## FORWARD SEASON SUGAR PRICES





This Price Management Fact Sheet will explain how forward season sugar prices are established and how they are converted into Australian dollars (A\$) per tonne.

Forward raw sugar prices are established using ICE#11 raw sugar futures contracts, but these must be converted into A\$ per tonne using foreign exchange contracts.

To convert a US\$ sugar price to an A\$ price we divide the US\$ value by the prevailing exchange rate.

For example, if the A\$/US\$ exchange rate is 0.8850 then a US\$400 per tonne sugar price is converted as follows:

$$\frac{A\$ Sugar}{Price} = \frac{US\$ Sugar Price}{Exchange Rate} = \frac{US\$400}{0.8850} = A\$451.98$$

The foreign exchange (FX) rates normally quoted daily in the media are 'spot' rates, meaning that someone wishing to exchange foreign currency today could expect to achieve an exchange rate somewhere close to that level quoted. However, there are also forward exchange rates, reflecting the rates that can be achieved on exchange of foreign currency at some point in the future.

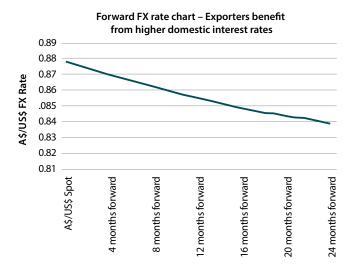
## Forward exchange rates can be beneficial for exporters

Forward A\$/US\$ exchange rates are usually lower (therefore 'better' from an exporter's perspective) than spot rates because of the interest rate differences between the US and Australia.

When interest rates are higher in Australia (than in the US), A\$/US\$ forward exchange rates will trade at a lower level than the spot rate. If this was not the case, risk-free profit could be made by borrowing

a sum of US\$ in the USA, converting that sum into A\$ and lending it out at a higher interest rate in Australia (because that money would yield a greater return) and then converting it back to US\$ at the same FX rate to repay the loan at a later date. For example, if interest rates were 3% in the US and 5% in Australia, the cost of borrowing in the US would be 3% but the return from lending in Australia would be 5%. This risk-free profit through exploiting the interest rate differential between Australia and the USA, is known as an 'arbitrage' opportunity. However, because financial institutions recognise any such opportunity, the consequent natural market forces act to lower the forward exchange rate wherever Australia's interest rate is higher than that in the US.

The following chart shows the impact of higher Australian interest rates compared with the US on a spot rate of 0.8773 on 30 October 2014.



Forward exchange rates can be used to great benefit for forward sugar price hedging by Australian sugar producers because they help enhance A\$ sugar price outcomes.

Using the previous FX chart as an example, if the futures price for the ICE#11 October 2016 position (e.g. 24 months forward) was US 18.31 c/lb and the spot A\$/US\$ was 0.8773, the 24 month forward exchange rate of 0.8390 would result in a forward A\$ sugar price of A\$481.12 compared with just A\$460.12 if the spot rate prevailed (US\$403.66 divided by 0.8773 equals A\$460.12).

ICE#11 Sugar 29-Oct-14

		Forward		
	Settle US	Fx Rate to		
Contract	c/lb	US\$/t	Oct 2016	A\$/t
Oct'16	18.31	\$403.66	0.8390	\$481.12

In this case, the forward exchange rate has improved the A\$ sugar price by some A\$21/tonne (\$481.12 - \$460.12).

It is therefore important to understand the two key elements in determining an A\$ Sugar Price, (i.e. the ICE #11 and the forward A\$/US\$ exchange rate).

## The linkage between forward sugar prices and grower forward pricing in Queensland

To facilitate grower forward pricing in Queensland, forward season sugar prices are established using a defined combination of ICE#11 futures contracts which closely match a standard Queensland season shipping program.

To enable a forward season hedging system, it was agreed within the sugar industry in 2008 to define a forward season pricing unit based on a standard shipping program. This forward season pricing unit comprises 6 futures lots using 1 lot of July plus 2 lots each of October and March plus 1 lot of May futures.

In essence, the underlying assumption behind the 1:2:2:1 pricing profile is that 50% of sugar (i.e. 3 of the 6 lots) will be sold to customers and shipped in the ICE#11 July and October shipping positions. These positions match approximately with the crushing season in Australia and limitations on storage capacity in the Queensland bulk sugar terminals, which creates a requirement for roughly 50% of the sugar to be shipped.

This definition of the forward season pricing unit allowed millers to offer pricing mechanisms to growers provided that hedging is done on the 1:2:2:1 futures contract profile. Forward A\$/US\$ exchange rate contracts are also used to convert all the US\$ ICE#11 futures prices into A\$ forward prices, thus enabling the calculation of an A\$ forward season sugar price. It is now quite common for growers to use forward pricing for up to 3 seasons forward.

Growers will see numerous forward season pooling and pricing mechanisms being offered and all are based on this 1:2:2:1 profile. These mechanisms have also been known as 'committed sugar pools' meaning that growers who participate in any committed sugar pools must supply sufficient cane equivalent to the nominal sugar exposure nominated to the pools, or otherwise bear the consequence (negative or positive) of over-hedged sugar futures and foreign currency positions.

Not all nominal sugar exposure is allocated by a grower to 1:2:2:1 pricing and pooling mechanisms. In fact, due to the risk and uncertainty regarding crop size from one year to the next, currently a maximum of 60% of a grower's estimated nominal sugar exposure can be committed to the 1:2:2:1 mechanisms. Excluding a small percentage of every grower's nominal sugar exposure which is allocated to the US Quota (normally 2-3%), any residual nominal sugar exposure not allocated to a committed sugar pool is allocated to a pool specifically intended to manage production risk. This pool is currently known as the Harvest Pool, and the sugar in this pool is priced according to when it is sold and shipped and thus will not conform to the 1:2:2:1 profile.

Further explanation regarding the different pools and pricing mechanisms will be provided in future Price Management Fact Sheets, and include an overview of the Harvest Pool and US Ouota Pool.

## **MICK AND TONY\***

Falling Chinese demand for coal and iron ore has resulted in significant falls in the value of exports from Australia and consequently the A\$ spot has fallen quickly to levels around A\$/US\$ 81 cents. While ICE#11 sugar prices have also fallen, the dollar has retreated to such an extent that forward sugar prices in A\$ terms have actually improved.

Mick and Tony both have little pricing concluded against their forward season cane deliveries and are encouraged by the recent improvement in forward season sugar quotes.

Indicative forward season sugar price quotes are provided via a daily email from Wilmar. For the 2016 season, the indicative price is shown in the following table.

				A\$ per
ICE#11	Lots	US c/lb	Forward FX	tonne
Jul-16	1	16.48	0.7924	
Oct-16	2	16.61	0.7894	
Mar-17	2	17.03	0.7858	
May-17	1	16.86	0.7846	
Weighted Average		16.77	0.7879	\$469.24

That is, the US\$369.71 price (i.e. US 16.77 c/lb x 22.046), at an FX rate of 0.7879 equals A\$469.24.

The 2017 Season price is also quoted today as A\$477.90 per tonne.



**MICK** decides he would like to increase the level of his forward pricing and places Price Requests just above current prices using Wilmar's Grower Website as follows:

	Quar	Order price (A\$/tonne)	
ICE#11	% of Nominal Sugar Exposure <sup>1</sup>	Tonnes	A\$ per tonne
2016 season	5%	122	\$475.00
2017 season	10%	244	\$480.00

**TONY** is also thinking of placing forward season orders but is comfortable to wait, as he believes there is a good chance of further weakness in the Australian dollar which he hopes will more than offset any weakness in ICE #11 prices.



<sup>\*</sup>Hypothetical case studies, not based on any individual farm or cane grower.

 $<sup>^{1}\,</sup>For\,further\,detail\,on\,Nominal\,Sugar\,Exposure\,please\,see\,Fact\,Sheet\,2\,available\,at\,www.wilmarsugarmills.com$