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UP from the PITS

A revitalized Chicago Merc has largely switched over to electronic trading, staved off European rivals and hatched new products. Is an acquisition next?

By Janet Lewis

Meet Chuck McElveen, the future of futures.

A floor trader for two decades, he fled the Chicago futures pits four years ago to start his own electronic trading firm, crossing the great digital divide. Today he oversees 50 traders clicking away at their keyboards in an office on Chicago's North Side. The rowdy, paper-strewn floor of the Chicago Mercantile Exchange, the biggest U.S. futures market, is only a couple of miles away, but it could just as easily be halfway around the world.

"We started trading CME stock index futures in 2000 and hit a sweet spot as the market started to grow," says McElveen, CEO of Kingstree Trading, which also deals in fixed-income and energy futures on the CME and other U.S. and international exchanges. "Only so many people can stand in a pit, but there can be almost unlimited participation in an electronic market."

Kingstree and hundreds of other proprietary trading firms have taken advantage of lightning-fast computing and communications to propel futures trading into the 21st century. Along the way they have helped drag the Merc, that onetime bastion of open outcry, shouting and gesturing into the modern age: The exchange's electronic trading network, Globex, now accounts for more than two thirds of CME volume.

"The change over the past five years has been indescribable," marvels Leo Melamed, the Merc chairman emeritus and financial futures pioneer who laid the groundwork for electronic trading on the CME in the late 1980s. Melamed, McElveen and other seasoned observers are betting that the Merc could be 100 percent electronic within a couple of years. That likely would make for cheaper, more efficient trading for the exchange's 6,000 customers, speed new product development and allow the CME to market more aggressively across borders for new customers, leading to volume gains and bigger profits.

To be sure, just as every trade has two sides, another school of thought holds that pit trading on the Merc won't disappear for at least several years, because of customer preferences and the continuing advantages of the open-outcry system for structuring especially complex deals, such as certain Eurodollar contracts. "Many clients still prefer to have their trades done on the floor," allows CME chairman Terrence Duffy. "It's difficult to set a date for closing it down, and it would be foolish to do so.

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That's for customers to decide."

Nevertheless, a more computerized future can't come too soon: After years of resisting change and focusing myopically on its local rival, the Chicago Board of Trade, the CME finally woke up to the threat posed by all-electronic competitors from Europe — Eurex and Euronext.liffe — that have set out to conquer the vast U.S. futures market. The Merc has won the first skirmishes, but it's still early days.

Eurex, for one, is betting that a transatlantic clearing platform that it began operating last month with Chicago-based Clearing Corp. will help it compete better with the CBOT and the CME. And Euronext.liffe is hoping to chip away at the CME's market share with its rival three-month Eurodollar futures contract, launched in March.

In turn, the CME has slashed prices and set up high-speed regional telecommunications hubs overseas to lure foreign customers onto the Globex platform.

The CME's chief weapon, Globex has absorbed the surging volumes in the futures markets, positioning the exchange for growth. In November, Globex handled 68 percent of the CME's average daily volume of 3.2 million contracts, more than double its activity a year before. Globex's share of the Merc's daily trading volume passed the 50 percent mark for the first time in the second quarter. Meanwhile, the shouting in some traditional trading pits, notably for currencies and Standard & Poor's E-Mini contracts, has faded to a whisper.

The benefits have cascaded to the bottom line. Fueled by a global boom in derivatives trading and by internal technology efficiencies, Chicago Mercantile Exchange Holdings, the CME's publicly traded parent, reported a 76 percent increase in net income, to $163 million, for 2004's first nine months, on a 35 percent gain in revenues, to $546 million. Since the company's IPO its stock price has gone pretty much in one direction — up: from $35 on December 24, 2002, its first day of trading, to a peak of $214 as of early this month. CME Holdings has $585 million in cash and no debt; its $7 billion market cap is tops among listed exchanges and puts it in a good position to acquire rivals. One recent rumor had CME eyeing Reuters Group trading subsidiary Instinet Group; CME officials declined to comment on that but say they are considering potential deals, most likely in or related to the exchange's existing derivatives markets.

The success has been hard-won, and in the face of fierce competition and the inevitable turn in the market cycle, there's no telling how long the CME's steep upward trajectory will continue. The Europeans are only just getting started, and Eurex hasn't yet directly attacked the CME. "We'll have to see what happens now that Eurex is live with its transatlantic clearing link," says William Cline, managing partner for capital markets at accounting firm Accenture. "The battle has yet to play out."

PIT TRADING MAY NOT DISAPPEAR OVERNIGHT, but the change at the Merc is nonetheless remarkable. After Globex was launched in 1992, it was grindingly slow to gain acceptance. Melamed came out of retirement in 1998 in part to get Globex on track; he had seen how technology had helped Eurex steal the German Bund contract away from the London International Financial Futures Exchange, which at the time still had a floor operation. Both European exchanges emerged as powerful threats to the Chicagoans, and now that Globex is thriving, there's no disputing Melamed's triumph. The 72-year-old remains on the CME board alongside chairman Duffy and CEO Craig Donohue.

The well-spoken, well-tailored duo are far from the rough-edged trader stereotypes of Chicago legend. Before rising from the pits, Duffy, 45, who had studied business administration at the University of Wisconsin–Whitewater, became an exchange member in 1981 as a hog trader and was president of his own firm, TDA Trading. He joined the Merc's board in 1995 and was vice chairman of CME Holdings at its inception in August 2001, becoming chairman in April 2002.

Donohue, 43, a graduate of Drake University in Des Moines, Iowa, and John Marshall Law School in Chicago, has spent 16 years in CME staff positions, including general counsel, head of business development and, when CME Holdings was formed, chief administrative officer. He became CEO in January of this year after the resignation of James McNulty, a former UBS executive who was instrumental in the IPO process and the demutualization that preceded it.

Duffy, Donohue and the Merc have had the trading winds at their backs. The Washington-based Futures Industry Association reports that in the first half of 2004, world derivatives trading grew 16 percent from a year earlier, to 4.6 billion contracts, and that the CME accounted for 394 million of those — a 25 percent increase. Futures alone jumped 16 percent from the year-earlier period, to 1.77 billion contracts, and U.S. futures growth — up 30 percent, to 645 million contracts — accounted for half of that increase.

Interest rate and currency volatility and the rapid growth of the hedge fund and managed-futures industries have been a boon to financial futures trading. The CME thrives on its product diversity: When one market — interest rates or equities or foreign exchange — is quiet, another is sure to be hopping. Amid recent declines in the U.S. dollar and the influx of hedge funds and other active managers into electronic futures trading, the Merc has lately been feasting on Eurodollars. Its benchmark three-month Eurodollar contract surpassed Eurex's Euro Bund as the world's most actively traded futures contract in the first half of the year, growing 40 percent, to 139.7 million contracts, while the Eurex product was off 8 percent, at 119.4 million.

"This is a unique time," says Donohue. "Futures and options are emerging as an asset class and investment vehicle, while the efficiency and value of derivatives in hedging and risk management are reaching a much broader audience."

Although the Eurodollar and S&P E-Mini contracts are the CME's mainstays, Donohue and Duffy have pressed forward with new initiatives to sustain the exchange's momentum. The most significant so far is a deal with archrival CBOT to handle its clearing business — which came up for grabs last year when Board of Trade Clearing Corp. (since renamed Clearing Corp.) opted to take on Eurex's U.S. clearing and create a link with Eurex operations overseas. The CBOT clearing arrangement contributed the bulk of the $41 million in transaction-processing revenues that the CME reported through September.

In another big step, the Merc announced in May that it would team up with Reuters to post foreign exchange futures and options quotes on the British company's vast network of trading terminals. Seven banks are set to test the link this month, and a full rollout is planned for early next year. Internationally, the exchange is aggressively marketing itself and its products: its communications hubs in seven European countries give traders there a local connection to Globex, challenging Eurex and Euronext.liffe on their home ground.

"The CME is clearly pursuing a growth agenda, and unlike other U.S. exchanges, it is playing offense, not defense," says Accenture's Cline. "It has consolidated its market position effectively and is embracing electronic trading more aggressively than others."

Still, like any trader, the CME needs to watch its back. Donohue and Duffy have had to spend a fair amount of time doing just that since January 2003, when Eurex, a joint venture of SWX Swiss Exchange and Frankfurt's Deutsche Börse, declared its intention to enter the U.S. Eurex had been supplying the CBOT with its electronic trading technology, but after CBOT decided to replace Eurex with the Liffe Connect system, Eurex was free to start offering dollar-denominated derivatives contracts.

The CME and the CBOT, in a rare show of unity, joined forces to fight Eurex's incursion. In multiple appearances before congressional committees and the Commodity Futures Trading Commission, they argued that new regulations applying specifically to foreign-owned exchanges should be adopted before Eurex could be permitted to open in Chicago. The Chicago pair also vigorously opposed Eurex's May 2003 agreement with Clearing Corp.

The best that the Merc and the CBOT could do was delay the planned opening of Eurex US in Chicago by a week, until February 8 of this year. And after gaining CFTC approval in October, Eurex has begun phasing in its transatlantic clearing scheme, saying it will lower costs and improve liquidity by giving Clearing Corp. customers direct access to Eurex Clearing and vice versa.

Eurex has pressed its cause aggressively. Still hanging over the CME and the CBOT is an antitrust suit, filed by Eurex in the U.S. District Court for the District of Columbia in October 2003, that accuses the two of offering financial inducements — in the form of guarantees against losses — to Clearing Corp. members to vote down the Eurex deal. Eurex heralded its arrival in the City of Big Shoulders with a mobile billboard showing an empty office chair with the tag line, "The only seat you need to buy."

So far Eurex has targeted only the CBOT, by launching all-electronic U.S. Treasury futures. The less-electronic CBOT has held its ground through price cuts, increasingly competitive technology and the larger-scale, lower-cost clearing operation provided by the CME. Eurex's inroads into the Treasuries business in its first ten months: less than 5 percent of daily volume, a slower start than many market watchers anticipated. Eurex US reported average daily trading volume of 57,000 contracts in November, a 28 percent increase over October.

Still, the CME has good reason to be nervous: The European exchange says it plans to move into stock index futures that would compete more directly with the Merc. Eurex has signed a deal to create products based on three Frank Russell Co. equity indexes.

"We're looking at a much broader extension of Eurex into the U.S. and Asian time zones," said Eurex CEO Rudolf Ferscha at an October press conference. "We haven't even started testing European benchmark products [such as Bunds and other euro-denominated government bond contracts] on Eurex US."

Meanwhile, on the CME's other flank, "Liffe has made little headway in the Eurodollar, which remains firmly in the CME's grasp," notes Harrell Smith, an analyst at Boston-based research firm Celent Communications. "As in most markets, liquidity remains extremely sticky."

The real winners in these battles are, of course, market participants.

"Competition has arrived and has changed the whole landscape here. It has been tremendously beneficial for all parties, especially clients," says Michael Dawley, head of futures products at Goldman, Sachs & Co. and chairman of the Futures Industry Association and of Clearing Corp. "The Chicago exchanges have met the competitive threat head-on. They have done an excellent job and will feel the benefit in the long run."

ONE REASON THAT THE CME HAS HAD TO PLAY catch-up with its European rivals is that it has a longer history and strong traditions. Founded in 1898 to trade futures con-

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tracts on agricultural products, the CME became a financial force in 1972 when Melamed, who had been chairman since 1969, devised futures contracts on currencies. The exchange later pioneered Eurodollar and stock index futures. Liffe wasn't born until 1982, and Eurex's predecessor, Deutsche Terminbörse, opened in 1990.

In 1987, Melamed, then special counsel to CME's board and chairman of its executive committee, entered into an alliance with Reuters to begin developing Globex, which was launched five years later. "I never had a doubt of which way the markets would go — that is, electronic," says Melamed. But even he didn't fully appreciate how tough it would be to persuade the CME's powerful member-owners to share his insight. Not for nothing does the 46-year exchange member adorn his office wall with a bronze relief, commissioned by a colleague, depicting him as Don Quixote tilting at windmills.

Melamed had officially retired as the system was getting off the ground, believing it was "well on its way." But, he says, "what happened to the Merc in the years that followed was not so good — there was this huge resistance in the open-outcry community."

Meanwhile, in Europe the all-electronic Eurex — then DTB — was challenging the open-outcry Liffe in trading the German Bund contract. By 1998 it had triumphed. "I said in a speech that it was a 'two-minute warning' to open-outcry exchanges that they could lose their franchise to electronic competitors," says Melamed, who had returned to the Merc's board in a tumultuous 1997 board election that gave the forces of reform the upper hand. The exchange, owned by its 3,704 members, set out on the long road to a public offering, beginning with a demutualization that became effective in 2000, setting the stage for the IPO two years later.

"The new board recognized that we had to compete electronically, which was very expensive," says Melamed. "Ultimately, the only way to get the money was through a public offering."

Melamed and his fellow reformers conducted painstaking negotiations over demutualization, pledging to update trading-floor technology with handheld computers and electronic quote boards and to set up a training program to usher traders into the electronic age. And they agreed not to close down a trading pit if it kept producing at least 80 percent of the previous year's volume.

"We told people that they were not monkeys — they could learn to adapt, and we would help them to adapt," says Jack Sandner, who was CME chairman for 13 years during the '80s and '90s and is now chairman of E*Trade Financial Corp.'s E*Trade Futures arm.

In 1999, CME management turned its attention back to Globex, hiring Arman Falsafi, then a 32-year-old University of Chicago MBA who had worked as a systems engineer for derivatives house O'Connor & Associates and outsourcing shop MCI Systemhouse. Falsafi's boss, CME products and services chief Rick Redding, credits her with upgrading and readying Globex — and hence the Merc — to go global. By 2001, 20 percent of CME contracts were trading electronically. That proportion rose to 34 percent in 2002 and has since doubled.

"People still think of us as a pit market, but Globex alone does more business than many futures markets do overall," says Falsafi, who moved from Chicago to London in August to take charge of the Merc's push into Europe and Asia. "The CME had a visionary leadership that very early on saw electronic trading coming, so we had a strong foundation to build on."

Although the long-term aim is to be entirely electronic — at least for financial products — the conversion isn't complete. More than 90 percent of the CME's equities and forex products are now traded on-screen; in the currency pits a sprinkling of traders stand around reading newspapers much of the day. On the other hand, there is plenty of activity in the S&P 500 pit, and the Eurodollar action on the floor has been lively, as well. Seventy percent of trades in Eurodollar contracts due to expire within a few months — known as "front months" — are electronic, but only 28 percent of those that expire later, in "back months," are on-screen. This may change when new software now in development is implemented. Meanwhile, some customers still prefer the floor for very large trades, particularly in the standard S&P contract, which is five times the size of the nearly all-electronic S&P E-Mini. So far the exchange has decided not to force customers to use Globex for these contracts, although it will ultimately have to make this a priority. Essentially, all of the CME's expansion initiatives revolve around Globex. "We don't build new pits anymore," says Duffy.

The CME's foreign exchange futures volume has doubled over the past two years — to about 7 percent of total transaction volume, generating 15 percent of CME revenues — and Donohue and Duffy are trying to crank up further gains. Historically, banks have traded forex products on futures exchanges not through their main currency trading operations but through subsidiaries. The result: Interbank FX traders haven't used futures for hedging as much as they might have. The CME's distribution deal with Reuters is meant to bridge that gap by letting traders see the exchange's prices alongside those of over-the-counter trading systems, making the Merc a more appealing hedging venue.

One goal of the Merc's growth plan is to pull in more business from Europe and, over time, Asia. The exchange has cut prices for new European customers to 44 cents a side (including clearing) — half of what existing customers pay. For CME members the price is just 14 to 18 cents a side, versus 46 cents on Liffe.

The Merc is addressing overseas customers' worries about telecommunications costs and time lags with its hub strategy, enabling connections to the CME through links in Amsterdam, Dublin, Frankfurt, Gibraltar, London, Paris and Milan. The shorter-distance hookups "have made it cheap and easy for people to connect," says Falsafi. The CME plans to establish its first Asian hub, in Singapore, in the second quarter of next year.

One measure of the impact of the hubs, and of CME's pricing incentives: Trading in Europe by proprietary shops and so-called arcades, Internet-café-like trading operations for individuals, has gone from zero in 2002, when the first hub opened in London, to 55,000 contracts a day, about 2 percent of the exchange's volume. One user, Geneva Trading, with 100 traders in Chicago and Dublin, manages the hub in the Irish city. It's part of a strategy to deal in the European and Asian

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time zones — and to take advantage of overseas talent. "Ireland turns out some wonderfully talented traders," notes Geneva's Chicago-based CEO, Mary McDonnell.

MOST CRITICALLY, THE CME MUST SUPPLY ITS pipeline with new products. The Merc, the CBOT, Eurex and Euronext.liffe all want to be the first to introduce the next new thing, because once an exchange attracts that critical mass of liquidity, rivals have a terrible time wresting away market share. (There hasn't been another coup to match Eurex's swiping of the Bund contract from Liffe.)

Chairman emeritus Melamed: "I never had a doubt of which way the markets would go — that is, electronic"

Most of the Merc's contracts are built around stock indexes, interest rates or currencies — categories that have changed little in decades. The CME tried mortgage bonds without much success; buyers didn't bite. The forecast is similarly cloudy for weather futures: After five years of meager activity, the Merc in July tried to stoke new interest in weather derivatives by introducing Japanese contracts, with little success so far.

OneChicago, the CME's two-year-old joint venture with the CBOT and the Chicago Board Options Exchange to peddle single-stock futures electronically, could use more wattage. OneChicago Chairman and CEO William Rainer left last month, citing personal reasons, and three senior executives — Peter Borish, Martin Doyle and Robert Walsh — moved up to chairman, president and COO, respectively. An encouraging sign: The venture's November volume of 189,422 contracts was 157 percent above the year-earlier level; the year-to-date figure of 1.77 million was up 39 percent.

Some critics see the CME and its rivals as weak in product development. "These exchanges are competing on price and fixated on stealing products from each other, and, sadly, they are not coming out with a lot of interesting new ideas — there is a lack of product innovation," complains Patrice Blanc, CEO of Fimat Group, Société Générale Group's derivatives subsidiary. He believes the Merc and its competitors may be overemphasizing technology. "Certainly, the CME has been very successful in moving volume onto Globex, which is efficient and benefits us all," acknowledges Blanc. "But technology becomes commoditized."

CME executives say they still have plenty to do to keep technology on the leading edge, and they are not letting up on product development, either. To get R&D advice, the CME earlier this year formed a panel of inside and outside experts, headed by Nobel laureate Myron Scholes, co-inventor of the Black-Scholes option pricing formula, an emeritus professor at Stanford University and chairman of hedge fund Oak Hill Platinum Partners. "We're trying to think outside the box," says Scholes, who is based in Rye Brook, New York. "The Merc is like a drug company — it needs to invest a lot in R&D."

Donohue counters that the CME has a long tradition of product development — it was first with stock index futures and currency futures, for example. He contends that the exchange's efforts will be increasingly fruitful because "our new products are all electronic." That means lower rollout costs, giving new offerings more time to find their markets.

The main product initiatives revolve around credit derivatives and economic indicators: In May the Merc signed a memorandum of understanding with the CBOT to jointly launch a credit derivatives contract, and this month it completed a letter of intent with Macro Securities Research, a unit of Cambridge, Massachusetts, consulting firm Case Shiller Weiss, to explore the development of futures contracts based on housing prices.

The CME is in as good a position to buy growth as it is to build it from scratch. The exchange's forward price-earnings ratio of 28 and its more than half-billion-dollar cash pile mean it can think seriously about acquiring another futures exchange — or even a stock exchange. "Naturally, we are always looking at acquisitions," says Duffy noncommittally. "The fact is, mergers have a failure rate of about 80 percent. We don't want to do a deal just to do a deal."

Might the CME and CBOT ever get together? Combined, they would be the biggest derivatives exchange in the world, and they could consolidate technologies and administrative staffs to cut costs, assuming egos didn't get in the way.

Although regulators might protest on antitrust grounds, the pair have scant product overlap — just in stock index futures, where the CBOT is a small player. Moreover, they've gotten downright friendly through their clearing partnership and their united front against Eurex. Cautious CME officials don't rule out a merger. They note that the CBOT is following the Merc's route to demutualization — a membership vote is expected by year-end — and to an eventual public listing. "They are out to do what we did," says Duffy coyly. "We wish them nothing but the best." ii