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2010 USDA Agricultural Outlook Forum

Diversification of Portfolios

- 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.

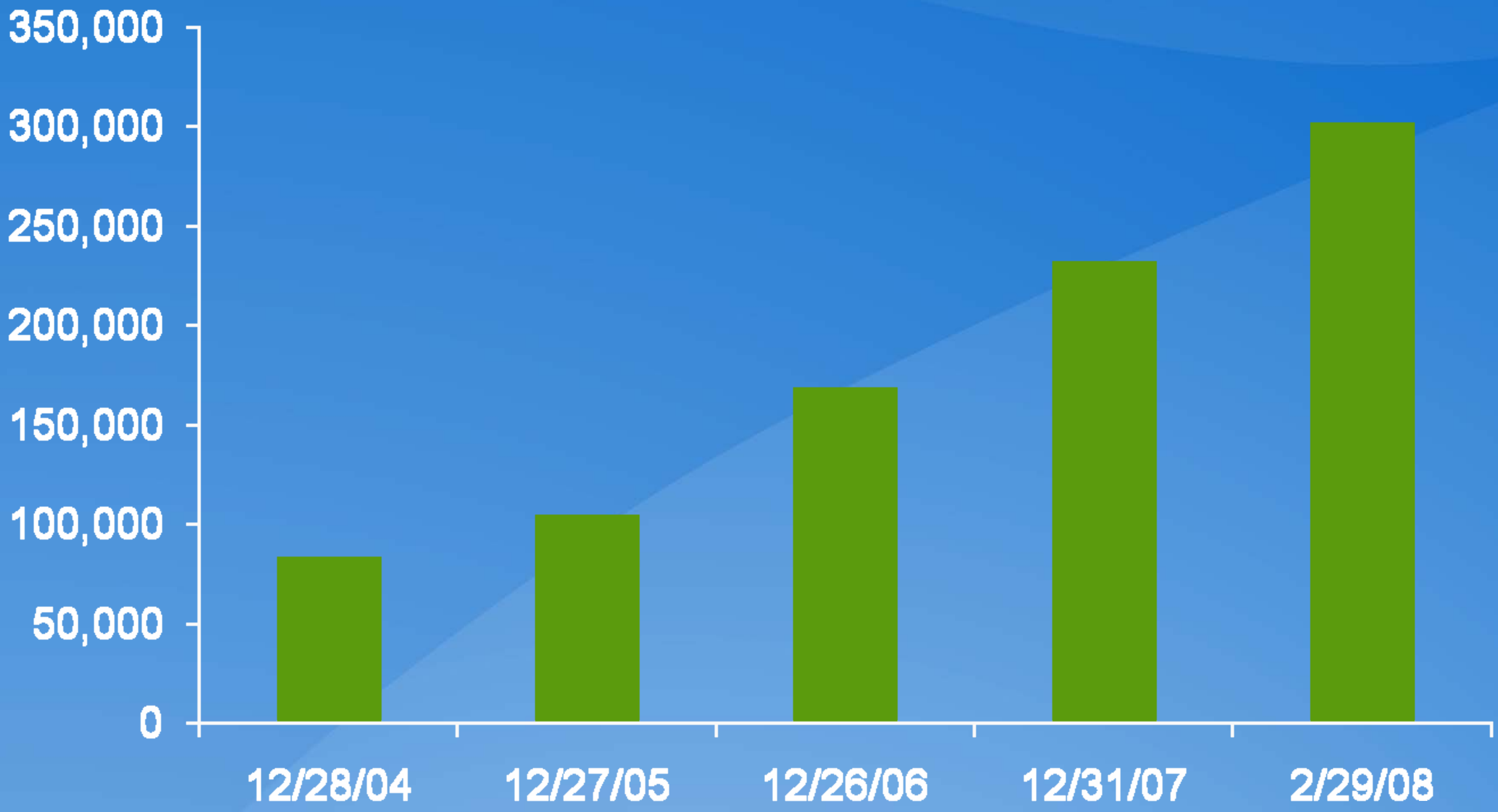
Commodity ETFs

- 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.

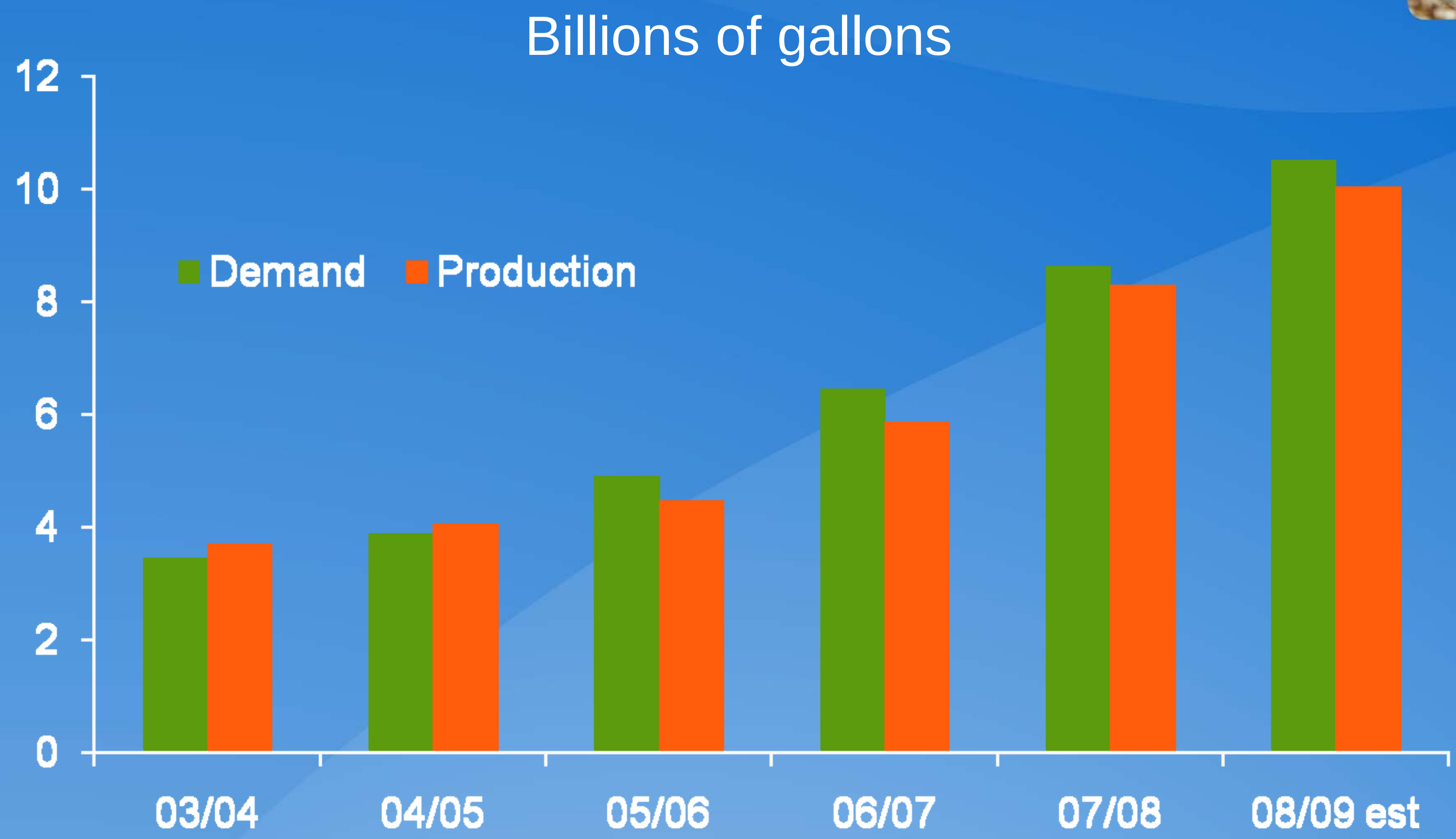
Swap Agreements

- 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.

Cotton Futures Open Interest

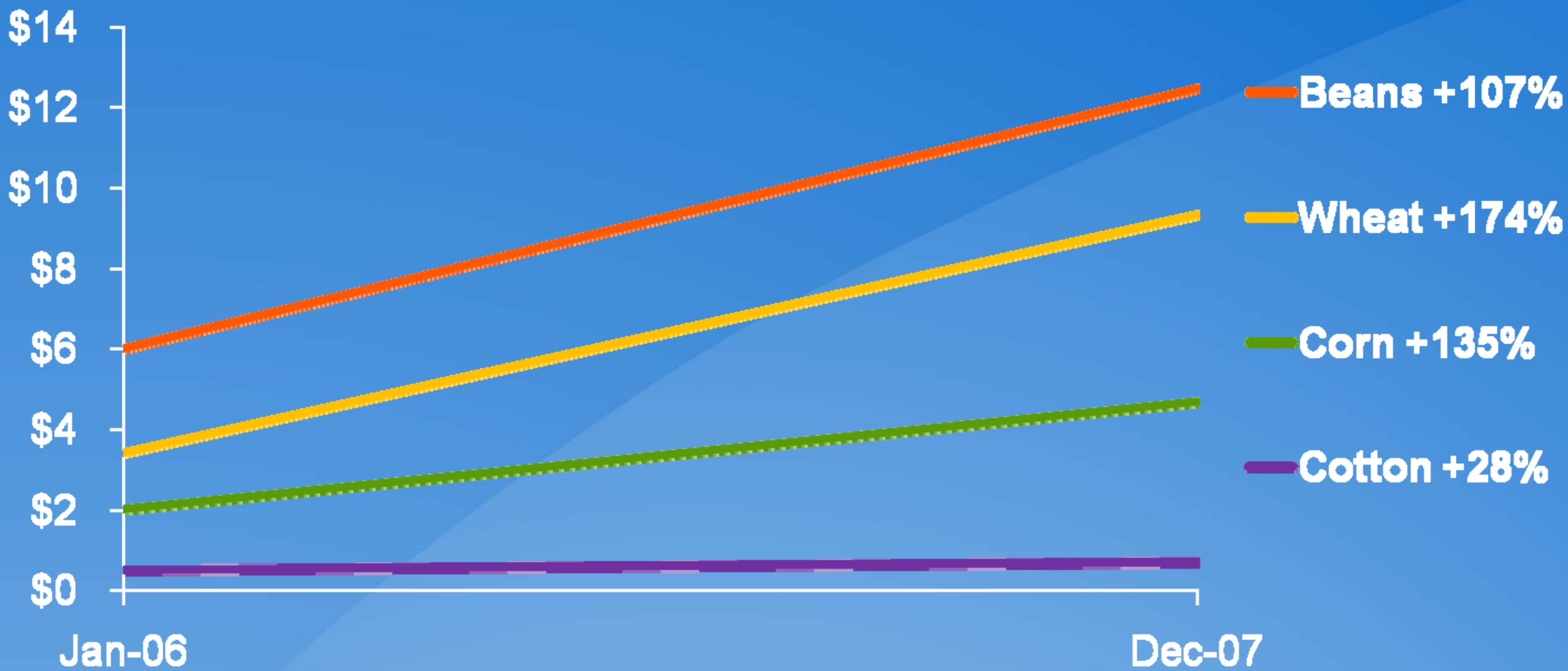


Ethanol Supply and Demand



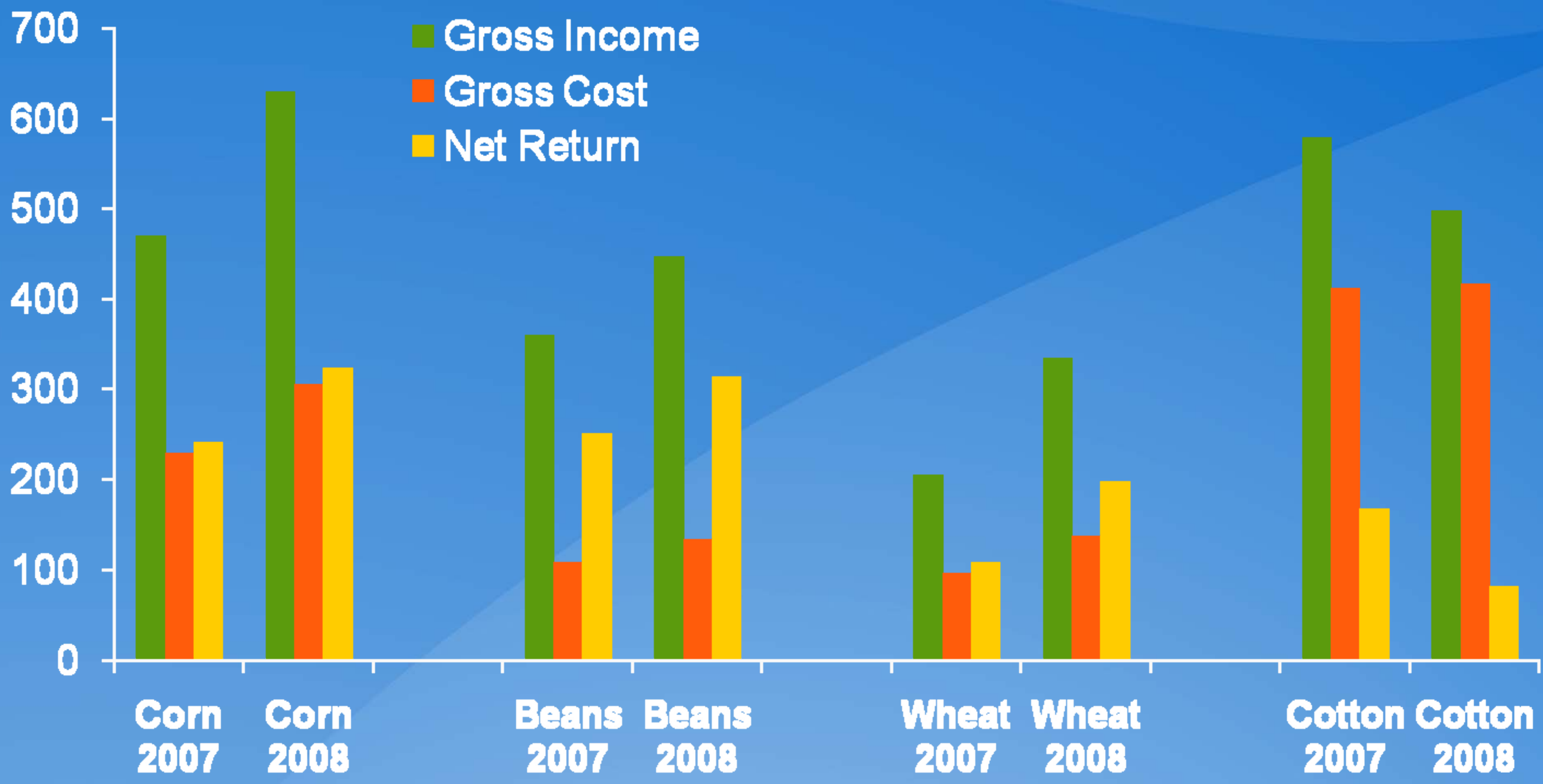
Commodity Prices

Per bushel or bale/$ lb



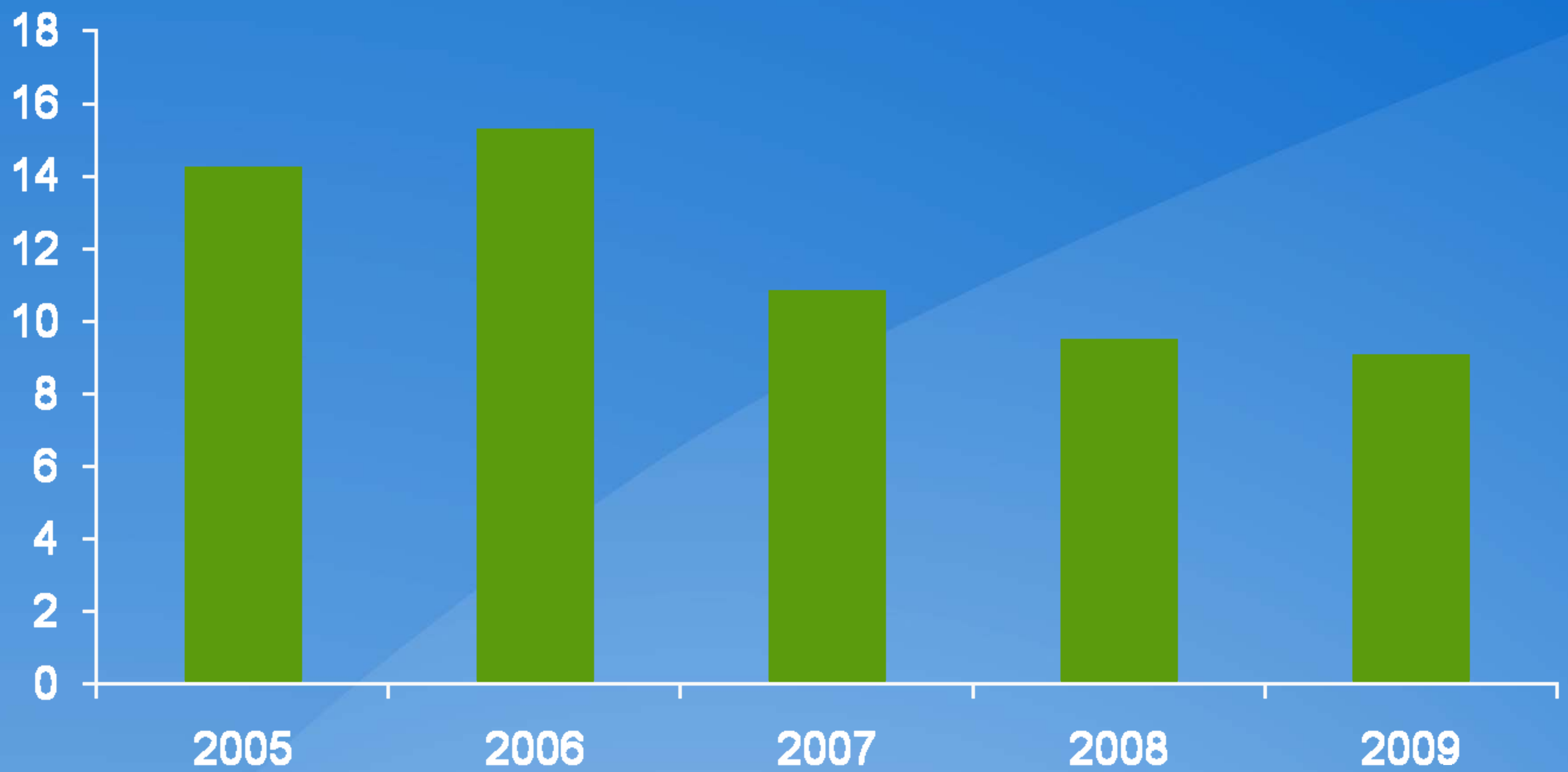
Commodity Income

Dollars per acre

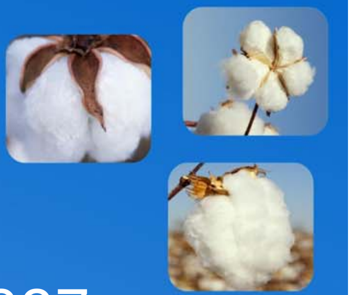


Cotton Acreage

Millions of acres



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.
  - Usually made around 11 AM New York Time.
- Must be met within 1 hour of being made.
- The variation margin due must be met by 10 AM on the next business day.

Transparency of Positions

- 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

NYBOT Cotton on ICE

IntercontinentalExchange™

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Kill All Activate All Live Only Hold Bids Hold All Hold Offers

Orders | Deals | COCOA | COFFEE C | COTTON NO 2 | OJ | Cocoa Matrix | Sugar11 | ALI Cotton

Hold All On Hit/Lift Hold Bids On Hit Hold Offers On Lift Re-Link Agents History Formulas

Product	Hub	Strip	+	-	Sell	Qty	Bid	Offer	Qty	Buy	High	Low	Last	WAP	Volume	Settlement	Change	Mkt.State	...	Qty	Bid
NYBOT Cotton No. 2	NYCC	Mar07	+		Hit	323	55.67	55.70	91	Lift	55.70	55.61	55.70	55.65	51	55.06	0.64	Open			
NYBOT Cotton No. 2	NYCC	May07	+		Hit	64	53.89	54.00	43	Lift	54.00	53.89	53.89	53.96	26	55.95	-2.06	Open			
NYBOT Cotton No. 2	NYCC	Jul07	+		Hit	21	54.90	56.95	21	Lift	56.95	54.90	54.90	55.41	8	56.95	-2.05	Open			
NYBOT Cotton No. 2	NYCC	Oct07	+		Hit	48	57.40	57.45	42	Lift	57.45	57.40	57.45	57.43	5	59.20	-1.75	Open			
NYBOT Cotton No. 2	NYCC	Dec07	+		Hit	100	57.95	60.11	74	Lift	60.11	57.95	60.11	59.57	4	60.15	-0.04	Open			
NYBOT Cotton No. 2	NYCC	Mar08	+		Hit	120	59.95	60.00	111	Lift	60.00	59.95	60.00	59.99	82	61.75	-1.75	Open			
NYBOT Cotton No. 2	NYCC	May08	+		Hit	79	59.55	60.00	83	Lift	60.00	59.55	60.00	59.87	25	62.15	-2.15	Open			
NYBOT Cotton No. 2	NYCC	Jul08	+		Hit	37	60.10	60.13	10	Lift	60.13	60.10	60.10	60.12	26	62.70	-2.60	Open			
NYBOT Cotton No. 2	NYCC	Oct08	+		Hit	103	61.02	61.90	93	Lift	61.90	61.90	61.90	61.90	10	63.00	-1.10	Open			
NYBOT Cotton No. 2	NYCC	Dec08	+		Hit	99	62.13	63.05	57	Lift	62.13	62.13	62.13	62.13	2	63.05	-0.92	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/May07	+		Hit	43	1.67	1.81	65	Lift						-0.89		Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Jul07			Hit	21	-1.28	0.80	21	Lift						-1.89		Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Oct07	+		Hit	42	-1.78	-1.70	48	Lift	-1.70	-1.80	-1.70	-1.75	2	-4.14	2.44	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Dec07			Hit	74	-4.44	-2.25	91	Lift	-2.25	-2.25	-2.25	-2.25	1	-5.09	2.84	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Mar08			Hit	111	-4.33	-4.25	91	Lift						-6.69		Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/May08	+		Hit	83	-4.33	-3.85	79	Lift	-4.35	-4.39	-4.39	-4.37	16	-7.09	2.70	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Jul08	+		Hit	10	-4.46	-4.40	37	Lift	-4.40	-4.48	-4.40	-4.45	24	-7.64	3.24	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Oct08	+		Hit	93	-6.23	-5.32	91	Lift	-6.25	-6.25	-6.25	-6.25	8	-7.94	1.69	Open			
NYBOT Cotton No. 2 Spread	NYCC	Mar07/Dec08			Hit	57	-7.38	-6.43	91	Lift						-7.99		Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Jul07			Hit	21	-3.06	-0.90	21	Lift	-0.90	-0.90	-0.90	-0.90	1	-1.00	0.10	Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Oct07			Hit	42	-3.56	-3.40	43	Lift						-3.25		Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Dec07			Hit	64	-6.22	-3.95	43	Lift						-4.20		Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Mar08	+		Hit	64	-6.11	-5.95	43	Lift	-5.95	-6.11	-6.11	-6.04	15	-5.80	-0.31	Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/May08	+		Hit	64	-6.11	-5.55	43	Lift	-5.55	-6.11	-5.55	-5.62	8	-6.20	0.65	Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Jul08			Hit	10	-6.24	-6.10	37	Lift	-6.10	-6.10	-6.10	-6.10	1	-6.75	0.65	Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Oct08			Hit	64	-8.01	-7.02	43	Lift	-8.01	-8.01	-8.01	-8.01	1	-7.05	-0.96	Open			
NYBOT Cotton No. 2 Spread	NYCC	May07/Dec08			Hit	57	-9.16	-8.13	43	Lift						-7.10		Open			
NYBOT Cotton No. 2 Spread	NYCC	Jul07/Oct07			Hit	21	-2.55	-0.45	21	Lift	-2.55	-2.55	-2.55	-2.55	1	-2.25	-0.30	Open			
NYBOT Cotton No. 2 Spread	NYCC	Jul07/Dec07	+		Hit	21	-5.21	-1.00	21	Lift	-5.21	-5.21	-5.21	-5.21	2	-3.20	-2.01	Open			
NYBOT Cotton No. 2 Spread	NYCC	Jul07/Mar08			Hit	21	-5.10	-3.00	21	Lift						-4.80		Open			

NYBOT Sugar No. 11 - NYCC - Mar07, 10 @ 11.06 (Feb 27, 2007 15:40:00 EST)
NYBOT Sugar No. 11 - NYCC - Mar07, 2 @ 11.10 (Feb 27, 2007 15:40:00 EST)
NYBOT Sugar No. 11 - NYCC - Mar07, 35 @ 11.12 (Feb 27, 2007 15:40:00 EST)
NYBOT Cotton No. 2 Spread - NYCC - Mar07/Jul08, 1 @ -4.40 (Feb 27, 2007 15:38:25 EST)
NYBOT Cotton No. 2 - NYCC - Mar07, 1 @ 55.70 (Feb 27, 2007 15:38:25 EST)
NYBOT Cotton No. 2 - NYCC - Jul08, 1 @ 60.10 (Feb 27, 2007 15:38:25 EST)
NYBOT Cotton No. 2 Spread - NYCC - Mar07/May08, 3 @ -4.39 (Feb 27, 2007 15:38:23 EST)
NYBOT Cotton No. 2 - NYCC - May08, 3 @ 60.00 (Feb 27, 2007 15:38:23 EST)

15:44:05 EST Users: 22

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



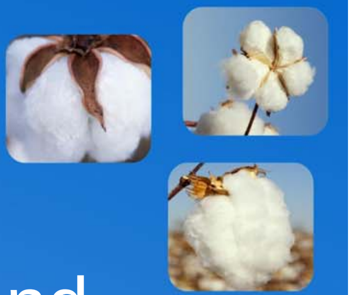
- Cotton committee is considering putting a price limit on options trading.
  - Issues of what the limit would be and how it would be enacted are under discussion.
- Committee is also reviewing requests from a couple of cities in Texas to be designated as delivery points.

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.