

# Ready or not, here they come

While still in their infancy, financial futures are already affecting every aspect of world capital markets. What will they be like when they grow up?

by Cary Reich

*Abe and Harry have been trading sardines with each other for years on the Sardine Exchange. One morning, Abe angrily confronts Harry on the floor. "Harry," he says, "after all these years of doing business with each other, how could you do this to me? I'm ruined!" "Abe, what did I do?" asks Harry. Replies Abe: "I returned a can of the sardines you sold me yesterday. They were rotten!" Harry drapes a comforting arm around Abe's shoulder. "Abe, don't you understand?" he says. "Those sardines aren't for eating. They're for trading."*

— An old futures-industry joke

The futures market always used to be good for a few laughs. It was, after all, the market of hog bellies and loose lard, the market that offered the enterprising trader the opportunity to awaken one morning to the sight of 1,000 pounds of soybeans dumped on his front lawn. Its practitioners sported diamond pinky rings and loud plaid sport jackets and spent their waking hours doing things like plotting how to corner the world supply of cocoa — when, of course, they weren't meeting margin calls.

But today no one is laughing. Like a character actor who has graduated to leading roles, futures have moved to the center stage of international finance. They are the focal point of many of the most dynamic, innovative developments in the world's capital markets. And their impact is being felt in every quarter, by banks, by insurers, by money managers, by major industrial companies, by pension funds and by investment banks.

Futures are more than just respectable. They are *in*. What has propelled the futures market to such heights, of course, has not been the traditional agricultural commodities but the glittering products known, collectively, as financial futures. Financial futures run the gamut from futures on U.S. Treasury bonds to futures on currencies, from futures on bank certificates

of deposit to futures on such stock indexes as the Standard & Poor's 500. Known irreverently on the commodity exchanges as "pork bellies in pinstripes," financial futures have taken the fundamental principle of all futures vehicles — the promise to buy or sell a specific item during a specific month at a preestablished price — and molded a revolution out of it. Consider the following:

- Daily volume and total positions in the Treasury bond and Treasury bill futures market now routinely exceed the volume and positions in the underlying cash market in Treasury securities. In the opinion of First Boston Corp. economist Albert Wojnilower, "It is the perception of futures speculators rather than of financial institu-

tions that will go far to determine the fluctuations of interest rates and the short-run ebb and flow of business conditions."

- On at least six occasions since last October, the trading volume of stock-index futures — when measured by how many shares of stock each futures contract represents — exceeded the same day's volume on the New York Stock Exchange.

- Some 200 banks in the U.S., including nineteen of the top 30, use financial futures in asset and liability management and government bond trading.

- Morgan Guaranty Trust Co., Citibank, Bank of America, Bankers Trust Co. and First National Bank of Chicago, among other big banks, have become or are taking steps to become full-fledged futures

brokers and exchange members through holding company subsidiaries. As futures brokers, they will be able to deal directly in the market for their own accounts and for their correspondent bank and corporate clientele.

- Several large corporate pension funds, including those of Exxon Corp. and Westinghouse Electric Corp., have begun using stock-index futures as important market-timing and trading vehicles.

Most of these developments have come about in the last year. Indeed, in many respects 1982 was the watershed year for the financial-futures market. Leo Melamed, the former Chicago Mercantile

Exchange chairman who has done as much as anyone to advance the cause of financial futures, notes that "1982 was the year that the financial world at last accepted and embraced the futures markets as a legitimate part of the community." For one thing, it was the year that Morgan Guaranty brought instant respectability to the market by starting Morgan Futures and joining the commodity exchanges. "Morgan Futures put a stamp of legitimacy on the marketplace that almost nothing else could ever have done," says Lawrence Geraghty of ContiCommodity Services, a major futures-trading firm. It was also the year when stock-index futures made their debut and took the equity markets by storm. And 1982 was the year when the first major non-U.S. financial-futures marketplace was born in London.

## Just beginning

Yet, so far as the market's leading proponents are concerned, the revolution is

only beginning. Drexel Burnham Lambert senior vice president Richard Sandor, the guiding force behind the first interest-rate-futures contracts, claims that "the financial-futures industry is in the same situation that the computer industry was in 1963 or where the automobile industry was in 1917. It's just a baby." London International Financial Futures Exchange chairman John Barkshire, who also is chief executive of Mercantile House, believes that financial futures will be to the 1980s what Eurodollars were to the 1960s and 1970s. "In the next ten to fifteen years," he says, "the dominant markets worldwide will be the futures markets just as in the 1970s the dominant market was in Eurodollars."

The main reason financial futures have come so far, and why they may well fulfill their boosters' dreams, is simple: They offer the most convenient and most efficient means for banks, government securities dealers and others to hedge and transfer their risk. "The mood of people now," notes Barkshire, "is to seek additional ways of avoiding risk and avoiding exposure, and I think the volatility of rates in the past few years made people re-

alize how dangerous that risk can be." By enabling a dealer with, say, a long position in Treasury bonds to offset it through the sale of a Treasury bond future, the market limits his vulnerability to the wilder gyrations of the yield curve. And because of the leveraging possibilities (margins in the futures market are less than 10 percent and sometimes as little as 1 percent), his hedging ability is infinitely greater than it would be in the underlying cash market.

While such simple hedging is the foundation of the market, what gives financial futures their special allure is the cornucopia of trading strategies and techniques the market allows. "Financial futures have opened up a one-dimensional market and made it multidimensional," explains Roger Froehlich, manager of First Boston Corp.'s financial futures and options department. "The futures market is at the leading edge of a lot of strategic development. It allows you to trade between the cash and futures market, to do basis trades, calendar spreads — March versus June versus December — and to do intersector trading: bills versus CDs, bills versus notes. The futures market can implement strategies in ways that were difficult or impossible before financial futures came along." What's more, dealers can effortlessly move positions whose size, in the old days, would have caused major market disruptions. "In the cash market," says R. Roderick Porter, senior vice president of Chemical Bank, "a \$50 million transaction can have an unsettling effect. But in the futures market you can do mind-boggling amounts without the market moving a few points either way."

In opening this Pandora's box of possibilities, both the market in futures and those who trade them have been transformed. At the Chicago Mercantile Exchange — once known as "The House That Bellies Built" — 64 percent of last year's trading volume came from financial futures, including S&P 500-index futures. (The exchange has two divisions in which those futures are traded, the International Monetary Market, for interest rate and currency futures, and the Index and Options

Market, for stock-index futures.) Squeezed for space, the CME will be moving later this year to a 40,000-square-foot trading floor that it says is the world's largest. And, already anticipating the day when even that won't be big enough, the exchange is building another 30,000-square-foot floor directly beneath the new one.

Meanwhile, at the older, more commodity-dominated Chicago Board of Trade, financial futures accounted for 41 percent of 1982 volume. And that was without any stock-market-index activity. (The CBT had planned to trade Dow Jones-index futures but was blocked in court by Dow Jones & Co.) The big grain companies, such as Cargill and Continental Grain Co., that have long been major forces on the exchanges are now known as much for their financial-futures businesses as for their wheat and soybean trading. Comments Geraghty of Continental's Com-

modity Services: "People who come into the business twenty years from now will never realize there was an agricultural business. The guys who started in hogs will be in S&Ps and currencies."

#### New breed

Upstairs at the trading desks, the changes have been equally wrenching. The financial-futures market has spawned a new breed of trader, one who is surrounded by computer monitors, immersed in technical charts, and who has replaced seat-of-the-pants judgments with regression analysis. Many traders have advanced degrees in mathematics and spend their time making arcane calculations of the relative value of different futures contracts.

"I don't have to make a judgment on the correct course of interest rates," one Ph.D.-trained-trader boasts. "I can just say CD futures are objectively cheap relative to

T-bills." A top partner at one big investment banking firm who is stunned by all this remarks that "five years ago if you asked your bond traders about the market, they told you if it was going up or going down. Now they tell you about the basis spread. You ask them what the market is going to do, and they look at you as if you're some kind of a buffoon."

On the retail side, stock-index futures are causing a similar revolution. Bracing themselves for a wave of individual investors eager to play the new instruments, individual brokers are scrambling for licenses to handle commodities accounts. (Despite their equity orientation, stock-index futures, along with all other futures products, are regulated by the Commodity Futures Trading Commission.) At Paine Webber, for instance, 1,100 account executives were registered as commodities brokers at the start of 1982; by year-end, 2,000 were, including most of the leading producers. Hopes are running high that stock-index futures, as well as the slightly less risky options on stock-index futures (which began trading in January), will be one of 1983's hottest products. "You start trading these things and they're addictive," says Charles Hoyt, who handles financial-futures product development at Merrill Lynch. "They're the Pac-Man of investments."

While institutional money managers have been somewhat slower to latch on to the new instruments, they are beginning to

sit up and take notice. Salomon Brothers vice president Louis Margolis, who has traveled the country spreading the gospel of stock-index futures, relates that "people start by saying, 'I have a half an hour, and I don't see us using it.' And a half hour later they're calling for an intensive research study on how to get into it."

One of the biggest obstacles to institutional involvement was removed last October, when the Labor Department issued an opinion letter that effectively cleared the way for pension funds to move into financial futures. "There is no legal inhibition we know of that would prevent an ERISA plan from being active in this market," says Margolis. Legislation is also expected to be enacted this spring allowing New York-based insurance companies to make broader use of the market. "If we saw a big run-up in the Dow, it would be real nice to take a 20 percent investment using futures without disturbing the stock portfolio," notes Equitable Life Assurance Society vice president Bruce Marquand, who adds that "while the clearest use of it is on the pension side, we can also use futures in guaranteed-rate contracts to hedge ourselves until the funds come in."

#### What risk?

Yet, as quickly as things are progressing, there are those at the exchanges who feel they could be moving even faster. As Chicago Mercantile Exchange president

Clayton Yeutter sees it: "We still have a lot of banks, savings and loans and insurance companies who ought to be using these markets but still aren't. It's not just an obligation on our part to teach and inform; those institutions have an obligation to their shareholders to learn. Had some of them been using the market in the last five years, they would have a heck of a lot more net worth than they have now." Then Yeutter utters the line that is fast becoming a rallying cry for apostles of the futures market: "He who is not a hedger," he intones, "is a speculator." In other words, the real risk takers aren't those who use financial futures but those who shun them.

Why is there still this bedrock of resistance to futures?

To some market partisans, it is simply a matter of hidebound conservatism. "People prefer to die in the acceptable way rather than take on something new," says one veteran futures trader. But undoubtedly much of the reluctance stems from the commodity exchanges' rowdy atmosphere and checkered reputation. The market's players have been characterized as "people who bet on raindrops" and worse. "You just look at the floor from the visitors' gallery and you say to yourself, 'What the hell are those madmen doing?'" says former Chicago Board of Trade president Robert Wilmoth, who now heads the industry's new self-regulatory body, the National Futures Association. "And we've got terms in the market that are stupid, terms like 'scalpers'—an Indian uprising is what you think of."

The industry's reputation was also damaged by the Hum scandal, in which the Texas billionaires tried—and failed—to corner the world silver market through the adroit use of futures. With memories of the Drysdale Government Securities debacle (*Institutional Investor*, September 1982) still fresh in bankers' minds, some of them might well wonder if a similar squeeze could occur in financial futures—particularly in view of the enormous leveraging possibilities (see box, page 54).

In the past those worries were shared by the U.S. government. In 1979 both the Treasury Department and the Federal Reserve Board expressed concern not only about possible corners in financial futures but also about the futures market's impact on the Treasury's ability to manage the federal debt. Since then, the Treasury has become a staunch supporter of futures. "We believe that the financial-futures markets on balance provide important services to the national economy," Miek Stalmecker, deputy assistant secretary of the Treasury, told Congress in late 1981. But the Fed has been more, well, reserved. Last April Fed governor J. Charles Partee told Congress that "several of us on the board have some skepticism about the economic utility" of stock-index futures. "The governors are a little skittish about it," a Fed staffer says. Among the most skittish is said to be Fed chairman Paul

Volcker. "Volcker for some reason has never liked futures markets," admits CME president Yeutter. "He sort of looks at them as Las Vegas."

#### Mad scramble

While the futures exchanges and their regulators can mount an effective defense of market practices, they are less convincing when dealing with another reason potential users may be staying away from financial futures: the unfettered, unruly proliferation of instruments. For the past five years, the exchanges have engaged in a mad scramble to list new products and new permutations of old products. The confusion was compounded by the efforts of the New York and American stock exchanges to jump on the futures bandwagon, often offering contracts that, except for a few technical twists, were virtual duplicates of those already traded in Chicago. Now a new race is on to list options on futures. Warns one futures executive, "We jeopardize the whole viability of the business with this chaotic introduction of new products."

The exchanges' response to this is initially laissez-faire. "The market usually dictates that which is successful and that which isn't," says former CME chairman Melamed. "If it's not needed, you're going to know pretty soon." New York Stock Exchange president John Phelan Jr. has a similar attitude. "After all, how many headache remedies are there on the market?" he says. "The drug companies keep probing the market, and the market sorts itself out." Phelan should know—the market so quickly sorted out the interest-rate-futures contracts offered by the NYSE's New York Futures Exchange that the NYFE was virtually moribund a year ago. It was saved from extinction only by the introduction of stock-index futures—in the NYFE's case, based on the NYSE index—last May. (The market also sorted out Amex, driving that exchange's futures operation completely out of business.)

Ironically, an argument can be made that as more institutions come on board, there will be pressure for more instruments, not fewer. This is because as efficient as the futures markets are, they can provide only a rough approximation of the hedges an institution needs. Although a bank might be able to hedge a six-month loan with 90-day Treasury bill futures, it will be far harder pressed to find an instrument to offset a five-year fixed-rate loan. "There are government-note futures, but the correlation is not there," says Chase Manhattan Bank executive vice president Wolfgang Schoellkopf. "You can get creamed."

As the exchanges try to lure more institutional players — or as institutions exert more influence — the temptation could be great to list contracts providing that correlation. And some observers think such a course would spell disaster for the futures market. Consultant James Kurt Dew, former research director of the International Monetary Market, points out that

"the fewer things that are traded in futures, the more efficient the market is in generating liquidity. Take the Board of Trade's two-year Treasury note contract. The banks want it, government dealers would like it, but I don't think it will wash. You may have 100 banks and 50 dealers in it, but on any given day you need 10,000 trades to make the contract go, and for that you need the small speculator. And what does he need the two-year note for if he already has the 90-day Treasury bill?"

#### Wanted: Speculators

"The sad reality," continues Dew, "is that the institutions are parasites in this market. The speculator is what makes the market work, because he cares about one basis point. If the institutions don't respect this, they will kill the goose that laid the golden eggs."

While it is generally agreed that no futures market that is totally based on speculation can survive, it is equally true that no market dominated by hedgers has much of a chance, either. The speculative element — for the most part, the floor traders on the exchanges — is critical to the success of any futures market, be it in soybeans or in Treasury bills. Indeed, one of the major reasons for the dominance of the Chicago exchanges is the strength of their indigenous floor population: the scalpers, day traders, position traders and spreaders who provide much of the day-to-day liquidity.

Many of these "locals," as they are called, have been on the floor since they were teenagers, starting as runners and teletype operators and plugging away until they could scrape up enough capital to buy a seat. "A high percentage of our present members used to be clerks," notes Melamed. "That kind of graduation system, no one has that but us. It's an important element in building that floor crowd." The lack of that element in New York was a key factor in the NYFE's dismal early showing. As one veteran of the futures market points out: "In Chicago being a runner on the Board of Trade or the Merc is a big deal. He's someone who's on his way up in the world. In New York a runner is only someone who comes to work on the Staten Island ferry."

In upstairs trading circles, Chicago's locals are often criticized and maligned. For one thing, they are perceived as mak-

ing exorbitant amounts of money by taking what one man calls "little pieces of flesh" from orders. "I met a guy down there once at 11 o'clock in the morning," an upstairs trader recalls. "He told me, 'Well, I'm going home now. I made my \$3,000.'" The locals are also sometimes accused of walking away from trades. "You buy ten contracts from him, the market goes up three and a half points, and he's never seen you before," one wire house trader complains. But even the harshest critics concede that without the locals the exchanges would come grinding to a halt. As Dew points out: "One mistake that the big firms make is that they come here and see the people they have to do business with, and they make the assumption that they simply need to step downstream and take that business away. They don't understand what a job the Chicago locals have done."

Nevertheless, it seems inevitable that the locals' influence will be diminished by the onslaught of major financial institutions. Notes Geraghty of ContiCommodity Services: "When I first came to the Merc, the decisions there were made by the belly scalpers. Now the Morgan bank is in on them. It is bound to affect decision-making patterns on everything from new products to formal planning."

And few players in the market doubt that the onslaught is coming. "The current lower interest rate market has tempered the need to hedge," remarks First Boston's Froehlich. "But if people began to feel the decline in interest rates was coming to an end, you'd see a tremendous amount of hedging. You're seeing a great amount of foundation laying now: industrial and institutional clients wanting to learn a great deal more so they can be protected the next time around. When the next turning point comes, we expect a tremendous outflow of institutional interest, much broader than ever before."

#### Bankers' offset

What forms will that interest take? To a large extent, it will come from commercial banks, which are eager to hedge their asset-liability mix. The big banks, as noted before, are already major players in the market. One case in point is provided by Chase's Schoellkopf: "The hardest maturity to raise on the liability side is the six-month maturity because rates are down. Five years ago we would have had to go out and buy six-month money, and it would have had a definite effect on the market. Now you don't have to do it. You can do the first three months in cash and the second three months in futures and lock in your interest rates."

As rates rise, many smaller banks that have had little or no experience with the futures market are expected to come in. With the advent of money market accounts, these banks are putting on their books many more floating-rate liabilities than assets, and could find themselves squeezed when rates move up again. By shorting the

Treasury bill or CD futures market, however, they could show gains in their futures positions that would offset whatever losses they experience in their lending margins.

A rising rate environment could also trigger a host of fixed-rate loan packages in which banks hedge their fixed-rate commitments in the futures market. Such fixed-rate loans are already being offered by Crocker National Bank and Harris Trust & Savings Bank; the banks use CD futures to lock in their money costs. And Merrill Lynch a year and a half ago began marketing a "rate protection program" in which Merrill, for a fee, would agree to pay companies the difference between the companies' cost of borrowing and a predetermined fixed rate. In effect, the companies can put a cap on their interest costs; Merrill, in turn, is able to hedge its commitment in the futures market.

Of course, there are those who suggest that corporate borrowers might be better off hedging their rate commitments in the futures market themselves rather than paying Merrill and others a fee for acting as surrogates. Indeed, the next great breakthrough for the financial-futures market may well be the involvement of the chief financial officer. As Laurence Berger, managing director of J.P. Morgan & Co.'s futures subsidiary, Morgan Futures Corp., points out, "It was well into the 1970s before most corporate treasurers became accustomed to the fact that they had foreign exchange risk on their receivables, on their exports, on their raw materials, and they began to develop programs to manage those risks. It's possible we'll see the same phenomenon in futures."

Drexel's Sandee is even more emphatic. "One day," he says, "there will be a little story in the right-hand column of *The Wall Street Journal* about some corporation that saved \$50 million by hedging, and that company's four largest competitors are going to call their CFOs in and say, 'Why didn't you do that?' They're going to ask, 'What the hell is going on? You mean you could have hedged our liabilities, and you didn't?'"

Already some investment bankers are suggesting that during the next rate upturn commercial paper users might well be hedging their commitments by setting up simultaneous short positions in CD futures — since there is a high correlation between CD rates and commercial paper rates. And

## Futures forecasts



If anyone can be called the founding father of financial futures, it is former Chicago Mercantile Exchange chairman Leo Melamed. His persistence, persuasiveness and occasional arm-twisting won over the skeptics and made Chicago the center of the futures universe. Today Melamed is positively ebullient about the prospects for financial-index futures. "We're going to see some attempt at indices that have nothing to do with stocks," he predicts. "There is probably no stopping some exchange from attempting an index on freight rates or insurance rates or the Fed fund rate or the consumer price index"

By John G. ...

corporate borrowers might seek to lock in an interest rate prior to a major underwriting by shorting Treasury bond futures. If rates rise by the time of the underwriting, the gain in the futures position could offset the increased cost of the higher rates.

In that respect, corporations could well follow the lead of investment bankers, who are already to some extent hedging their underwriting commitments in the futures market. Salomon Brothers, for instance, used futures to hedge its major underwriting for IBM Corp. in 1979. (However, such underwriting hedges may not be as widespread as some futures-industry advocates claim. Remarks Salomon Brothers managing director Thomas Strauss: "We rarely use futures to hedge new-issue commitments. We're risk takers, and risk takers don't look to hedge every commitment.")

### Timing tactics

Perhaps the biggest growth area of the market, at least in the near term, could be stock-index futures. Thus far, the major players in that market have been stock exchange specialists and Wall Street block traders, who have been assembling minibaskets of stocks that roughly approximate the indexes and trading futures against those. In addition, there has been heavy speculative day trading, in which investors not only bet on that day's movement in the market but also actually arbitrage

between different index futures. (One favorite ploy involves arbitrage between the S&P 500 future and the Value Line Index future traded on the Kansas City Board of Trade.)

Heavy institutional involvement, however, may be just over the horizon. "The ability to alter market exposure quickly and inexpensively is of tremendous value," notes Salomon's Margolis. "To take a \$70 million portfolio from 100 percent invested to 90 percent invested, you have to sell \$7 million worth of stock. Then you have the question, What are you going to sell? The best performer? The worst? And selling \$7 million of stock requires some skill. But selling \$7 million in S&P futures — approximately 100 S&P contracts — goes by in an instant. It isn't even noticed in the marketplace." Using stock-index futures, an institution can take advantage of anticipated market moves and postpone the cumbersome decision making as to which stocks to buy or sell. As Margolis sees it, "One of the results of the existence of this market will be that market timing will be a respectable strategy again because of the ability to alter the stock-cash level very cheaply and very efficiently."

As an added inducement to institutions, Salomon is pointing out to them the mispricing going on in the futures market; at any given time, the futures have been either grossly undervalued or grossly overvalued in relation to the underlying index. Consequently, Salomon feels that by buying a sufficiently underpriced futures contract an institution can be virtually certain of outperforming the S&P 500 by 1 to 1.5 percent over a two- to three-month period. Both the Exxon and Westinghouse pension funds, using Salomon as their broker, employed such strategies during their recent forays into futures.

Another alluring feature of stock-index futures is that they tend to serve as a leading indicator of imminent moves in the Dow Jones average. This may be partly self-fulfilling, since NYSE specialists are spending almost as much time following movements in the futures market as movements in their own. Nevertheless, it is real, and it has led to some peculiar cause-and-effect relationships in the market. For instance, one day last December the Treasury bill market on the IMM was rallying while S&P futures were languishing. Since T-bill trading closes earlier than the S&P

futures market, the newly flush T-bill traders walked over to the S&P pit (the commodity market equivalent of a trading post) and began aggressively trading stock-index futures. The S&P futures began to rally — and so, some minutes later, did the Dow. Although no one could be certain, there were some strong suspicions that the T-bill traders' prosperity had a lot to do with the stock market's performance that day.

### Pointed criticisms

Such feats are bound to add to the already considerable appeal of stock-index futures. So are options on stock-index futures, the latest wrinkle, which because of their limited downside risk hold enormous attraction for retail investors. "The potential in this product," says Merrill's Hoyt, "is huge, awesome." Yet the very popularity of these instruments also poses some troubling questions. As a top partner at one major investment banking house puts it: "What is the social value of having all these derivative securities? How many bright people are thinking about all these things, and what is society gaining?"

Some of the most pointed criticisms have come from former CFTC commissioner James Stone, who left the commission at the end of January. "I am somewhat concerned when I see public funds that should go to real investment staying in short-term speculation instead," Stone told *Institutional Investor*. "I'm all for specu-

lation as oil in the machinery. But while a few drops may make a machine run better, you certainly don't want to pour a whole barrel in."

Stone believes that it's healthy "when people base their decisions on whether to buy and sell stocks on the fundamentals. That is useful. It's not as true that a tremendous attachment to guessing which way the index is going to move has the same impact." Concludes Stone, "I don't want to see the nation devote its human and capital resources to a guessing game instead of to fundamental capital formation."

Stone is not alone in having these concerns: Congress recently asked the Fed, the Securities and Exchange Commission and the CFTC to do a \$3 million study on the impact of the futures market on capital formation. Nevertheless, industry officials are confident they can put such worries to rest. Stock-index futures, they insist, are not a gambling vehicle; they are a *hedging* vehicle.

In the meantime, the futures market forges ahead. The next big product move will be futures on various industry groups. (The NYFE already offers futures on a sub-index of financial companies.) And after that? "We're going to see some attempt at indices that have nothing to do with stocks," says former CME chairman Melamed. "Once the index world has been beached, there is probably no stopping some exchange from attempting an index on freight rates or insurance rates or the

Fed fund rate or the consumer price index. We're going to have to try something other than stocks. That's probably the next revolutionary thing." At the Chicago Board of Trade, president Thomas Donovan is just as ebullient. "There's just no telling what's going to happen in the near future," he says. "It's a question of what the users in the market demand. If there's a great deal of risk in a certain area, there will be a contract that covers that risk. We're going to cover every part of the yield curve."

And once the financial-futures market conquers the United States, it will set its sights on the world. A study is already under way on a futures market in Singapore that could have some lineup with the IMM in Chicago. An automated International Futures Exchange, based in Bermuda, is scheduled to start operations this month. Although LIFFE in London started slowly, chairman Barkshire points out that "in the first three months we had a total volume of 250,000 contracts, equal to what the Merc achieved in its first year. Growth now will be at a far faster rate." Once Singapore starts trading, Barkshire envisions the first 24-hour futures market, in Eurodollars.

"There's a huge pie out there from which only slivers have been taken," says National Futures Association head Wilmouth. "There's a fantastic opportunity out there for business."

The legions of pin-striped pork bellies — and their Ph.D. followers — are on the march. ■