

Where will cotton be  
in 10 years time?  
A vision for the future.

Plexus Cotton Limited

March 2011



*“Trying to predict the future is like trying to drive down a country road, at night, with no lights, while looking out the back window.”*

(Peter F. Drucker, writer.)





# Cotton Overview.

“From over-production to over-consumption.”

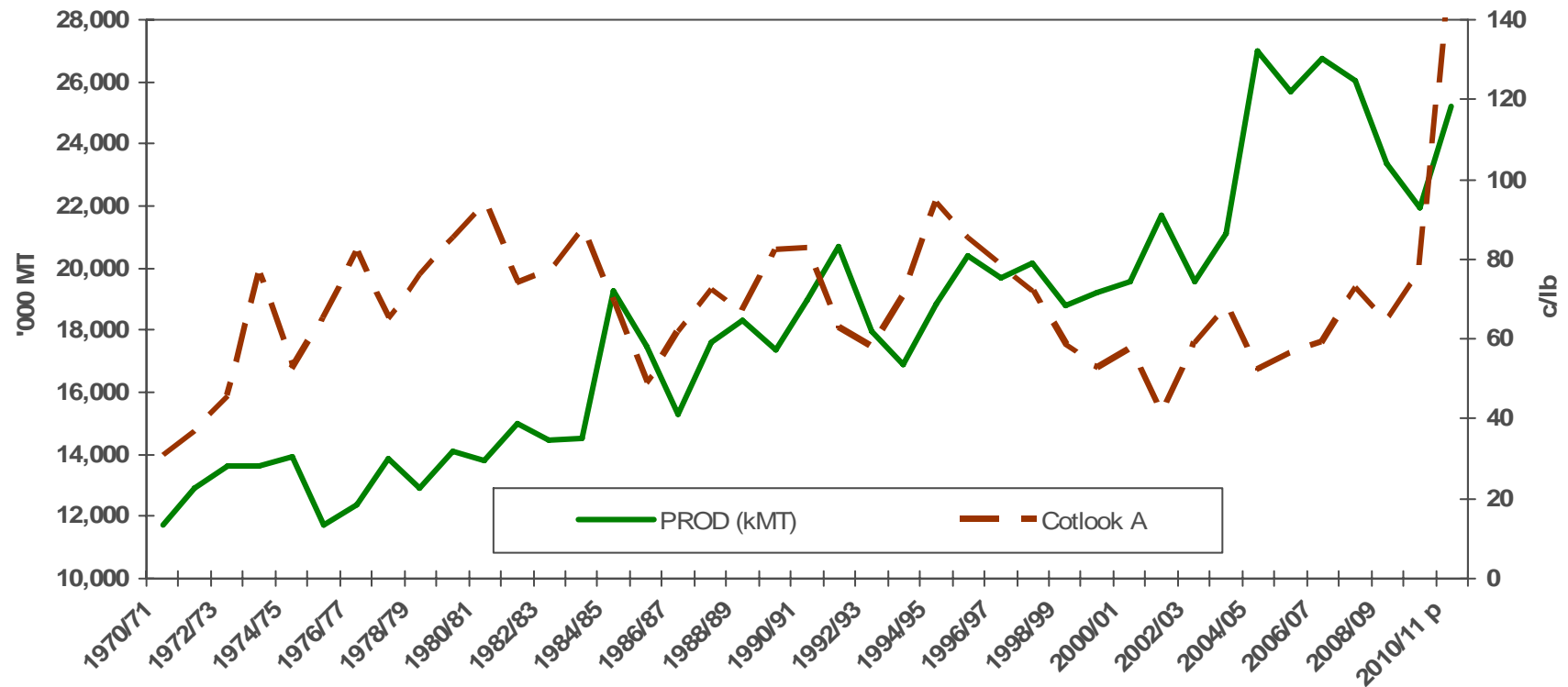




# Production



# Historical Production



Source: ICAC "Cotton World Statistics"

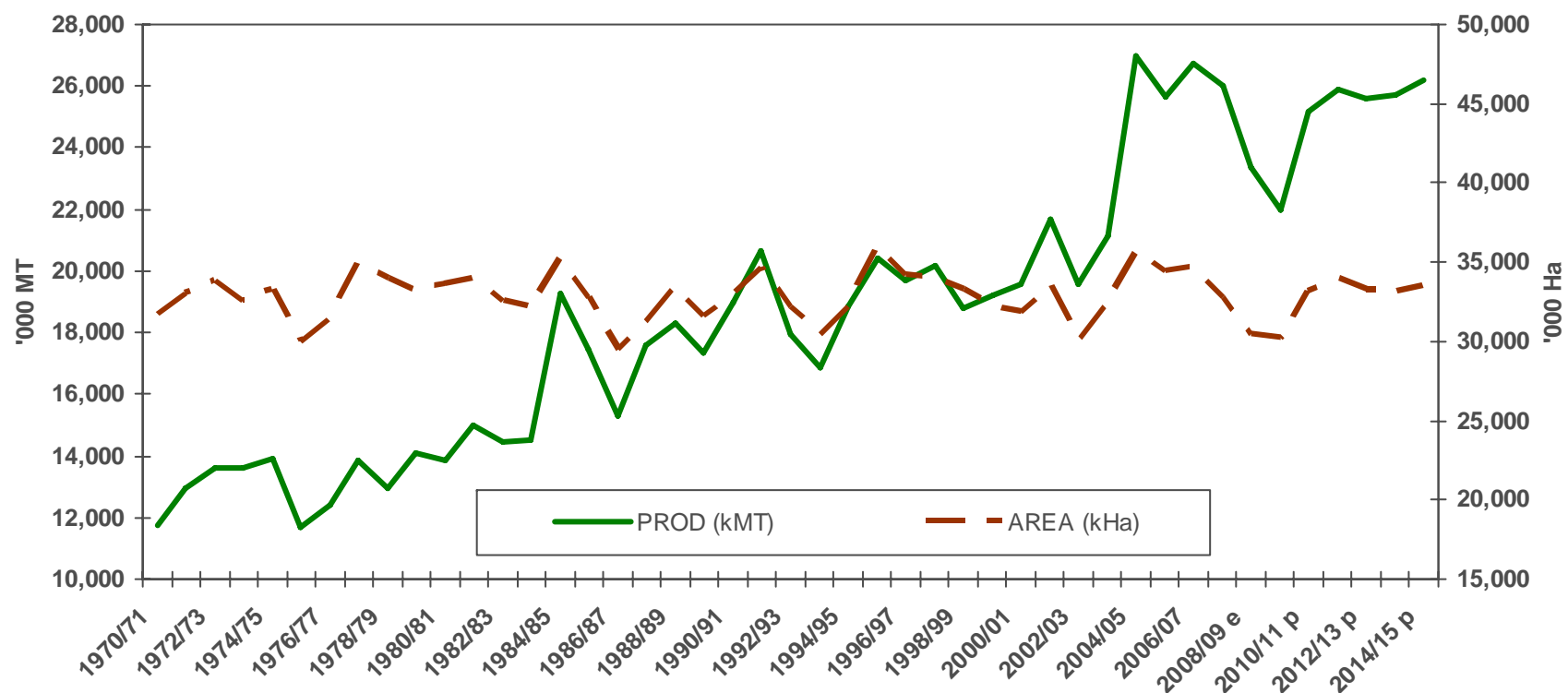


# Historical Production

- 40 years trending upwards.
- Over-production.
  - U.S. Farm Bill / E.U. Subsidies
  - Artificially low prices?
  - WTO & Brazil
- Early 2000's: GM production explosion

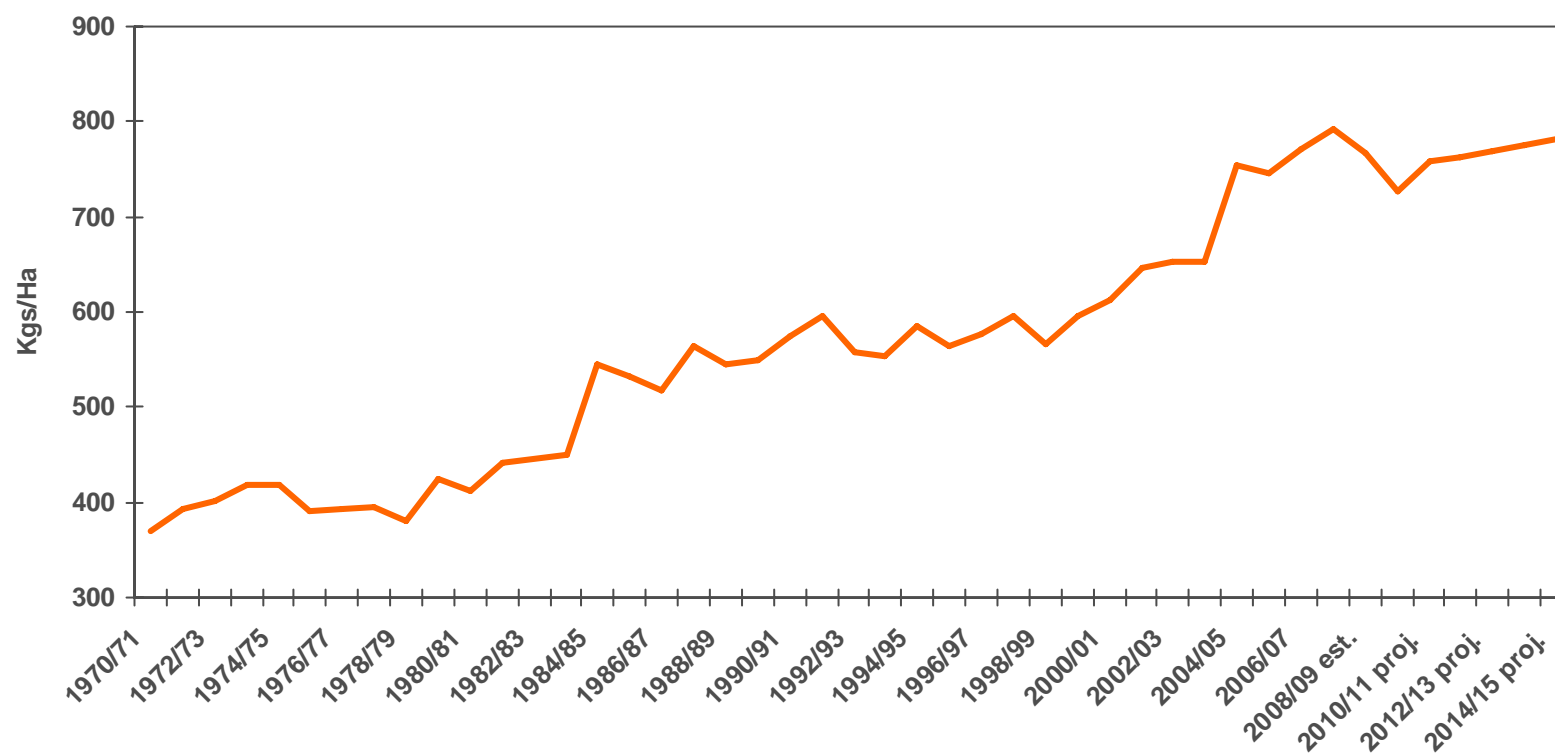


# Limited Planted Area Variation.



Source: ICAC "Cotton World Statistics"

# Yield Gains



Source: ICAC "Cotton World Statistics"





# Acreage Outlook

- Irrigated cotton acreage limited by water constraints.



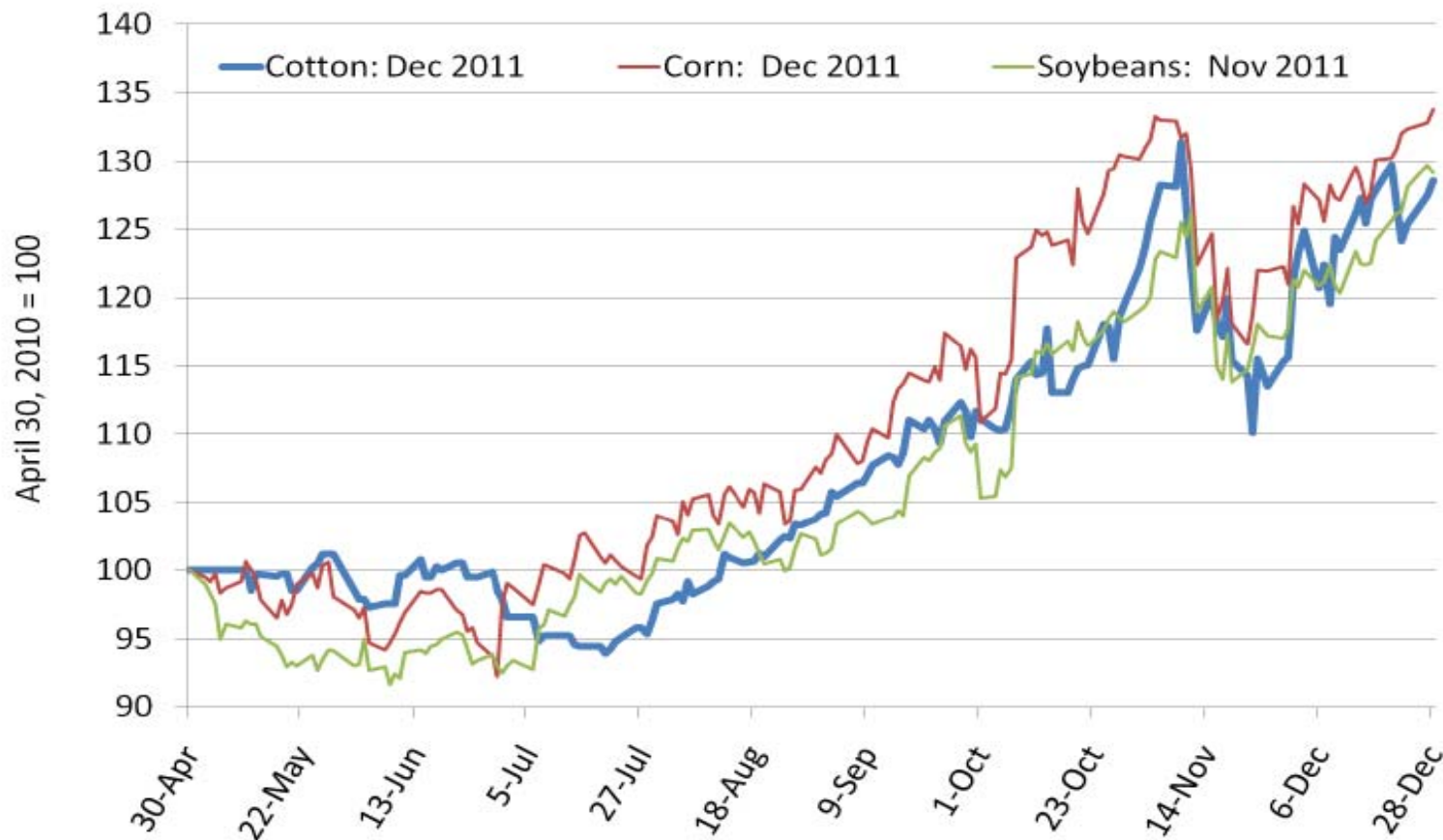


# Acreage Outlook

- Irrigated cotton acreage limited by water constraints.
- Competition for acreage between cotton and grains.



# Acreage Outlook: Comparative Crop Prices



Source: "Impact of Demand Driven Cotton Cycle" Lea - ITMF Textile Value Chain Meeting, 2011P



# Acreage Outlook

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- Food before fibre.



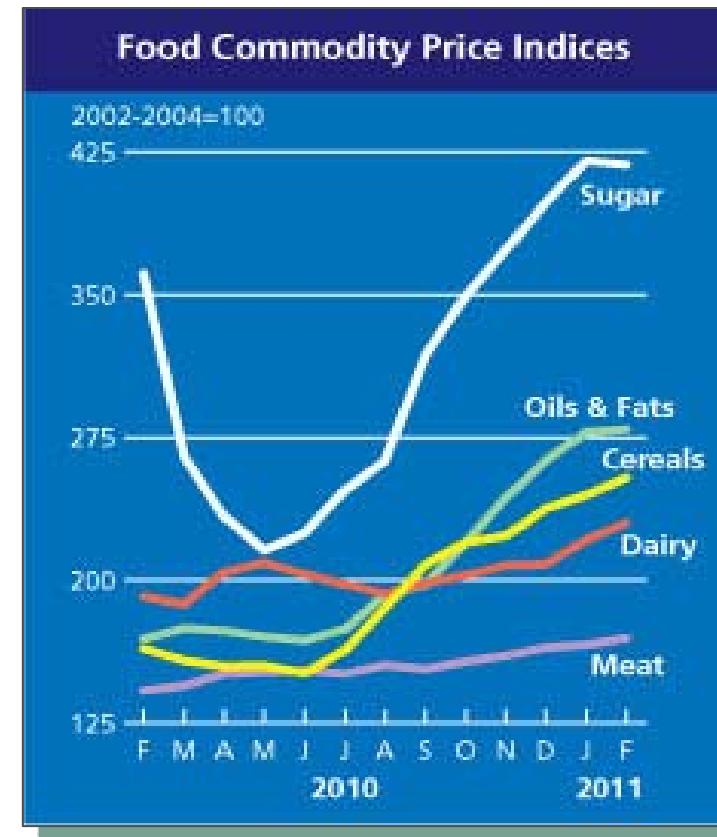


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- Food before fibre.
- Ethanol mandate displacing food acres.

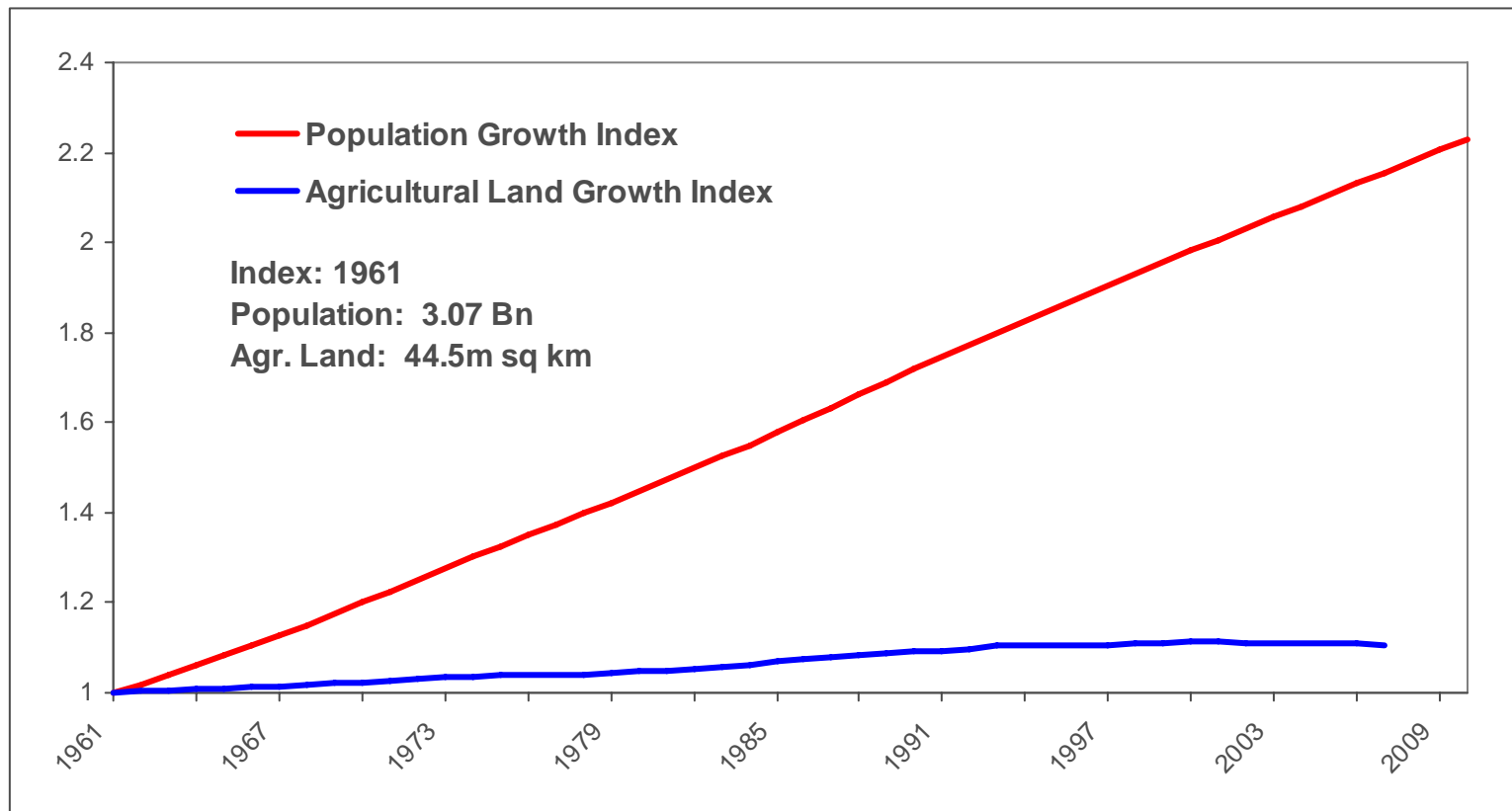


# Food Commodity Prices



Source: Food & Agriculture Organization (U.N.) – March 2011

# Acreage Outlook: Population v Agricultural Land.



Source: World Bank



## Yield Outlook:

### Can yields continue upwards?

- ICAC May 2010: “The incoming technological innovations are expected to have greater impacts on production costs than cotton yields.”
- Limited scope for nearby technological increases.
- Potential of bio-engineering & gene technology is difficult to predict.
  - Heat/cold/drought resistance.
  - “Make unsuitable land suitable?”







# Production Outlook

- Strong prices will encourage production.
- Fierce acreage competition from food, feed and fuel crops will limit potential production gains.
- Yield increases more gradually and depending upon technological advancement.

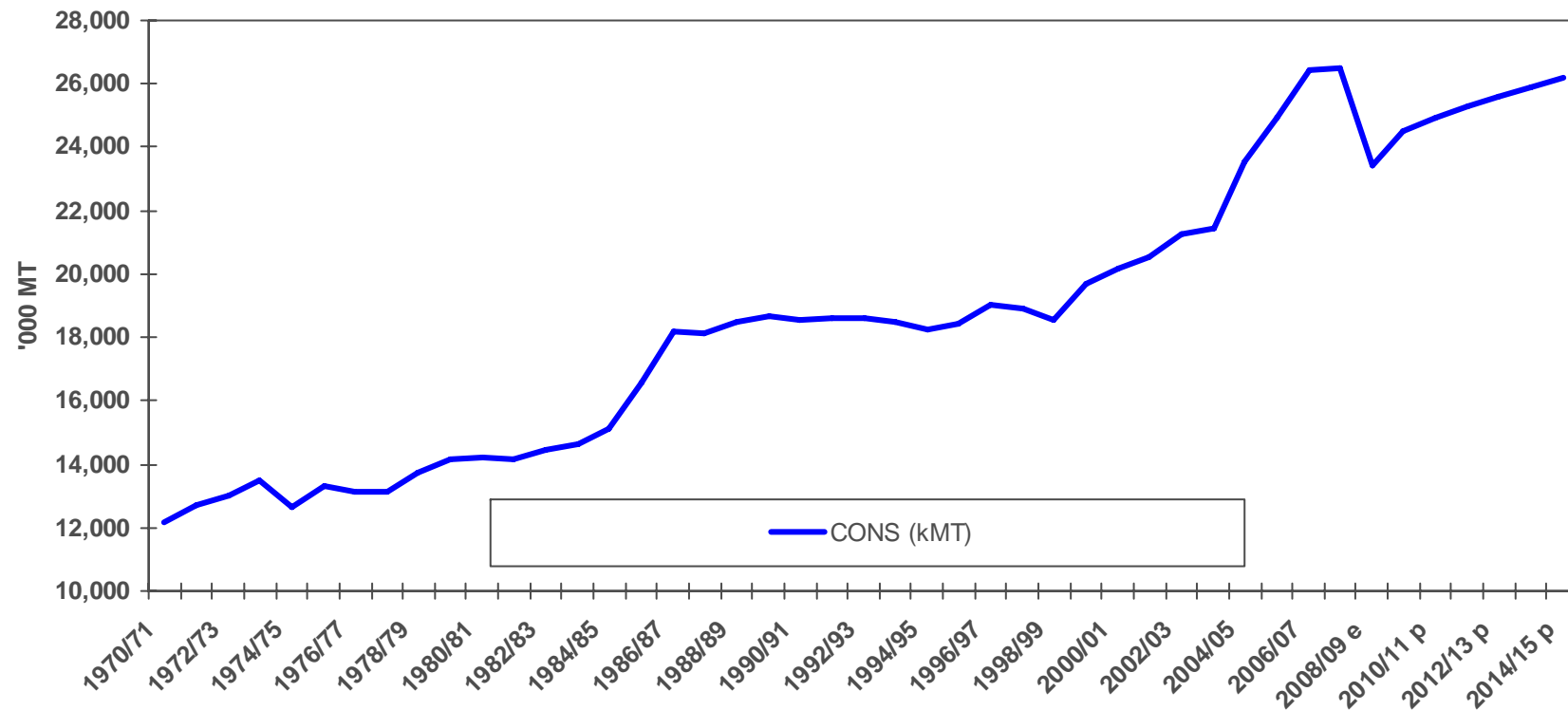




# Consumption



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Source: ICAC "Cotton World Statistics"

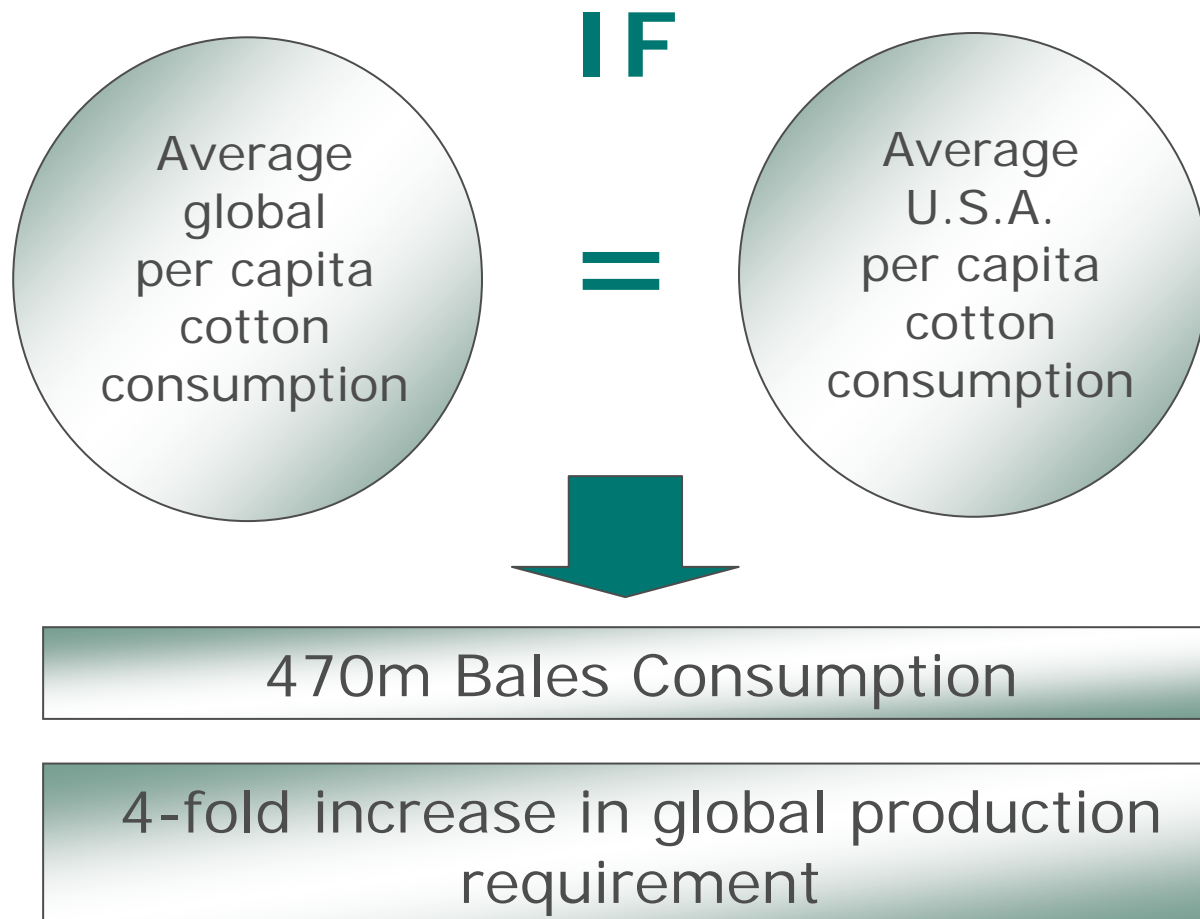


# Consumption.

- 2004/05 onwards: BRIC country awakening.
- Population migration & middle class expansion.
  - Increasing textile demand
  - Increasing protein demand
- A consumption-driven world economy.

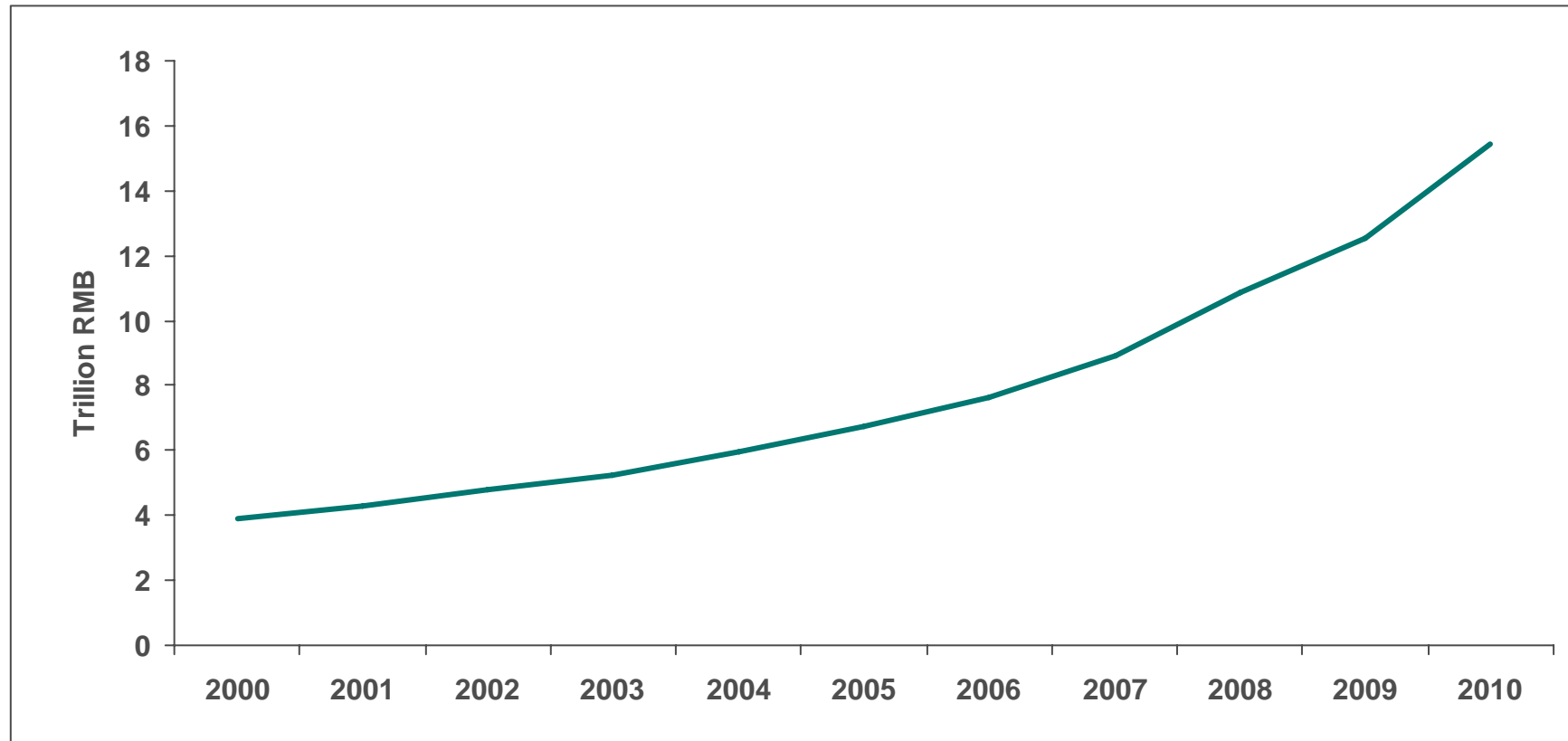


# Global Cotton Fibre Consumption

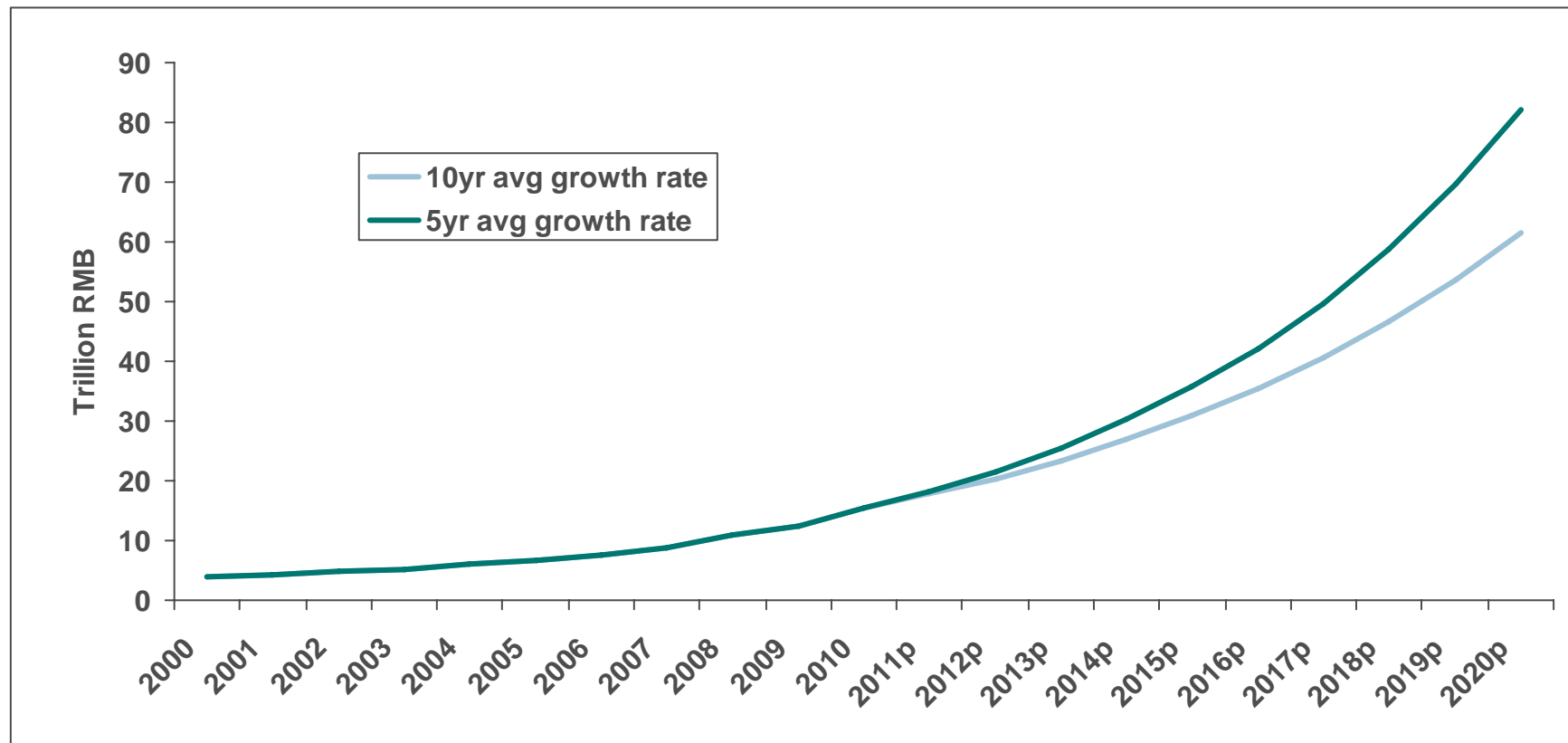




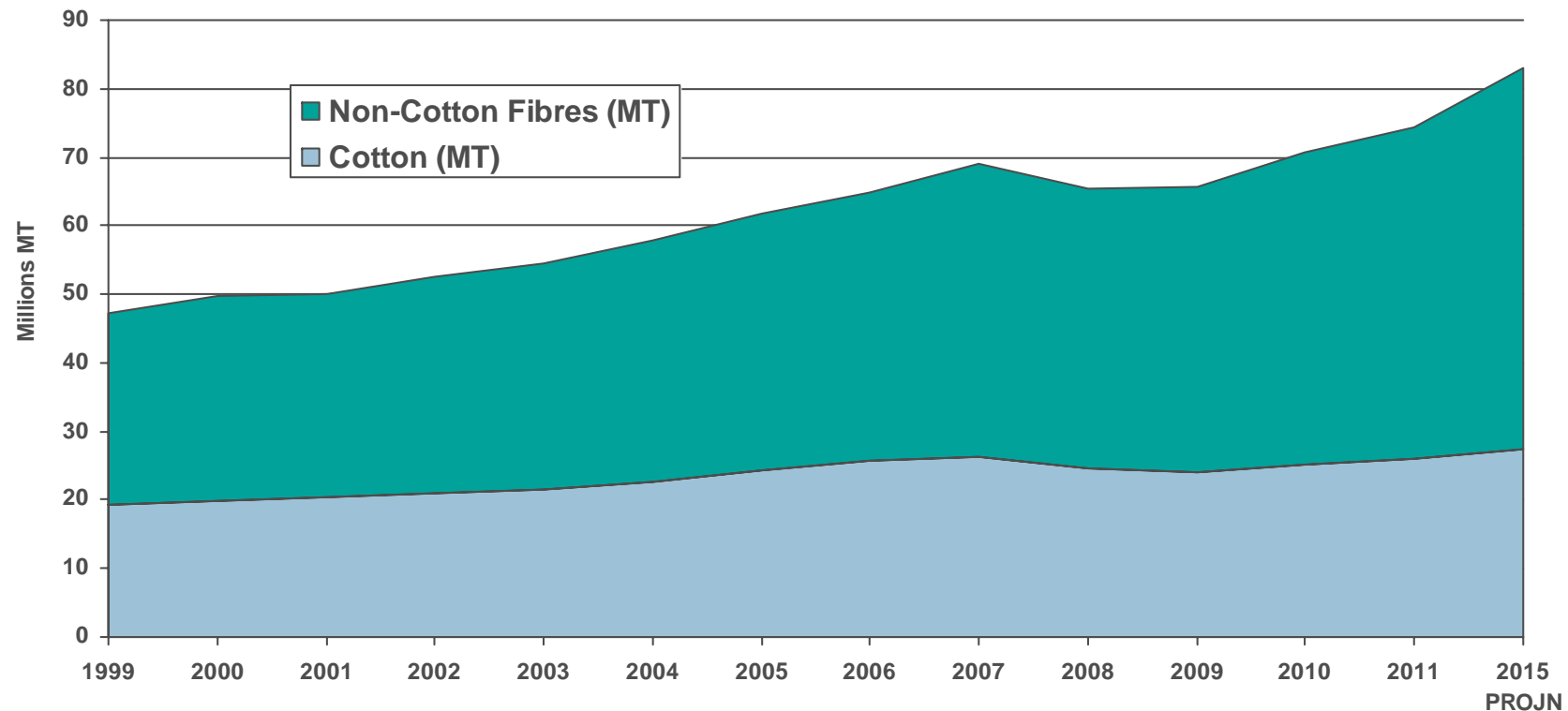
# PRC Retail Sales



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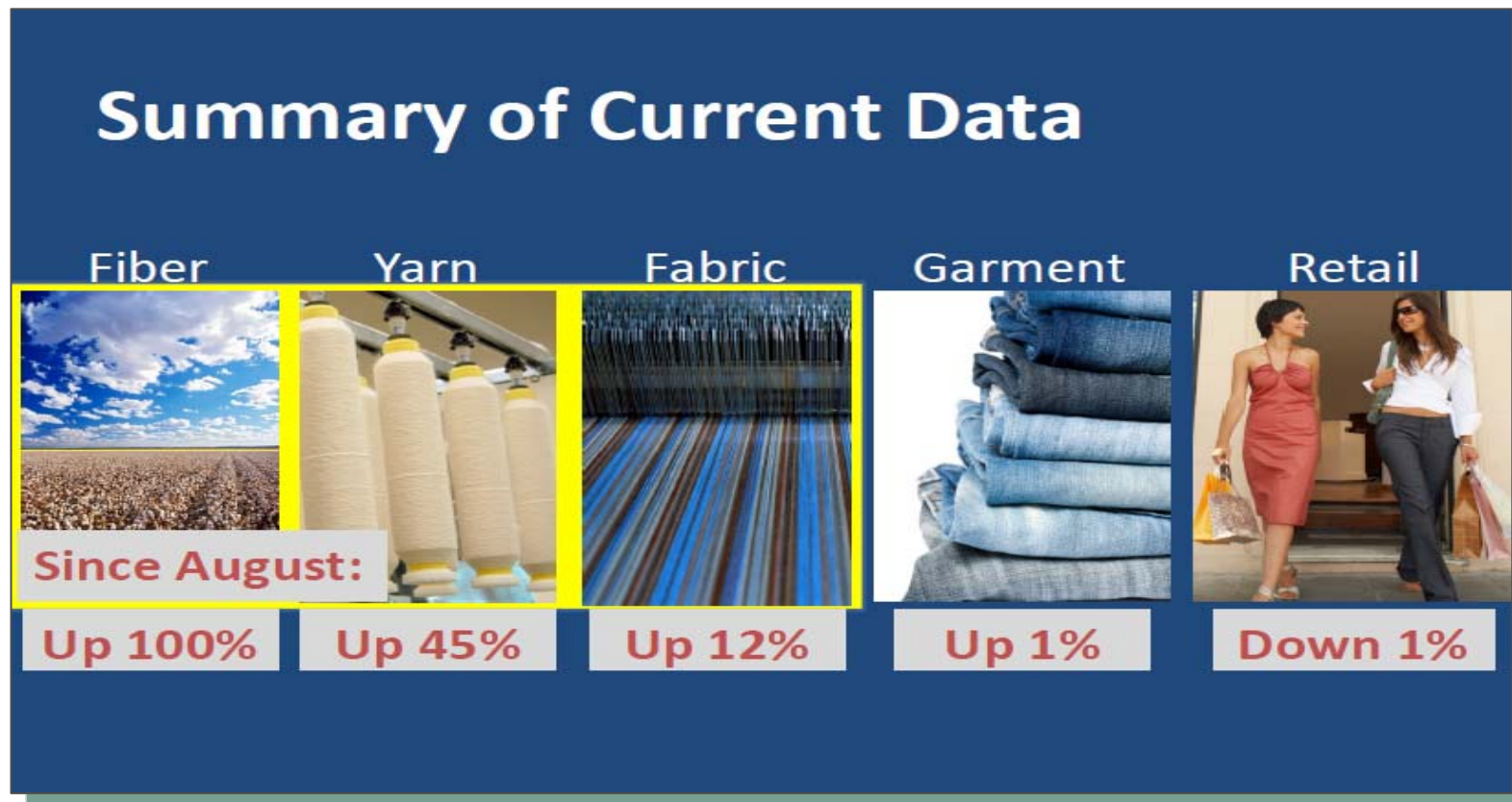
# Cotton's Share of Global Fibre Consumption



Source: ICAC "Cotton World Statistics"



# Supply Chain Price Response: The U.S. Cotton Example.



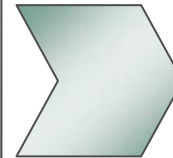
Source: Cotton Inc & ICAC: "Pass Through Analysis of Cotton Prices"



# Consumption Outlook

Consumption continues to grow, driven by demand from developing markets.

Price remains firm & cotton's share of fibre market continues to decrease on supply limitations.



Cotton increasingly becomes a luxury item.

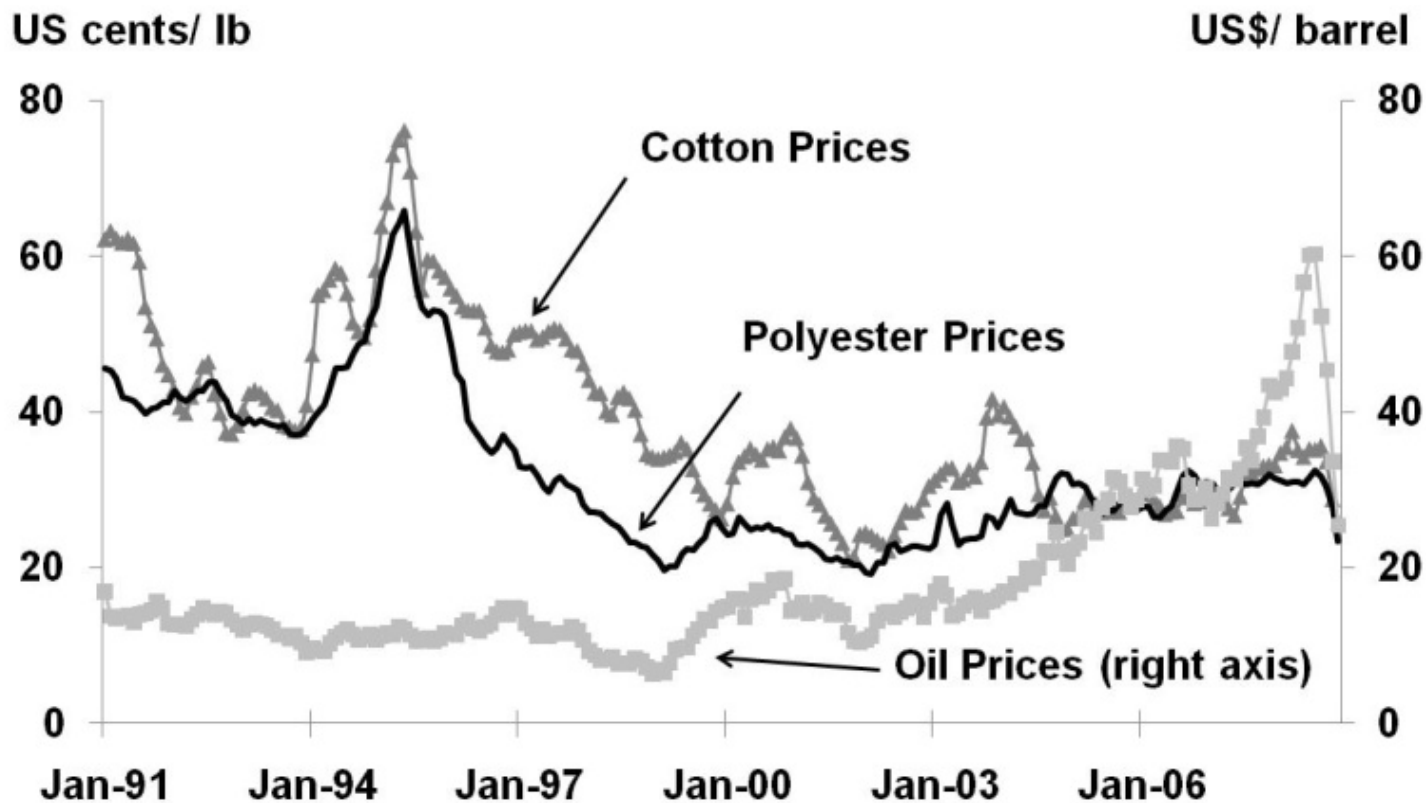




# Man Made Fibres



# Real Prices of Cotton, Polyester & Oil.



Source: ICAC "Revisiting the Relationship between Cotton, Polyester & Oil Prices"



# Cotton, MMF & the Oil Price Effect.

- Correlation between oil, polyester & cotton prices is complex & often overstated.
- ICAC Report Jan2011:
  - No stable relationship, but..
  - “A shock in oil price shifts the equilibrium polyester price and this, in turn, shifts the equilibrium cotton price.”

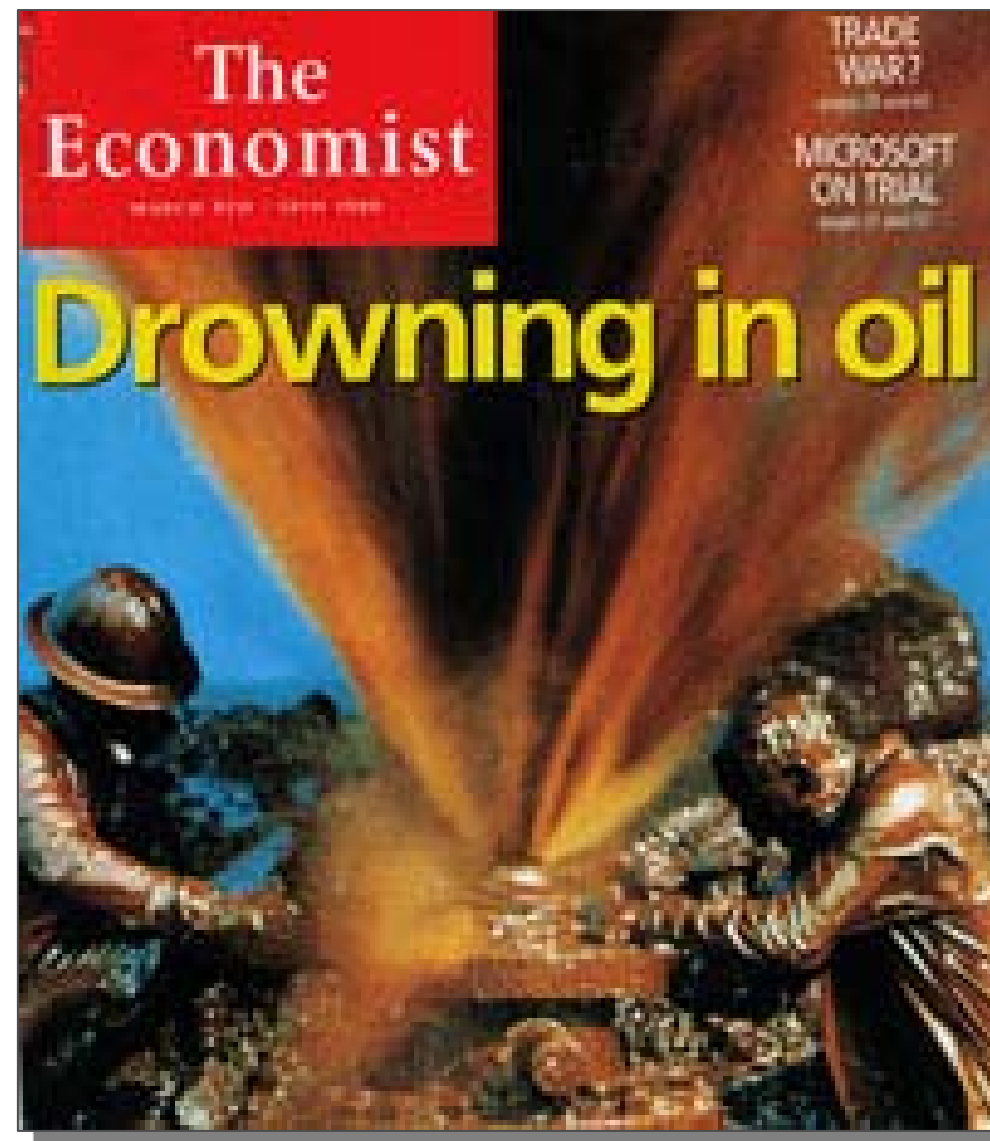


# Newsweek

# CHEAP OIL FOREVER

ERICH SCHAFER







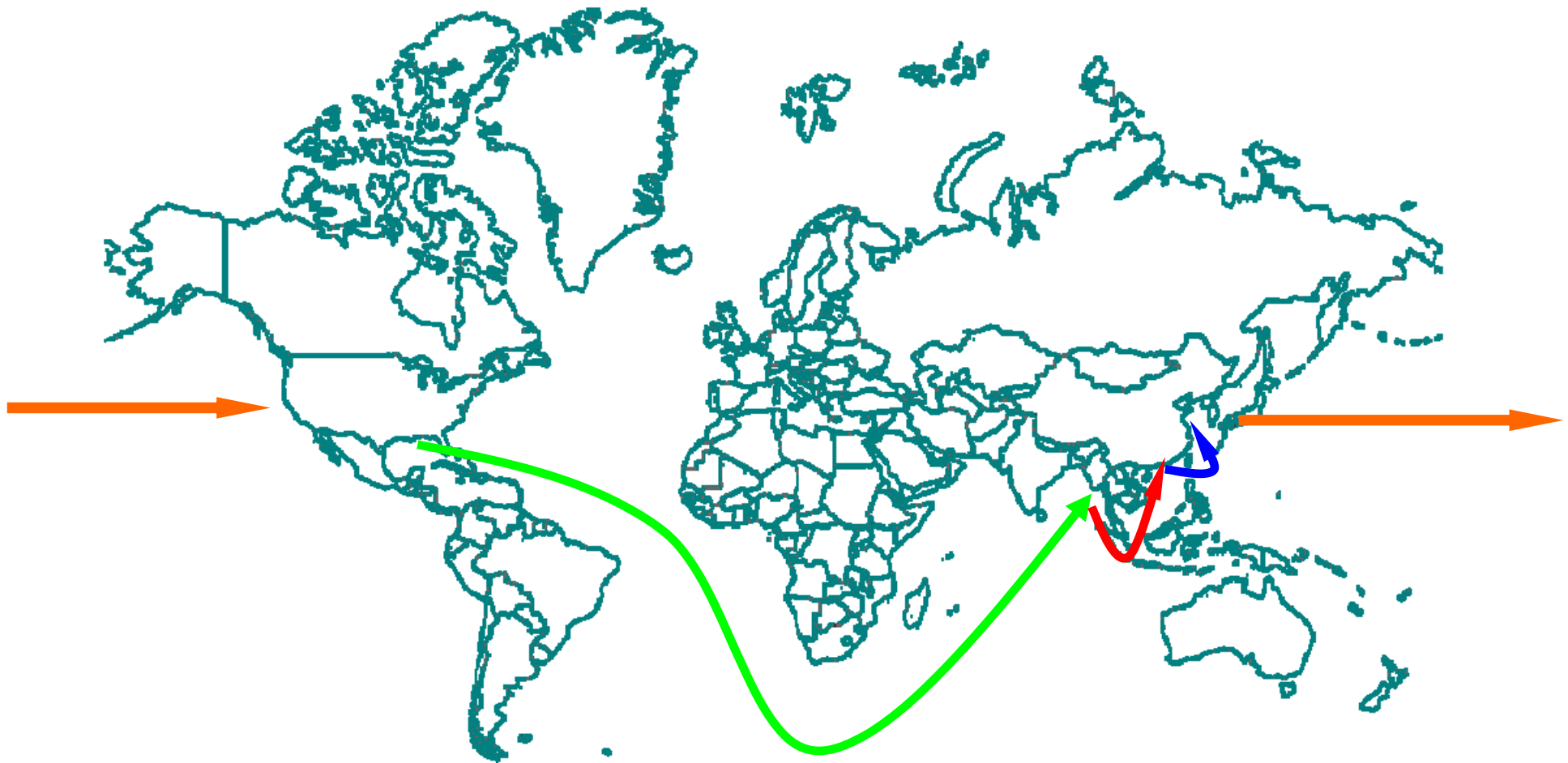
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- Correlation between oil, polyester & cotton prices is complex & often overstated.
- ICAC Report Jan2011:
  - No stable relationship, but..
  - “A shock in oil price shifts the equilibrium polyester price and this, in turn, shifts the equilibrium cotton price.”
- Cotton cannot be divorced from oil & polyester prices.

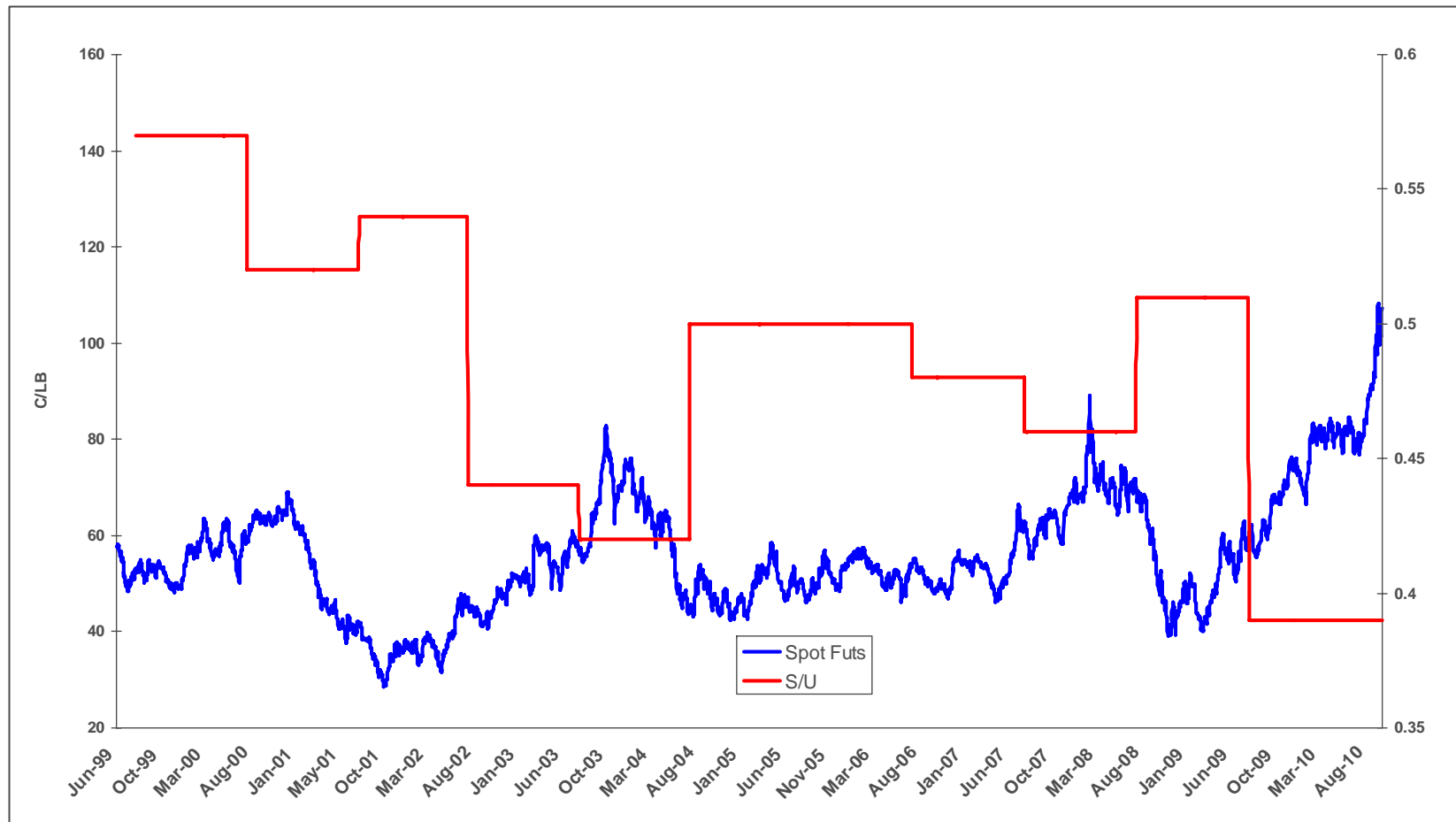




# Energy Costs in the Supply Chain



# World Stocks/Use v Spot Futures



Source: ICAC "Cotton World Statistics" September 2010



# The Dollar Outlook

- US Budget Deficit Fiscal 2011: 1.66 trillion
- US Public Debt end 2011: 15.8 trillion
- 42 cents in every dollar spent must be borrowed or printed.
- Interest payment on National Debt:
  - \$430 billion p.a.
  - About 1/3rd of tax receipts





# The Dollar Outlook

- For every 1% in interest rate increase, the interest on National debt will rise approximately 150 billion dollars (35%)
- National Debt increases by more than the annual budget deficit, because it includes off-budget items like appropriations for Iraq/Afghanistan wars.

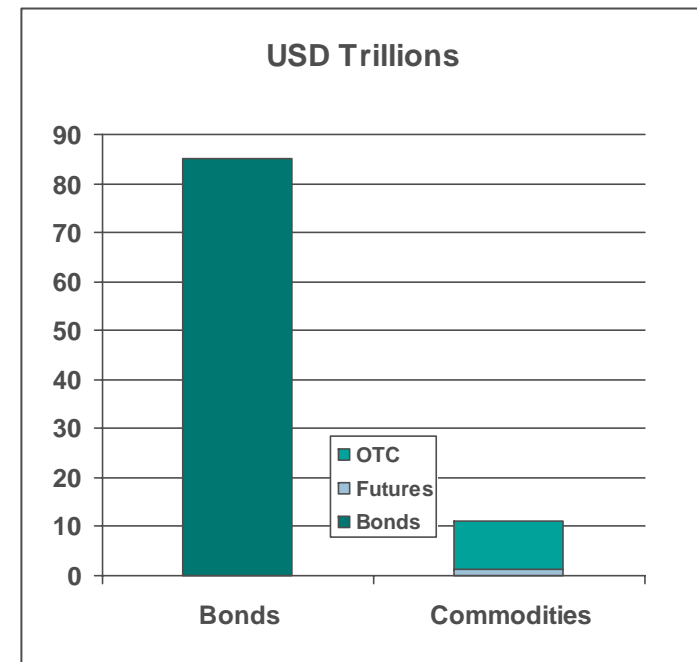


# Gold: The Ultimate Hard Currency



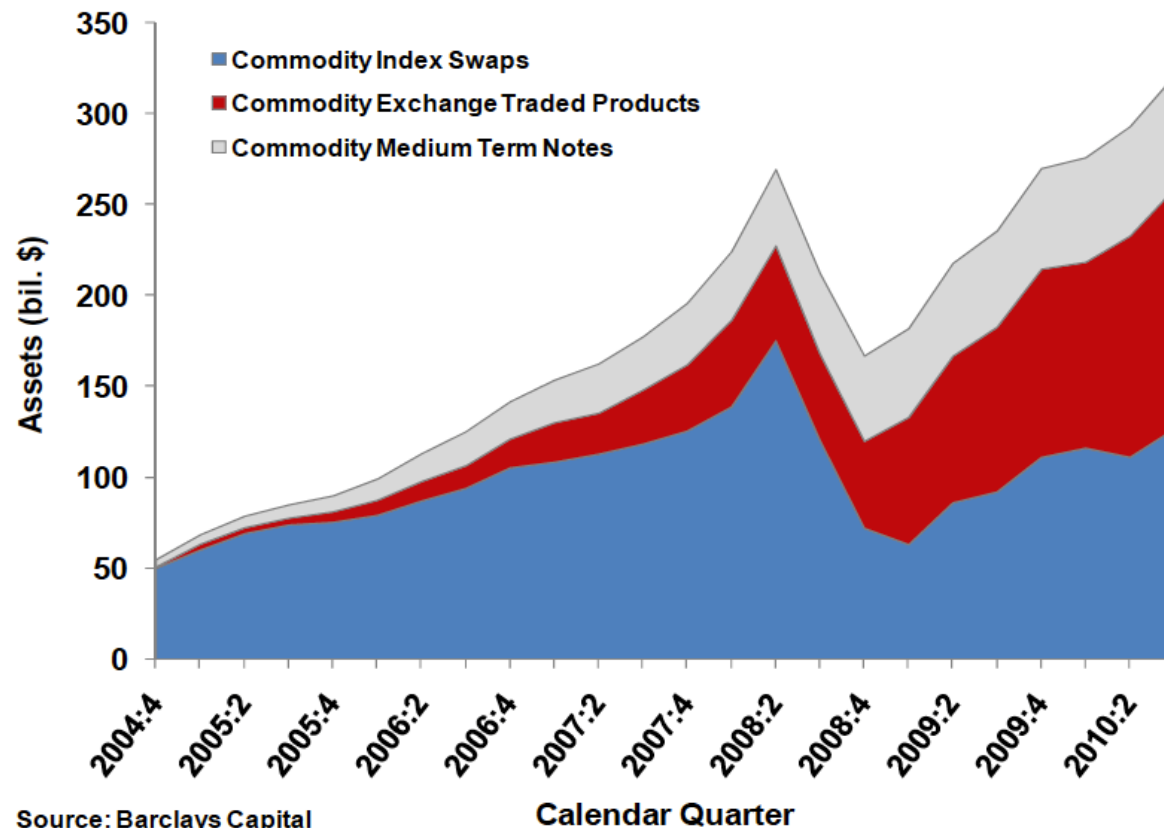
# Futures Market: Index Funds

- Moving in from bond markets.
- Global Bond v Commodity Markets (Trillions):
  - Bonds: USD 85
  - Commodity Futures: USD 1.2
  - Commodity OTC: USD 10



# Increasing Commodity Index Products

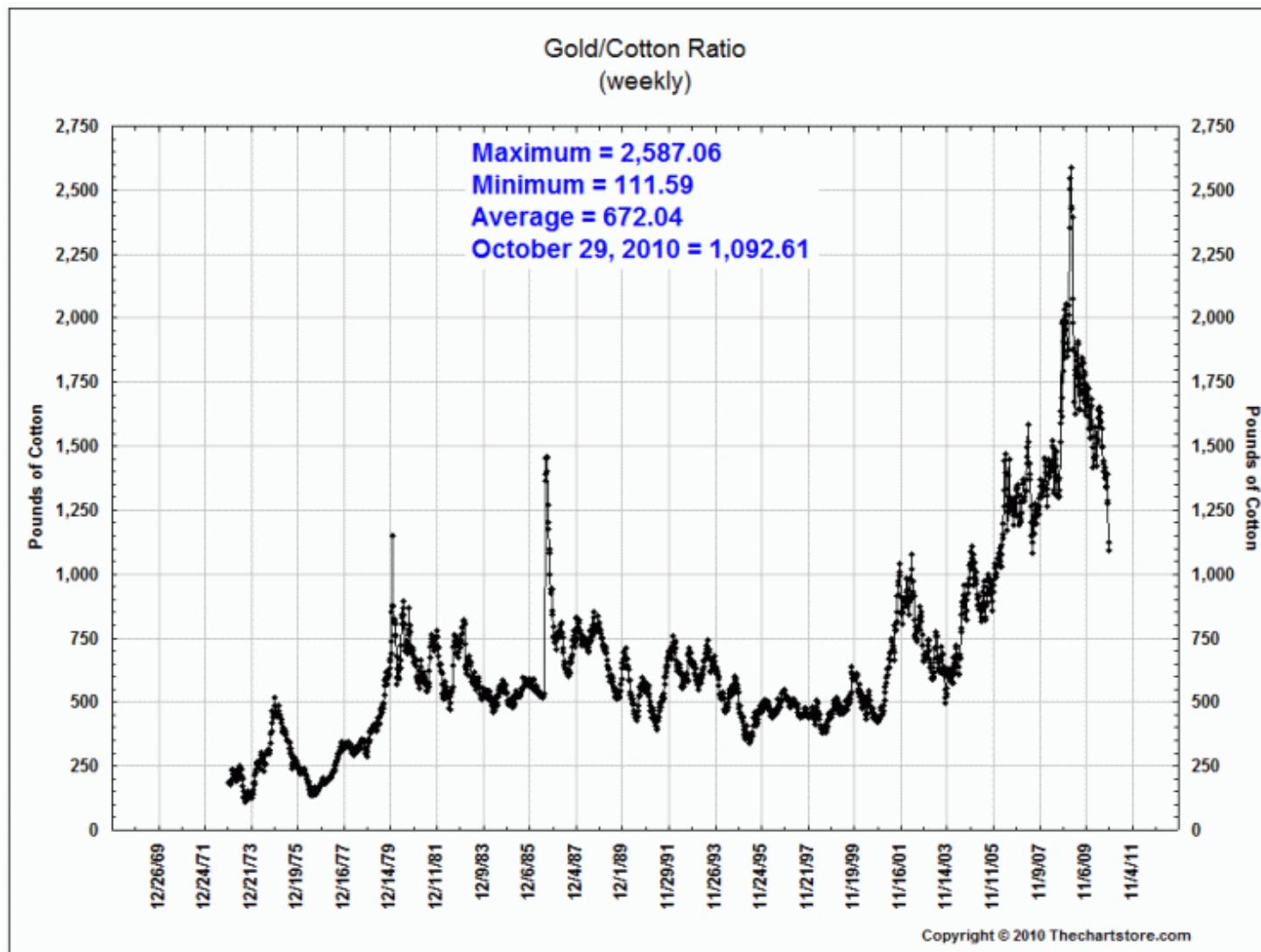
**Figure 2. U.S. and non-U.S. assets in commodity index products, first quarter, 2004-  
quarter, 2010**



Source: Barclays Capital

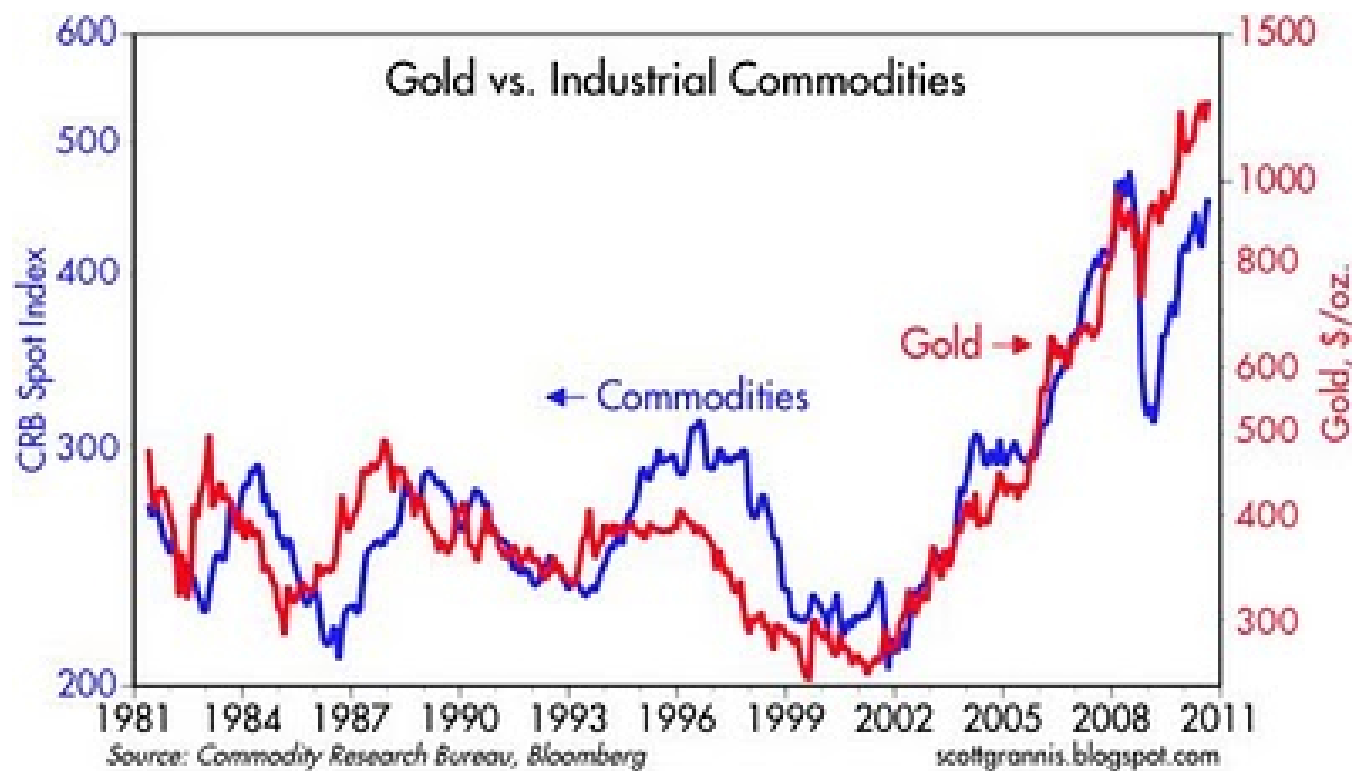


# Cotton (lbs) per Gold Oz.





# CRB & Gold in USD





# Price Outlook

- A new price arena?
  - ☐ Limited scope for production increases
  - ☐ Increasing consumption.
  - ☐ Weak Dollar outlook.
- Strong long-term Prices
- **Security & Sustainability of Supply**





# “Sustainability & Traceability”

- No longer buzzwords.
- Social and environmental credentials = core product attributes.
- The Cocoa example.



# The Cocoa Example: Initiatives & Brands



MAÎTRE CHOCOLATIER SUISSE  
DEPUIS 1845



# Sustainability in the Cotton Supply Chain



- Retailer/brand needs control & visibility of supply chain to ensure:
  - ☐ Security of Supply
  - ☐ Security of Price





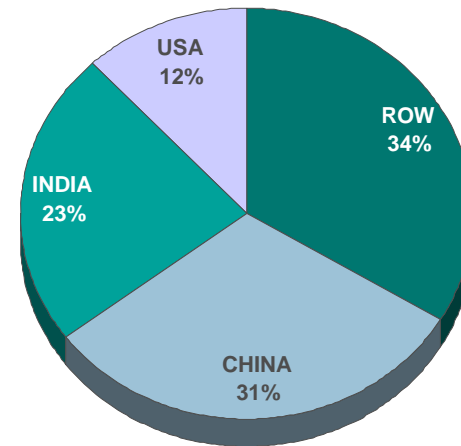
# Price Discovery



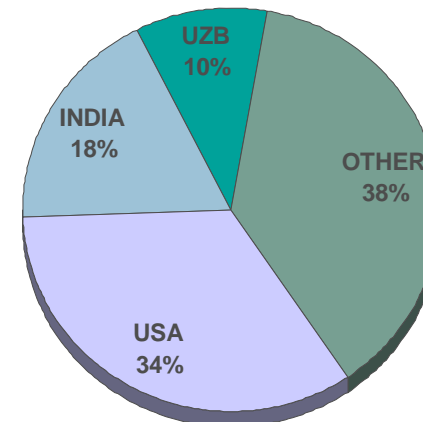
# Cotton Futures Market

- Suitable for Price Discovery?
  - US cotton delivery only
    - 12% of world prodn.
    - 34% of world trade.
- Not enough physical supply.
- Operational imbalance in the futures market.

Global Cotton Prodn



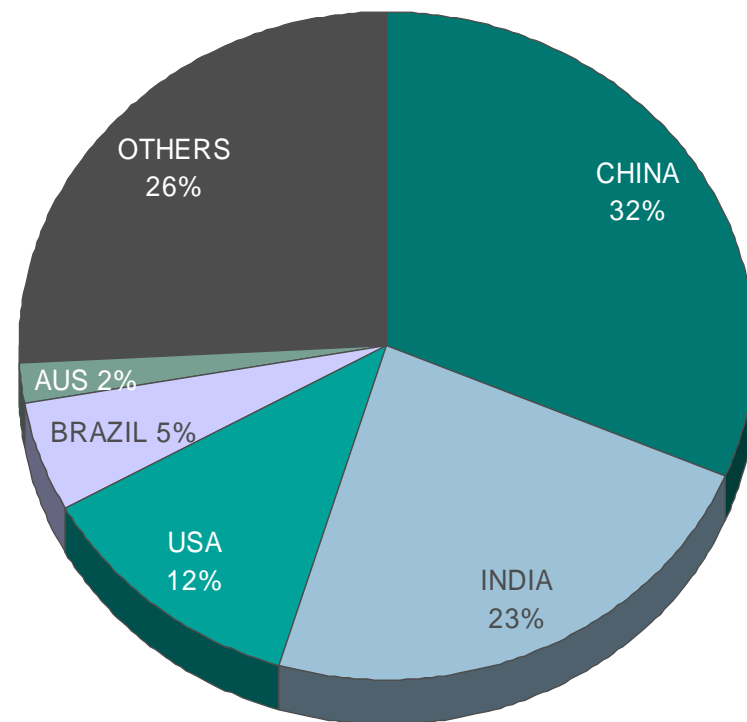
Global Cotton Exports



# A new vehicle for price discovery is required.

- Needs to allow delivery of cotton from Australia & Brazil.
- China, India, Africa & CIS need to follow, but more difficult.

Share of Global Cotton Production







# Conclusions

- Acreage & yield limitations.
- Inflationary price pressures.
- Global Consumption.
- “Security Of Supply”
  - controlling supply @ origin
  - ensuring sustainability & traceability
  - obtaining price stability.
- Proper Price Discovery



