Price Volatility in the World Cotton Market: Causes, Impacts, and Mitigation

Plastina, A. and T. Townsend
International Cotton Advisory Committee (ICAC)
USDA Outlook Forum
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Factors Affecting Cotton Prices in 2010/11

A Index, US cents/lb

- Unexpected surge in demand
- Speculation surges
- Unexpected government interventions
- Floods in Pakistan
- Low stocks
- Broken contracts (sellers)
- Collapse in mill use
- Broken contracts (buyers)

2010/11
Price Volatility by Season: Cotlook A Index

Difference with respect to season average

Season highest value

Season lowest value

2011/12: 1 August – 21 February
Price Volatility: Cotlook A Index
First 7 months of each season

Difference with respect to season average

Season highest value

Season lowest value

August – February
Price Volatility by Season: Cotlook A Index

Coefficient of Variation

2011/12: 1 August – 21 February
Price Volatility: Cotlook A Index
First 7 months of each season

Coefficient of Variation

August - February
Ranking of Cotton Price Volatility among 64 Commodity Prices (RS)

2011/12: August - February
Price Level vs. Price Volatility:
1973/74 – 2010/11

Volatility of A Index

A Index in US cents/lb

2010/11
Impacts of Volatility

- Drop in Market Share
- Industry Exit
- Defaults
- Increased Cost of Hedging
Market Share of Cotton in World Textile Fiber Consumption

Average 1960-2010

Percent

35.6
33.5

LARGEST MERCHANTS

Avg. Trading Volume, Thousand Tons

- 1994: 360
- 2006: 470
- 2010: 690
Capital Requirements

2007: $6 in Credit per $1 in Equity

2010 & 2012: $3 in Credit per $1 in Equity
ICA Arbitrations

2003 2005 2007 2009 2011
2 cent Option Premiums
December Contracts
February each year

2007: 4.6 cents out of money
2010: 14 cents out of money
2012: 19 cents out of money
Tools of Mitigation

- Price suppression will not work
  - Hedging Instruments
  - Transparent Policies
- Enforcement of Contracts
  - Timely Statistics, Metric Measures
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Average A Index vs. Volatility Measures by Seasons

Relative Spread

Coefficient of Variation

2010/11
Cotlook A Index 2011/12

A lindex, US cents/lb

Aug-11 Sep-11 Oct-11 Nov-11 Dec-11 Jan-12 Feb-12
Changes in Industry Structure

Firms exited in 2008
Jobs were lost in 2011

Multi-commodity firms replacing traditional family-owned cotton businesses