Finance theory advocates diversification both between and within asset classes as a means to reduce portfolio risk.

Traditionally, this meant investing in a mix of stocks, bonds, and real estate.
Adding Commodities to Portfolio

Over the past 10 years, commodities have emerged as an increasingly accepted alternative asset class.

– Started with oil, gold and other metals
– More recent inclusion of softs.
New Investment Vehicles

- Managed Futures
- Index Funds
- ETFs
- Swaps
Managed Futures

◆ A class of hedge funds that take long and short positions in futures contracts.
◆ 1980 - $1 billion under management
◆ 2000 - $38 billion
◆ 2008 Q3 - $228 billion
Index Funds

◆ Track the return from a basket of commodities (energy, metals, grains, softs etc.)
◆ Passively managed and long only.
◆ 2000 - $15 billion under management
◆ Today - $260 billion
  – $55 billion added in the 1st quarter of 2008 alone.
Commodity ETFs

- A basket of commodities that trades like an equity on major stock exchanges.
- Passively managed.
- Have grown rapidly in both popularity and variety in recent years.
Swap Agreements

- Bi-lateral non-exchange traded agreements to transfer or create price risk for a premium
- Used by hedgers and funds.
- Attractive because of customizability and lack of regulatory impediments and oversight.
Ethanol Supply and Demand

Billions of gallons

- Demand
- Production

Year: 03/04 | 04/05 | 05/06 | 06/07 | 07/08 | 08/09 est
Commodity Prices

Per bushel or bale/$ lb

- Beans +107%
- Wheat +174%
- Corn +135%
- Cotton +28%

Jan-06 to Dec-07
Cotton Acreage

 Millions of acres


Acres: 14, 16, 10, 9, 6
Global Economy and Cotton Market

◆ As Dow dropped precipitously from late October 2007 through early 2008, commodities increasingly attracted investor interest.

– Cotton, which had been neglected relative to other commodities, started to receive special attention.

◆ Media-hyped prediction of $1 cotton, based on growing demand from developing countries.

◆ Economists countered that recession could temper prices.

◆ India’s yields increased to the point where it would continue shift from being a significant importer to a large exporter.
Spec Limits

- CFTC mandated cotton market position limits
  - 3500 contracts in any one month.
  - 5000 contracts in all months combined.

- Do not apply to hedgers, long only index funds or ETF providers.
Price Limits

Daily maximum price movement for cotton contracts

– Futures under 84 cents: 3 cents per pounds.
– Futures over 84 cents: 4 cents per pound.
– Options: no limits.
Original Margin

Original margin, in effect since 1/15/08

- Hedge: $1500 per contract.
- Speculators: $2100 per contract.
Variation Margin

- Futures are margined to futures prices except when the market moves a limit.
  - If the market moves a limit then the market is margined to the synthetic price derived from the limitless options market.

- Margin calls must be met within 1 hour.

- Variation margin due at 10 AM on the next business day.
Options to Options

- Options are margined to options prices.
Margin Calls

◆ Margin calls can be made at any time during the trading session.
◆ Must be met within 1 hour of being made.
◆ The variation margin due must be met by 10 AM on the next business day.
The CFTC and the Exchange both publish reports outlining the holders of positions by category.

Traditionally broken down into Hedge and Spec.
- Hedge category includes long only index funds, ETF providers and swap dealers.

In response to requests from trade groups in all the commodities, the CFTC added a separate category to their reports consisting of long only index traders, ETF providers and the swap dealer.
- This report began in September 2007.

Non-exchange traded swaps are not included in any report.
Method of Trading

Trading on the New York Cotton Exchange was exclusively open outcry from its founding in 1870 through 2006.

In January 2007, electronic trading was introduced.

Open outcry discontinued on March 3rd 2008.

- Eliminated the centralized market place for cotton.
- Loss of liquidity provided by “local” floor traders.
Trading Ring
Feb 2008 - Last 2 Weeks

◆ Open interest increased
  – Specs, managed futures, index funds and swap dealers were overwhelmingly long.
  – Trade (merchants and co-operatives) were overwhelmingly short.

◆ Specs got longer; trade got shorter.

◆ Price of cotton increased by 11 cents per pound.

◆ Financing becoming strained.
March 3rd

- With no trading floor, market now operating in the dark.
- Tightening and denial of new financing.
- Market moved up to limit and remained there for duration of session.
- An illiquid futures market forced traders into the options market to offset their positions.
  - Bid/offer spreads widened.
  - Volume reached 100,000 contracts, about 10 to 20x normal level.
- Options market implied synthetic price rose 12 cents per pound, causing a 12 cent margin call.
March 4th

◆ Greater financing strain led the trade to try and liquidate or offset their futures positions.

◆ Locked limit situation forced use of the options market.
  – Experienced unprecedented volatility and volume.
  – Synthetic value of intraday options moves of 25 cents per pound (85 - 110 cents).

◆ Trade shorts suffered devastating losses.

◆ Convergence was nonexistent.

◆ Cotton trade on the verge of extinction.
  – Spot market completely shut down.
May Life of Contract Ranges

19 Year Average Range: 27 cents
After Shock

◆ Markets returned to normal as convergence returned and prices settled to the 65 to 75 cent range by the middle of March.

◆ Many merchants forced to exit business or merge.

◆ Industry lost confidence in futures markets.
  – Long term or forward contracts became almost nonexistent as merchants and mills began living hand to mouth.

◆ In Sep 2008, recession-induced demand destruction and spec flight to cash drove down prices and disrupted futures and spot markets.
  – Price fell to 40 cents per pound over next 3 months.
CFTC Changes

◆ New reports to increase transparency in the markets:
  – The Index Investment Data report, published quarterly, delineates positions held by index funds and swap dealers.
  – The weekly published Disaggregated Commitment of Traders report breaks categorizes position holders into: swap dealers (includes index funds), managed commodity funds, and traditional hedgers.
ICE – New Futures Variation Margin Policy

◆ Margin futures to futures and options to options.
  – Policy has been implemented and used last 5 or 6 times that futures have closed at a limit.

◆ ICE reserves right to revert back to synthetic margining when the Exchange finds it appropriate.
ICE – New Price Limit Rules

◆ When prices under 84 cents, the limit is 3 cents.
◆ If the market closes at a limit, next business day’s limit moves to 4 cents.
  – If it closes again at a limit, the market limit moves to 5 cents.
◆ If one of the two months with highest open interest is trading at 84 cents or higher, limit becomes 4 cents.
  – If market closes at limit, new limit becomes 5 cents on next business day.
  – If again, limit moves to 6 cents.
Under Discussion at ICE

- Cotton committee is considering putting a price limit on options trading.
  - Issues of what the limit would be and how it would be enacted are under discussion.
- Committee is also reviewing requests from a couple of cities in Texas to be designated as delivery points.
Under Discussion at CFTC

◆ Aligning rules for the energy, metal and Ag sectors.
  – Ag sector limits could be reviewed annually and new limits established automatically, potentially based on the magnitude of open interest.

◆ Elimination of position limit exemptions for index funds, ETF providers and swap dealers.

◆ Establishment of common clearing house.
  – Require reporting of all non-cleared swaps.

◆ Eddie Murphy rule – Outlaw the release or reception of confidential USDA information.
Congress

- Considering legislation to require clearing and trading on exchanges or electronic platforms for all standardized transactions between swap dealers and other large market participants.
- SEC would oversee activity in swaps that are based on securities like equity and credit default swaps.
- CFTC would have jurisdiction over all other swaps.
- Regulators would set margin levels for non-cleared transactions.
- Financial reform has bi-partisan support, but in polarized Congress, form and timing still uncertain.
New Hedging Techniques

◆ Swap transactions: For a fee, trade participant gets hedge without margin call risk.
  – Frees capital for primary business needs and reduces financing worries.

◆ Hedge your hedge: Sell a futures contract, sell an at the money or in the money call and buy 3 or 4 out of the money calls.
  – Reverse works for long side hedging.
  – Protects from price movement in either direction.
  – Works best in volatile markets.