

Approach Market Monitor Issues 20-22 (2013/14)

This bulletin provides information on price changes for staple food items and their impact on the cost of the basic food basket. For the most vulnerable population groups in developing countries, food expenditures represent generally more than 50% of total household expenditures, and staples contribute 40-80% of energy intake. Therefore, any change in staple food prices has a high impact on overall food consumption, especially when the food basket is composed of very few food items. In other words, households with diverse calorie sources are likely to be less affected by price rises than households with limited calorie sources, unless significant price increases are witnessed for each major caloric contributor of the food basket. Column D displays the **contribution of each food item to households' total energy intake.**

The analysis is based on quarterly price indices[1] of the main food items (contributing to minimum 5% of caloric intake according to FAO's country-specific Food Consumption Patterns[2]):

i) **"Change from last quarter"** (column E) is calculated as a percentage change of quarterly averaged nominal prices from the previous quarter.

ii) **"Seasonally adjusted quarterly change"** (column F) is calculated as a percentage change of quarterly averaged real prices from the previous quarter. Real prices are calculated by dividing each monthly nominal price by its corresponding baseline average price* (a.k.a. long-term seasonal averages).

iii) **"Monthly change from last year"** (column G) is calculated as a percentage change of the latest available monthly nominal price of the quarter from the same month in the previous year.

iv) **"Quarterly change from last year"** (column H) is calculated as a percentage change of the quarterly averaged nominal prices.

v) **"Quarterly price change from baseline"** (column I) is calculated as the quarterly average of the three relevant months' percentage changes from their corresponding baseline average prices*. This estimate indicates whether there is a structural shift of the current price from its long-term seasonal pattern[3].

* To take into account the new situation of global structural changes resulting in volatile food prices, the baseline period has been changed (as of Q2-2013) to a moving period covering the previous 5 years of the same quarter (e.g. Q2-2008 to Q2-2012). However, available data for the baseline period does not always cover the whole 5-year baseline period. Indicators depending on the baseline prices (columns F & I) are only calculated if at least 2 years of relevant data is available (see column M).

The percentage changes of these quarterly price indices indicate the extent to which recent price changes can be considered normal or abnormal as compared to the relevant reference period (i.e. the previous quarter, the preceding year, or the baseline period).

Assuming that the caloric contribution is a proxy of the relative importance of the food item in the food basket[4], the **"cumulative impact of the quarter"** (column K) and the **"cumulative impact since baseline"** (column L) present the partial change of the cost of the food basket since, respectively, the previous quarter or the baseline. It is calculated as the sum of each commodity's price change (column E or F) multiplied by its caloric contribution (column D). The likely impact is considered low when it is below 0, moderate when it is between 0 and 5%, high between 5 and 10%, and severe above 10%.

While this approach can help gauge how vulnerable households are likely affected by food price changes, results should be interpreted with caution as they do not capture the impact of the long-term trend in food prices. Furthermore, the approach uses a reduced food basket which means that the cumulative impact of the change on the food basket is partial. The impact of the remaining part of the basket will have an additional unmeasured (positive or negative) impact on the total cost. Additionally, it measures only direct impacts while an indirect impact is not accounted for. For instance, substitution and income effects due to price changes are disregarded. Similarly, it does not provide insights into the causes of the price increases. Finally, this approach does not account for the severity of the likely impact; it may differ between and also within households due to different incomes and food baskets according to wealth or livelihoods groups, coping capacity, and intra household distribution.

1. Prices are calculated as indices, using reference years, i.e. last year to capture 12-month percentage changes and last 5 years to capture percentage changes from the long term patterns.
2. Caloric contributions are based on FAO 2005-2007 estimates.
3. Prices normally vary throughout a year due to seasonal patterns of the production cycle. Accounting for seasonality helps differentiating between normal seasonal price variations and additional changes which can be considered abnormal, depending on the magnitude of those changes.
4. Comparing FAO estimates of calorie contribution of each food item with a study by Reardon (1993) for selected countries in Africa, it appears in rural areas that the majority of households get most of their calorie intake from a few food items. The national patterns will likely reflect the rural patterns, assuming most of households leave in rural and semi-urban areas in the developing countries.

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