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Chicago's Exchanges Look Toward an Electronic Salvation

To keep their world leadership, the exchanges are joining forces — and systems.

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CHICAGO

LAST December, after President Bush toured the trading floor of the Chicago Mercantile Exchange, he came away dazzled by the frenzy of shouts and hand signals. "I have seen the future," he said.

Officials at the Merc and its longtime neighbor and rival, the Chicago Board of Trade, were pleased by the vote of confidence. But in fact they are counting on the future looking a bit different. Separately and jointly, the two exchanges are investing heavily to modernize as they battle to preserve their leadership in the world's markets for futures, options, and related instruments.

The exchanges are spending millions of dollars annually on electronic systems. Some aim to make the current open-outcry trading more efficient by eliminating paper orders along with many of the clerical workers who handle them. Other systems will sidestep the pits entirely to help Chicago's traders compete with new exchanges around the world that trade exclusively on computers.

And in moves that would have seemed unimaginable a decade ago, top officials from the Merc and Board of Trade have set aside historical rivalry to travel together to Europe and Asia on sales trips, to merge overseas offices and to begin negotiations to merge the back offices that process trades.

The exchanges' products are known as derivatives because they are based on underlying commodities. The extension of the futures concept from traditional commodities like crops, animals and metals to financial commodities like stocks, bonds and currencies has transformed derivatives into a basic cog in the global economy and one of the most incredible growth industries ever. Hal T. Hansen, the Cargill Investor Services executive who is president of the Futures Industry Association, a trade group, described the industry's growth chart as looking like the path of a homesick angel.

Industry sources figure there were more than 500 million futures and options contracts traded in the world last year — an average of nearly 1,000 per minute. Chicago became the worldwide futures king by leading the development of financial futures.

But Chicago's share of futures and options trading, estimated at about 75 percent just five years ago, is now thought to be just under 50 percent and falling. The exchanges have been losing ground to the approximately 50 exchanges outside the United States, about half of which have been founded since 1985. Off-exchange deals between banks and other institutional investors are also a rapidly growing part of the derivatives business.

Futures are an obligation to buy or sell, anywhere from a few days to several years in the future, a fixed quantity of a commodity. The commodity could be securities like Treasury bonds, 5,000 bushels of corn, or even the exchange rate between the German mark and the Japanese yen. A futures contract specifies price, date, and place and terms of delivery. Options are the right, but not an obligation, to complete similar trades on or before a specified date.

Futures and options were once regarded as dangerous financial oddities because they attracted so many speculators. It seemed that in every famous financial bust dating back to the run-up and crash in tulip-bulb prices in 16th-century Holland, derivatives had worked like gasoline thrown on a fire. In the past 20 years, though, derivatives have come to be accepted as a useful tool for any conservative business exposed to wide swings in profitability.

THE Chicago markets, and rivals like the New York Mercantile Exchange and the London International Financial Futures Exchange, allow a farmer to establish the revenue he will have after selling a crop long before it is harvested, a manufacturer to lock in the dollar value of exported products long before payment is made, or a pension fund to build a safety net of assets that generate income to match the projected pace of payments to its members.

Although no bottom-line measure of the benefits to the world economy of financial derivatives is possible, the business world has been won over. Futures trading in the United States alone went from 18.3 million contracts in 1972 to 112.4 million contracts in 1982 to a peak of 276.5 million in 1990, according to the Futures Industry Association. (Exchange officials say that increased competition might have been a factor in the decline to 262.9 million last year but that the recession was the primary reason) Options on commodities, and on futures contracts themselves, began trading in 1982 and soared to 64.1 million contracts by 1990, the trade group said.

Not included are trades on exchanges that focus on options on stocks or stock indexes. The largest is the Chicago Board Options Exchange, a Board of Trade spinoff that has a daily volume of 500,000 contracts.

IF worldwide trading continues to expand as rapidly as it has in recent years, the Chicago exchanges could prosper even as they lose market share. But they aren't taking growth in this country for granted.

In the past, the exchanges' growth has been driven by a handful of big products. The Board of Trade, founded in 1848, owes its claim to being the world's largest derivatives exchange primarily to its 30-year Treasury bond futures, introduced in 1977. The bond contract is the world's most popular way of hedging on long-term interest rates. The Merc, founded in 1919, has grown even faster. It grabbed the lion's share of bets on short-term interest rates (through Eurodollar contracts) and foreign-exchange movements (through foreign-currency futures). And with its S.& P. 500 contract, it is Wall Street's favorite place to trade stock futures.

In recent years, though, neither exchange has come up with a new-product home run. The Board of Trade is currently making the most adventurous efforts here to snap the slump, with forays into insurance and environmental futures (see box). Most outside experts are not optimistic. "All of the obvious ideas have been done," said Jack D. Schwager, director of futures research at Prudential Securities Inc.

Conceding as much, the exchanges here are working hard to market themselves and their derivatives to investors around the world. The most potent symbol of cooperation is Globex, an electronic network that allows traders to offer and buy futures contracts through their computers. It was developed jointly by the two exchanges with Reuters, to allow their products to be traded anywhere when the exchanges are closed. .

Originally seen as a two-year project, Globex has swallowed about $7 million from the two exchanges and tens of millions more from Reuters. When trading finally began this summer, interest was limited because a number of crucial features are still under development. Among them: built-in credit limits on users of the trading terminals, ability to program in buy or sell orders that are placed automatically when fast-moving markets hit a specified price and instantaneous switching to backup networks.

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Some critics doubt that Globex will ever generate the trading volumes needed to justify the hundreds of thousands of dollars members have to invest in equipment, fees and staffing to use it. But Globex did teach the exchanges that they could cooperate on complicated projects, leading not only to the joint marketing efforts but also to other technology projects. An example: work on Audit, a handheld order-keeping and order-entry device being developed for pit traders (an early prototype was tested this fall at both exchanges). Recording trades and forwarding them for clearing, the device will allow clearers to quickly detect errors, unauthorized trades or disagreements about what happened. The exchanges also hope Audit devices will eventually provide traders with news and pricing aids.

LEO MELAMED, chairman of the joint venture company managing Globex, said Globex is already serving its purpose of discouraging other exchanges from setting up competing systems or attempting to trade Chicago's products. In fact, Globex has agreements with exchanges in Singapore and France to list their most popular contracts and is negotiating with the London exchange.

In addition to being an after-hours home for many exchanges' crown jewels, Globex may also serve as a forum for global experiments with new products. It costs far less to put something on a screen and see whether it trades than to develop a trading pit. For just that reason, the Board of Trade recently brought on line a computer-based trading network known as Project A that operates during the exchange's normal trading hours. It can be an incubator for contracts that may grow into pit trading, or a permanent home for niche products like barge traffic futures.

"The idea is to be ready to trade whenever the demand arises," said William O'Connor, the chairman of the Board of Trade. That sums up the driving force behind both Project A and almost everything else the exchanges are doing these days. ■

Jonathan Player for The New York Times

Chicagoans in London, selling (from left): John Sandner, the Merc; Thomas Donovan, the Board of Trade; Leo Melamed, Globex; William Brodsky, the Merc; William O'Connor, the Board of Trade.

Chicago's Exchanges

	Chicago Board of Trade	Chicago Mercantile Exchange	Chicago Board Options Exchange
Projected 1992 volume * In millions of contacts	150	136	130
Biggest contract	30-year Treasury bond futures	Eurodollar futures	Options on S. & P. Index
Membership	3,633	2,725	1,380
Recent seat sale	$360,000	$600,000	$270,000

Source: Futures Industry Association

*Does not include MidAmerica Commodity Exchange, a subsidiary trading small contracts.

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