

Food Price Watch



YEAR 5 • ISSUE 18 • SEPTEMBER 2014

International food prices declined 6% between April and August, hitting a four-year low and fully reversing price increases in the first quarter of 2014. Sharp price declines for wheat and maize are the result of continuously improving production outlooks and strong food stocks. Yet, prices of rice have recently increased, in part due to policy developments in Thailand. Uncertainties related to the effects of a likely *El Niño* at the end of the year also call for caution. **Domestic prices** of grains have remained mostly stable, except across Central America and some parts of western Africa, the latter partly associated with the Ebola Virus Disease. International food price declines and domestic price stability make this period a prime time to prepare for potential future food crises. Contributing toward such efforts, the World Bank Group is launching a [Food Price Crisis Observatory](#) that will monitor global and national vulnerabilities to large food price changes, their sociopolitical consequences, and related public interventions aimed at preventing and coping with food price crises.

Global Price Trends

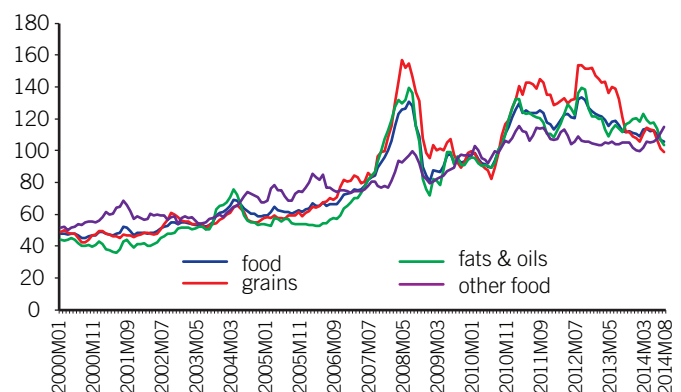
International food prices decreased 6% between April and August 2014, fully reversing increases in the previous January to April quarter (figure 1). Prices in August were some 6% lower than those observed a year ago, and 21% lower than their all-time peak in August 2012 (table 1). In fact, prices are at a four-year low, with similar levels not seen since September 2010. Responsible for these declines in international food prices are sharp decreases in the prices of grains and fats and oils (12% each). In contrast, the prices of other foods increased 9% between April and August, mostly from increases in meat prices.

International prices for wheat and maize decreased sharply between April and August, while rice prices increased markedly. International wheat prices plunged 19% between April and August 2014, with two consecutive 9% monthly decreases in June and July (6% in August). Such monthly price decreases had not been seen since October 2011. Likewise, the prices of internationally traded maize plummeted 21% between April and August 2014, remaining 26% lower than those observed a year ago. Rice prices followed a different pattern: between April and August 2014, prices of Thai 5% rice increased 13% (and so did other major varieties of Thai and Vietnamese rice, not

reported in table 1).¹ Since June, as a result of the government of Thailand's halt in the sales of its public reserves, prices of internationally traded rice have started to rise.

Regarding commodities other than grains, the World Bank's monthly average price of **crude oil** decreased 5% between April and August 2014, with marked declines in

Figure 1. World Bank Global Food Price Index



Source: World Bank, DECPG.

Note: The Food Price Index weighs export prices of a variety of food commodities around the world in nominal U.S. dollar prices, 2010 = 100. Note that the previous base, 2005 = 100, has now been changed to 2010.

Table 1. Price Change of Key Food Commodities

Indices	Apr 2014 – Aug 2014 (%)	Aug 2013 – Aug 2014 (%)	Aug 2012 – Aug 2014 (%)
Food	-6	-6	-21
Fats and oils	-12	-7	-26
Grains	-12	-18	-35
Other	9	9	8
Fertilizer	8	-5	-24
Prices			
Maize	-21	-26	-47
Rice (Thai, 5%)	13	-7	-22
Wheat (U.S., HRW)	-19	-14	-25
Sugar (world)	-3	1	-18
Soybean oil	-14	-14	-32
Crude oil, average	-5	-7	-5

Source: World Bank, DECPG.

July and August that overturned increases in April and June. These variations are partially associated with changes in the perceived tensions in Iraq and Ukraine.² **Fertilizer** prices increased 8%, reversing declines observed in previous months—but they still remain some 5% below their level a year ago. Between April and August 2014, **soybean oil** prices markedly decreased (14%), while those of **sugar** decreased a more moderate 3%. World record soybean harvests and some uncertainty in the production of sugar in Brazil, the world's largest exporter, explain such variations.

Sharp price declines respond to continued projections for improved production and stronger stocks for 2014.³ Recent uncertainties related to weather, import demand, and Ukraine geopolitical tensions have abated since April. Increased production prospects are reported for both wheat and maize in the northern hemisphere (China, India, the European Union, and the United States). World rice production will also reach a new historical record, despite recent downward revisions. As a result, the overall cereal output in 2014 is virtually on par with the 2013 record crops.⁴ World cereal ending stocks have also been revised upward for 2014, to their highest levels since 2001 (with a stocks-to-use ratio of 24.7%).⁵

Record **wheat** harvests are now projected for 2014, even in the face of a decrease in overall yields in the United States and weather and area planted issues in Canada.⁶ Winter wheat crops—mostly harvested—in the northern hemisphere and recently planted crops in the southern

hemisphere have mostly favorable conditions.⁷ Wheat harvests in China, India, the European Union, and the Russian Federation are all expected to improve with respect to last year, based on favorable weather prospects.⁸ Continued favorable weather has also contributed to increased production projections in Ukraine.⁹ Global wheat stocks are expected to end strong in the 2014/15 season, with recent upward revisions due to supplies increasing faster than utilization.¹⁰ Ultimately, rising production prospects and strong stocks foretell ample supplies for 2014/15.

Prospects for **maize** have continued to improve, including for the early-stage harvests in China, the European Union, and the United States.¹¹ The most recent prospects for the 2014/15 maize crop exceed those of the so far historically high crop of 2012/13. Large carryover stocks from last year are also expected, partially due to a previous buildup of stocks in Canada, China, Ukraine, and the United States.¹² Global ending stocks of maize are expected to increase 10% in 2014/15 from their already historical levels of 2013/14.¹³ Import demand is expected to decline in China and the European Union due to the increasing use of wheat feeding and lower industrial use of maize, respectively.¹⁴ Instead, the use of maize for ethanol is expected to increase as a result of both improved maize production and the recovery in biofuel production in the United States, reversing decreases in recent years. Maize export competition is also expected to intensify because of increasing supplies, further keeping prices from increasing.

Rice production for 2014 is also expected to reach a new record high, although this year's growth maintains the slowdown trend in annual output growth observed over previous years. Small declines from last year are expected in India, mostly attributed to the late start of the monsoon,¹⁵ while increases reported in the United States are attributed to planted area expansion.¹⁶ Weather concerns in the form of dry conditions in certain regions in Thailand, whose main crop is planted in May and June, have emerged, although latest reports talk of near normal monsoon rainfall throughout Thailand.¹⁷ This is important because Thailand's increase in exports in 2014 is expected to partially compensate for India's reduced rice exports in a

context of strong—and recently revised upward—international import demand. The decision of the government of Thailand to suspend sales of rice from public reserves in June (and its failure to fully resume previously announced sales in August¹⁸) has further tightened availability and international prices, since exporters have more limited access to those reserves.¹⁹ In addition, India is reported to be releasing 5 million tons of rice from its public reserves into the local market over the next months to control food price inflation.²⁰

Looking forward, certain optimism appears to be settling in. Even though the probability of *El Niño* developing in the last quarter of the year remains around 60%,²¹ it is now believed that it might not have major impacts on international prices.²² The expected limited impact is because of the stage of the crops in the last quarter of the year in most of the main producing countries.²³ And even for those crops that would be harvested in the presence of *El Niño*, their outcome may not necessarily be a decline in production. It is reported that *El Niño* is typically associated with above-average rains in South America and Australia and dryness in Asia, thus affecting yields and quality in different ways across locations.²⁴ Beyond weather issues, import demand concerns have also subsided on account of marked decreases in import demand for maize and wheat from China, and maize from the European Union.²⁵ This is explained in part by large carryover stocks from last year and anticipated record harvests this year. Regarding the Ukraine situation, now several months into the crisis, tensions do not appear to have affected either the country's production or its exports.²⁶

Yet, market uncertainties should not be fully ruled out in the coming months. The arrival, length, and intensity of *El Niño* remain to be seen. If it unfolds and persists longer than the average six to nine months, it might have more serious consequences on major crops later on in 2015. In addition, the effects of the Russian import ban are still unclear, but if the ban continues or intensifies, countries exporting (dairy and meat) to Russia might have to face increasing competition in other export markets.²⁷ Finally, the Agricultural Market Information System (AMIS) reports the development of a new scheme in Thailand (a replacement for the suspended rice pledging program) that will support rice farmers in covering their costs, with lower input prices and increasing credit. The effects of such a program are currently unknown and might have effects in international markets as Thailand seeks to expand its volume of rice exports.²⁸

Domestic Price Trends

Domestic prices of grains remained mostly stable between April and August 2014. In western Africa, cereal prices remained remarkably stable due to adequate market supplies from increased production.²⁹ However, certain areas of Chad and Niger have seen significantly increased demand from displaced populations fleeing violence in the Central African Republic and Nigeria,³⁰ while Ebola virus disease (EVD)-affected countries have also seen restricted trade flows and market disruptions.³¹ The effects of EVD on food prices are not yet clear in the three most affected countries, Guinea, Liberia, and Sierra Leone. Price data are very scarce and evidence of sharp increases is limited to only specific markets.³² Seasonal trends continue to play a significant role on domestic food prices and these countries depend on imported staples to a large extent. Yet, the situation calls for close and continuous monitoring because the World Health Organization anticipates that the number of cases will increase before the outbreak is fully controlled.³³

In southern Africa, maize prices stabilized and declined seasonally as a result of good harvests, especially in South Africa, the largest in three decades, and bumper crops in Malawi and Mozambique.³⁴ In eastern Africa, maize prices have followed seasonal trends, with stable and/or declining trends in most countries,³⁵ but increasing cereal prices have been reported in Sudan and South Sudan, mostly associated with lean season and conflict-related disruptions in markets.³⁶ In Central America, red bean prices increased sharply to record highs associated with reduced crops in 2013, expectations of droughts affecting 2014 crops, and increased regional demand. Maize prices have started to increase, seasonally, as the lean season settles in, and expectations for 2014 production have worsened as well.³⁷ In South America, wheat prices stabilized, but remain at high levels,³⁸ while maize prices declined due to good supplies expected from Argentina and Brazil.³⁹ In East and South Asia, rice prices remained mostly stable. Downward pressures resulting from good availability from previous harvests compensate for upward pressures from increased export demand; lower imports; and ongoing public procurement programs in some countries.⁴⁰ In Central Asia, wheat prices generally remained stable because of adequate supplies from favorable harvests and imports.⁴¹

Between April and August 2014, the largest wheat price increases (table 2) took place in monitored markets in Sudan (Kadugli, 85%, affected by conflict and increasing demand),⁴² followed distantly by Ethiopia (Debre Marcos,

Table 2. Largest Variations in Domestic Prices

Quarterly Price Movements: April 2014 – August 2014			
Wheat	% change	Maize	% change
Sudan, Kadugli, wholesale, Sudanese pound/local	85	El Salvador, San Salvador, white, wholesale, US\$/local	54
Ethiopia, Debre Marcos, white, wholesale, Ethiopian birr/local	30	Nicaragua, natl. avg., white, wholesale, cordoba oro/kg	40
Mongolia, Ulaanbaatar, flour, retail, Tugrik/kg	22	Somalia, Baidoa, white, retail, Somali shilling/kg	40
Bolivia, La Paz, pelado, wholesale, boliviano/local	16	Honduras, San Pedro Sula, white, wholesale, US\$/kg	30
Kyrgyzstan, Jalal-Abad, flour, 1st grade, retail, som/kg	8	Russian Federation, natl. avg., offer EXW, wholesale, ruble/kg	22
Tajikistan, natl. avg., flour, 1st grade, retail, somoni/kg	7	Haiti, Port-au-Prince, meal, local, retail, gourde/local	17
South Africa, Randfontein, wholesale, rand/ton	-6	Zambia, natl. avg., white, retail, kwacha/local	-30
Ukraine, natl. avg., 3rd class, bid, EXW, processing, hryvnia/ton	-8	Malawi, Lizulu, retail, kwacha/kg	-34
Pakistan, Karachi, retail, Pakistan rupee/kg	-9	South Africa, Randfontein, white, wholesale, rand/ton	-35
Moldova, Chisinau, retail, leu/kg	-15	Uganda, Kampala, wholesale, US\$/ton	-38
Brazil, natl. avg., wholesale, real/kg	-21	Tanzania, Dar es Salaam, wholesale, US\$/ton	-38
Argentina, Buenos Aires, wholesale, US\$/kg	-25	Togo, Korbongou, white, retail, CFA franc/kg	-41
Rice	% change	Sorghum	% change
Vietnam, Dong Thap, 20% broken, retail, dong/kg	15	El Salvador, San Salvador, Maicillo, wholesale, US\$/local	92
Somalia, Bossaso, imported, retail, Somali shilling/kg	13	Somalia, Baidoa, red, retail, Somali shilling/kg	57
Togo, Korbongou, imported, retail, CFA franc/kg	10	Sudan, El Obeid, Feterita, wholesale, Sudanese pound/local	38
Thailand, Bangkok, 25% broken, wholesale, baht/ton	9	Chad, Abeche, retail, CFA franc/kg	19
India, New Delhi, retail, Indian rupee/kg	8	Niger, Tillaberi, local, wholesale, CFA franc/local	10
Tanzania, Dar es Salaam, wholesale, US\$/ton	-10	Ethiopia, Addis Ababa, red, wholesale, US\$/kg	-9
Rwanda, Kigali, wholesale, US\$/ton	-12	Togo, Korbongou, retail, CFA franc/kg	-29
Burkina Faso, Ouagadougou, imported, wholesale, CFA franc/local	-15		
Panama, Panama City, 1st quality, retail, balboa/kg	-33		
Annual Price Movements: August 2013 – August 2014			
Wheat	% change	Maize	% change
Sudan, Kadugli, wholesale, Sudanese pound/local	238	Somalia, Baidoa, white, retail, Somali shilling/kg	127
Ethiopia, Jimma, white, wholesale, Ethiopian birr/local	75	El Salvador, San Salvador, white, wholesale, US\$/local	42
Ukraine, natl. avg., 3rd class, bid, EXW, processing, hryvnia/ton	46	Ukraine, natl. avg., bid, EXW, processing, wholesale hryvnia/ton	33
Uruguay, natl. avg., flour, wholesale, peso Uruguayo/kg	35	Kenya, Kisumu, wholesale, US\$/ton	21
Bolivia, La Paz, pelado, wholesale, boliviano/local	26	Mexico, Culiacán, white, wholesale, Mexican peso/kg	19
Mongolia, Ulaanbaatar, flour, retail, tugrik/kg	22	Chad, Moussoro, retail, CFA franc/kg	17
Kyrgyzstan, Osh, flour, 1st grade, retail, som/kg	18	South Africa, Randfontein, white, wholesale, rand/ton	-25
Pakistan, Karachi, retail, Pakistan rupee/kg	-7	Ethiopia, Bahirdar, wholesale, Ethiopian birr/local	-25
Brazil, natl. avg., wholesale, real/kg	-21	Togo, Korbongou, white, retail, CFA franc/kg	-34
Moldova, Chisinau, retail, leu/kg	-32	Mozambique, Chokwe, white, retail, metical/kg	-35
Argentina, Buenos Aires, wholesale, US\$/kg	-59	Malawi, Mzuzu, retail, kwacha/kg	-38
		Moldova, Chisinau, retail, leu/kg	-44

table continues on next page

Table 2. Largest Variations in Domestic Prices (continued)

Annual Price Movements: August 2013 – August 2014 (continued)			
Rice	% change	Sorghum	% change
Mongolia, Ulaanbaatar, retail, tugrik/kg	34	Somalia, Baidoa, red, retail, Somali shilling/kg	147
Peru, Lima, milled, corriente, wholesale, nuevo sol/kg	24	Sudan, Al-Damazin, Feterita, wholesale, Sudanese pound/local	111
Philippines, MetroManila, regular milled, retail, Philippine peso/kg	24	El Salvador, San Salvador, Maicillo, wholesale, US\$/local	58
Sri Lanka, Colombo, white, retail, Sri Lanka rupee/kg	23	Mali, Sikasso, local, wholesale, CFA franc/local	20
Russian Federation, natl. avg., local, retail, ruble/kg	17	Chad, Moundou, retail, CFA franc/kg	-17
Philippines, natl. avg., regular milled, retail, Philippine peso/kg	16	Ethiopia, Addis Ababa, red, wholesale, US\$/kg	-26
Burkina Faso, Ouagadougou, imported, wholesale, CFA franc/local	-15	Niger, Maradi, local, wholesale, CFA franc/local	-26
Uganda, Kampala, wholesale, US\$/ton	-15	Togo, Korbongou, retail, CFA franc/kg	-61
Thailand, Bangkok, 25% broken, wholesale, baht/ton	-18		
Mozambique, Manica, retail, metical/kg	-19		
Panama, Panama City, 1st quality, retail, balboa/kg	-29		

Source: Food and Agriculture Organization (FAO), and Global Information and Early Warning System (GIEWS).
 Note: Currencies as originally reported by FAO.

30%, as a result of seasonal factors and below average production) and capital cities in Mongolia and Bolivia (22% and 16%, respectively, reflecting the lean season, reduced past production, and limited imports from regional exporters).⁴³ The most marked declines in wheat prices were reported in the capital cities of Argentina (33%), Brazil (national average, 21%), Moldova (15%), and in monitored markets in Pakistan (Karachi, 9%), mostly resulting from improved production conditions in these countries.⁴⁴ Domestic **maize** prices experienced the largest increases in Central American countries, with increases of 54% in El Salvador (San Salvador), 40% in Nicaragua (national average), and 30% in Honduras (San Pedro Sula) due to seasonality and drought-related concerns lowering expectations for the upcoming harvest. In monitored markets in Somalia, maize prices increased 40% (Baidoa), associated with serious disruptions in trade by recently intensified conflict and below-average harvests.⁴⁵ Large decreases—between 30% and 41%—were observed in monitored markets across Africa, in Malawi (Lizulu), South Africa (Randfontein), Togo (Korbongou), Uganda (Kampala), the United Republic of Tanzania (Dar es Salam), and Zambia (national average), all reflecting increasing supplies from recent harvests—some of which are record highs.⁴⁶ Between April and August 2014, **rice** prices increased 15% in monitored markets in Vietnam as a result of increased export demand; 13% in Somalia and 10% in Togo due to increasing cost of imports; and 9% and 8%, respectively, in the capital cities of Thailand and India because of procurement policies and import demand,

among other factors.⁴⁷ The largest decline in rice prices occurred in Panama (Panama City, 33%) because of increasing availabilities due to imports and recent harvests and, more modestly, in the capital cities of Burkina Faso, Rwanda, and Tanzania due to the recently available good harvests.⁴⁸

Domestic prices between August 2013 and August 2014 show particularly large variations. The price of **wheat** in August 2014 was 238% higher than 12 months ago in Sudan (Kadugli) due to strong local demand, high prices of other cereals, drought-affected harvests, and devaluation of the domestic currency,⁴⁹ and 75% in monitored markets in Ethiopia (Jimma) and more than 30% in Ukraine and Uruguay (national averages) due to strong demand and, in the case of Ukraine, also the devaluation of its currency.⁵⁰ In contrast, price declines of 59% in Argentina and 32% in Moldova (in their respective capital cities) were observed following improved supplies stemming from increased production and regional exports. Large increases in annual **maize** prices occurred in monitored markets in Somalia (Baidoa, 127%), partly reflecting scaled back humanitarian assistance and insecurity. More modest but still sharp increases are reported in El Salvador (San Salvador, 42%) and Ukraine (national average, 33%). Maize prices declined over the last year in monitored markets in Moldova (Chisnau, 44%), Malawi (Mzuzu, 38%) and Mozambique (Chokwe, 35%), with bumper crops and currency appreciation explaining the strong declines in the two southern African countries.⁵¹ **Rice** prices increased in the

capital cities of Mongolia (34%, due to last year's low level of imports), Peru and the Philippines (24% each, with lower imports and localized crop losses), and Sri Lanka (23%, from reduced output and unfavorable prospects).⁵² In contrast, annual price declines ranged between 15% and 30% in the capital cities of Burkina Faso, Panama, Thailand, and Uganda.

Food Price Crisis Observatory

Does the recent sharp decline in international global prices and the relatively optimistic outlook justify decreased attention on food prices? The answer is a categorical no. During previous food price spikes, countries and donors learned the hard way that reacting to a crisis as it is already unfolding is not an effective strategy—preparation needs to start well before a crisis arrives. In this context, the World Bank Group is introducing the [Food Price Crisis Observatory](#), a monitoring system that aims to contribute to the early detection of food price crises in the most vulnerable countries.

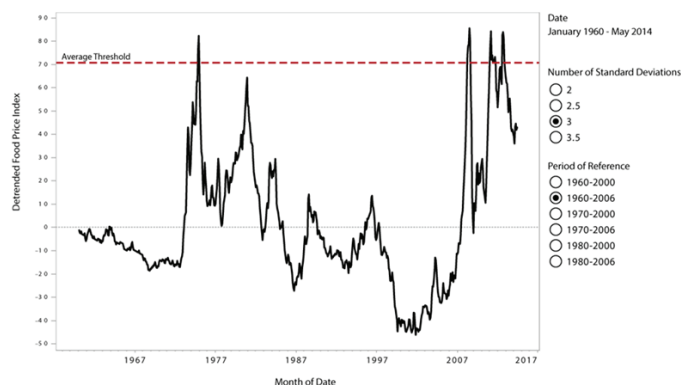
Looking at the global picture today, uncertainty remains in international markets, and sudden international price rebounds might still have important consequences. Recent reports⁵³ showed major shortfalls in aggregate food supply, widespread lack of access, and severe localized food insecurity in 33 countries. Conflict and civil insecurity are expected to worsen the prospects for current crops in the Central African Republic, Somalia and the Syrian Arab Republic, and South Sudan and Somalia may have food emergency episodes early in 2015 due to lean seasons, flooding, displacement, and insecurity.⁵⁴

Existing monitoring mechanisms follow different dimensions of food insecurity,⁵⁵ but none has the capacity to simultaneously monitor global and national level key indicators and sound the alarm without extensive and laborious assessments.⁵⁶ The [Food Price Crisis Observatory](#) complements existing mechanisms, taking an integrated approach to crisis monitoring and focusing especially on those countries covered by the [International Development Association](#).⁵⁷

The [Food Price Crisis Observatory](#) goes beyond following food price trends and provides an evidence-based platform to identify:

- when price trends begin translating into full-fledged crises;
- the sociopolitical consequences of such crises (riots and violence); and

Figure 2. Crisis Monitor: Global Module, International Food Price Trends (1960–2014)



Source: <http://www.worldbank.org/en/topic/poverty/food-price-crisis-observatory>.

- the interventions adopted (or not adopted) to cope with, mitigate, and prevent food crises.

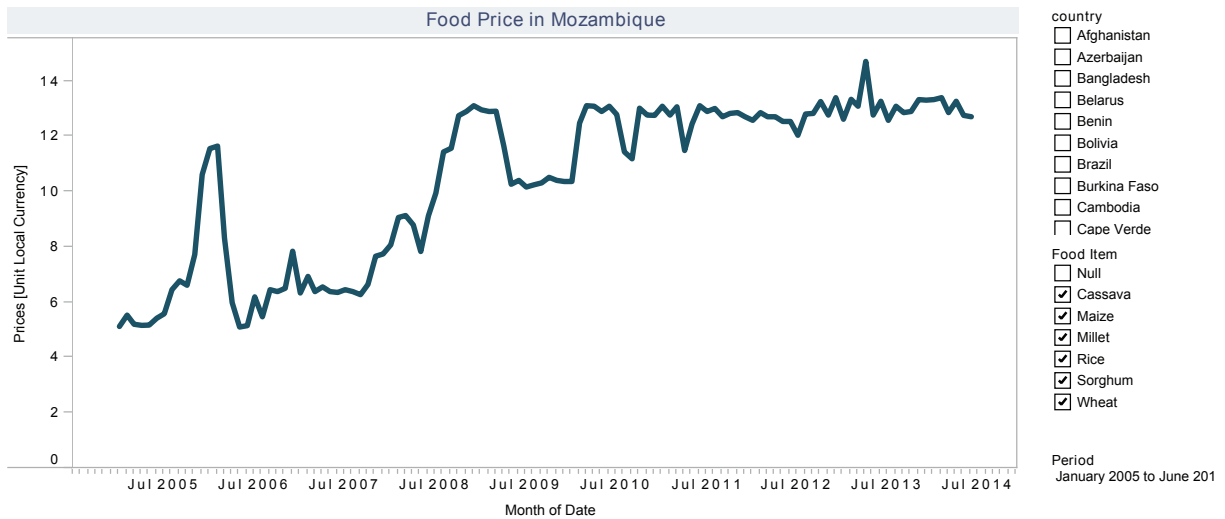
Building on the existing [Food Price Watch](#) report, this integrated approach to crisis monitoring introduces three new components: the *Crisis Monitor*; the *Food Riot Radar*; and the *Policy Monitor*.

The *Crisis Monitor*, based on food price trends and macroeconomic variables, monitors countries' vulnerability to food price crises and their capacity to react to areas of concern. It identifies potential national and regional food insecurity hot spots and whether a country or a region is reaching a critical threshold of food insecurity (box 1). In figure 2, the *Crisis Monitor* shows that current international prices are well below the historical threshold for food price spikes; and, figure 3 shows the country profile of Mozambique as an illustration of the national analysis provided by the *Crisis Monitor*.⁵⁸

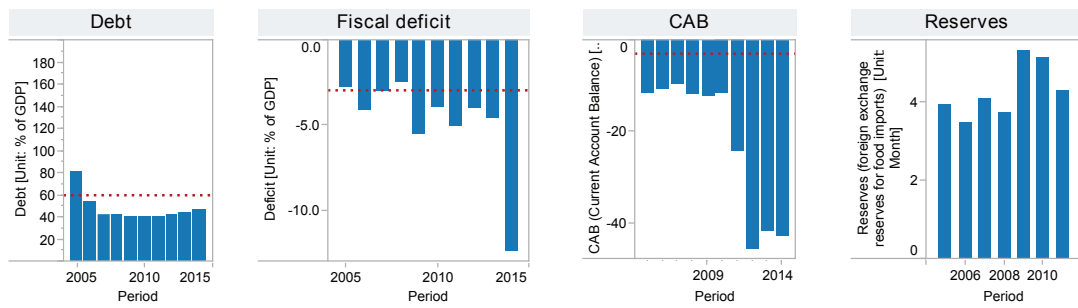
The *Food Riot Radar* spots social unrest episodes related to food price instability, distinguishing between two types of riot episodes: type 1 riots are mainly motivated by food inflation, while type 2 riots are mostly brought on by severe food shortages. Figure 4 shows a total of 55 food riot episodes between 2007–14, 76% motivated by food prices and 24% by food shortages.⁵⁹

The *Policy Monitor* focuses on the policies used to prevent, cope with, and mitigate food price hikes. The component is organized according to 17 policy instruments that target specific food commodities.⁶⁰ It tracks policies worldwide that are relevant to food price crises. Figure 5 shows that very few countries—six in total—have introduced food price controls since August 2012, the historical peak of international food prices.

Figure 3. Crisis Monitor: National Module, Mozambique

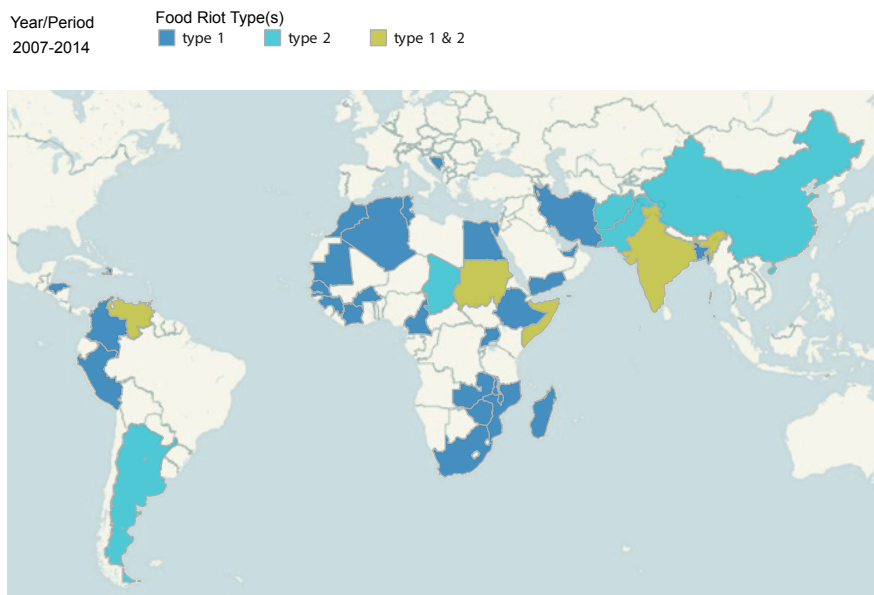


Macroeconomic Vulnerability Thresholds
 Debt: over 60% of GDP Deficits: below - 3% of GDP Current Account Balance: below - 3% of GDP
 Foreign Exchange Reserves - below three months worth of imports



Source: <http://www.worldbank.org/en/topic/poverty/food-price-crisis-observatory>.

Figure 4. Food Riot Radar: Worldwide Food Riots, 2007–14

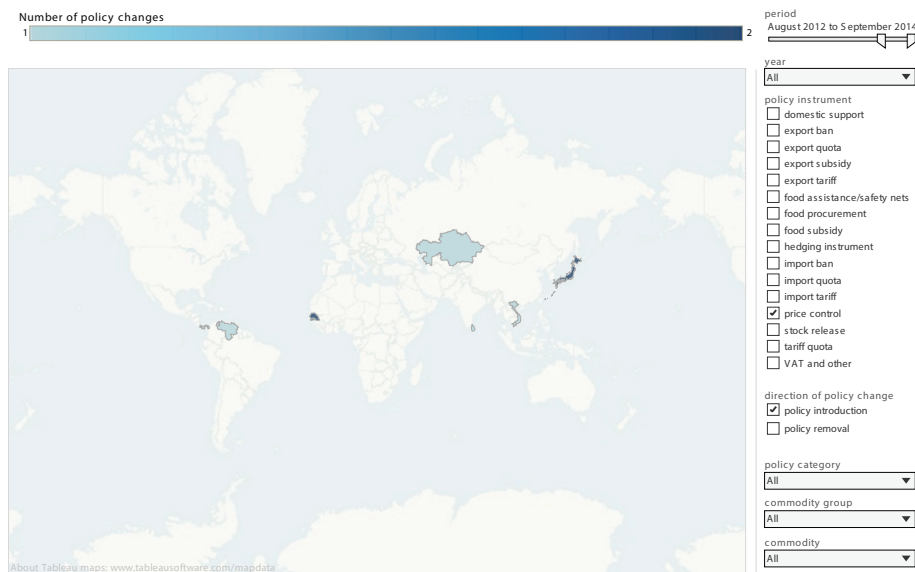


Source: <http://www.worldbank.org/en/topic/poverty/food-price-crisis-observatory>.

All four components of the [Food Price Crisis Observatory](#) have **interactive features**, allowing users to easily and intuitively select and change key elements such as time period, country, commodity, type of intervention, and reference indicators and baselines. Users can also communicate with the Observatory team through several direct channels, from participating in *Food Price Watch* live chats to submitting suggested resources to be featured in the Observatory.⁶¹ The Observatory also makes critical knowledge available in the “Resources,” “Related Links,” and “What’s New” sections.

The Observatory does not attempt to cover all dimensions of food insecurity, nor does it adopt theoretical

Figure 5. Policy Monitor: Price Controls Introduced Since August 2012



Source: <http://www.worldbank.org/en/topic/poverty/food-price-crisis-observatory>.

Box 1. An Empirical Approach to Defining Food Price Crises

Although the concept of food security has a widely accepted definition, the concept of food crisis does not. As a result, the terms famine, food insecurity crisis, humanitarian disaster, and food crisis are often used almost interchangeably. Instead of a theoretical definition that has proven vague in the past, the *Crisis Monitor* uses an empirical definition that is flexible, easy to operationalize and monitor, and based on observed trends rather than on concepts of abnormality, severity, and cause and effect that are hard to capture in practice.

A calibration exercise determines the best-performing triggers in terms of identifying past crises' peaks: minimizing false positives; early detection of the crisis (that is, the number of months before the price peak is reached); and length of the crisis. The calibration exercise, using a wide set of indicators, identified a threshold defined as 3 standard deviations from the detrended 1960–2006 historical mean of the World Bank's Global Food Price Index as the best-performing trigger in terms of: identifying the 2008 and 2011 international food price peaks and the Horn of Africa 2012 famine; minimizing the number of false positives; and providing time for preparation before the crisis peak. At the national stage, the best-performing threshold was a combination of increases of 15% or more during a period of five months and observing at least a macroeconomic vulnerability across fiscal, debt, foreign reserves, and current account balances in a given country. Details of these calibration exercises can be found in the [Guidance Note](#) of the Food Price Crisis Observatory, as well as in the recently published paper by [J. Cuesta, A. Htenas, and S. Tiwari](#) ("Monitoring Global and National Food Price Crises," *Food Policy* 49: 84–94 [2014]).

definitions (box 1).⁶² It is designed to be accessible and useful to everyone—from policy makers, civil society groups, members of the media and interested citizens to students, food insecurity experts, and statisticians. The Observatory's interactive and integrated features enable users from multiple backgrounds, interests and responsibilities to effectively monitor price trends, consequences, and related interventions on their own.

At the same time, the [Food Price Crisis Observatory](#) provides relevant inputs on the early detection of unfolding food crises in the most vulnerable countries to

institutions like the World Bank Group and others participating in fora such as the UN High Level Task Force on Global Food Security and the Agricultural Market Information System. **This tool is not to be used unilaterally by the World Bank Group or any of its partners to declare global or national food crises. There are existing international venues and engagements for such declarations to be collectively made, and this tool should never be used for unilateral declarations.**

Notes

1. Prices of Thai 25%, Thai A.1 and Vietnamese 5% rice all increased by 18%, 15% and 19%, respectively, between April and August 2014 (World Bank, "World Bank Commodity Price Data [Pink Sheet]," September 4, 2014).
2. World Bank Global Economic Perspectives, "Commodity Markets Outlook," July 2014, http://www.worldbank.org/content/dam/Worldbank/GEP/GEPcommodities/commodity_markets_outlook_2014_july.pdf.
3. The year 2014 refers to 2014/15 season, and 2013 to 2013/2014 season.
4. The USDA's *World Agricultural Supply and Demand Estimates Report* (WASDE) 533 increased its September projected output up to 2,466.12 million tons to 2014/15 compared with 2,466.78 million tons in 2013/14, some 0.03% lower. Increases in ending stocks in that month led to an overall total supply for 2014/15 larger than that of 2013/14.
5. FAO, *Crop Prospects and Food Situation*, September 2014.
6. The overall drop in yields in the United States is explained by the long-term drought in the Southern Plains. Although wheat production prospects have been increasing in recent months in the United States, the 2014/15 projected output is below 2013/14 levels (USDA, WASDE 533, September 2014). Weather issues in Canada refer to wet and cooler than usual weather, mainly in the Prairie region (FAO, *Crop Prospects and Food Situation*, July 2014; FAO, AMIS, July 2014).
7. AMIS, July 2014.
8. In China and India, increasing supplies are also explained by minimum support price policies and public purchases (*Food Price Watch*, May 2014). In the southern hemisphere, production is also expected to improve in Ar-

- gentina and Brazil, while decreasing in Australia (FAO, "Cereal Supply and Demand Brief," September 11, 2014).
9. USDA, WASDE 532. Yet, Ukraine production is expected to drop due to declining yields from last year's historical highs (FAO, *Crop Prospects and Food Situation*, July 2014).
 10. USDA, WASDE 532.
 11. Earlier in the year, weather conditions delayed to some extent the planting of maize in the United States; yet a sharp rebound from last year's reduced harvests is still expected in the United States from increased yields. USDA WASDE and FPW May 2014.
 12. World Bank's Food Price Watch May 2014.
 13. USDA WASDE several numbers; AMIS July 2014.
 14. FAO, AMIS July 2014, FEWS NET, Price Watch, July 2014, WASDE 532.
 15. FAO, AMIS, July 2014.
 16. USDA, WASDE 532.
 17. FAO, AMIS July 2014; USDA, *World Agricultural Weather Highlights*, August 12, 2014. USDA, *World Agricultural Weather Highlights*, September 11, 2014.
 18. FAO, *Global Food Price Monitor*, September 11, 2014.
 19. FEWS NET, *Price Watch*, July 2014.
 20. The Indian government has also recently approved a 10 million ton release of public stocks of wheat into the local market. FAO, AMIS September 2014.
 21. FAO, *AMIS Market Monitor*, September 2014. In July, probabilities were higher at around 80%, as reported by FAO GIEWS *Global Price Monitor*, July 10, 2014.
 22. FAO, *Global Food Price Monitor*, 10 July 2014.
 23. In effect, wheat is already harvested in the northern hemisphere; maize is also already harvested in South America and it is being harvested in the northern hemisphere. FAO *Global Food Price Monitor* July 2014; *Crop Prospects and Food Situation*, July 2014; FAO-AMIS, AMIS Crop Calendar, 2012.
 24. More specifically, *El Niño* is typically associated with above-average rains in South America and Australia, which could benefit quantity of wheat crops although affect negatively its quality. In Brazil, it could potentially delay and reduce plantings but may also improve yields. In Asia, the typically expected below-average precipitations could affect yields if takes place early in the harvest season. FAO, *Crop Prospects and Food Situation*, July 2014.
 25. FAO, *Crop Prospects and Food Situation*, July 2014.
 26. The previous issue of the *Food Price Watch* in May 2014 had already indicated that the depreciation of the national currency, below average rain precipitation in recent months, and switches to more profitable crops may had had a larger impact on prices of wheat and maize than the political instability itself.
 27. USDA, WASDE 532.
 28. FAO, AMIS July 2014; FAO, *Commodity Policy Developments*, <http://www.fao.org/economic/est/est-commodities/commodity-policy-archive/detail/en/c/351920/>. At the same time, the government of Vietnam is considering removing the minimum export price for rice, which might compensate to some extent for the new development in Thailand (FAO, AMIS, July 2014).
 29. FAO-GIEWS (*Global Food Price Monitor*, July 10, 2014) reports increased production from 2013 and favorable prospects for 2014 crops. Other reported factors that have contributed to stable prices include lower than anticipated institutional purchases and intraregional and international trade.
 30. Famine Early Warning System Network (FEWS NET), *Price Watch*, August 31, 2014, and July 31, 2014.
 31. FAO GIEWS, *Global Food Price Monitor*, September 11, 2014.
 32. World Food Programme (WFP), "West and Central Africa: Markets Update; Special Issue on the Ebola Outbreak—26 August 2014." Since the start of the outbreak in March 2014, this special bulletin reports sharp increases in the prices of local rice in Labe and palm oil in Kankan, Guinea; increases of 30% in the price of cassava and 29% of palm oil in Monrovia, Liberia; and 48% increases in the price of cassava in Koinadugu, Sierra Leone, in the second quarter of the year (40% increase in the national price of cassava).
 33. WHO ("Ebola Response Roadmap," August 28, 2014) talks of a total of 20,000 cases by the end of February 2015 (see also FEWS NET ["Guinea, Liberia and Sierra Leone Special Report," September 8, 2014]).
 34. FEWS NET, *Price Watch*, August 31, 2014; FAO-GIEWS, *Global Food Price Monitor*, July 10, 2014.
 35. Prices declined in Kenya, Somalia, Tanzania, and Uganda, coinciding with increased availability from recent harvests, and remained stable in Ethiopia. In Somalia, price declines are expected to be short-lived due to conflict and unfavorable production prospects for the upcoming harvest (FEWS NET, *Price Watch*, August 31, 2014, p. 8).
 36. FAO, *Global Food Price Monitor*, August 8, 2014; FEWS NET, *Price Watch*, August 2014.
 37. FEWS NET, *Price Watch*, August, July, and May 2014; FAO-GIEWS, *Global Food Price Monitor*, September 2014.
 38. These trends respond to the recovery in output prospects for Argentina, the largest regional exporter, after two consecutive unfavorable crops. FAO, *Global Food Price Monitor*, August 8, 2014.
 39. FAO, *Global Food Price Monitor*, August 8 and July 10, 2014.
 40. FAO, *Global Food Price Monitor*, July 10, 2014. In effect, upward pressures from increased import demand are reported in Vietnam; in Thailand due to the cease of public sales of stocks; in the Philippines and Sri Lanka following reduced production and, in Philippines, also from lower imports. Ongoing public procurement programs in India and Bangladesh also put upward pressure on domestic prices.
 41. FEWS NET, *Price Watch*, August, July and May 2014.
 42. FEWS NET, *Price Watch*, July 2014.
 43. FAO-GIEWS, "Mongolia Country Brief," August 12, 2014, "Bolivia Country Brief," March 10, 2014.
 44. In the case of Moldova, improved import availabilities constitute another driving factor (FAO-GIEWS, *Global Food Price Monitor*, September 2014; FAO, *Crop Prospects and Food Situation*, July 2014).
 45. FAO, *Crop Prospects and Food Situation*, July 2014.
 46. It is worth noting that, in Togo, price declines were limited to producing areas such as Korbongou, while price increases were observed in the capital city and other nonproducing parts of the country. Bumper crops were reported in South Africa and Malawi (FAO-GIEWS, "Togo Country Brief," February 10, 2014; FEWS NET, *Price Watch*, August 2014).
 47. FAO-GIEWS, *Global Food Price Monitor*, August 2014.
 48. FAO-GIEWS, "United Republic of Tanzania Country Brief," August 28, 2014.
 49. FAO-GIEWS, "Sudan Country Brief," September 11, 2014.
 50. FAO-GIEWS, *Global Food Price Monitor*, September 2014.
 51. FAO-GIEWS, *Global Food Price Monitor*, September 2014.
 52. FAO-GIEWS, "Mongolia Country Brief," August 12, 2014, "Philippines Country Brief," August 8, 2014, "Sri Lanka Country Brief," June 4, 2014.
 53. FAO, *Crop Prospects and Food Situation*, July 2014.
 54. FEWS NET, "Food Assistance Outlook Brief," July, 2014 http://www.fews.net/sites/default/files/documents/reports/FEWS_NET_July_2014_FAOB.pdf.
 55. The World Bank's *Food Price Watch* (April 2012, box 1) reviews these monitoring tools.
 56. According to Cuesta, Htenas and Tiwari ("Monitoring Global and National Food Price Crises," *Food Policy* 49: 84–94 [2014]), on September 24, 2011, the international community met in New York to pledge US\$218 million of new humanitarian aid to the Horn of Africa famine. This pledge came almost exactly a year after the Food Security and Nutrition Analysis Unit (FSNAU) of the FAO reported that 2 million people were in need of emergency humanitarian assistance in the region. Twelve months later, and with an additional 10 million people in dire distress, the international community sprang into (concrete) action.
 57. More concretely, the monitoring framework focuses on IDA countries as a priority, but also monitors other developing countries to the extent that data availability permits.
 58. The profile shows the extent to which the country is exposed to food price shocks and has a mixed macroeconomic capacity to address such shocks (with deteriorating fiscal deficits and current account imbalances, but improving debt and foreign reserve positions).
 59. Figure 4 maps all episodes of food riots, defined as collective violence motivated by either price increases or food shortages across the world since 2007. A yearly

analysis shows that 60% of all food riots took place in 2007 and 2008, associated with the first food price spike since the 1970s. The output of this module was preliminarily presented in the May 2014 *Food Price Watch*.

60. In effect, the *Policy Monitor* maps policy changes related to 35 food and other key commodities closely related to food security, such as crude oil and biofuels. The tool captures the inclusion and removal of about 17 types of policy interventions comprising consumer, producer, risk management, and trade domains as publicly reported by governments and specialized international institutions.
61. More specifically, users can provide real time feedback in the live chats and blogs produced around the *Food Price Watch*. They can also directly discuss technical issues and submit additional resources to be featured in the Observatory. Users can access and use specific data sets collected, maintained, and updated in each of modules.
62. Although to the extent that prices convey the effects of other shocks, they are not completely overlooked. In effect, price-related food crises refer to

the subset of crises that are driven by sudden spikes of food prices, typically at a global level. Even though this is only a partial set of crises, two considerations underscore its relevance: first, the module is expected to capture drivers other than prices that are reflected or conveyed by prices. Thus, the hypothetical resulting reduction in food imports, for example, is not considered a shock, but to the extent that is the effect of a debt shock (which is monitored in the module) it will be featured in the module. As a result, global food—and, similarly, oil—prices are considered both shocks and transmission mechanisms from other global shocks into national food insecurity. Second, the framework is also able to capture other crises not related to prices, such as the Horn of Africa famine. One reason for these results is that, contrary to the previous systems, the proposed framework consists of two fully integrated components, the global and domestic stages.