ECONOMICS UPDATE

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Abstract

If current estimates are accurate, the '07 marketing year will be the first in five years with consumption significantly above production. Even if there is a slowdown in the demand, that relationship should hold true in '08 as well. The result would be further tightening of the balance sheet. The fundamentals are generally supportive of prices. In addition, cotton is strengthened by the spillover from other commodity markets. The December '08 contract is trading in the mid-70's while the '09 contracts have moved into the low 80's. With rising input costs and competition from other crops, the supply side of the equation calls for better prices. Demand remains the wildcard in the face of higher energy prices that require more of the consumer's disposable income and uncertainty about overall economic performance.

Introduction

To begin our review of the cotton market, let's recap the recent movement in cotton prices. Between August 2004 and June 2007, cotton prices, or more specifically the nearby New York futures contract and the A Index, generally moved between 50 and 60 cents per pound. That changed in the summer of 2007 as futures contracts moved into the low- to mid-60's and the A Index reached 70 cents. Reasons behind the price move will be covered in greater detail, but in short, a primary factor underlying the markets is a spillover from strength in other commodity markets. In the face of competition from stronger grain and oilseed prices, it became evident that a tighter balance sheet for cotton was likely as production was expected to fall short of consumption.

World Production

Looking at cotton production in more detail, USDA's December estimate put the world crop at 118.8 million bales. China remains the largest producer with a crop of 35.5 million bales, or 30% of world production. India now ranks second with a crop of 24 million bales, having surpassed the United States in 2006 and widening the gap in '07. Together, India and China are one-half of the world's production. With a crop of 19 million bales, the United States is the third largest producer, with Pakistan and Brazil rounding out the top five. Together, these countries account for almost 80% of world production.

We are well aware of the shift in U.S. cotton acres that occurred in 2007. Declines across the Cotton Belt put planted acreage at 10.8 million acres. Regionally, the Mid-South and Southeast showed the largest reductions of 35 and 32 percent, respectively. Slightly smaller declines occurred in the western cotton-producing states.

Prior to last year's planting time, a decline in acres was widely anticipated with the strong increase in prices of competing crops. While the final decision about which crop to plant takes into account a number of factors beyond relative prices – such as expected yields, input costs and rotational constraints – it is evident that the market was encouraging more acres of other crops.

A simple comparison of futures prices for the harvest-time contracts at planting time shows the increased competition for acreage. At planting time in '07, the ratio of the corn December '07 contract, measured in cents per bushel, to the cotton December '07 contract, in cents per pound, had increased to almost 7. In other words, the ratio is based on a corn futures price of almost $4.00 and a cotton contract trading close to $0.60. By comparison with the previous years, a corn-to-cotton ratio closer to 4 had prevailed with little deviation. A similar story holds for the soybean-to-cotton ratio, with the '07 value close to 14 while previous years were closer to 10.

The planting flexibility of the farm program, coupled with the prevailing market signals, contributed to the 29% decline. One issue of note is the adjustment in other countries – specifically, those countries that constitute the top 5 producers. '07 cotton acreage was either flat, or in most cases, up from the '06 number. First, the adjustment in U.S. acreage undermines criticisms that we hear about the U.S. cotton program – particularly in the international arena. It is clear that U.S. producers do respond to market signals and adjust acreage accordingly. Second, it begs the question as to why there have been no responses by other countries. There is no single reason that can be identified. In the case of China, their internal price situation is much different than what is observed in the international market. For India, corn and soybeans are not a significant part of the farmer's rotation and cotton's profitability has improved with recent yield increases. For Brazil, there is the issue of timing of Southern Hemisphere plantings. Now, the focus will be on the 2008 plantings and whether or not there is more adjustment.

World Mill Use

Globally, USDA's latest estimates put mill use at roughly 128 million bales. This compares to a '02-06 average of 109 million bales. While total mill use has increased in recent years, it has also become more concentrated across countries. For example, the "Big Three" of China, India and Pakistan now account for two-thirds of the world total. A decade ago, the three countries represented less than one-half of total mill use. Turkey and the United States account for the remainder of the top five.

Over the three-year span from 2004 through 2006, mill use grew by more than 8 million bales per year. Relative to previous decades, the '04 to '06 period represents unprecedented growth in mill use. For the current marketing year, USDA projects mill use to grow at a slower pace of 5 million bales. At the halfway point of the marketing year, can this level of growth be achieved at current price levels?

Cotton use by the textile mill not only depends on the price of cotton, but also on the price of their output – the yarn – and the price of competing fibers. A comparison of these prices from January 2004 to the present shows that the recent rally in cotton prices created a gap between the cotton price and both the yarn price and the polyester price. Specifically, using price indices with the 1995 average equal to 100 shows that cotton's price index is about 130 while the yarn index is approximately 115. The polyester price index in key Asian markets, excluding China, is also about 115, up from 105 in May 2007. However, it is important to note that each of the three indices were close in value in May, prior to the recent increase.

China's Cotton Market

As previously discussed, China is the largest producer and processor of cotton. Currently, their mill use is estimated in the range of 55 million bales. However, when talking about China, we must not forget the uncertainty around their data. What we do know is that their mill use is growing and should continue to expand in the future. Investment in spinning machinery continues. Also, China will have greater access to the U.S. market as restraints on selected categories of textile imports are scheduled to expire at the end of 2008. Their textile industry is not without challenges that could limit growth. These include rising energy costs, tighter credit access and environmental concerns.

The growth in mill use has outpaced China's cotton production and established China as the largest importer of raw fiber. Recently, imports ranged from 10 and 20 million bales per year, with between 5 and 9 million bales being U.S. cotton. While China is a valued customer, the concern of the industry is the manner in which they administer their basic import quota of approximately 4 million bales. While a nominal import duty of 1% is applied to imports under this quota, the bigger concern is the manner in which the quota is allocated. In addition, imports above the initial 4 million bales are assessed a variable levy that ranges between 5 and 40%.

The combined effect of the variable levy and the import allocation allows China to support internal cotton prices at levels well above the world market. Regardless of international signals, their prices range between 75 and 80 cents per pound. The result is reduced competitiveness relative to manmade fiber and restricted imports.

India's Cotton Market

After China, India is now the second largest producer and processor of cotton. They also devote more area to cotton production than any other country. While their textile industry has been expanding, the most notable development in the Indian market is cotton production that has more than doubled in the last 5 years. The growth in production is largely the result of improved yields. In 2002, India averaged about 270 pounds per acre. The average across all other cotton-producing countries was 650 pounds. By 2007, India's yield had grown by more than 200 pounds per acre to 490 pounds. Much of the yield growth can be attributed to better inputs and better varieties. Currently, more than one-half of India's acreage is planted to biotech varieties. With yields in other countries averaging 760 pounds, India has the potential and is expected to expand production in the future. The improved yields contribute to better profitability for cotton and limit their inclination to switch to alternative crops.

The growth in cotton production has allowed India to establish itself as a significant exporter of 5 million bales. They have also been very aggressive in pricing their cotton below comparable growths from other countries. A comparison of India's quote for 31-3-35 type cotton and the average of the other 5 lowest quotes show a consistent gap of 2 to 4 cents. At times, the gap approaches 5 cents. Since the U.S. and India are often selling into the same markets, this has a direct impact on the U.S.'s ability to export cotton. While China is in many ways still the primary concern, India is a close second.

U.S. Cotton Demand

The U.S. retail market remains the largest market for cotton textile and apparel products, purchasing the fiber-equivalent of 23 to 24 million bales. That comes to roughly 38 pounds per person. Unfortunately, an ever-increasing share of the U.S. retail market is supplied by imported textile products. As a result, mill use remains under pressure and has now fallen below 5 million bales.

The resulting decline in mill use in the United States has left the industry in a position of being increasingly reliant on exports. That brings its own set of challenges for the industry. The necessity of delivering cotton in a timely and competitive manner has never been greater. The reliance on exports also brings greater volatility in overall demand, and potentially prices, as well.

China, Turkey and Mexico constitute the top 3 export customers and account for 60 to 70% of total U.S. exports. The '06/07 marketing year was disappointing with exports of only 13 million bales. To a large extent, the drop from the previous year is a result of the loss of the Step 2 provision of the marketing loan program.

For the current marketing year, growing global demand should allow U.S. exports to recover. Year-to-date data suggest better exports, but there is still a question as to the magnitude. The pace needs to improve to reach the USDA estimate of 16.2 million bales. It is typical for exports in the second half of the marketing year to improve, but increased purchases by China are necessary.

Looking Ahead to 2008

Since the '07 planting season, cotton prices have improved with the December '08 contract trading roughly 15 cents above last year's December contract. However, the competition from other crops is as strong, if not stronger, than last year. Based on current futures prices for the harvest-time contracts, soybeans and wheat are showing the most notable gains relative to cotton. The soybean-to-cotton ratio is at 15, compared to a historical average closer to 10. For winter wheat, the values in early November suggested a ratio of 10. In the case of corn, the higher cotton prices have largely kept pace with corn.

Based on the current economics, it is reasonable to understand how most projections by private forecasters and market analysts put U.S. cotton acreage between 9 and 10 million acres, as compared to 10.8 million in '07. In addition to the economic signals, there are also concerns about water availability in California that could lower acres.

While there are ample reasons to expect acres to fall further in '08, there are also some factors that could limit further declines. First, there were significant shifts in '07 and growers with vertical investments in gins and warehouses might be reluctant to make another significant reduction in cotton acreage. Second, in a number of counties, crop insurance data show shifts of 50,000 acres out of cotton and into grains. It may be the case that much of the '08 adjustment occurs on those same acres. In other words, we continue to see those acres now shift from grain into a double crop of wheat and soybeans.

At this point in the year, much of this is still economists making educated guesses. In the next month, there are two releases of survey-based data that will give us a better indication of intentions. First is the winter wheat acreage report released by USDA on Friday, January 11th, and second is the NCC's annual survey of cotton acreage intentions, to be released on February 8th.

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