Global and Regional
Food Consumer Price Inflation Monitoring

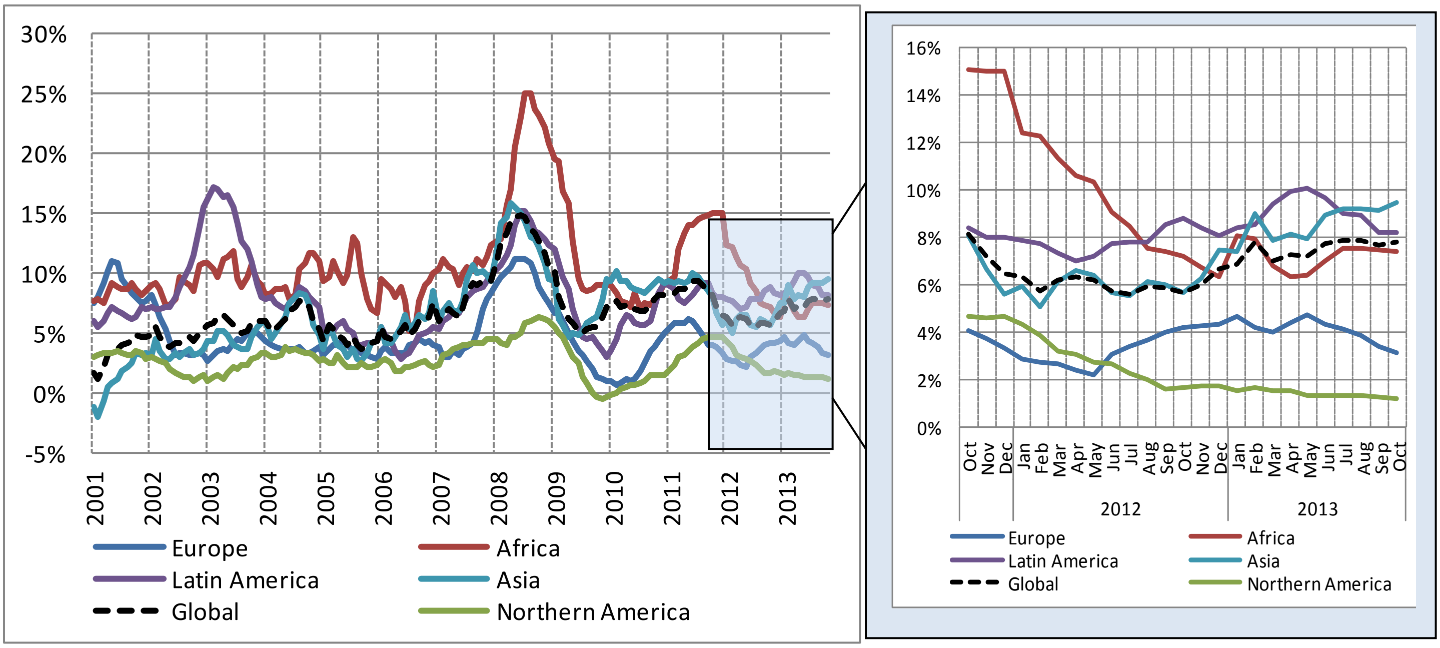
January 2014 – Issue 3

Global Overview

World inflation in food consumer products is estimated at +7.5% in the first ten months of 2013 (Table). In the absence of a significant drop in the last two months of the year, food inflation in 2013 will be significantly higher than in 2012, when it increased by 6.0%.

Asia is the region that contributed the most to this increase, with an estimated inflation of +8.6% in the first ten months of 2013, compared to +6.1% in 2012. South America has also been adding to world inflation in 2013. In the rest of the Americas and in most of Europe, food price inflation has remained relatively subdued, while in Africa, it has continued to decline: in this region, the inflation rate for the first ten months of 2013 (+7.3%) is almost half the level reached in 2011 (+13.5%).

Chart 1 Consumer food price inflation – Global and regions (y-o-y)



Source: ILO, UNStats, National websites (country food CPIs), FAO Statistics Division (calculations)

Table Trends in global and regional consumer food price inflation

Growth rates in percent	2011	2012	2013*	Oct. 2013 (y-o-y)
World	**8.4**	**6.0**	**7.5**	**7.8**
Africa	***13.5***	***9.1***	***7.3***	***7.4***
Southern Africa	7.0	7.3	6.1	4.3
Western Africa	9.3	8.7	7.1	5.9
Northern Africa	9.4	8.4	7.5	8.5
Central Africa	12.1	12.0	9.4	7.8
Eastern Africa	23.3	10.1	7.3	9.1
Americas	***6.6***	***5.8***	***6.1***	***5.4***
South America	9.5	8.4	10.6	10.3
Central America	5.9	6.8	5.7	3.4
Caribbean	7.2	6.3	6.2	4.2
Northern America	3.7	2.6	1.4	1.2
Asia	***8.6***	***6.1***	***8.6***	***9.5***
Eastern Asia	10.6	4.5	4.0	5.7
South-Eastern Asia	2.6	4.1	7.6	7.9
Western Asia	6.1	10.2	12.6	12.6
Southern Asia	8.8	8.1	13.5	13.6
Europe	***5.0***	***3.3***	***4.1***	***3.1***
Southern Europe	2.5	2.5	2.6	1.3
Eastern Europe	8.6	4.3	6.1	5.0
Northern Europe	5.1	3.0	3.3	2.9
Western Europe	2.3	2.9	3.0	2.2

Source: ILO, UNStats, National websites (country food CPIs), FAO Statistics Division (calculations)
* Dec. 2013 – Oct. 2013 compared to Dec. 2012 – Oct. 2012

Regional focus: Asia

After a deceleration in 2012, food inflation in Asian countries is back in 2013 to the levels reached in 2011 (+8.6% on an annual basis). In the last two months for which data was available, food inflation even seemed to be picking up, reaching +9.5% in October 2013 (y-o-y). Increasing inflation rates can be observed in all Asian sub-regions, except in Eastern Asia, where food prices have remained subdued since mid-2012, driven by the sharp slowdown of food inflation in China in 2012 (+4.6% after +11.6% in 2011) and its stability since then.

In Southern Asia, which accounts for 42% in the all-Asia index, food prices have gone up by 13.5% in the first 10 months of 2013 compared to the same period of the previous year. In 2012, the annual food inflation rate in this sub-region was only +8.1%. The rising trend is almost entirely attributable to India, where food inflation in 2013, at +13.5%[1], is more than twice the rate observed in 2012 (+6.6%). Food inflation in India has been largely driven by wheat prices, which began to rally in mid-2012. Other basic commodities such as pulses and oilseeds are following similar trends. The Government of India has announced measures to lower tensions on food prices, such as increasing the quantities sold at a discounted price of grain held in state-owned granaries. The National Food Security Act, signed in September 2013, will also have major impacts on food markets and prices, by providing subsidized grain to approximately two thirds of India's population (See Box 1 for more details).

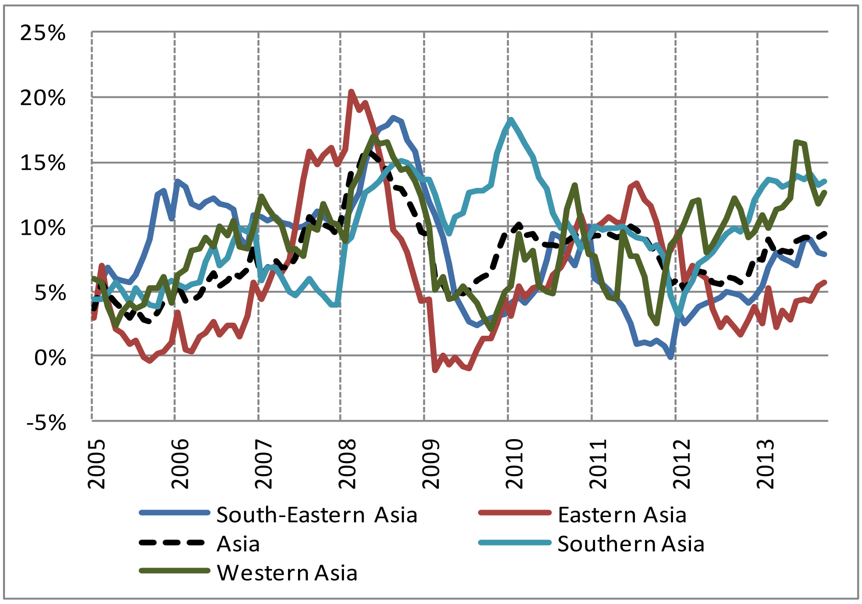
In South-Eastern Asia, food inflation is continuously rising since the beginning of 2012: it has reached +7.6% in the first 10 months of 2013, compared to an annual rate of +4.1% in 2012. The bulk of this increase can be attributed to Indonesia, where food price inflation in 2013 has doubled compared to 2012 (+12.0% in the first ten months of 2013 compared to +5.9%). One of the recent drivers of food inflation in this country is the structural imbalance between the demand in soybean-based products, on the rise since 2003, and the supply of this commodity, which has been particularly low in 2012[2]. These structural factors, combined with recent climatic events such as Typhon Haiyan, which hit the Philippines and Viet Nam in November 2013, and the rainy season flooding in Cambodia, suggest that tensions on food prices remained high in the last two months of 2013. Given the damages inflicted to the agricultural sector in these countries (the Typhoon damaged roughly 40000 hectares of crop land in Viet Nam, according to a government estimate[3]), these tensions will very likely carry forward in most of 2014.

In Western Asia, food inflation has also been on the rise during the past two years: it is estimated at +12.6% for the first ten months of 2013, after +10.2% on average in 2012 and +6.1% in 2011. Price trends in this sub-region, which comprises countries from the Middle and Near-East, used to be driven by Turkey, which makes up 53% of the sub-regional index. It has not been the case in the past two years, with food inflation in Turkey rising only moderately in the first ten months of 2013 to +9.0%, after +8.4% in 2012. The current source of food price rises in this sub-region is the persisting political

[1] Dec. 2013 – Nov. 2013 compared to the same period of 2012.
[2] Asia Food Price and Policy Monitor, December 2013, Issue 6, FAO Asia-Pacific: http://www.fao.org/fileadmin/templates/rap/files/APFPPM/APFPPM_December2013.pdf.
[3] *Ibid.*

and military conflict in Syria, which explains the high inflation levels reached in this country in 2012 (+38.4%) and the acceleration observed in 2013 (+57.3%)[4].

Chart 2 Consumer food price inflation – Asia and sub-regions (y-o-y)



Source: ILO, UNStats, National websites (country food CPIs), FAO Statistics Division (calculations)

Agricultural commodity prices and food consumer prices

The price of major agricultural commodities traded on international markets has slightly declined in 2013 (-1.5%[5]), according to FAO's Food Price Index (FPI)[6]. World food consumer prices are instead set to increase in 2013 by 7.5%, in the absence of any major shock in the last two months of the year. This difference in price changes between the two series is not surprising, given their intrinsically different properties: world food consumer prices follow to a certain extent core inflation which, at world level, follows an upward trend and exhibits little volatility. Commodity prices, on the contrary, are much more volatile and exhibit a less marked upward trend. A closer look at these time series allows us to see that their movements in 2013 were not as uncorrelated as they seem: the decline of the FPI in 2013 is much less pronounced than the fall observed in 2012 (-7.3%), indicating a relative "recovery" or stabilization in commodity prices; in 2013, the infra-annual movements in the CPI continued to track, with the usual lag, changes in the FPI.

This said, the level of pass-through between international commodity prices and food consumer prices has been slightly lower in 2013, as illustrated by Chart 4. This can be explained to some extent by the appearance or strengthening of tensions on food prices in different regions of the world in 2013 which are not or little related to the movements of agricultural commodity prices on international markets. This is the case, for example, of food price developments in India, which respond much more to internal drivers than to external ones. This is also the case of political and military conflicts in the middle-east and in Africa, which affected countries and regions which are not major agricultural producers.

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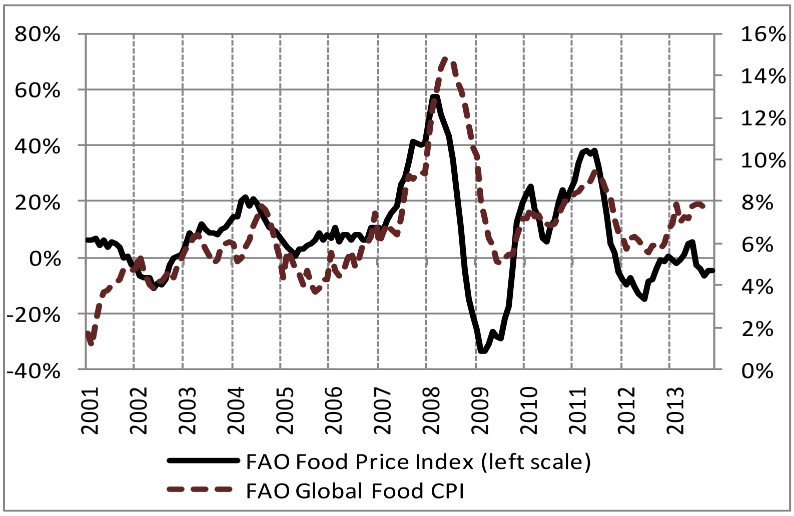
[4] These estimates reflect both official data reported by Syria's Central Bureau of Statistics and own estimates made by FAO Statistics Division. These figures may not entirely reflect true inflation trends in the country.

[5] December to November 2013 compared to 2012

[6] http://www.fao.org/worldfoodsituation/en/

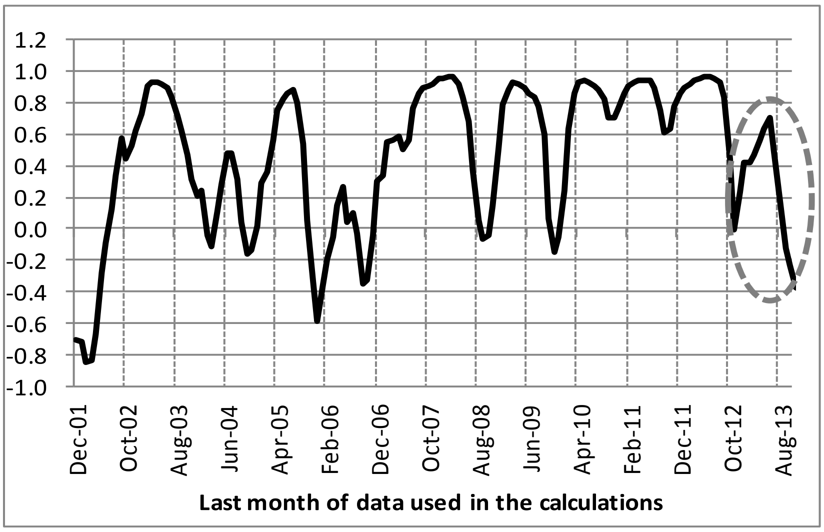
In addition to these factors, it has been showed in previous releases and studies[7] that while agricultural commodity price changes are indeed transmitted to food consumer prices, this transmission is lagged and incomplete (Chart 3 and 5). In addition, it has also been showed that the extent and speed of this pass-through is highly variable across regions.

Chart 3 Food consumer prices vs. agricultural commodity prices (y-o-y)



Source: FAO's Statistics Division (FAO Global Food CPI) and FAO's Trade and Markets Division (FAO Food Price Index)

Chart 4 Sliding correlation between food consumer prices and agricultural commodity prices



Source: FAO's Statistics Division, with data up to October 2013
Note: the linear correlation coefficient used here measures the degree of linear relationship between the y-o-y growth rates of the two price indexes. By construction, this coefficient does not capture non-linear correlations. 12-months sliding time periods have been used.

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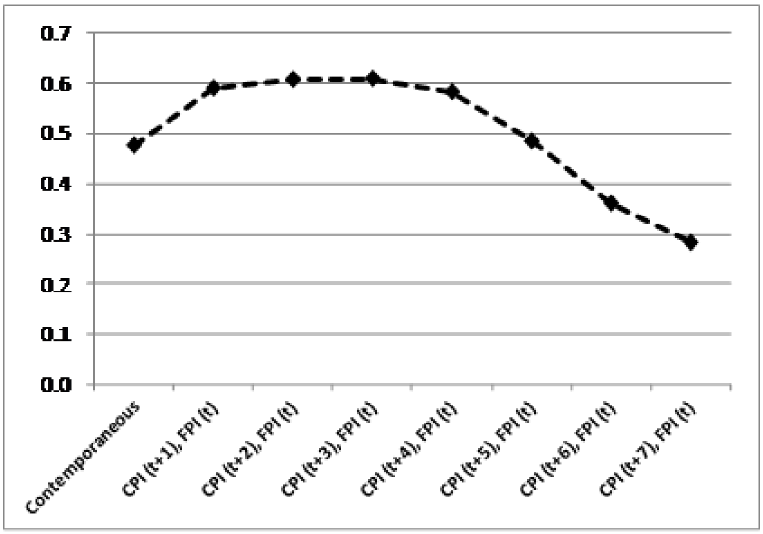
[7] See for example http://www.fao.org/fileadmin/templates/ess/documents/consumer/Study_on_regional_food_inflation_transmission_FAO_2013.pdf

Chart 5 Correlation between the Global Food CPI and the FPI



Source: FAO's Statistics Division
Note: the linear correlation coefficient is used here and applied to the y-o-y series.

Box 1 The 2013 Indian Food Security Act

The 2013 Indian National Food Security Act, also known as the Right to Food Act, was signed into law September 12, 2013. Under the provisions of the bill, beneficiaries will be able to purchase five kilograms of cereals per eligible person per month at the following prices:

- Rice: 3 INR per kg (approx. 4.6¢ US);
- Wheat: 2 INR per kg (approx. 3.1¢ US);
- Coarse grains (millet): 1 INR per kg (approx. 1.5¢ US).

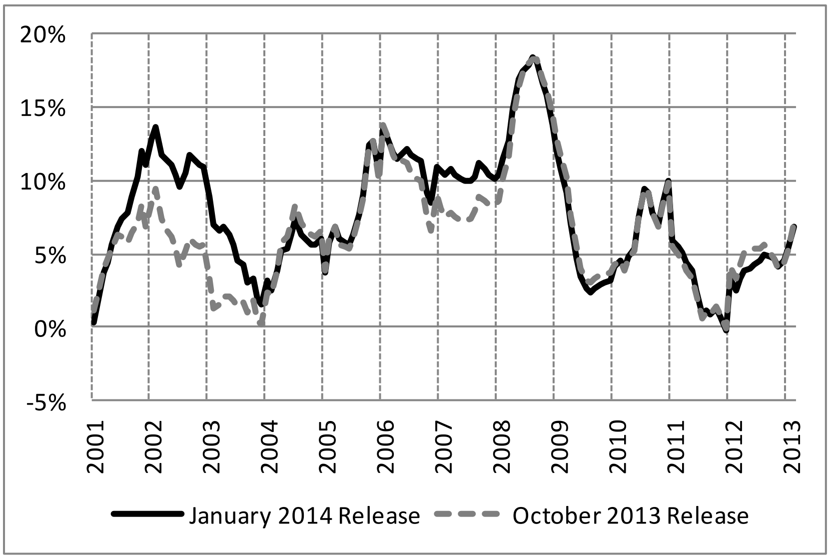
The eligibility criteria will be determined by the States. Pregnant women, lactating mothers, and some categories of children will be eligible for daily free meals. Its aim is to cover 75% of the rural population and 50% of the urban population, representing approximately two-thirds of India's people.

Given its scope, this new legislation will have major effects on food markets and prices, the magnitude and direction of which are difficult to predict at this early stage. Impacts on food security may be positive, at least on the short-run, given the high number of potential beneficiaries and the characteristics of the scheme, which guarantees supply of significant amounts of basic food staples at discounted prices or, if the supply of grain cannot be guaranteed, a compensation in cash to cover food purchases. Adverse effects cannot be ruled out, however: agricultural production might shift towards cereals, which may in turn exacerbate tensions on food prices if the demand for other products, especially those with a high protein content, continues to increase.

Box 2 Data revisions

In this release, a particular effort has been made to improve the timeliness and the geographical coverage of disseminated indices. Price indices up to October 2013 have been compiled based on data covering 151 countries, up from 125 in the previous release. This improvement in coverage is particularly noticeable for Asia, and especially South-Eastern Asia, with the inclusion of important countries such as Lao People's Democratic Republic and Myanmar. As illustrated in the figure below, while this has lead to some revisions in the Food Consumer Price Index for South-Eastern Asia, the general trend of the index has not been significantly altered. As the geographical coverage of the indices stabilizes, fewer data revisions are to be expected in future releases.

Chart - Revision in food inflation estimates for South-Eastern Asia (y-o-y)



Source: ILO, UNStats, National websites (country food CPIs), FAO Statistics Division (calculations)

Definitions and Acknowledgements

FAO's Global and Regional Food Consumer Price Indices (CPI) measure food inflation for a group of countries at different geographical scales: sub-regional (e.g. South America), regional (e.g. Americas) and global (world, all countries). The Global Food CPI covers approximately 150 countries worldwide, representing more than 90% of the world population.

The aggregation procedure is based on the use of population weights. Population weights may better reflect regional food inflation and its impacts on households, while using the Gross Domestic Product (GDP) or any other measure of national income may better reflect the impact on the economy as a whole. Using GDP would also mean giving a higher weight to countries less exposed to food insecurity, because households in countries with higher GDP tend to be richer, spend a lower proportion of their income on food and benefit from an economic environment characterized by lower and less volatile consumer price inflation.

The source of data for the country CPIs are the International Labour Organization (ILO), the UN Statistics Division and websites of national statistical offices or central banks. We gratefully acknowledge the Statistics Division of the ILO for their methodological and technical guidance on the compilation of global and regional food inflation indices. Please also note that the ILO publishes twice a year world aggregates of food and all items CPI, based on GDP weights, as part of the Global Trends in the Labour Market (http://laborsta.ilo.org/sti/).

Because of significant conceptual and methodological differences involved in the compilation of national CPIs by countries around the world, any global and regional CPI aggregates should be used with caution.

For a more detailed description of the indices, please consult the technical note on the subject: *Regional Aggregations of Food Consumer Price Indices*, Statistics Division, FAO, August 2013

Next release

Country Consumer Food Price Indices are updated every month on FAOSTAT. Regional and Global indices are updated every quarter. The next release presenting global and regional trends will be on April 16th 2014.

Contact information

For more information, or to enquire about the concepts, methods or data quality of the CPIs, contact the Price Statistics Team of FAO's Statistics Division (Price-Statistics@fao.org / +00 39 0657052553).