



australian commodities

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sugar

outlook to 2012-13

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Growing demand for biofuels is likely to underpin world sugar prices over the medium term, despite steadily increasing sugar cane production in Brazil. The world indicator price for sugar is projected to be maintained above US10 cents a pound in real terms (2007-08 dollars) over most of the projection period to 2012-13, considerably above the depressed levels of the early 2000s. Other key factors lending strength to world sugar prices over the medium term are the demand effect of strongly growing incomes in developing countries, such as China and India, and the supply effect of policy reform affecting the sugar beet industry in the European Union.

A return to average seasonal conditions is projected to result in a modest recovery in Australian sugar production, to 5.1 million tonnes by 2012-13. The process of structural change in the industry is likely to continue over the medium term, with reductions in the number of cane growers and increases in the average size of cane farms.

positive short term outlook

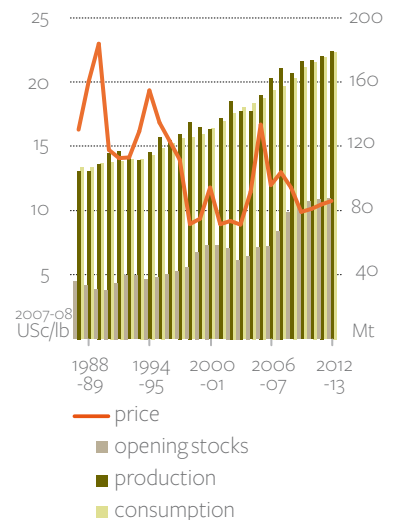
The world indicator price for sugar (Intercontinental Commodities Exchange no.11 spot, fob Caribbean) is estimated to average US13 cents a pound in 2007-08, an increase of 11 per cent on the average achieved in 2006-07. The strength in sugar prices is somewhat surprising in that it is occurring at the same time as stocks of sugar are forecast to rise by 17 per cent (12 million tonnes) over the course of the year.

Sugar prices in 2007-08 have been buoyed by strong demand for sugar cane and molasses as feedstocks for ethanol production and the prospects of further cuts in sugar beet production in the European Union. The introduction of a range of market support policies in India, including export and storage subsidies, have the potential to depress world sugar prices, but do not appear to be having an effect so far.

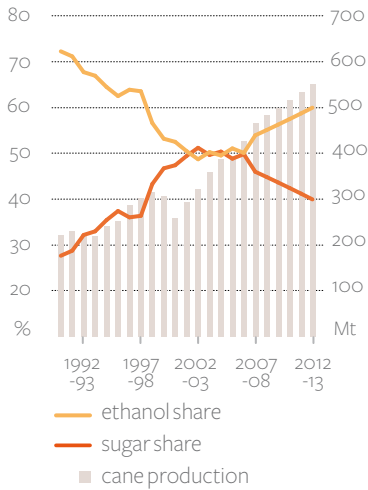
Higher global prices for sugar will flow in part into improved returns for Australian producers. The average price received by Australian cane growers for 2007-08 sugar cane is forecast to be similar to 2006-07. Australian producers will not receive the full benefits of the rise in world prices, mainly because of the assumed appreciation in the Australian dollar in 2007-08.

Heavy rains in the main sugar cane producing regions of Queensland in recent months have generally boosted prospects for Australian sugar cane

world sugar



brazilian sugar cane



production in 2007-08, despite some isolated flood damage to cane crops. Australian sugar production is forecast to recover to around 4.85 million tonnes (raw sugar terms) in 2007-08, 3 per cent higher than in 2006-07 and is occurring despite a reduction of 3 per cent in area harvested. The heavy rain is also leading to improved prospects for 2008-09 production, as irrigation dams are replenished and irrigation aquifers recharged.

brazil important to medium term outlook

Brazil will remain the dominant player in the world sugar market over the five year projection period. Given low production costs and potential to bring substantial new land into production at below current prices, it seems likely that sugar cane production in Brazil will continue to rise and put downward pressure on global sugar prices over the projection period.

Despite such price pressures, it seems likely that with domestic Brazilian and global demand for ethanol growing strongly, global sugar prices over the outlook period will be substantially higher than the depressed prices in the period 1997-2003. The market indicator price for sugar is projected to decline to around US11 cents a pound (in 2007-08 dollars) in 2012-13.

Within the Brazilian market, the principal factor determining whether sugar cane is used for ethanol or sugar production is the returns from producing either at different sugar and oil prices. The price switch point between sugar production and ethanol production is influenced principally by the oil price. However, there are other supply and demand factors, particularly domestic Brazilian policies for ethanol use (discussed below), that mean that there is some independent variation between oil and ethanol prices.

world sugar production to continue growing

World sugar production is projected to increase to 179 million tonnes by 2012-13, around 6 per cent higher than estimated output in 2007-08. Key determinants of world sugar production over the medium term are likely to be Brazilian cane production and its allocation between sugar production and ethanol production, and EU reforms of its sugar beet industry.

Brazilian production of sugar cane is projected to increase by 20 per cent by 2012-13, while ethanol production is projected to increase by 35 per cent. It is assumed that the proportion of sugar cane used in Brazil to produce sugar declines steadily to around 40 per cent by 2012-13. This compares with 47 per cent of cane going to sugar production in 2007-08.

The European Union instituted a number of reforms starting in 2006-07 that are expected to continue to result in EU sugar beet production declining over the medium term. The measures include lower guaranteed minimum prices to beet growers, lower market intervention prices and reduced quotas to which the minimum prices apply. There are various incen-

tive arrangements for individuals to voluntarily give up quota entitlements. By mid-2007, however, only 2.2 million tonnes of quotas had been renounced and the European Union decided in September 2007 to make additional incentives to attract a further 3.8 million tonnes of quota renunciations. If targets are not reached by 2010, compulsory cuts to quotas will be made.

In response to successive record harvests and payment delays to Indian sugar cane growers, the Indian Government has introduced policy measures to shore up domestic prices. For example, there are government subsidies for the storage of 3 million tonnes of sugar. Despite this addition to Indian stocks, Indian sugar exports are forecast to increase sharply to 2 million tonnes in 2007-08, almost double those in the previous year.

Protected by high import duties on sugar, the Russian sugar beet industry has grown at nearly 10 per cent a year over the past decade. The Russian Federation is currently the world's largest importer of sugar but it has a target of meeting around two-thirds of its total sugar consumption with domestic production by 2012. In order to achieve this target, further strong production growth is projected for the Russian sugar beet industry over the projection period to 2012-13.

With modest increases in plantings and increases in yields, Chinese production of sugar is projected to be 9 per cent higher in 2012-13, compared with the record estimated sugar production of 14.6 million tonnes in 2007-08. China supports sugar cane and sugar beet production through controls over the production and sale of artificial sweeteners.

sugar outlook

	unit	2005 -06	2006 -07	2007 -08 ^f	2008 -09 ^z	2009 -10 ^z	2010 -11 ^z	2011 -12 ^z	2012 -13 ^z
world a									
production	Mt	152.1	162.6	169.0	165.6	173.1	173.8	176.4	179.1
consumption	Mt	150.3	155.3	157.3	162.7	169.3	172.6	175.7	179.0
stocks ^b	Mt	57.5	67.4	79.1	82.0	85.8	87.0	87.7	87.8
price									
- nominal	US\$/lb	15.8	11.7	13.0	12.1	10.4	10.9	11.5	12.1
- real ^c	US\$/lb	16.7	12.0	13.0	11.8	9.9	10.1	10.5	10.8
australia ^d									
production ^e	kt	5108	4722	4852	4965	5015	5053	5091	5129
export volume	kt	3883	3714	3604	3692	3724	3737	3747	3758
export value									
- nominal	A\$m	1454	1510	958	974	905	890	924	958
- real ^g	A\$m	1539	1552	958	948	859	824	835	845

^a October–September years. ^b Historical estimates of closing stocks are based on individual country estimates of production, consumption, trade and stocks. Given possible under/over reporting of statistics in individual countries, changes in world closing stocks from year to year may not necessarily equal the difference in world production and world consumption. ^c In 2007-08 US dollars. ^d July–June years. ^e Raw tonnes actual. ^g In 2007-08 Australian dollars. ^f ABARE forecast. ^z ABARE projection.

Sources: Australian Bureau of Statistics; International Sugar Organisation; ABARE.

strong growth in world sugar consumption

There are two main components to the demand for sugar cane or beet — food use and nonfood use. The nonfood use is mainly as a feedstock for ethanol product, an important component of which is used as a motor fuel, either alone or blended with petrol. Ethanol is also made using molasses, a byproduct of the sugar refining process.

sugar for food use

Factors affecting the demand for sugar for human food are income; the prices of alternative sweeteners, particularly high fructose corn syrup; and, increasingly, the availability of a range of low calorie artificial sweeteners. A characteristic of world sugar consumption is that per person consumption of sugar in foods is declining in developed countries, but increasing in less developed ones. These trends reflect, in part, the fact that consumers are able to choose more costly (and healthier) food alternatives as income increases.

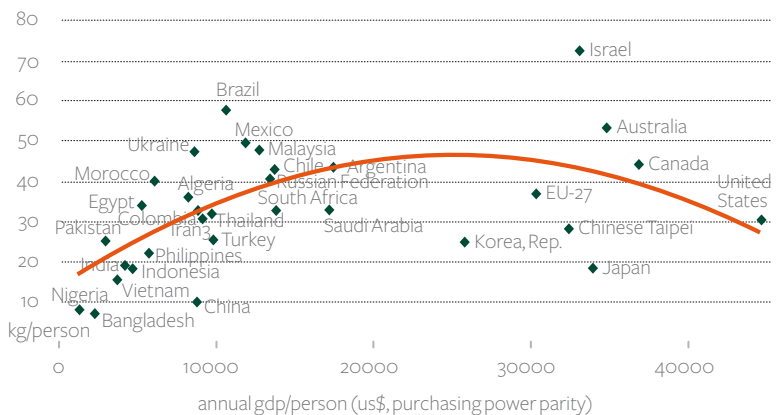
World sugar consumption has increased on average by 2.4 per cent a year over the past ten years, faster than the rate of world population growth of 1.17 per cent. Reflecting higher sugar prices, world sugar consumption is projected to grow at a slightly slower rate in the five years to 2012-13.

ethanol demand

Demand for ethanol as a replacement for oil based fuels is increasing rapidly and being encouraged by a range of government policies including targets for biofuel use and tax concessions for producers. The feedstocks for ethanol are primarily corn, sugar and molasses. Biofuel usage targets vary across countries.

annual sugar consumption

annual average, three years to 2007-08



Brazil pioneered the widescale use of ethanol for motor vehicle fuel and ethanol production accounts for around half of Brazil's sugar cane production. Brazil also supplies a major part of a growing world trade in ethanol.

Brazil supports domestic ethanol production through regulations affecting consumption and tax incentives. The key regulation is a government set blending ratio of anhydrous ethanol with gasoline that is currently 23 per cent but has varied from 20 to 25 per cent. Another key instrument is a lower excise tax for ethanol compared with petrol. This is leading to a rapidly growing fleet of flex fuel vehicles that can run on ethanol, petrol or any mix of the two fuels.

With crude oil prices likely to remain relatively high throughout the projection period, the proportion of sugar cane used in Brazil to produce ethanol is assumed to rise steadily, to around 60 per cent by 2012-13. This compares with 53 per cent of cane going into ethanol production in 2007-08.

little potential to expand sugar production in australia

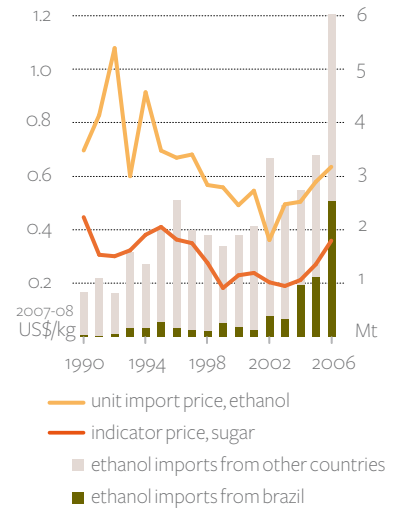
The bulk of the Australian sugar industry is essentially 'land locked' along the Queensland coast and part of northern coastal New South Wales. As there is little scope to expand areas under sugar in these regions, there is unlikely to be any significant increase in Australian sugar production over the next five years.

Harvested areas of sugar cane in Australia have declined sharply since 2002-03. A range of factors has contributed to this decline, including low prices at various times, drought, cyclones, sugar cane smut, urban encroachment, increased use of rotation crops (mainly soybeans and peanuts) and higher returns from alternative land uses, particularly forestry. Sugar production in the Ord River area, which at its peak accounted for more than 4000 hectares harvested annually, ceased in November 2007.

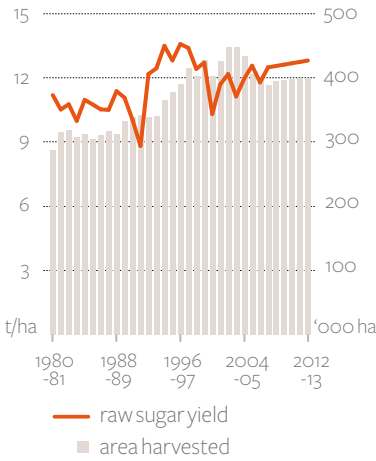
Projected relatively high sugar prices, the adoption of smut resistant sugar cane varieties, and an assumed return to average seasonal conditions are likely to result in a small rise in Australian sugar production. The area harvested of sugar cane in Australia is projected to recover to 400 000 hectares by 2012-13, still 48 000 hectares less than in 2002-03. Combined with ongoing yield improvements, Australian production of raw sugar is projected to increase to 5.1 million tonnes by 2012-13.

At the farm level, it is expected that the number of Australian cane growers will continue to decline and that farms will increase in size. This view is supported by abare survey results for the 2005-06 season that show that bigger cane farms are generally associated with higher farm incomes and therefore more likely to be economically viable over the longer term.

world ethanol trade



australian sugar production

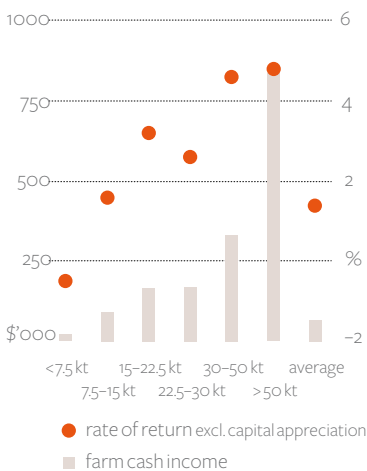


Apart from the increase in size, there is a trend toward diversification of production on cane farms in Australia. Diversification includes increased use of leguminous crops, such as soybeans and peanuts, as rotation crops. Replacing the traditional burning of sugar cane crops before harvest is the increasing use of ‘whole cane crop harvesting’ practices, particularly in New South Wales. With whole cane harvesting, the leaf material that is separated from the cane is sold as garden mulch, or delivered to mills to be used (along with the bagasse generated by the milling process) to generate electricity surplus to running the sugar milling process for sale into the national electricity grid.

The profitability and mix of products produced by the Australian sugar industry over time could be affected by policies associated with control of greenhouse gas emissions. Such policies include carbon taxes, carbon trading arrangements and minimum renewable energy targets. Increases in such targets could lead to increased electricity generation from bagasse or cane trash, or increased production of ethanol from molasses and perhaps from sugar cane juices. Credits for carbon sequestered in the form of soil carbon may result in more cane harvest trash being used as on-farm mulch (green cane trash blanketing), rather than being transported to mills to generate electricity.

Sugar mills in Queensland produce approximately 1100 GWh of electricity, equivalent to around 2 per cent of Queensland’s total electricity use, mainly from bagasse but also from cane trash. The Queensland industry claims that it could potentially supply up to 20 per cent of Queensland’s electricity requirements.

australian sugar cane farms financial performance 2005-06



Australian sugar mills also produce more than 60 million litres of ethanol a year, using molasses as the feedstock. Molasses is a byproduct of sugar processing and is mainly used as a high energy feed for livestock. Australia produces enough molasses to manufacture around 270 million litres of ethanol a year. However, it is likely that the livestock feed market will continue to provide the highest returns from molasses production.

trade policies, sugar and ethanol

Despite long term efforts in various multilateral and bilateral negotiations to reduce distortions in the global sugar market, only limited gains have occurred. World markets for sugar and ethanol remain highly distorted and these distortions can be expected to adversely affect the functioning of the sugar market over the projection period. Barriers to trade in biofuels are emerging as an issue for sugar producers.

The United States, Japan and the European Union are the largest importers of ethanol and Brazil is the largest exporter. The United States is also an

important exporter of ethanol, produced largely from corn, mainly to other North American Free Trade Association countries — Canada and Mexico.

Like the world market for sugar, the world market for ethanol is distorted by a range of subsidies and market access barriers. In the United States, for example, there is a tariff and import duty on ethanol imports equivalent to a 25 per cent tariff. In the European Union, the tariffs are 45 per cent and 24 per cent on undenatured and denatured ethanol respectively. As well, in both the United States and the European Union, there are market access concessions that favour ethanol imports from developing countries. This is one of the reasons why Jamaica is a major re-exporter to the United States of Brazilian hydrous ethanol after its conversion to its anhydrous form.

If the market access barriers for ethanol in the United States and the European Union were removed, the world price for sugar would probably be considerably higher. It is possible that the import duty of US54 cents a US gallon (US14 cent a litre) on ethanol could be lowered to enable the United States to meet its ambitious biofuels supply targets.

world ethanol trade
5 year average to 2006

