For the 2001 crop marketing year, the US average price received by farmers for cotton was 32 cents per pound (Figure 1). This was the lowest average price in almost 30 years (since 1972). This situation was brought about by large US and foreign crops, continued decline in the US textile mill industry causing increased reliance on exports, a strong US dollar which required that prices be driven even further down to trade-competitive levels, and near record-level stocks.

As we consider the outlook for marketing the 2004 crop and look ahead to 2005, there are pending signs that this could be another year in which prices again struggle to reach levels that will be profitable for most cotton producers. Producers will again depend on Loan Deficiency Payments (LDP’s or POP’s), Marketing Loan Gains, or Option To Purchase (OTP) equity payments to provide any profit margin.

While there are some supply and demand factors that appear to mirror 2001 and thus strike fear in us, prices have not yet shown any tendency to drop to 2001 levels. At this writing, the large US and world crops are not out of the field and in the warehouse yet. All eyes will certainly be focused on the Chinese crop and any internal issues that might affect supply and demand.

It is also worth noting how quickly economic forces can change. Prices for the 2003 crop are expected to average over 60 cents per pound. While this is unlikely for the 2004 crop, looking ahead to 2005 reminds us that anything can happen. Prices for the 2005 crop will very likely be higher than this season.

**US Production and Demand Situation**

US farmers planted 13.76 million acres of cotton in 2004—up just 2% from 2003. The 2004 crop, however, is expected to be a record 20.9 million bales—14% higher. This is due to (a) a record yield of 759 pounds per acre and (b) a low acreage abandonment of just 3.9% which would be the lowest since 1997 (Figure 2). In fact, high abandonment (particularly in Texas) and/or disappointing yield kept the US from making 20+ million bale crops in many other recent
years (1995, 1998, 1999, and 2000). US farmers planted enough cotton acres to have produced a much larger crop that what was actually realized. Prices would have been even lower than they were if not for weather-induced supply management.

A 20.9 million bale US crop, if realized, would be a record crop—surpassing the 20.3 million bale 2001 crop.

Without question, the major fundamental market shift within the US cotton industry in recent years has been the decline of the US textile mill industry (Figure 3). US textile mills now account for only one-third of total purchases of US cotton compared 60% in 1997. The decline of the US mill industry has been due to lower costs in foreign mills and the rapid influx of foreign manufactured cotton products into the US.

While mill use has declined, total off-take (US mill use plus US exports) has actually been increasing and topped 20 million bales in 2003. For 2004, however, total off-take is forecast to decline by about 2 million bales—the first drop in demand for US cotton since 2000. For 2004, US mill use is forecast at 6.1 million bales compared to 6.49 million last year. US exports are forecast at 12.2 million bales compared to 13.8 million bales last year.

The major markets for US cotton exports are China, Mexico, Turkey, Indonesia, Korea Republic, Thailand, Canada, and Taiwan. These countries accounted for 80% of US export sales of the 2003 crop. China has become a major buyer of US cotton as its’ mill industry has expanded tremendously. When China experiences a short crop and needs imports, the US has typically supplied 40-60% of its’ need. Mexico has become the #2 buyer of US cotton since the passage of the NAFTA agreement.
In an export-driven US market, the price for cotton received by the US producer will depend heavily on China’s production and demand for imports, cotton production in countries that are our major trade competitors in the world market, currency exchange rates, and trade policies. As US exports have increased, its’ market share has also increased (Figure 4). From 1995-2000, US exports averaged about 24% of total world exports. 2001-2004, US share has averaged 39%. For the 2004 crop, market share is expected to decline from 42% to 39%-- a relatively minor reduction particularly in light of the expected large increase in foreign production and world stocks. This could signal that USDA’s export projection is high or that low prices will likely be needed to move that much cotton.

**Foreign and World Situation**

Foreign cotton production is currently forecast by USDA at 86.35 million bales—up 10.3 million bales or 13.5% from 2003. The total world crop stands at an estimated 107.25 million bales (Figure 5). If realized, this too would be a record crop. Most of the increase in foreign production is accounted for by one country—China. China increased acreage by 1.46 million acres in 2004 and is expecting a crop of 29.5 million bales—7.2 million bales above 2003. This represents 70% of the increase in foreign production for 2004. Larger crops are also expected in Pakistan, Central Asia (former Soviet states), and Australia.

On the demand side, world consumption of cotton is expected to top 100 million bales for the 2004 crop season. World demand is expected to be 100.85 million bales—2% above 2003. This would be a record level of use. Cotton demand has increased each year since 1998.

While the US textile industry has declined, world consumption of cotton has actually increased. Since 1997, US mill consumption of cotton has declined by over 5 million bales while foreign mill
consumption has increased by 19 million bales. What this means is that roughly 5 million bales of what used to be US mill business has been lost to overseas mills plus another 14 million bales in demand growth.

While the demand side has been trending upward and is expected to reach a record level in 2004-2005, price will be determined by supply. The 2004 world crop will be the first crop since 2001 and only the second crop since 1997 to exceed demand. Thus, stocks are expected to rise by 6.6 million bales and to the highest level since 2001. However, stocks will still be less than in 2001 and the stocks-to-use ratio will be 40% compared to 50% in 2001. So, while this will likely keep a lid on prices for the 2004 crop, there is hope that prices will not reach the very low levels experienced with the 2001 crop.

**Country Spotlight: China**

The Chinese textile industry has grown from 18.7 million bales of cotton use in 1998 to 32.4 million bales in 2003 and a projected 34.5 million bales for the 2004 crop year (Figure 6). China accounts for over one-third of total world use of cotton.

While China is expected to produce a record crop of close to 30 million bales this year, it will still fall 5 million bales short of meeting the needs of its’ mill industry. Provided that China’s mill industry remains at high levels, China’s cotton production will likely continue to fall short of demand—requiring use of stocks and/or imports. This will continue to provide an export opportunity for the US. Therefore, as previously stated, the price of cotton to the US producer will depend at least in part (if not greatly) on Chinese production, China’s demand for imports, and available competing supply of exports from other countries.

**Country Spotlight: Brazil**

In recent years, Brazil has emerged as a major factor in world cotton production and trade. It is widely believed that Brazil has even further potential as a cotton producer. Brazil will continue to be a factor in world cotton production, trade, and prices.

Brazil’s cotton acreage has increased from 1.7 million acres harvested in 1998 to a projected 2.7 million acres for 2004. During this time, yield has steadily improved. Yields now average over 1,000 pounds per acre. Brazil’s cotton production has increased from 2.4 million bales in 1998 to a projected 6 million bales in 2004 (Figure 7).

Brazil has gone from being a net importer to a net exporter of cotton. For the 2004 crop year, Brazil is expected to export 2.2 million bales of cotton compared to essentially none prior to 2000.
One troubling trend is the dramatic increase in carry-over stocks. Brazil currently holds 5.1 million bales in stocks compared to just 2.4 million bales in 2001. Brazil’s stocks represent 84% of its’ total annual use and 232% of its’ annual exports. (In fact, the US, China, and Brazil combined account for almost one-half of the world’s old-crop cotton inventory).

Increasing stocks at this pace are typically a troubling sign and it signals that Brazil would probably like to move some of this cotton. Price and trade competitiveness would then be key factors in doing so (perhaps this explains, at least in part, Brazil’s WTO complaint against the US).

**Price Situation and Outlook**

Prices for the 2004 crop (December futures as of this writing) are currently about 48 cents per pound. This places farmer cash prices around 45 cents +/- quality premiums and discounts. Hurricanes Frances and Ivan trimmed the crop in the Southeast and Hurricane Jeanne may also present further problems. Barring any significant reduction in the size of the US crop (Georgia and Alabama losses could total 600-750,000 bales or more) or other problems, prices may not be able to hold at this level. The burden of large US and world crops may be too much. USDA’s October report should provide further direction to the market. Until then, the path of least resistance for price seems down rather than up.

On the downside, prices could test the 40-cent level (the 44 cent level easily) on futures which would translate into cash prices in the mid 30’s to low 40’s for the farmer. On the upside, if the US crop comes in shorter than expected or problems develop in foreign crops, futures prices could easily challenge the 55-cent area or higher.

In summary, based on what we know of supply and demand at the present time, the likely range of pricing opportunities for marketing the 2004 crop appears to be 40-55 cents on futures (maybe 44-60 but this is more unlikely. This would translate into mostly 37-52 cents per pound cash price +/- fiber quality premiums and discounts.

The A-Index (world price) and US futures prices generally move together (Figure 8). The Adjusted World Price (AWP) determines any Loan Deficiency Payment (LDP) for the producer. An LDP is in effect when the AWP falls below the Loan Rate (52 cents/lb). Because the A-Index and US price tend to generally move together, when US prices are low the AWP will also be low—thus the total money a producer receives will depend on the relationship between the A-Index and US prices and not necessarily the prices themselves.
The producer can expect a Loan Deficiency Payment (LDP or POP) or Marketing Loan Gain on the 2004 crop. Presently and in recent weeks, the A-Index has averaged about 7 cents above New York nearby futures. The AWP adjustment or differential from Northern Europe for US grade and average location has been 15 cents below the A-Index. Therefore, the AWP has typically been about 8 cents below the nearby futures (+7 cents to the A-Index – 15 cents to the AWP).

Assuming this “spread” holds and assuming a basis of –3 cents, if the futures price was 40 cents, the AWP would be 32 cents and result in an LDP of 20 cents. An LDP plus cash sell would total 57 cents per pound (40 – 3 + 20 = 57). If the futures price was 55 cents, the AWP would be 47 cents and LDP would be 5 cents. An LDP plus cash sell would again total 57 cents (55 – 3 + 5 = 57). Unless cotton prices increase significantly and assuming this “spread” and basis, a combination of LDP+cash sell or Gain+cash sell or Loan+equity should total about 57 cents or better +/- fiber quality premiums and discounts.

From a risk management standpoint, perhaps the best approach for a producer to take on the 2004 crop would be to (a) take the LDP, sell cash cotton, and purchase an out-of-the-money Call Option or (b) place the cotton in government loan. For any cotton already contracted and priced for delivery, total money received on that cotton will increase in prices decline prior to harvest, delivery, and application for the LDP because the LDP will increase.

Holding cotton in storage has become increasingly risky and often unprofitable. In the past 4 crop marketing seasons, prices have declined during the storage period in 2 of 4 years and have risen enough to reward storage only 1 year of the 4 (Figure 9).

During periods when the AWP is less than the Loan Rate (when an LDP or Marketing Loan gain is in effect), when placing cotton in loan, how the producer fares depends on the relationship between the cash market and the AWP.
If the AWP falls in relation to cash prices or if cash prices rise in relation to the AWP, total money (cash price + loan gain or loan + equity) will increase.

The demand relationship for cotton appears to have shifted since 1999 (Figure 10). The causes for this are not known with certainty. For the 2001 crop, the world stocks-to-use ratio was 50% and the world price of cotton (A-Index) averaged 42 cents. In 1999, again with a 50% S/U ratio, The A-Index averaged 53 cents (higher but not significantly different). Compare this with 1997 and 1998. In 1997, the A averaged 72 cents with a S/U ratio of 53% and in 1998 the A averaged 59 cents with a whopping 57% S/U ratio. For 2003, it took at S/U ratio of 34% to achieve essentially the same prices as in 1997.

The current USDA forecast estimate for the 2004 world ending stocks-to-use ratio is 40%. Using the demand relationship illustrated in Figure 10, the estimated 2004 crop year average A-Index would be about 59 cents. Assuming the current minus 7-cent A-Index “spread”, this would place the 2004 crop US average futures price at 52 cents—within the likely forecast range discussed earlier.

Based on world stocks, supply/demand, previous price history, and recent price behavior, low prices (40-44 cents on futures) this fall should be sufficient to generate buying interest and pull prices back up. How low prices will go and prospects for trending up will depend on the level and pace of US exports.

Looking ahead to 2005, it would seem unlikely that the US and world could repeat with record crops. This year’s lower prices could discourage some acreage both US and foreign. This combined with more average yields would reduce production. Large carry-in stocks from 2004, however, would keep prices in check somewhat but 2005 crop prices should improve above 2004 crop levels.