Cotton Market Outlook

2021 Cotton Tour
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Overview

• Supply and Demand Update
• Prices and Outlook for 2021 and 2022.

“In marketing, we must play the hand we are dealt; the goal is to maximize the outcome, while managing risk, subject to resources and constraints.”
Nearby monthly futures have closed above $0.90, 8.8% of the time; and above $1.00, 5% of the time.

81 cents is the 80th percentile; Dec 2022 at ~84 cents.
SUPPLY AND DEMAND UPDATE

US, Global, and Trade
Significant uncertainty remains for 2021 production. US stocks projected to be the lowest since 2016/17.
U.S. Production

- Delayed planting in Tennessee.
- Adequate moisture in Texas.
  - Reduced abandonment in 2021 compared to 2020.
- Lower national average yield.
  - Low abandonment means that a lot of low yielding dryland cotton will get harvested and pull down the overall U.S. average yield.
  - Delayed maturity of the crop in many states, including Tennessee.
  - Hurricanes/storm damage.
Percent of Planted Acres Harvested, 2000-2021

- TN: 90.3-99.3%
- US: 63.5-97.5%
- TX: 37.7-96.4%
- US-TX: 90.9-98.9%

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US-TX: 90.9-98.9%
USDA August Crop Production report projects below trend line yields for 2021.

Yield (lb/acre)

Upland Cotton Yield, 1980-2021

y = 15.811x + 389.12
R² = 0.7817

y = 8.4287x + 524.16
R² = 0.7486

y = 10.278x + 316.2
R² = 0.726
Demand has been very strong. Are we replacing past demand, meeting current demand, or borrowing from future demand?

Source: https://apps.fas.usda.gov/psdonline/app/index.html#/app/advQuery
World Cotton, Corn, Wheat, and Soybean Consumption per Person, 1964 to 2020

Compared to 1964 per person consumption:
- Soybean: 1,223%
- Corn: 216%
- Wheat: 130%
- Cotton: 98%
US Cotton Exports **Globally** - Monthly Accumulated Value ($), 2016/17 to 2020/21

US Cotton Exports to **China** - Monthly Accumulated Value ($), 2016/17 to 2020/21

US Export Sales Commitments to **China**
Supply and Demand Summary

• US stocks have retreated to 3 million bales (down from 7.25 million).
• Final US production in 2021 is still uncertain.
• Global stocks are down.
• Drought in Central Asia.
• Demand has been strong.
• Export commitments to China are substantially lower than the start of the 2020/21 marketing year.
• Per capita cotton consumption has been stagnant.
• Has strong past and current demand eroded future demand?
PRICES AND OUTLOOK

Past, 2021, and 2022; and Input Prices
17.7% Stocks-to-use ratio projects a MYA price of 75.1 cent for 2021/22 with a range of 69.8 to 80.5 cents.
December Futures Contract (Daily Close Jan 1 to Expiration)

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<td>Average</td>
<td>88.0</td>
<td>113.2</td>
<td>79.3</td>
<td>83.8</td>
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<td>63.9</td>
<td>65.3</td>
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<td>Min</td>
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<td>Range</td>
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<td>31.9</td>
<td>18.5</td>
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<td>21.1</td>
<td>9.3</td>
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<td>22.3</td>
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<tr>
<td>MYA Price</td>
<td>81.5</td>
<td>88.3</td>
<td>72.5</td>
<td>77.9</td>
<td>61.3</td>
<td>61.2</td>
<td>68.0</td>
<td>68.6</td>
<td>70.3</td>
<td>59.6</td>
<td>66.5</td>
<td>80.0</td>
</tr>
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How does the marketing year average price compare to offerings in futures markets and cash markets?
December Cotton Futures (CTZ)

- Colored bars Dec 21 futures.
- Black line Dec 22 futures.
- Strong uptrend starting April 2020.
Cotton Price and Outlook Summary

• Bearish Factors
  – High prices, COVID, shipment delays, limited supplies of quality, competition with synthetic fibers, USD strength, geopolitical environment, what happens after Phase 1 completion, and global economic uncertainty.

• Bullish Factors

• A case can be made for higher prices, but risk management should be a primary concern.

• Growers have a wealth of marketing tools, marketing loan, forwarding contracting, futures hedges, the options market, and/or a combination.
Managing Price Risk

• Remove some additional price risk for the 2021 crop (for illustrative purposes not a trading recommendation):
  – Protect against the downside:
    • Buy an 88 cent Dec 21 put option 2.31 cents establishes an 85.69 cent futures floor.
      or
    • Buy an 88 cent Mar 22 put option 4.42 cents establishes an 83.58 cent futures floor.
  – Benefit from an upside move after selling the cash crop:
    • Buy a 95 cent Mar 22 call option for 5.19 cents gain above 100.19
Input Prices

- **Inflation**
  - As at July 5.4%; Energy 23.8% from BLS.
- **Increased substantially year-over year.**
  - Land Rent: 1,150 lb/acre x 0.85/lb = $977.50
  - At 25% share = $244.38/acre land payment.
  - Equipment cost and availability (including parts).
  - Crop protection / seed.
  - Diesel fuel.

Tennessee: Ten Year Rolling State Average of 25% of Gross Cotton Revenue, 2000-2020

![Graph showing the trend of cash rent and 25% of cotton revenue from 2000 to 2020.](image-url)
What happens if input prices remain high and prices retreat? We have more tools to manage output price risk than input price risk.