation that could result for various reasons, including weather conditions, supply disruptions or infrequent resetting of prices by the government.

### **Q. Does the core inflation measure replace the headline measure?**

**A.** No, the core measure is derived from the headline and is used as a complementary indicator, mainly to distinguish the underlying trend of the inflation rate from its transitory movements. Therefore, core inflation should not, in any way, be regarded as a substitute for the headline inflation.

### **Q. Why use core inflation measure?**

**A.** Temporary and sudden movements in the prices of some CPI components cause the headline inflation rate to experience sharp fluctuations. The volatility caused by temporary price shocks can make it difficult for policymakers to accurately distinguish between price changes that are likely to be persistent which, in turn, have implications for future inflation trends, and those which are temporary. In other words, the core measure provides a mean by which the monetary authority can separate the 'noise' and short-run fluctuations in the incoming data from the more persistent trend which provides 'signals' about current and future inflation.

### **Q. Why publish core inflation measure?**

**A.** By timely communicating the core inflation measure, the CBE aims to improve the public's understanding of the inflation dynamics. This is expected to reduce the pass-through of temporary price shocks to inflation expectations and, in turn, minimize the variability in inflation.

### **Q. What are the methods of computing core inflation?**

**A.** Most estimates of core inflation rely on some sort of transformation of the actual price data. Broadly speaking, there are two common ways of obtaining a measure of core inflation. One approach, the exclusion method, excludes nominated items from the CPI basket which display perverse behavior or are prone to exceptional or non-representative price movements. An alternative approach, the statistical method, is to exclude all extreme individual price movements on a monthly basis regardless of the source.

### **Q. How does the CBE calculate core inflation?**

**A.** Similar to many other central banks (see last question), the published core inflation measure is based on the exclusion method because it is straight-forward, easy to understand by analysts and the general public and could be easily replicated outside the central bank.

Core inflation measures based on the exclusion method remove the direct effect of price movements in those items that tend to exhibit undue volatility and are often not reflective of the underlying or persistent inflation pressures in the economy. The second-round effects, however, that these items' price movements have on the other components within the CPI basket are part of the underlying inflation pressures in the economy and hence are not excluded. Therefore, excluding one-off price changes provides a better picture of existing underlying inflation pressures.

### **Q. What specific items are excluded from the headline index to compute the CBE's core inflation?**

**A.** The items excluded from the core measure are:

- (i) Items with prices that are regulated by the government. While there is no official list of regulated items within the CPI basket, a thorough study carried out by the Monetary Policy Department at the CBE of historical developments in CPI components, shows that 19.4 percent of the CPI basket is regulated.