

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.



## THE IMPACTS OF THE ELIMINATION OF COTTON STORAGE CREDITS ON THE U.S. COTTON INDUSTRY

Darren Hudson, Director Suwen Pan, Research Scientist

> CERI-TR-09-01 March 2009

# Cotton Economics Research Institute Report

### THE IMPACTS OF THE ELIMINATION OF COTTON STORAGE CREDITS ON THE U.S. COTTON INDUSTRY

#### **Executive Summary**

A Report Prepared by the Cotton Economics Research Institute, Texas Tech University
Darren Hudson, Director
Suwen Pan, Research Scientist

The impacts of the removal of the cotton storage credit were modeled using the Global Fibers Model at the Cotton Economics Research Institute at Texas Tech University. A 5-year baseline was estimated under existing policy. The impacts of removing the storage credit was simulated and compared with the baseline.

#### **Key Assumptions:**

- Macroeconomic assumptions in the FAPRI baseline are maintained
- No other policy changes either in the U.S. or globally
- Previous estimates by the National Cotton Council suggest that the average storage charge for cotton is \$24/bale or 4.5 cents/lb. Farmer's Cooperative Compress provided historical data to suggest that their average was \$11/bale or 2.3 cents/lb., although they indicated that they were likely on the low end of storage tariffs. We use the FCC as the lower bound and the NCC as the upper bound.

#### Key Model Findings:

- Elimination of the storage credit will result in an estimated 2.34% to 4.55% decline in farm price in the first year with an average price reduction of 0.78% to 1.46% over the 5-year period. This translates into an approximate decrease of \$144 million to \$268 million in revenue resulting from market sales over the 5-year period, excluding government payments.
- Elimination of the storage credits will result in a 1.48% to 2.93% increase exports in the first year, with an average annual increase of 0.68% to 1.24% over the 5-year period. This is mainly due to lower U.S. prices.
- The policy change only results in a minor annual average decrease of 0.04% to 0.14% in production.
- Ending stocks decline by 2.56% to 5.05% in the first year, with an average annual decrease in ending stocks of 5.67% to 11.24%.

#### Qualitative Discussion (items not addressed in the model):

• When prices are low (as they are forecast to be for several years), elimination of the storage credit may actually lead to a greater probability of forfeiture of cotton stocks to the government, thereby increasing government costs. That is, when prices are low, the storage credits allow for an orderly marketing through time. If producers are forced to pre-pay for storage, they may be more likely to forfeit the cotton to the *CCC* to avoid lengthy storage and higher storage charges, thereby increasing government costs.

- The level of reduced ending stocks suggested by the model leads to some concern of increased
  within-season and across-crop year price volatility. Because revenue insurance products are
  priced on the basis of the volatility of the underlying commodity price, increases in price
  volatility will increase insurance premiums. For those not utilizing revenue insurance, risk
  management costs will likely increase because options prices on futures contracts will likely
  increase along with volatility.
- The impacts of the above are exacerbated by the recent events in the cotton market with large price movements resulting in high margin calls and the bankruptcy of several cotton merchants. As such, there is a greater reluctance of merchants to enter into forward contract for fear of excess risk exposure in derivative markets as well as a reluctance of producers to enter into financial agreements with firms that have a higher probability of bankruptcy.