

Cotton Price & Marketing



This is an excerpt from UNE & Cotton Catchment Community CRC's 'Cotton Production Course'. These notes are one section of those provided for internal undergraduate students to round off their unit in cotton production



It must be emphasised that the course coordinator, University of New England (UNE) or the Cotton CRC do not, in any way, endorse one or another particular scheme or organisation for either the marketing or insurance strategy.

9.0 Marketing — Minimising Market Risk

9.1 Introduction

During the last ten years, the competitive nature of the international cotton market has given rise to an extremely diverse range of marketing alternatives for Australian cotton growers. The aim of this course is to outline a majority of the marketing tools available and discuss the methods available to hedge the various elements of the Australian cotton price.

The exact application for each marketing alternative will vary from grower to grower depending on their individual level of risk aversion, sophistication and understanding, annual budget and target returns, yield and price expectations. Practical examples and exercises illustrating the use of cotton futures, cotton options, and currency hedges are provided throughout this section on marketing. Finally, this section contains recommended guidelines for establishing a successful risk management program.

9.2 The Market for Australian Cotton

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|---------------|----------|-------------|------------|
| COTTON GROWER | MERCHANT | MILL | CONSUMER |
| (Producer) | (Trader) | (Processor) | (End user) |

Like all commodities, the price of Australian cotton is determined by supply and demand for that particular product. Approximately 98% of Australian cotton is exported into the international market (only 2 small mills remain in the domestic market), where it competes with growths from all over the world. In terms of volume of production, Australia ranks outside the top ten producing nations in the world and is therefore a relatively small player. However, Australia is amongst the top ten cotton exporting nations and, as such, the volume and quality of production in Australia can have a significant effect on the international market price (particularly during the second half of the cotton marketing year when the Southern Hemisphere cotton growths come on the market).

The international supply and demand for raw cotton is constantly fluctuating and, as such, cotton prices are extremely volatile. The following chart of Australian dollar gross per bale returns, between 1986 and 2008, illustrates how the extent of this volatility can impact on cotton producers' annual returns.

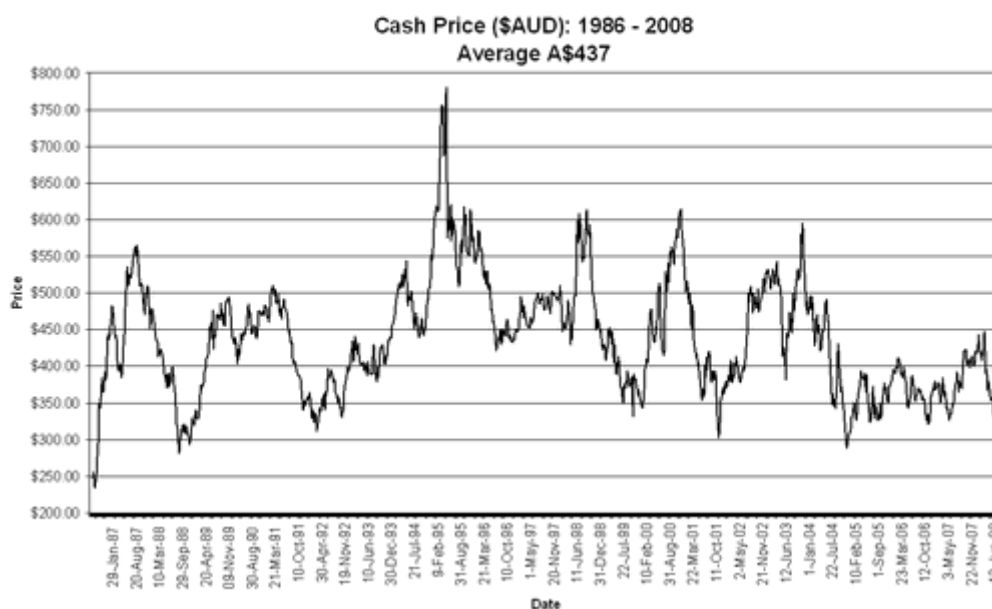


Figure 9.1: Gross Australian Cash Price Source: Namoi Cotton

9.3 Hedging Marketing Risks

The following information outlines methods to alleviate or 'hedge' against this marketing risk.

Marketing risk means volatile commodity prices, foreign exchange and interest rates.

Australian cotton growers are not only at risk to the fluctuations of the price of cotton in US dollars but also to the relationship between the US dollar (income stream) and the Australian dollar (production costs). Everyone knows of businesses which have failed because they were exposed to these risks. Though any company or individual would not be in business if a certain element of risk was not being taken; large amounts of risk can sometimes be profitable, but other times, devastating. Anyone who is worried that commodity prices or exchange rates are going to change is a potential '**hedger**'. A hedge is a defensive measure. Forward and futures markets provide a means of defence against changes in commodity prices and exchange rates. Options on futures allow similar defence but enable unlimited rewards for favourable market moves. Designing and implementing a hedging strategy requires that one has a thorough understanding of both the character of the risk and the intricacies of forward contracting, commodity futures and options.

9.3.1 Marketing Alternatives Available to Australian Growers

Forward contracts are customised agreements between two parties.

Cash contracts are usually agreements for the immediate delivery of commodities or for negotiated future delivery. A cash contract in which merchandise is not to be delivered immediately, but on an

agreed-upon future date, is known as a **cash forward contract**. In both these sales, certain common elements must be agreed upon. Price will be determined in reference to the other terms of the contract — quality, quantity, and the time and place of delivery.

Forward contracts involve yield and quality risks by both parties. In negotiating a cash forward contract, the buyer may require a guarantee of a specific grade or quality of the commodity from the seller. In the event the seller is unable to deliver that specified grade, it is common practice for the seller and buyer to agree on alternative price adjustments. When delivery occurs, the commodity is carefully examined and its grade determined. Payment of a premium is usual when the grade is higher than the standard, or a discount in price is accepted when the grade is inferior.

The following list sets out a range of the most common forward marketing alternatives for Australian cotton growers. A comprehensive list of possible marketing combinations is often governed by imagination and budget.

Fixed bale pool: is a commitment to deliver a specified number of bales to a 'pool' of bales with a particular marketing organisation. Both price risk and yield risk are borne by the grower, but the price risk is managed by the marketing organisation. Most pools have an indicative price attached and often once that price is no longer achievable, the pool will be closed. As with all pools, payment is spread over a period of time as delivery of cotton from growers, and sales to mills proceed.

Fixed acreage pool: is a commitment to deliver all the cotton produced from a specified number of acres to a 'pool' of bales within a marketing organisation. Once again, price risk is borne by the grower, but is managed by the marketing organisation. Growers only have to deliver that amount of cotton produced on that fixed acreage; so an acreage pool lessens yield / production risk. An acreage pool is also known as a 'seasonal' pool.

Minimum price pool: is similar to a fixed bale pool. A grower still bears production risk and some price risk, but a certain minimum return is guaranteed by the marketing organisation.

Balance of crop pool: is similar to the acreage pool, which is a commitment to deliver (to a pool), the balance of the crop over and above a certain amount already committed to fixed price contracts. Price risk is borne by the grower (but managed by the marketing organisation), and only that amount over and above the target production figure needs to be delivered.

AUD Fixed price: is a fixed Australian dollar cash price forward contract for delivery after ginning. Growers accept a certain fixed price and a fixed number of bales is agreed upon in the contract; thus, there is a fixed commitment to deliver.

USD Fixed price: is a fixed US dollar cash price forward contract for delivery after ginning. All terms are similar to a fixed AUD cash sale, except the grower can elect to be paid in US dollars, or can hedge the exchange rate at a later date.

Call Pool: a grower commits a certain number of bales to a call pool and elects to hedge the three components (futures, basis, currency) of the Australian dollar cash price separately, at his discretion. Growers can, subsequently, hedge the cotton futures price, the basis, and the exchange rate at different times to take advantage of favourable price movements as they occur (rather than locking in all three elements at once when one element may not be attractive). The product also generally allows for the purchase of futures options whereby a grower may buy a 'put' to place a floor in the futures component

of his pricing or may buy a 'call' against existing fixed contracts to participate in a higher futures market. Options have an upfront cost and this must be accounted for in determining their worth in the growers mix of marketing. There are only a very small number of growers who use the call pool on a regular basis and only a few of these use make use of options.

AUD/USD Minimum price: is a minimum price contract in either US dollars or Australian dollars for a fixed number of bales. The minimum price is contracted, usually at a discount to the prevailing fixed cash price on the day. The grower then elects to fix the final price on any subsequent increase in the cash market, on or before a certain expiry date.

As a guide, during the 1991 season, 55% of the Australian crop was sold in fixed bale and acreage pools, 10% in call pools, 20% in forward fixed price cash sales, and 12% sold after ginning for a cash price (ABARE, 1992). In the late 90's this mix changed to approximately 20% pools, 30% Call pool and 50% fixed. By 2005 the combination of smaller crops, a concentrating market together with industry issues associated with foreign exchange hedging resulted in the mix drifting to approximately 80% fixed and 20% pools. Historically many growers have made use of pool type structures in their tax planning to defer income.

The cotton marketing system is somewhat of a niche market when compared say to grain marketing. In the local cotton market there are now only between 500 to 1,000 producers. Merchants involved in the cotton market tend to build robust relationships with clients and indeed may be contracting forward contracts with these growers up to 4 years into the future. Likewise it appears that it is usually the cotton merchants approaching / chasing growers to lock in business. Only a very small proportion of cotton is traded on the spot market ie at harvest. In comparison the grains market is much larger (both in volume and geographically), has many more producers and merchants, and typically 60% is sold on the spot market or later. For the proportion that is forward sold this is typically for the current season only ie very little grain is contracted 2 years plus forward. Generally in the grains market growers tend to contact merchants regarding pricing levels and contract terms.

9.3.2 Elements of the Australian Cotton Price

The benchmark for determining the forward price for Australian cotton is the Intercontinental exchange (ICE) Cotton No2 contract (previously managed by the New York Board of Trade). US dollar cash prices at the gin, in Australia, are determined by the prevailing daily price for May or July futures (corresponding with the Australian cotton harvest period) plus a certain 'basis' to account for location, grade, local supply and demand conditions.

'Basis' can be a difficult term to understand. To deal with this it is best to focus on the underlying hedge market that being ICE futures. The standardised terms for ICE futures for example stipulate March delivery, a low grade cotton (4134), and delivery to 5 designated US warehouses. In Australia if we wish to make use of this market as our hedge market then we need to modify the terms and thus adjust the price. Locally we wish to take delivery May / July, stipulate a higher grade (3136) and set delivery to free on truck (FOT) the gin yard. Naturally modifying these parameters causes the price to change. This change is the basis.

The final element of the Australian dollar cash price is the prevailing exchange rate. This is not necessarily the spot exchange rate, but the forward rate for delivery in the Australian ginning period (ie

May to July). The following sub-sections outline the elements of the Australian cotton price and detail how each element can be hedged.

AUD Gross cash price per bale equals:

$$\frac{\text{(US\$/lb Cotton Futures price + US\$/lb Basis)} \times 500 \text{ lbs per bale}}{\text{AUD/USD exchange rate}}$$