



IntercontinentalExchange® (ICE®) became the center of global trading in “soft” commodities with its acquisition of the New York Board of Trade (NYBOT) in 2007. Now known as ICE Futures U.S.®, the exchange offers futures and options on futures on soft commodities include coffee, cocoa, frozen concentrated orange juice, sugar and cotton.

Cotton futures have traded in New York since 1870, first on the New York Cotton Exchange, then on the New York Board of Trade and now on ICE Futures U.S. Options on cotton futures were introduced on the NYBOT in 1984. Futures and options on futures have been used by the domestic and global cotton industries to price and hedge transactions. Because cotton is at the center of the global textiles industry, it is a preferred contract among commodity trading advisors and hedge funds. ICE Futures U.S. is the exclusive global market for Cotton No. 2 futures and options.

#### A BRIEF HISTORY OF COTTON IN COMMERCE

Cotton is grown widely around the world and has been used for at least seven thousand years. While the oldest archaeological fragments have been found in Mexico, the Indus valley in modern Pakistan was the first commercial cotton-growing center. Alexander the Great brought cotton back from the Indus Valley into the Hellenistic world. Europeans’ unfamiliarity with cotton led to the legend of “the Vegetable Lamb of Tartary” as the fiber’s source.

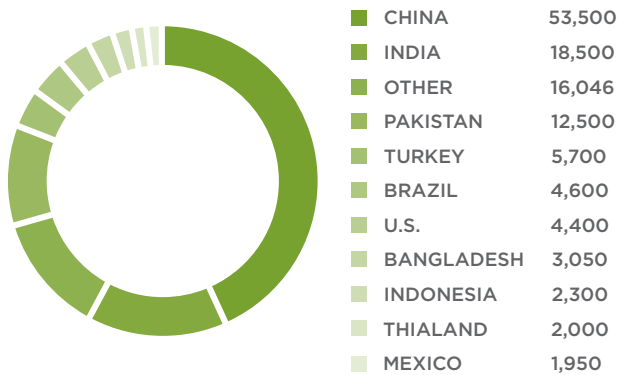
Cotton’s impact on history has been considerable. It was imported into England by the East India Company in the 17th century and began to compete with English wool in the textile industry. However, it was the introduction of cotton into the British colonies in North America, and the development of steam-powered textile machinery in the United Kingdom, that led to cotton textiles’ central role in the 18th century British industrial revolution. Later, Eli Whitney’s invention of

the cotton gin in 1794, and the opening of cotton plantations in what is now Mississippi and Alabama, that led to cotton’s dominance of the economy in the American south, the perpetuation of slavery and ultimately the American Civil War. Cotton was so critical to British and French industries at the time that both countries contemplated intervening on behalf of the Confederacy during the Civil War, their opposition to slavery notwithstanding. Many Confederate bonds sold in Europe were backed by cotton.

The European dependence on American cotton exports led to the financing of cotton plantations in Egypt, India, various African colonies and Australia. Tsarist Russia expanded cotton plantings in what are now Uzbekistan, Kazakhstan and Turkmenistan. Later, the diversion of the Amu Darya and Syr Darya rivers under the Soviets to irrigate cotton led to the desiccation of the Aral Sea.

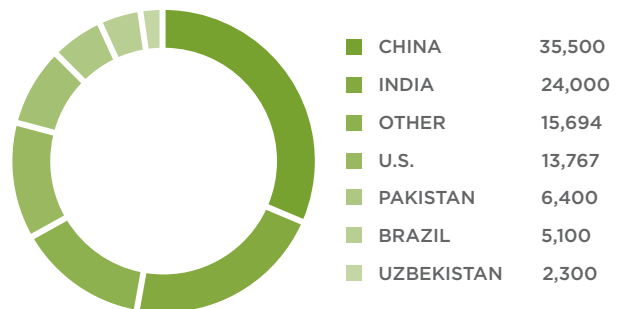
Textile manufacturing is always among the first steps of industrialization. In India, for example, Gandhi protested the British Raj's restrictions on textile manufacture by advocating home spinning, and the chakra, or spinning wheel, became the symbol of the Indian National Congress party. Today China and India, two rapidly growing industrial powers, are the largest consumers of cotton, respectively. They also are the largest two producers of cotton, respectively.

**USDA 2008-2009 PROJECTED CONSUMPTION (1,000 BALES)**



Source: U.N. Conference on Trade & Development

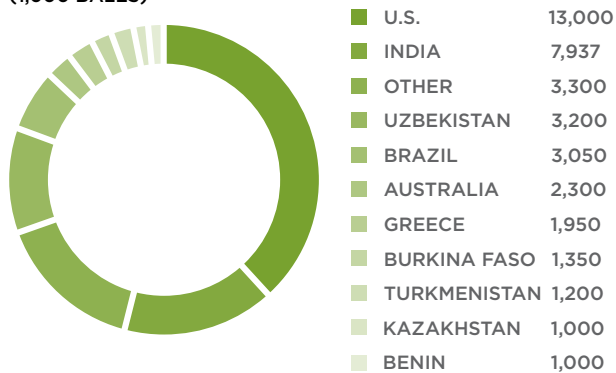
**USDA 2008-2009 PROJECTED PRODUCTION (1,000 BALES)**



Source: U.N. Conference on Trade & Development

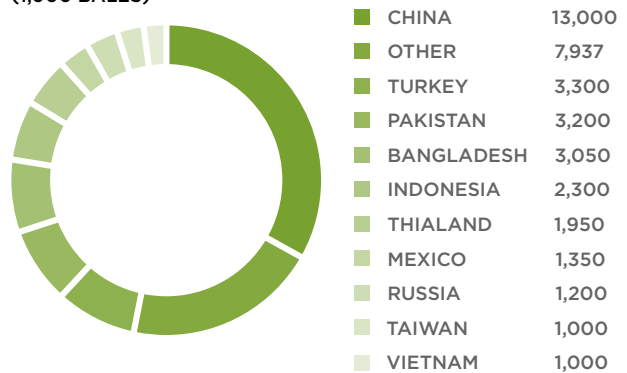
Just as cotton is important to developing industry, it is also important to developing agriculture. The 2008 collapse of the Doha Round of international trade negotiations had many contentious issues, and cotton was near the top. The United States is the third largest producer of cotton, but it is the world's largest cotton exporter, and its production efficiencies give it a formidable advantage over smaller growers, especially those in Africa.

**USDA 2008-2009 PROJECTED EXPORTS (1,000 BALES)**



Source: International Coffee Organization

**USDA 2008-2009 PROJECTED IMPORTS (1,000 BALES)**



Source: International Coffee Organization

One issue contributing to the cotton debate is the relative strength of the U.S. dollar. If we compare the ICE U.S. Dollar Index\* (USD<sup>X</sup>) to Cotton No. 2 over a long period of time, we find the USD<sup>X</sup> leads Cotton No. 2 by eight months on average. This is quite unsurprising; a cheaper dollar makes U.S. cotton more competitive on world markets, and vice-versa.

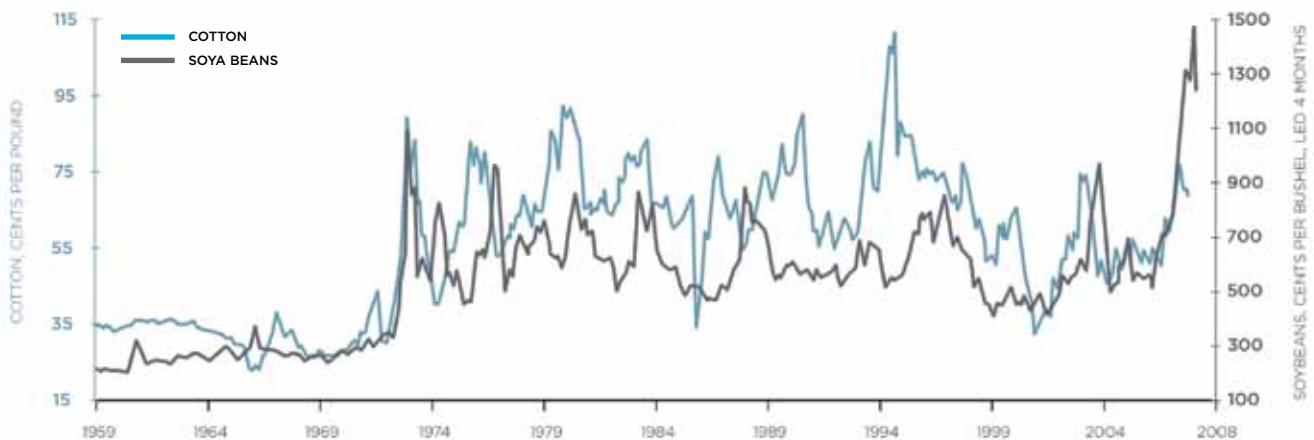
### THE DOLLAR INDEX LEADS THE PRICE OF COTTON



Source: CRB-Infotech CD-ROM

While cotton has few direct price competitors in the final textile market — wool is used for different products and polyester reflects petrochemical feedstock prices more than demand considerations in the final market — U.S. cotton does have an interesting battle with soybeans. The two crops can be grown on many of the same acres in the American South, the Mississippi Delta in particular, so when soybean prices rise or fall, acreage shifts into and out of soybeans, respectively. This affects the planting intentions for cotton; the average lead time is about four months.

### SOYBEANS, COTTON AND THE BATTLE FOR ACRES



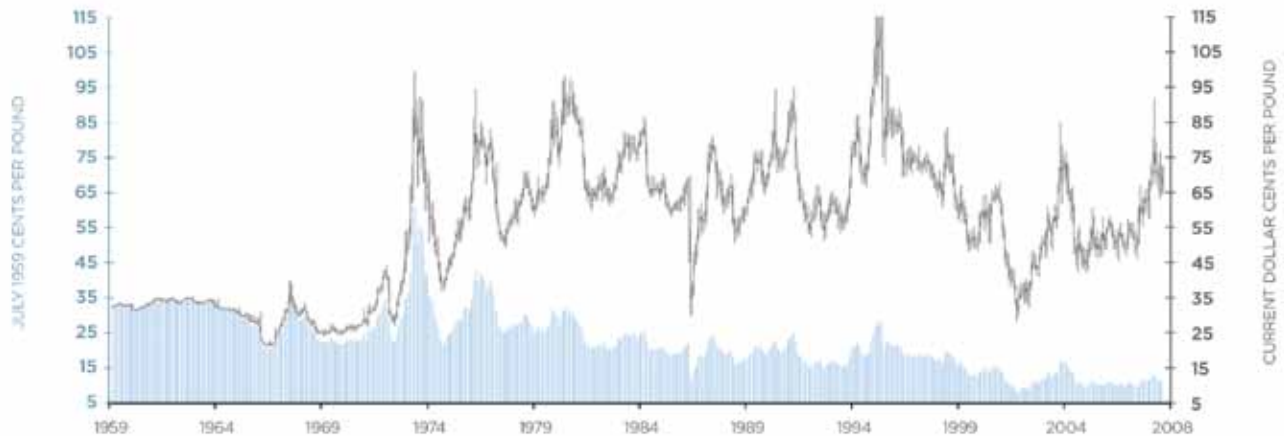
Source: CRB-Infotech CD-ROM

U.S. cotton production is also impacted by the battle for acres between corn and soybeans in the Midwest. As the U.S. corn crop is diverted to ethanol distillation, fewer acres in the Midwest produce soybeans. This makes soybeans more attractive in the U.S. South and diverts acres away from cotton.

### LONG-TERM COTTON PRICES

Even with the growing global demand for cotton and the increasing competition for acreage with soybeans, cotton farmers have done an extraordinary job in keeping the constant-dollar price of cotton low. However, traders do not trade the long-term constant-dollar price of cotton; they trade the short-term current-dollar price of cotton. That price has put in some major trends and sharp reversals over the past half-century.

### REAL PRICE OF COTTON REFLECTS INCREASED PRODUCTIVITY



Source: CRB-Infotech CD-ROM

### COTTON TRADING AT ICE FUTURES U.S.

This price history tells us in a nutshell why textile mills and cotton farmers need to hedge their price risks, and why cotton futures and options have been so successful over the contracts' lives. No large commodity trading advisor or commodity-based hedge fund can ignore the cotton market — not just for its trading opportunities, but for its diversifying properties vis-à-vis other commodity futures as well. The volume history speaks for itself. As with all ICE Futures U.S. contracts, volume and open interest rose with the adoption of electronic trading in 2007.

### LONG-TERM SUCCESS OF COTTON NO. 2 CONTRACT



Source: CRB-Infotech CD-ROM

### ICE FUTURES U.S. COTTON NO. 2 CONTRACT

The ICE Futures U.S. Cotton No. 2 futures contract is for the physical delivery of strict low middling quality cotton, 1 2/32nd inch staple length, to one of five U.S. locations. The key specifications are:

#### ICE FUTURES U.S. COTTON NO. 2 FUTURES SPECIFICATIONS

HOURS	2100 EASTERN STANDARD TIME TO 1430 EASTERN STANDARD TIME NEXT DAY TRADING PLATFORM AVAILABLE FROM 2000 EST THE PRIOR DAY FOR ORDER ENTRY
SYMBOL	CT
SIZE	10 METRIC TONS
QUOTATION	CENTS AND HUNDRETHS OF A CENT PER POUND
CONTRACT CYCLE	MAR - MAY - JUL - OCT - DEC (CURRENT MONTHS PLUS ONE OR MORE OF THE NEXT 35 MONTHS)
MINIMUM FLUCTUATION ("TICK")	.01 CENT; EACH .01 CENT = \$5.00 FLUCTUATION SPREADS MAY ALWAYS TRADE AND BE QUOTED IN \$0.01 INCREMENTS
SETTLEMENT	PHYSICAL DELIVERY TO ONE OF FIVE U.S. LOCATIONS (GALVESTON, HOUSTON, NEW ORLEANS, MEMPHIS, GREENVILLE/SPARTANBURG)
GRADE	BASIC GRADE = STRICT LOW MIDDLING QUALITY OF 1 2/32 OF AN INCH STAPLE LENGTH
DAILY PRICE LIMIT	THREE CENTS ABOVE/BELOW PREVIOUS DAY'S SETTLEMENT PRICE. WHENEVER ANY OF THE TWO FUTURES CONTRACT MONTHS WITH THE HIGHEST OPEN INTEREST SETTLES AT 84 ¢ OR HIGHER, ALL MONTHS MAY TRADE AT FOUR CENTS ABOVE/BELOW THE PREVIOUS SESSION'S SETTLEMENT. NO LIMIT ON SPOT MONTHS ON OR AFTER FIRST NOTICE DAY
FIRST/LAST NOTICE DAY	FIVE BUSINESS DAYS BEFORE THE FIRST BUSINESS DAY OF THE SPOT MONTH / TWELVE BUSINESS DAYS FROM THE END OF THE SPOT MONTH
LAST TRADING DAY	SEVENTEENTH LAST BUSINESS DAY FROM END OF THE SPOT MONTH LAST NOTICE DAY IS TWELVE BUSINESS DAYS FROM END OF SPOT MONTH
FEES	SCREEN TRANSACTIONS: \$1.75/CONTRACT OR SIDE (NON-MEMBERS). \$0.75 EFP SURCHARGE

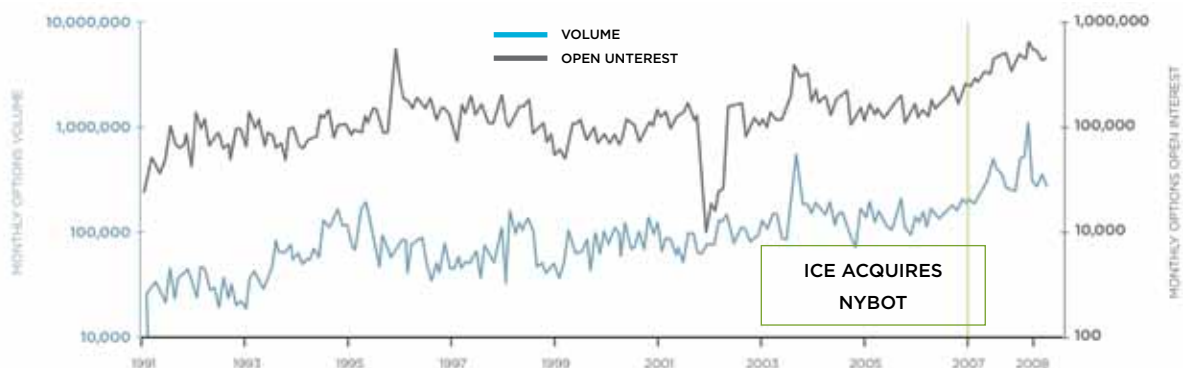
A complete list of specifications, including deliverable growths and trading fees is available at: [www.theice.com/cotton](http://www.theice.com/cotton)

Options on the Cotton No. 2 futures contract are also available. Each futures contract has options that settle into that contract along with serial options for the months of January, September and November. These serial options settle to the March, December and December futures, respectively. Option strikes are spaced 1 cent apart. The last trading day for regular options is the last Friday preceding the first notice day for the underlying futures by at least five business days; for the serial options it is the third Friday of the month in which the option

expires. A complete list of option specifications is available at: [www.theice.com/cotton\\_options](http://www.theice.com/cotton_options)

Options trading volume on the Cotton No. 2 futures contract has grown significantly since the late 1990s. Options tend to be used by two groups of sophisticated traders. The first is commercial participants hedging their physical positions. The second is experienced speculative traders. The growing use of these markets by both groups is an important indicator of the Cotton No. 2 futures contract's success.

#### LONG-TERM SUCCESS OF ICE FUTURES U.S. COTTON OPTIONS



Source: CRB-Infotech CD-ROM

### TRADING ICE FUTURES U.S. COTTON FUTURES AND OPTIONS

Futures markets exist for the purposes of price discovery and risk transfer. Price discovery requires buyers and sellers to meet in a competitive marketplace; prices resulting from each transaction signal to other traders what a given commodity might be worth.

Anyone approved by a clearing member or futures commission merchant can participate in the price discovery process, regardless of their participation in the coffee business. A market participant who is not in the cotton or textiles business will be classified as a non-commercial or speculative trader. A market participant active in the cotton or textiles business will be classified as a commercial trader or hedging trader. For a speculator, the price discovery trade is simple and straightforward; if you believe the price of cotton will rise, you “go long” a futures contract; if you believe the price of cotton will fall, you “go short” a futures contract.

These same market views can be expressed in options as well. If you believe prices will rise, you can buy a call option, sell a put option or engage in a large number of spread trades tailored to your specific price view and risk acceptance. If you believe prices will fall, you can buy a put option, sell a call option or engage in a different set of spread trades. A long call (put) option is the right, but not the obligation, to go long (short) the underlying future at the strike price at or by expiration. A short call (put) option is the obligation to deliver (take delivery) of the underlying future at or by the expiration if that option is exercised.

Hedgers may use Cotton No. 2 options frequently. Producers can set a floor beneath a selling price with long put options, and buyers can establish a ceiling over costs with long call options, among other strategies. In a futures trade, you and the counterparty to your trade will post initial or original margin with your futures commission merchant or clearing member. Minimum margins are set by ICE Futures U.S., and your futures commission merchant may require additional funds. margin schedule for ICE Futures U.S. is available at: [www.theice.com/margins](http://www.theice.com/margins)

There are no margin requirements for long option positions. Margin requirements for short option positions vary according to the relationship between the option strike price and the futures price.

If the market moves in your favor — higher for a long position (or commitment to take delivery of cotton or to offset the contract by selling it prior to delivery), or lower for a short position (or commitment to deliver cotton or to offset the contract by buying it prior to delivery) — the equity in your account will increase. You may withdraw these funds down to the “maintenance margin” level, depending on your account agreement.

If the market moves adversely — lower for a long position or higher for a short position — your futures commission merchant will require you to post additional funds, called variation margin, to sustain your maintenance margin level. These “margin calls” assure both your futures commission merchant and ICE Clear U.S. <sup>®</sup>, the exchange clearinghouse, that you can perform according to your contractual commitment. All futures accounts are marked-to-market daily, and participants deficient in margin obligations may have positions liquidated involuntarily.

As the designated clearinghouse, ICE Clear U.S. serves as the counterparty to every futures contract traded on ICE Futures U.S. As a AAA-rated entity, the clearinghouse clears trades matched by ICE Futures U.S. and guarantees performance in delivery even if a trader defaults. The financial integrity and anonymity provided by ICE Clear U.S. are increasingly important in the financial system.

What do the financial flows look like in a futures trade? Let’s say a five-contract December futures position is initiated at 69.65¢ per pound and the market rises to 71.30¢ per pound on the following trading day.

- For the long position, the gain is:  
**5 contracts x [71.30 - 69.65] / contract x \$5.00 per .01¢ = \$4,125**
- For the short position, the loss is equal and opposite:  
**5 contracts x [69.65 - 71.30] / contract x \$5.00 per .01¢ = -\$4,125**

If we reverse the price path, we reverse the gains and losses. Let's change the starting price to 69.83¢ per pound and have the market decline to 68.91¢ per pound the next day.

- For the long position, the loss is:

$$5 \text{ contracts} \times [68.91 - 69.83] / \text{contract} \times \$5.00 \text{ per } .01¢ = -\$2,300$$

- For the short position, the gain is equal and opposite:

$$5 \text{ contracts} \times [69.83 - 68.91] / \text{contract} \times \$5.00 \text{ per } .01¢ = \$2,300$$

Options traders see the same directional profit and loss profiles relative to price, but the actual profit and loss is subject to a range of additional factors, including market volatility, time to expiration, interest rates and the relationship between the current futures price and the option's strike price.

### RISK TRANSFER

Risk transfer is the second purpose of a futures market. Any grower of cotton, any holder of cotton inventories, or any party at risk if the price of cotton declines can seek protection in the futures markets. These participants are long the market and can offset risk by going short a futures contract. Any textile mill or user at risk if the price of cotton increases is short the market and can offset risk by going long a futures contract.

The mechanics and financial flows are identical to those outlined above. A cotton grower at risk to prices falling can acquire a financial asset, the short futures position, which will rise in value as the market declines. The opposite is true for a textile mill at risk to prices rising; there a long futures position will rise in value as the market rises.

While the financial flows should offset the economic gains and losses of the physical cotton position, there are two important things to remember. First, even though futures prices converge to cash prices at expiration, the convergence process is subject to what is called "basis risk" or differences resulting from changes in hedging demand, location of the cotton and grade differentials. The daily premium and discount of various grades of cotton is available at: [www.theice.com/report\\_center](http://www.theice.com/report_center)

Second, while the economic gains on, for example, a warehouse full of cotton are real, they are not realized until the cotton is

sold. If this inventory is hedged with a short futures position and the market rises, the beneficial owner will have to keep posting additional funds in the margin account.

Nothing in the above discussion of hedging tells you when or at what price to hedge. This is one of the reasons options are valuable to hedgers. While the cotton grower may wish to have downside protection or a price floor, that same grower probably wants to participate in any future price increases. The grower concerned about a decline in the value of cotton between now and the time he expects to be able to sell his cash crop at harvest in the fourth quarter could buy a December 69¢ put option, which is the right, but not the obligation, to receive a short position in a December future at 69¢ for 4.27¢, or approximately \$2,135. The purchased put guarantees the grower the right to sell the December future for an effective price of 64.73¢ per pound (the 69¢ strike price less the premium paid of 4.27¢). This right gives him protection if cotton prices have fallen by the expiry of the December option, but at the same time preserves his ability to profit should the price of cotton move higher over the period.

The textile mill wishing to cap the price of cotton, but not be exposed to margin calls if the price continues to rise, can do an opposite trade and buy a December 70¢ call option, which is the right, but not the obligation, to receive a long position in a December future at 70¢ for 4.44¢, or approximately \$2,220. The purchased call gives the textile mill the right to buy the December future at an effective price of 74.44¢ per pound (again, the strike price of 70¢ cents plus the premium paid of 4.44¢), offering protection against an unfavorable rise in the price of cotton while preserving the ability to take advantage if prices decline.

It should be noted that the risk profile for sellers of options is dramatically different than for buyers of options. For buyers, the risk of an option is limited to the premium or purchase price paid to buy the option. For sellers, the risk profile is unknown and can be potentially quite large. Options can become complex very quickly, with trading influenced by variables including time remaining to contract expiration, underlying commodity volatility, short-term interest rates and a range of expected movements collectively called "the Greeks."



### ABOUT ICE

In addition to agricultural commodities, ICE operates existing futures and options markets for crude oil, refined products, natural gas, power, emissions, and foreign currency and equity index futures and options.

ICE conducts its energy futures markets through ICE Futures Europe<sup>®</sup>, its U.K. regulated London-based subsidiary, which offers the world's leading oil benchmarks and trades nearly half of the world's global crude oil futures. ICE conducts its soft commodity, foreign exchange and index markets through its U.S. regulated subsidiary, ICE Futures U.S., which provides global futures and options markets, as well as clearing services through ICE Clear U.S., its wholly owned clearinghouse. ICE's state-of-the-art electronic trading platform brings market access and transparency to participants in more than 50 countries.

ICE was added to the Russell 1000<sup>®</sup> Index in June 2006. Headquartered in Atlanta, ICE also has offices in Calgary, Chicago, Houston, London, New York and Singapore. ICE also conducts futures and options trading in canola oil, feed wheat and western barley through ICE Futures Canada TM, a regulated market in Manitoba, Canada.

### LEADING ELECTRONIC TRADING PLATFORM

ICE's electronic trading platform provides rapid trade execution and is one of the world's most flexible, efficient and secure commodities trading systems. Accessible via direct connections, telecom hubs, the Internet or through a number of front-end providers, ICE offers a 3 millisecond transaction time in its futures markets, the fastest in the industry. ICE's platform is scalable and flexible – which means new products and functionality can be added without market disruption.

ICE offers numerous APIs for accessing futures and OTC markets, including a FIX API.

### INTEGRATED ACCESS TO GLOBAL DERIVATIVES MARKETS

ICE's integrated futures and OTC markets offer cleared and bilateral products on a widely-distributed electronic platform, with quick response times to participants' needs, changing market conditions and evolving market trends.

### TRANSPARENCY

Price transparency is vital for efficient and equitable operation of markets. ICE offers unprecedented price transparency and ensures that full depth-of-market is shown. Trades are executed on a first-in/first-out basis, ensuring fair execution priority. ICE also displays a live ticker of all deal terms, and maintains an electronic file of all transactions conducted in its markets.

### ICE FUTURES U.S. REGULATION

ICE Futures U.S., Inc. is a designated contract market pursuant to the Commodity Exchange Act, as amended, and is regulated by the Commodity Futures Trading Commission. For well over a century, the Exchange has provided reliability, integrity and security in the global marketplace.

### GETTING INVOLVED

A list of ICE Education programs is available at: [www.theice.com/education](http://www.theice.com/education); an overview of ICE capabilities is available at: <http://www.nxtbook.com/nxtbooks/ice/overview/#/O>. In addition to our other education offerings, ICE provides contract specific webinar presentations. A list of these presentations can be found at [www.theice.com/webinars](http://www.theice.com/webinars).

The ICE website: [www.theice.com](http://www.theice.com) should be your first place to start. The home page for cotton is: [www.theice.com/cotton](http://www.theice.com/cotton). The link: [www.theice.com/clear\\_us](http://www.theice.com/clear_us) provides you with the technical details on exchange rules, margins and fees and delivery and expiration.

To contact ICE Futures U.S., visit: [www.theice.com/contact](http://www.theice.com/contact)

web [theice.com](http://theice.com) | telephone +1 212 748 4000

This brochure serves as an overview of the Cotton No. 2 futures and options markets of ICE Futures U.S. Examples and descriptions are designed to foster a better understanding of the Cotton No. 2 futures and options market. The examples and descriptions are not intended to serve as investment advice and cannot be the basis for any claim. While every effort has been made to ensure accuracy of the content, ICE Futures U.S. does not guarantee its accuracy, or completeness or that any particular trading result can be achieved. ICE Futures U.S. cannot be held liable for errors or omissions in the content of the brochure. Futures and options trading involves risk and is not suitable for everyone. Trading on ICE Futures U.S. is governed by specific rules and regulations set forth by the Exchange. These rules are subject to change. For more detailed information and specifications on any of the products traded on ICE Futures U.S., contact ICE Futures U.S. or a licensed broker.

IntercontinentalExchange is a Registered Trademark of IntercontinentalExchange, Inc., registered in the European Union and the United States. ICE is a Registered Trademark and Marque Deposees of IntercontinentalExchange, Inc., registered in Canada, the European Union, Singapore and the United States. ICE Futures U.S. and ICE Futures Europe are Registered Trademarks of IntercontinentalExchange, Inc., registered in Singapore and the United States. ICE Clear U.S. is a Registered Trademark of IntercontinentalExchange, Inc., registered in the European Union, Singapore and the United States. Russell 1000 is a Registered Trademark of the Frank Russell Company. U.S. Dollar Index is a Registered Trademark of ICE Futures U.S., Inc., registered in the United States. USDX is a Registered Trademark of ICE Futures U.S., Inc., registered in Japan and the United States. Sugar No. 11 and Sugar No. 14 are Registered Trademarks of ICE Futures U.S., Inc., registered in the United States and Japan.

