

# High maize & wheat prices: cereals outlook for 2011/12 — not out of the woods yet

## Recap from the April update

International maize and wheat prices have risen sharply since mid 2010, driven largely by harvest failures in the Northern Hemisphere in 2010, poorer than hoped for Southern Hemisphere harvests into 2011, and strong demand, particularly for maize to make fuel. Rice prices, though high compared to historical norms, have been more stable than wheat and coarse grains prices over this time.

## What has happened to prices since early April?

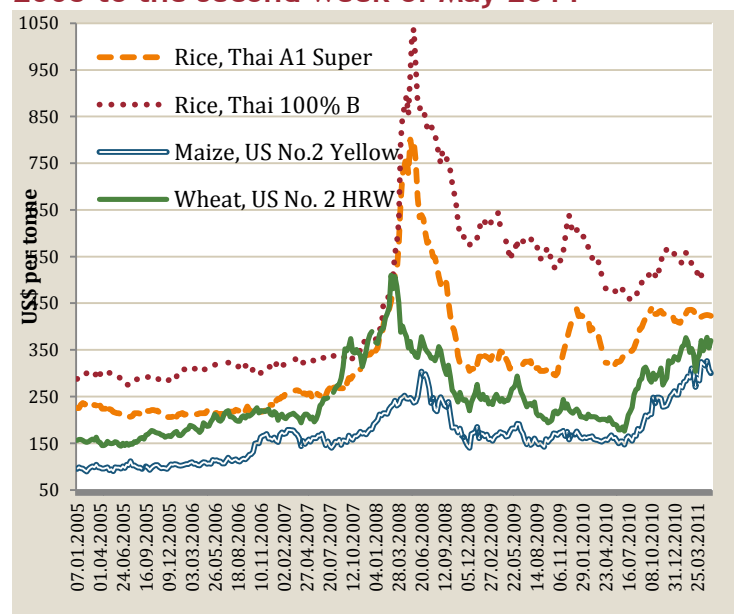
### In cereals markets

Maize prices rose through most of April before turning down in May, wheat prices jagged around before remaining at a similar level, and rice prices were quite flat and unchanged. See Figure B.

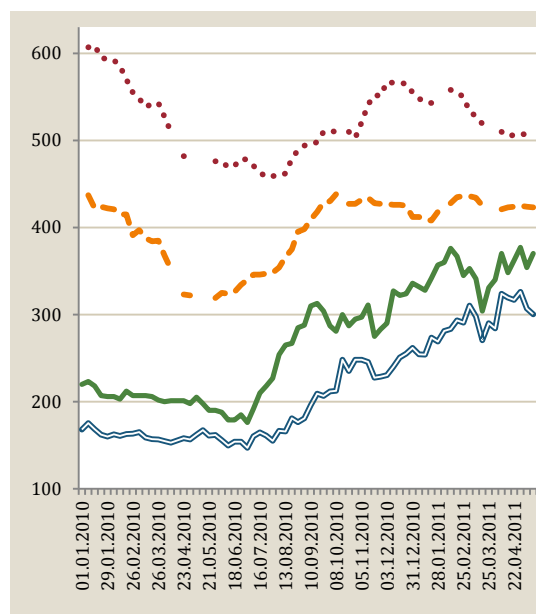
By the second week of May:

- US Yellow Maize was trading at US\$300/tonne, 101% higher than mid 2010;
- US Hard Red Winter Wheat was trading at US\$370/tonne, 108% above mid 2010 levels; and
- Low grade Thai Rice was trading at US\$423/tonne, up 31% from mid 2010, while medium grade was trading at US\$505/tonne, up only 8% over the same period.

**Figure A: International cereals prices from Jan 2005 to the second week of May 2011**



**Figure B: Focus on 2010/11**



**Source:** Constructed with data from FAO ESC. **Note:** Weekly prices run from Jan 2005 (or Jan 2010) to week ending May 13<sup>th</sup>, 2011.

### Futures prices

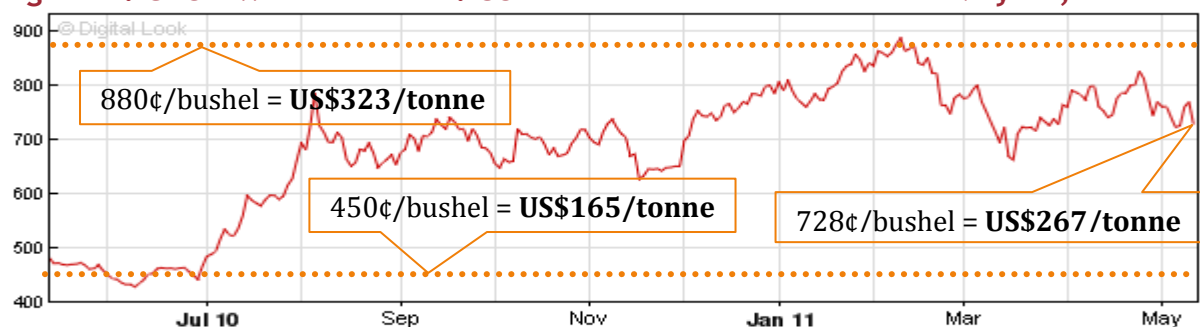
Maize futures have been trending down lately: See Figure C. Any similar trend in wheat is less apparent; however wheat futures have remained below the highs reached in early February.

**Figure C: CBOT Corn Futures: US cents/bushel - 12 months to May 12, 2011**



Source: BBC Market data. Dotted lines and US\$/tonne added

**Figure D: CBOT Wheat Futures: US cents/bushel - 12 months to May 12, 2011**



Source: BBC Market data. Dotted lines and US\$/tonne added

- Maize futures which more than doubled from mid 2010 to the end of March, fell about 14% since the start of April to May 12, 2011.
- Wheat futures prices which almost doubled from mid 2010 to February 2011 fell about 8% since the start of April to May 12, 2011.
- Futures prices for wheat are well below the spot price, while those for maize are very close to the spot price, which could indicate that traders are looking forward to wheat harvests that should bring down the spot price, while feeling more cautious about maize harvests. The difference may lie in timing: there will be new wheat by July, but no new maize before September

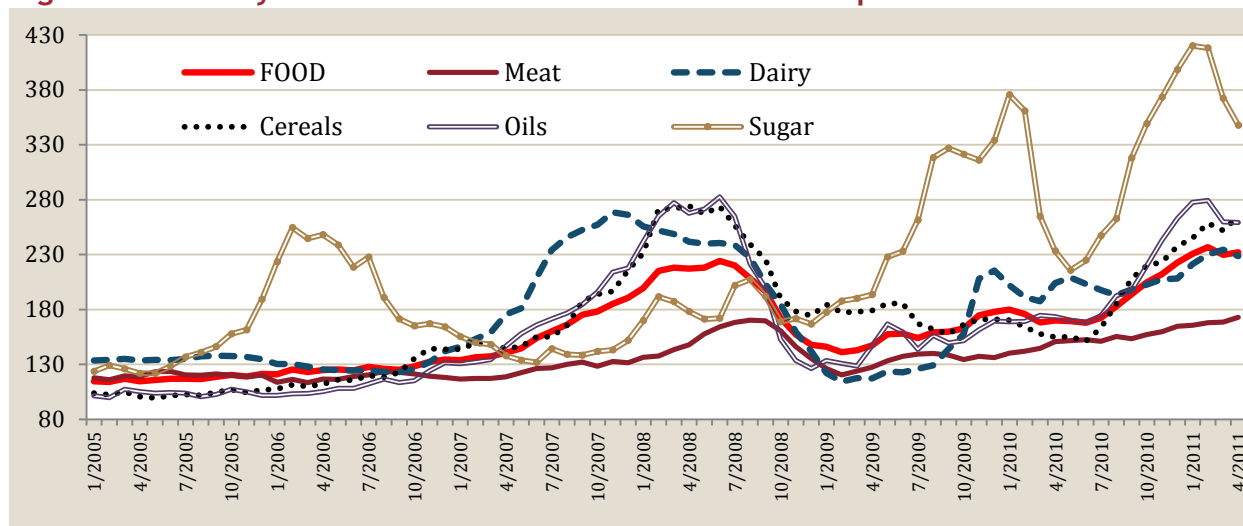
### In the FAO food prices indices

FAO's overall food commodity index was barely changed in April: See Figure E

Though sugar, oils and dairy indices were slightly down, cereals<sup>1</sup> and meat indices were slightly up.

<sup>1</sup> This is an index for April, and maize and wheat price declines reported earlier only happened in May.

**Figure E: Monthly FAO Food Price Indices: Jan 2005 to April 2011**

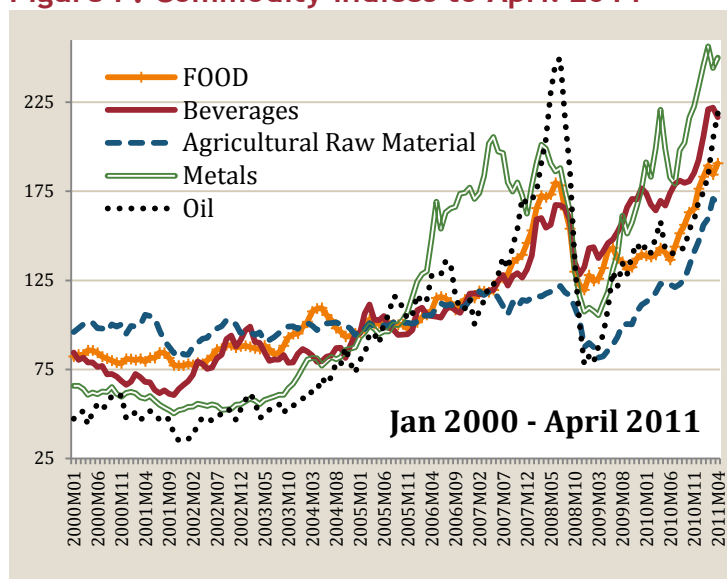


Source: FAO

### In the IMF commodity indices more generally

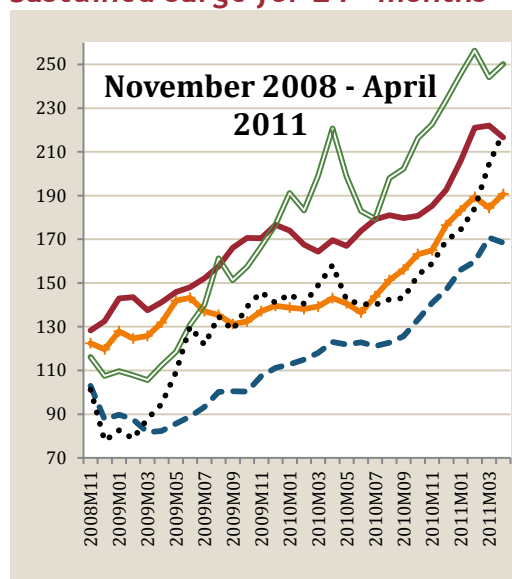
With the exception of the beverages and agricultural raw materials indices, which both turned down slightly in April, indices for oil, food, and metals moved upwards (food and metals after turning down slightly in March). The two year surge in commodity prices seems to be continuing.

**Figure F: Commodity indices to April 2011**



Source: IMF Data. Note: 2005 = 100

### Sustained surge for 24+ months



This is presumably largely driven by demand, resulting from the resumption of economic growth in the developing world after the shocks of 2008. Expanded money supply ('quantitative easing') may have added to inflationary pressures on commodity markets. It is uncertain as to how long this rise in commodity prices will continue.

## What might have caused very recent changes? Are there significant changes to the forces affecting prices?

### Updates on the big Southern Hemisphere harvests of maize and wheat

Estimates for the **Argentine** harvests of wheat and maize for 2010/11<sup>2</sup> are slightly up since the April update, with wheat production estimated at 15.7MT instead of 15MT, and maize production estimated at 20.4MT instead of 19.5MT. Estimates for **Australian** wheat harvests<sup>3</sup> are also slightly up since the April update, from 26MT to 26.6MT. These figures show a slight increase in wheat harvests over last year, and small decline in the maize harvest. It thus seems that after early fears that bad weather might lead to harvest failures in these two significant grain exporters have not been realised.

This might go some way towards indicating why maize and wheat prices, particularly maize futures prices, seem to be trending down.

### Updates on the Northern Hemisphere crop outlook

Recent news<sup>4</sup> on the outlook for Northern Hemisphere winter wheat and other forthcoming Northern Hemisphere crops for 2010/11 indicates there is little room to manoeuvre.

Although it is still early days, there are some indications that the winter wheat (next to be harvested in the N Hemisphere) as well as the main 2011 crops may suffer from poor weather. The same source reports:

- In France, Germany, and the UK, hot dry weather threatens crops
- Corn planting in the U.S. is only proceeding at half of last year's pace because of excess rain
- The Canadian Wheat Board said fields are so muddy that only 3 percent of grain has been sown, compared with 40 percent normally.
- Drought has left the Kansas wheat crop in the worst shape since 1996
- Dry spells are threatening crops in Western Australia and China.

Furthermore, though much depends on weather, there are still strong policy considerations. For instance, Bloomberg quotes an analyst as saying: "If the Russian government retains the export ban to protect domestic supply, farmers may sow less wheat and plant sugar beets, oilseeds including sunflower, and buckwheat".

### Updates on the rice market

Recent reports suggest the rice price is likely to remain stable.

Summing these up, Bloomberg<sup>5</sup> reported that abundant supplies expected from Thailand were likely to help boost stocks globally and keep a damper on prices. Since planting has not been delayed by rains as it was last year, projections for the main 2011 harvest (representing about 70% of the total Thai harvest) are good. It might rise 4.6% to a two-year high of 23.2MT for the marketing year beginning October, assuming the monsoon season cooperates. The secondary crop which is presently being harvested (through to July) is also expected to climb 6.3% to a record of 9.42MT.

Also depressing prices is the competition from second largest rice exporter, Vietnam, expected to export more than 7MT this year. This compares to Thailand which may export 10MT in 2011, close to their 2004 record of 10.1MT.

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<sup>2</sup> From Bolsa de Cereales: <http://www.bolsadecereales.com/>

<sup>3</sup>From ABARES: <http://www.daff.gov.au/abare-brs>

<sup>4</sup>Bloomberg. May 10, 2011. *Crop Weather Damage Grows as Europe Drought, Canada Rain Boost Grain Costs*. Online at: <http://www.bloomberg.com/news/2011-05-10/grain-crop-weather-damage-growing-on-europe-drought-canada-rain.html>

<sup>5</sup>*Rice May Fall on 'Abundant' Thai Supply, Aiding World's Poor as Corn Gains*. Online at: <http://www.bloomberg.com/news/2011-05-04/-abundant-thai-rice-supply-to-keep-cap-on-global-prices-un-agency-says.html>

Furthermore, FAO predictions of global rice inventories also expect them to reach their highest level since 2002 this year. Some analysts report that rice prices may decline by as much as US\$20/tonne on the prospect of increasing supplies.

A stable rice price is good news considering rice is: a) the staple of choice for over half the world's population, and b) traded in a relatively thin market, and therefore prone to price shocks—it was the cereal which saw the most dramatic price rises in 2008.

Bloomberg also quoted FAO's Abdolreza Abbassian suggesting that the rather modest rises in rice prices might be “separating us from a food crisis.”

### New projections for all cereals on the next marketing year

The last USDA World Agricultural Supply and Demand Estimates (WASDE) released on May 11 showed their first full projections for marketing year 2011/12.

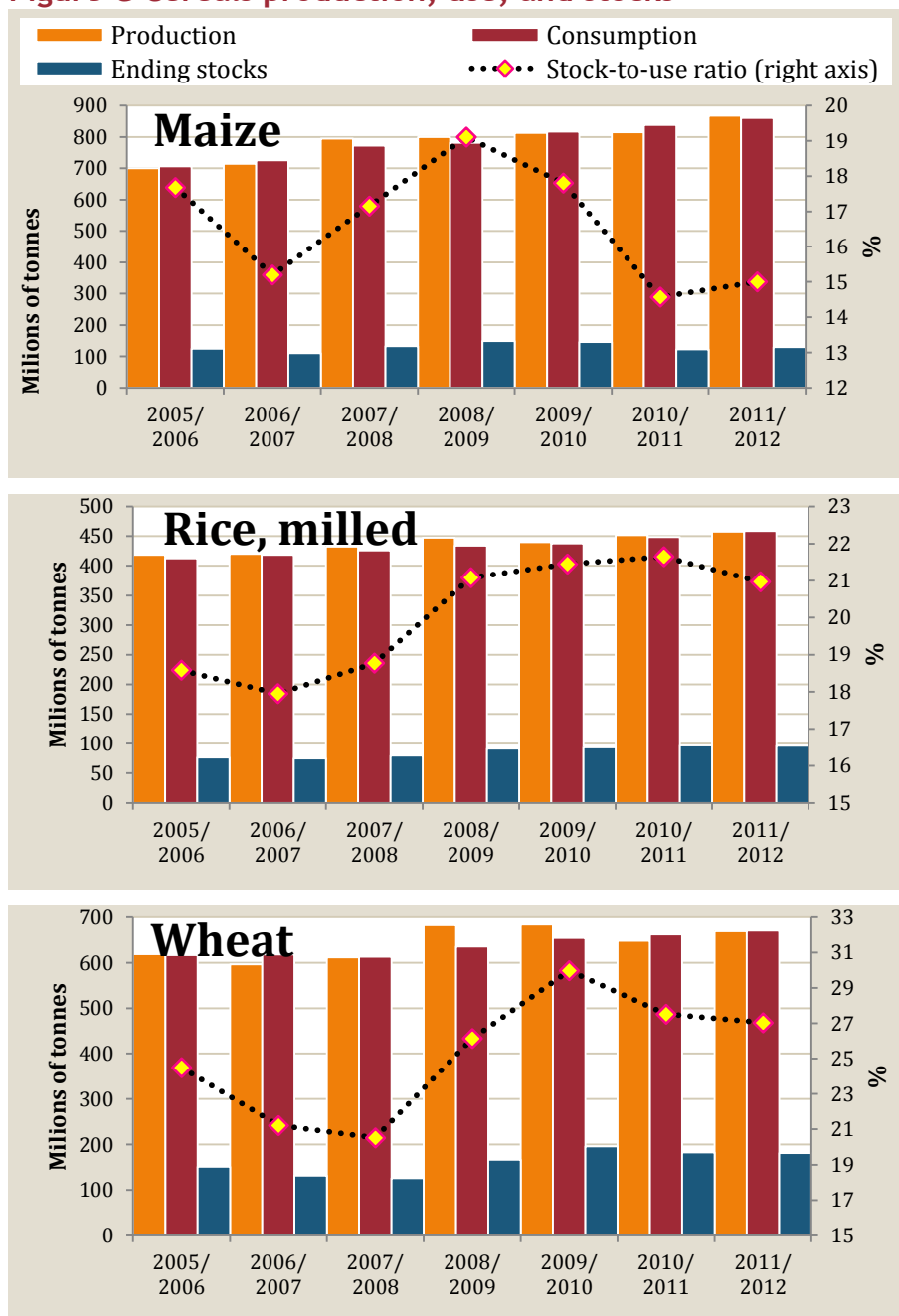
Figure G displays their estimates for marketing years 2005/06 to 2010/11 and the projections for 2011/12 for maize, rice, and wheat.

If a similar set of cereal harvest failures were to occur this year, prices could be sent considerably higher.

As far as *prices in the near future* are concerned, much continues to depend on the large Northern Hemisphere harvests of maize and wheat.

Although the projections for 2011/12 suggest production will meet consumption, there is still *cause for concern* in maize markets owing to low stocks.

**Figure G Cereals production, use, and stocks**



**Source:** Constructed with data from USDA FAS PSD and USDA WASDE May 2011. **Note:** Estimates for 2009/10 and 2010/11 marketing years are from the latest WASDE, as is the projection for 2011/2012

### **BOX: Climate change's medium-term role in reducing cereals production**

Recently published research has suggested that climate change since 1980 has contributed to medium-term production decreases in maize and wheat.

It reported:

Models that link yields of the four largest commodity crops to weather indicate that global maize and wheat production declined by 3.8% and 5.5%, respectively, compared to a counterfactual without climate trends. For soybeans and rice, winners and losers largely balanced out. (Lobell et al, 2011)

The lost amount was equivalent the study said to the entire maize crop of Mexico or wheat crop of France, the EU's largest producer, though in the grand scheme it pales compared to how much world cereal production has increased over the last 28 years; roughly 38%.

Interestingly, 3.8% of global maize production and 5.5% of global wheat production in 2008 (the record) amounts to about 69MT; close to the shortfall of 70MT that set prices skyrocketing in 2007/08. The disappointments in grain harvests in 2010 that have doubled maize and wheat prices in a year amount to around the same lost tonnage.

The models were based on data showing rising temperatures across almost all the world's main growing regions except the USA. Furthermore, they did not account for extreme weather events including heat waves or rainfall, thought to be largely responsible for the latest price rises. Some analysts also said they relied on "heroic" statistical analysis:

"The research provides evidence of big shifts in wheat and maize production," commented Prof Tim Wheeler at the Walker Institute for Climate System Research, Reading University, UK, who added it had involved "heroic" statistical analysis. But he said that, while long-term climate change impacts were another pressure on food prices, short-term price spikes were linked to extreme weather events, such as the Russian heatwaves and wildfires in 2010." (Ecobusiness)

**Sources:** Lobell, D.B.; Schlenker, W.; & Costa-Roberts, J. May 5 2011. Climate Trends and Global Crop Production Since 1980. Science. [DOI:10.1126/science.1204531]; Reuters, 2011: <http://www.reuters.com/article/2011/05/06/us-climate-food-idUSTRE74520720110506>; Ecobusiness.com 2011: <http://www.eco-business.com/news/food-prices-driven-up-by-global-warming-study-shows/>; FAOSTAT; USDA WASDE

### **Implications**

It seems that in the last month fears of even higher cereals prices have been allayed somewhat. Hence the implications for developing countries remain as set out before. That is:

Higher international staple cereals prices spell hardship for countries

- a. with existing high levels of poverty and hunger;
- b. where cereals make up most of the staples consumed; and
- c. where there is a high dependence on imported cereals.

Highly exposed countries (where 40% or more cereal staples are typically imported and hunger levels are high include: Eritrea, Afghanistan, Haiti, Comoros, Yemen, Somalia, Timor-Leste, Liberia, Djibouti, Guinea-Bissau, DPR Korea, Gambia, Senegal, Tajikistan, and Sri Lanka. Exposed countries (<40% but >25% typical cereal import dependency) include: Sierra Leone, Mozambique, Togo, Sudan, Kenya, and Guinea.

This spike differs from that of 2008, however, in that rice prices have been little affected; and now appear unlikely to be.

There is also a potential opportunity for growers of agricultural commodities whose prices have risen this time round in a way they did not in 2008, as applies for countries where cotton and beverages are produced for export. Windfall gains on these exports could in some cases heavily offset or outweigh any additional costs of cereals imports.