

# Rising prices for agricultural commodities

The prices for most agricultural commodities rose sharply through 2007 and early 2008. The increases have been driven by a combination of structural and short-term factors. These include rising demand, driven by economic growth in developing countries; increased production of biofuels, which has reduced the availability of crops for food and feed; and a string of poor seasons for a number of major agricultural producers, which severely affected global supplies.

Global stock rebuilding will be slow and global demand is expected to remain strong. Consequently, international prices are expected to stay high by historical standards for at least a few years.

## Introduction

After a long period of declining real values, agricultural commodity prices, led by grains, oilseeds and dairy, have been increasing since 2005. In the last 12 to 18 months, prices have risen more sharply, raising questions about what is driving price increases and whether an historic long-term upward shift in agricultural commodity price levels has occurred (see **Charts 1-3**). There has also been a marked increase in the volatility of prices, as a broader range of investors have entered commodity markets, attracted by the rising prices.

A wide variety of forecasters, including the Australian Bureau of Agricultural and Resource Economics (ABARE), the United Nation's Food and Agriculture Organisation (FAO) and the World Bank, are now expecting agricultural commodity prices to remain high for at least the next few years.

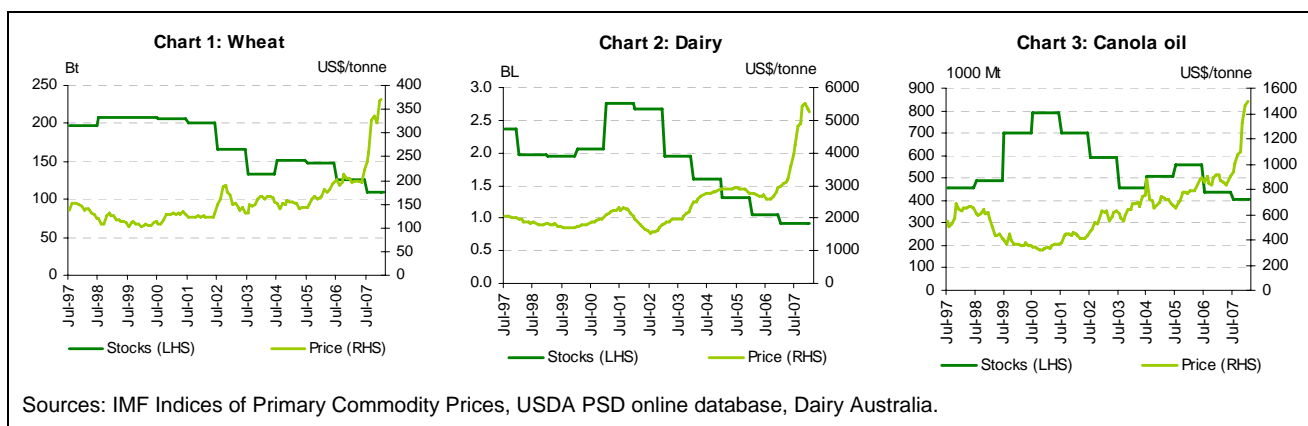
When coupled with rising input costs (notably soaring fuel and freight costs), high agricultural commodity prices have led to price increases in domestic food markets, and contributed to social unrest in many countries. Low income food-importing countries have been the most affected – they have experienced protests and food riots. Even OECD countries have been affected. Italy and Mexico have seen protests against the rising cost of staples such as pasta and tortillas.

## Demand factors

The price increases have been driven by a combination of structural and short-term factors. The key structural change has been a long-term rise in demand for agricultural commodities driven by economic growth in developing countries, particularly China and India.

In developed countries, food comprises a small proportion of overall spending (perhaps 15-20 per cent) and this remains relatively constant as incomes rise. However, in poorer nations, food comprises a significantly larger share of overall spending and a high proportion of any increase in income is spent on food, such as traditional staples, edible oils and sugar. As incomes rise further, demand also rises for higher value foods such as meat, eggs, fish and dairy products, as well as more fruit and vegetables, better quality edible oils and fats, and some processed foods and beverages. Meat, egg and dairy production in many countries relies on feed grains, so an increase in meat production in turn increases the demand for corn, barley, sorghum and wheat.

In addition to rising demand from developing countries for food, climate change and energy security concerns have encouraged governments to support biofuels such as ethanol and biodiesel. These two biofuels are almost entirely derived from food and feed crops (mainly corn and sugar cane for ethanol, and canola, palm and soybean oil for biodiesel).

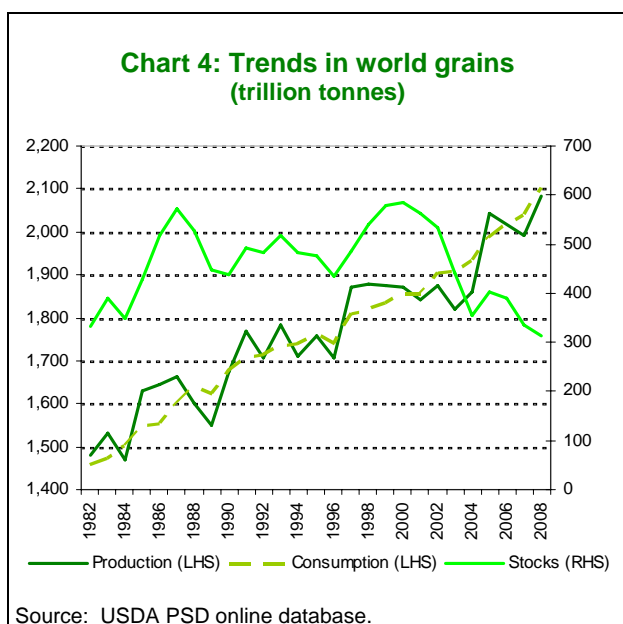


Government policies to encourage the use of biofuels include production/consumption subsidies and mandatory blending requirements. The policies, together with an increase in demand for alternative fuels as oil prices have risen, have caused biofuel production to rise rapidly. The EU and the US provide the greatest support for biofuel production. However, Brazil and China are also major ethanol producers, with strong government policy support, albeit with less government funding. Malaysia and Indonesia, the dominant palm oil producers, are also rapidly increasing production of palm oil for biodiesel.

Rising demand for biofuels has increased pressure on the prices of the commodities used to make them. In addition, high prices for corn and canola (rapeseed) because of the demand for biofuels, has encouraged producers in the US and EU to grow these crops at the expense wheat and soybeans. This has reduced the supply and driven up the price of a wide variety of commodities not directly used for biofuels. Although much research is being undertaken to develop non-food feedstocks for biofuels, there is uncertainty about when commercially viable alternatives might be available to ease (or reverse) the current demand for biofuel crops.

The shift to greater use of biofuels has been relatively recent and it is unclear how long the increased demand will last. Biofuel production in temperate countries in particular, relies heavily on supportive government policies and high oil prices. Moreover, should it become feasible to use alternative, non-food sources of feedstock for biofuel production, then international demand for biofuel feedstock crops may well fall markedly.

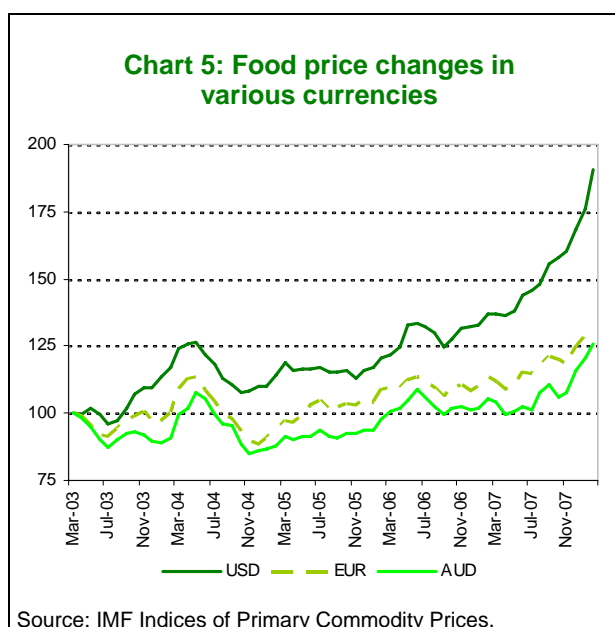
### Supply constraints



In the short term, the global supply of agricultural commodities has been severely affected by a string of poor seasons in a number of major agricultural producing areas. Aside from Australia's severely drought-affected production in the last few years, the EU, US, Canada, Argentina, Ukraine and Russia have all recently experienced poor seasons for various crops. Coupled with strong global demand lower global production levels have seen global stocks fall to their lowest levels in many years (see **Chart 4**).

In addition, recent agricultural policy reforms in developed countries have affected the incentives for production of a variety of commodities. While the impact of these reforms is often overstated, there is evidence to suggest that internal prices and production for some commodities, such as sugar, have been falling in some developed countries.

### Currency and other market effects

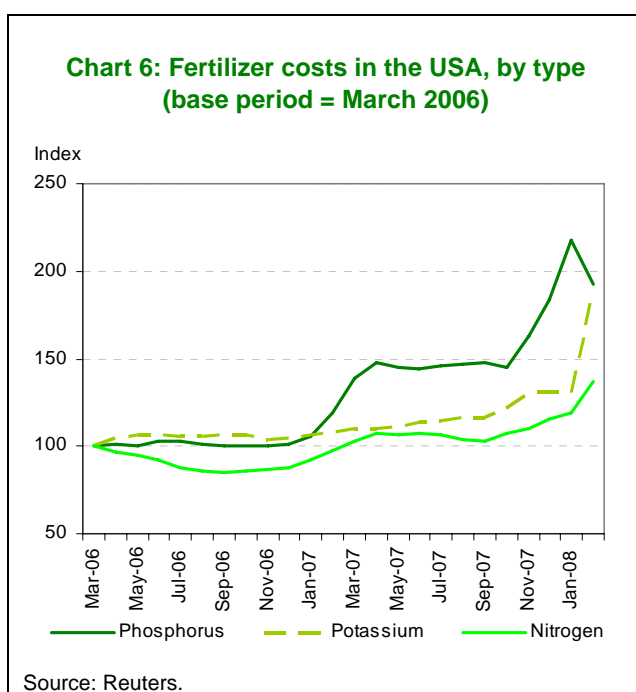


Most internationally traded commodities are priced in US dollars. However, the value of the US dollar has fallen significantly in recent years and this has resulted in substantial increases in the US dollar prices of a number of commodities. When commodity prices are translated to Australian dollars or Euros, overall trends are similar though less pronounced – a gradual rise in prices over the last couple of years with a spike in the last 12 months or so (see **Chart 5**).

Rising commodity prices have encouraged speculative investment in the so-called “soft commodities boom”, further increasing prices and volatility. While speculators may only have a limited long-term effect on agricultural commodity prices, there are signs that speculative funds are having an impact, not just on commodity prices, but also on the prices for some inputs (such as agricultural land) as investors look for new ways to take advantage of the boom.

## Increasing costs of production

Increases in the costs of production have also impacted on commodity prices; the sustained rise in the price of oil has been the most significant. Oil is a significant direct cost to farmers who use it to run farm machinery like tractors and harvesters. In addition, rising demand and high oil prices have also led to increases in transport, nitrogen fertiliser, pesticide and herbicide costs (production of many agricultural chemicals is highly energy intensive). Strong demand has also seen a steep rise in the cost of the other two main fertiliser components, phosphorus and potassium, both of which are mined (see **Chart 6**).



Heightened public interest in disease, food safety and animal welfare issues are also leading to increased production costs. In response to these concerns, expensive traceability systems have been implemented in a number of countries. At the same time, disease outbreaks such as foot and mouth disease, BSE (mad cow disease), swine fever and avian influenza have resulted in expensive, large-scale culls. There is also an increasing number of private standards addressing animal welfare and food safety issues – all of which incur supply chain costs which are passed on to consumers.

## International responses to high food prices

High food prices are a growing global concern, particularly for developing countries with large low-income populations. Governments have responded to concerns about cost and food security through implementing a range of “temporary” measures such as: imposing export quotas or taxes;

implementing price controls; cutting food import tariffs; abolishing taxes; and lifting production subsidies. These measures mostly aim to lower domestic prices by increasing local supply. Consequently, they differ markedly from the traditional market distortions in agriculture where rich countries such as Japan and in Europe, try to keep domestic prices high to benefit their farmers.

Many developing countries which export agricultural commodities have sought to *limit exports* in order to increase domestic supply. For example, in February 2008 Kazakhstan announced that it was imposing an export tariff on wheat to restrict its exports and, as a result, the already high price of top-quality wheat jumped a further 25 per cent in a single day. In Argentina, the rising cost of beef led the government to impose a quota limit on exports in order to limit domestic price increases and hold down inflation.

In contrast, food importing nations have implemented policies, such as reducing tariffs or increasing import quotas, to *encourage imports* in order to increase local supply. For example, Morocco reduced its tariffs on wheat imports from 130 per cent to 2.5 per cent in December 2007, joining the ranks of other countries such as Brazil, South Korea, Nigeria and Russia that have also cut wheat import tariffs.

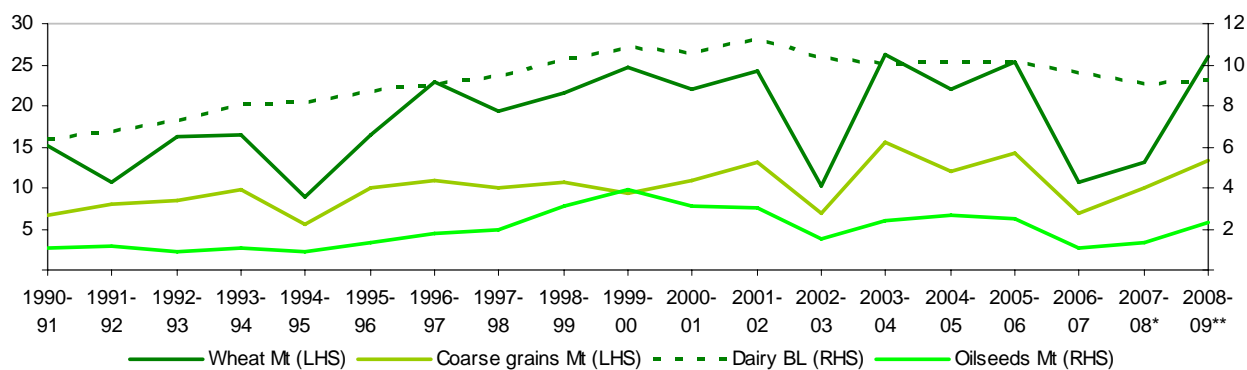
A number of countries are also introducing new subsidies, such as Indonesia’s subsidy to local processors for importing soybeans (used to make tempeh - a major source of dietary protein). With prices rising rapidly, these measures are becoming costly to maintain.

## Outlook for Australian production

Australia is a net food exporter, particularly of bulk commodities such as beef, wheat and dairy. Although domestic production of some of these commodities is not large on a global scale, Australia’s share of many export markets is significant; Australia is amongst the world’s largest exporters of dairy, barley, wheat, barley, beef, wine, sugar and lamb. As a net food exporter, Australia stands to benefit greatly from high prices. While high prices have raised the unit value of agricultural exports, the drought has affected production significantly. As a result, export volumes and overall export value have fallen.

The short-term outlook for Australian grains and canola production has improved with good rainfall in the early months of 2008. ABARE has forecast total winter crop production in 2008-09 to be nearly double the 2007-08 harvest, as farmers respond to high prices, reduced livestock levels and improved rainfall (see **Chart 7**). This should provide an opportunity for significant increases in the export values of wheat, barley, canola and sorghum in 2008.

**Chart 7: Drought significantly reduced Australian production in 2002-03, 2006-07 and 2007-08**



\* Estimate. \*\* Forecast.

Source: ABARE.

### Outlook for global production

Producers around the world are also increasing production in response to high prices. Grain and oilseed production is forecast to rise significantly<sup>1</sup>, offset slightly by reduced wheat production in China. Greater areas are expected to be planted – particularly with the EU allowing food to be produced on set-aside land in the CAP. Increased global production should put some downward pressure on prices. However, global demand is expected to remain strong and it will take some years to rebuild stocks, so prices are unlikely to return quickly to the low levels of earlier this decade.

Over the longer term, there are major challenges to address in order to lift global agricultural production sufficiently to keep up with the forecast growth in demand. These include: increased demand for water resources resulting in water shortages; the impact of adapting to climate change; improving the environmental sustainability of agriculture; and the need for reform of agricultural policies within countries and in global agricultural markets.

### International implications

As noted earlier, high food prices have raised concerns about food security and led to the imposition of a large number of “temporary” measures by governments. However, many of these measures add an additional layer of distortion to already distorted world markets for agricultural products. Such disconnected, *ad hoc* and even contradictory measures do not advance, and can undermine, long term global food security. They may also prove difficult to remove once prices stabilise.

<sup>1</sup> ABARE Australian Commodities, March quarter 2008.

The concerns over rising global food prices offer a window of opportunity for WTO members to help address this challenge. Existing trade barriers and domestic support programs insulate inefficient producers from market price signals and lead to a misallocation of finite resources. Liberalisation would bring about a reallocation of resources to more efficient producers, resulting in increased productivity.

Higher world prices have created a climate where it should be possible to reduce subsidies and trade barriers without hurting incomes. Implementing reforms in this climate will ease the structural adjustment costs on all producers.

### Summary

The recent rise in prices of global agricultural commodities has been substantial and could signal an upward shift in long-run average prices and an historic change from a century-long downward trend. High prices are benefiting Australia directly as a major exporter of many agricultural commodities. However, Australia’s ability to capitalise on the higher prices for agricultural commodities has so far been limited by the drought. Increased global production should ease the tight supply situation and world prices are forecast to fall slightly, assuming no further disruptions. However, the rebuilding of global stocks will be slow and global demand is expected to remain strong, meaning that international prices are expected to remain high by historical standards for years to come. The best opportunity for the world to address long-term food security and the effects of high prices on developing countries is through removal of market distortions, not the imposition of new ones. The current Doha Round is a golden opportunity to do this.

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