

Feature Interview

Innovation Deserves More than 15 Minutes of Fame

Leo Melamed
Chairman Emeritus and
Senior Policy Advisor,
Chicago Mercantile Exchange



BY RUSSELL WASENDORF, SR.

There is no one quite like Leo Melamed. Known widely in the futures industry and beyond as the “father of financial futures,” he is no ordinary guy. Deliberate but spontaneous, too – the kind of qualities it takes to make things happen.

In one of his books, Leo indicated that one thing the Chicago Mercantile had to its advantage in the early days was that it had “pent-up energy that needed uncorking.” There’s no question that he was standing ready with the corkscrew. In coming years, due to his efforts and those of his close colleagues, he would have the opportunity to toast many of the successes that changed the derivatives industry inexorably – financial futures as a broad category and foreign currencies, interest rates and stock indexes as subsets of the whole. Electronic trading platforms, in use in the securities industry but not in futures, took a step up when Melamed stepped in.

Some people are born to be leaders and to make waves; others fall into it and step up to the plate. And, still others face adversity and are forced to survive. In Melamed’s case, it was probably a little bit of each. “Chance may take us places,” he wrote, “but it’s character that keeps us there.”

Leo wasn’t looking for 15 minutes of fame, or he would have burned out long ago. Instead, he looked forward past the clock and backward at ideals that have endured. Some 30 years after he took futures innovation under his wrap, he’s still ticking.



In product development, exchanges have been known to “throw spaghetti against the wall” and see what sticks. Silver coins in 1973 was one of those that didn’t. CME Everette Harris and Melamed are left holding the bag.



Milton Friedman and Melamed on the opening day of T-bill futures in 1976.



RW: *Leo, you came immediately to mind when SFO decided to pursue derivatives innovations as a theme for the June issue. I don't think there is anyone in the derivatives or securities industry who doesn't know who you are or what you have contributed. However, our readership is aimed at individual investors and traders, and many of them are not aware of the industry icons that shaped the product areas in which they now trade or will someday trade. So, let's begin with you offering a little bit of background on what got you started in this business in the first place, and then we'll take it from there.*

LM: Well, I think it's a rather well-known story, too, but just for the record a lot of it was very accidental. I was in law school and was looking for an afternoon job, preferably with a law firm so that it would fit my hours at John Marshall Law School. My first class began at 1:15. So, a friend of mine called me and said, "There's an ad in the paper. It seems like it has (the) perfect hours for you. It says from 9:00 to 1:00, and it's a law firm—Merrill Lynch, Pierce, Fenner and Smith." So, I looked up the ad and, sure enough, it said Merrill Lynch, Pierce, Fenner and Smith, and I assumed a name like that probably was a law firm. So, I went over for an interview. It was at the Board of Trade building—141 West Jackson. Well, *that* obviously wasn't a law firm, and I knew that, but I still wasn't quite sure. They wanted a runner, and I figured maybe it was running to court with briefs and files. "OK, is this where I'd be working?" I said. "No, you'd be working at 110 North Franklin." Oh, I figured, well there's a law firm there; this is just a recruitment office or something. So, I went to 110 North Franklin, and it was the Chicago Mercantile Exchange building, and there on the second floor I met the guy that was conducting the interview and, obviously, it wasn't a law firm. For the first time in my life, I saw this hectic scene of people running around, screaming at the top of their voices, waving their hands—boy, I loved it. It was instant love.

RW: *Did you have any idea what they were doing?*

LM: I had absolutely *no* idea what they were doing. But whatever they were doing, I pretended to understand because I wanted the job—whatever it was. And I was hired by Merrill Lynch to be a runner. The rest is history.

RW: *That's a wonderful story. And, of course, that was actually well prior to any financial futures being traded...even before they had been thought of. Cattle wasn't even trading then, or hogs, or pork bellies, or any of the other futures contracts that traders take for granted.*

LM: No, none of them were yet trading at the Merc. Of course, at the Board of Trade, there were the feed

grains, but the Merc was limited. At that time, even onions were still being traded, and, of course, they're long gone now. Onions was a tremendous winner for the Merc because you could manipulate onions almost at will—almost better than eggs, although eggs were pretty manipulable, too. These guys loved the fact that this market could be pushed up and down all the time. Eventually the U.S. Congress ruled that "there shall be no onion futures trading" ever again.

RW: *It's the only market that was forbidden by Congress.*

LM: That's right. That was the market distinction of the then Chicago Mercantile Exchange.

RW: *What a change from then until now.*

LM: I was just a kid running orders into the trading pits then, of course, and I had no knowledge of what was causing the uproar in the courts, but eventually they even lost the onion trade. Butter trading for all intents and purposes was dead because there was an oversupply that the U.S. government was...supporting. As a result, there was no trade at all in butter. So, eggs were the only thing left, and *that* was dying because somebody figured out that they could make a chicken lay year round by putting a light bulb in its little cage. Once they did that, they didn't need an egg market, because they could just produce eggs year round. You had no more cycle in egg production, which meant there was no need to hedge forward and worry about price change.

RW: *Well, this did not paint a very pretty picture for the Merc's future growth then.*

LM: By the time I got there, the market was at the beginnings of its death throes. They had lost the onions, and then were afraid to appeal the decision to the Supreme Court because that would have set a precedent. They probably should have appealed it. You can't just single out a product and say, "you can't trade in this product." What kind of a business is that for a court to say? There were a lot of politics going on. If they had appealed, and with adequate lawyers, I think they would have won, because in my opinion it was unconstitutional for that kind of law to be passed by Congress.

RW: *In losing that market, didn't it also create the need for innovation and ultimately become a positive?*

LM: No, I don't think so. The need for innovation began with Adam and Eve or before that. There's never an excuse to need innovation — it's implicit in the markets. Some of the people who were running the Merc at that time were the worst of the breed. This was known

as the warehouse of LaSalle Street, although we weren't on LaSalle Street. And, there was no real commerce. This was more or less a gambling den where might made right, and the rules were for the privileged. The board of directors of that day were either founding fathers of the institution or sons or son-in-laws, or relatives of some sort.

RW: *What do you think was the pivotal event that really caused this casino-type atmosphere to evolve into the very legitimate economic function that the futures markets perform today?*

LM: It took a young idealist with a legal background and some feeling for economics to become chairman. Kidding aside, it was really a matter of a "shareholder revolt," and it certainly didn't just happen easily nor did it happen overnight. It took a motivated membership and the talents of many individuals who rose through the ranks to become directors and leaders.

RW: *So often there are so many changes necessary, it's hard to determine where to start. Where did you begin?*

LM: Well, we changed everything, including the rules of the exchange. And then, of course, I started to look toward product innovation. The first order of business, though, was to put us into the modern world and change the rulebook so that it reflected modern-day legal principles of trade and transactions and market efficiencies – leaving the past of "might makes right" and transforming that instead into "the rules make right." That was my first act in 1969 – to convene a constitutional convention for comprehensively rewriting the rules of the exchange and bringing them into the

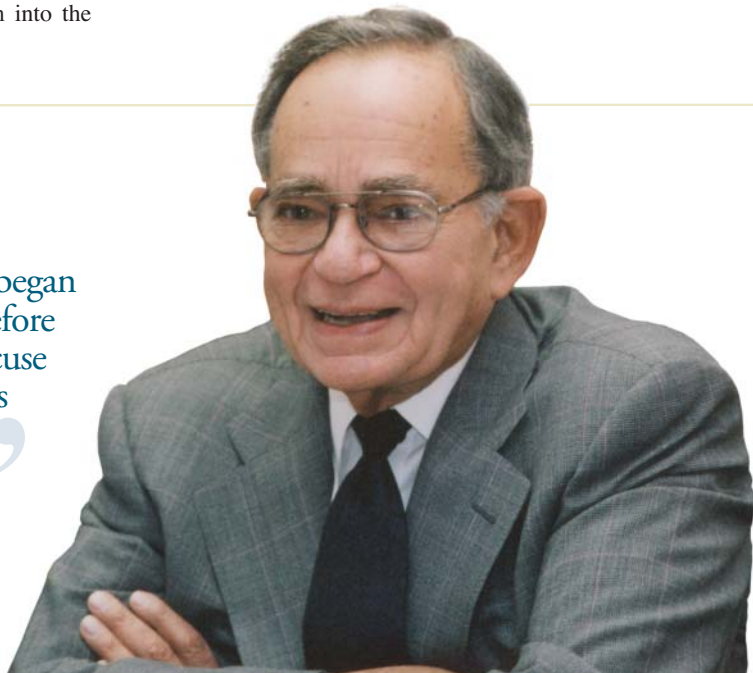
modern era. That took a year and a half to do. Every committee of the exchange participated.

RW: *So, changing the rules to reflect fair and modern practices was an important step. And then came innovation. What was the first innovation, the first new market created after the new rulebook was out?*

LM: We were working on rules and new, innovative products simultaneously, and one had nothing to do with the other. Cattle had already been started, and I had a hand in changing the cattle specifications to make them more viable for the industry. Pork bellies were already in place, and it was already a good market by the time I was elected chairman. In fact, it's in that market that I made my early money. So, we had two markets and then launched a third market in hog futures. But all three of those markets – cattle, hogs and pork bellies – you recognize, represent meats. And so, basically, it was still a one-product exchange. And I was categorically opposed to a one-product exchange, because I knew what happened when we lost onions. If you have a one-product exchange and you lose the one product—where are you? You're dead.

RW: *Absolutely. There are too many businesses that pin growth and subsequent success to one product area or to one major customer and, then, one day lose the farm when there's a turn in that once-profitable business. It's happened in the futures markets, too. So, then*

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you need diversification, one thing that the Chicago Mercantile Exchange has done very well.

LM: That's right, and I was on a holy mission to diversify the institution's product line. I knew it couldn't just rely on the meats. It had to find other products that would counterbalance, if anything went wrong in the meat market or with the meat contracts, and so forth. So, I began an intensive mind search for almost any product that you could imagine. We tried everything. We tried shrimp. We tried scrap steel. We tried turkeys. We tried apples. We tried potatoes. None of those turned out to be very good. Some of them lasted for a little bit. They flared up and then died very quickly. But the attempts were ongoing through '69, '70 and even maybe in the beginning of '71, although, by then I had moved to a new idea.

RW: *And that was the currencies?*

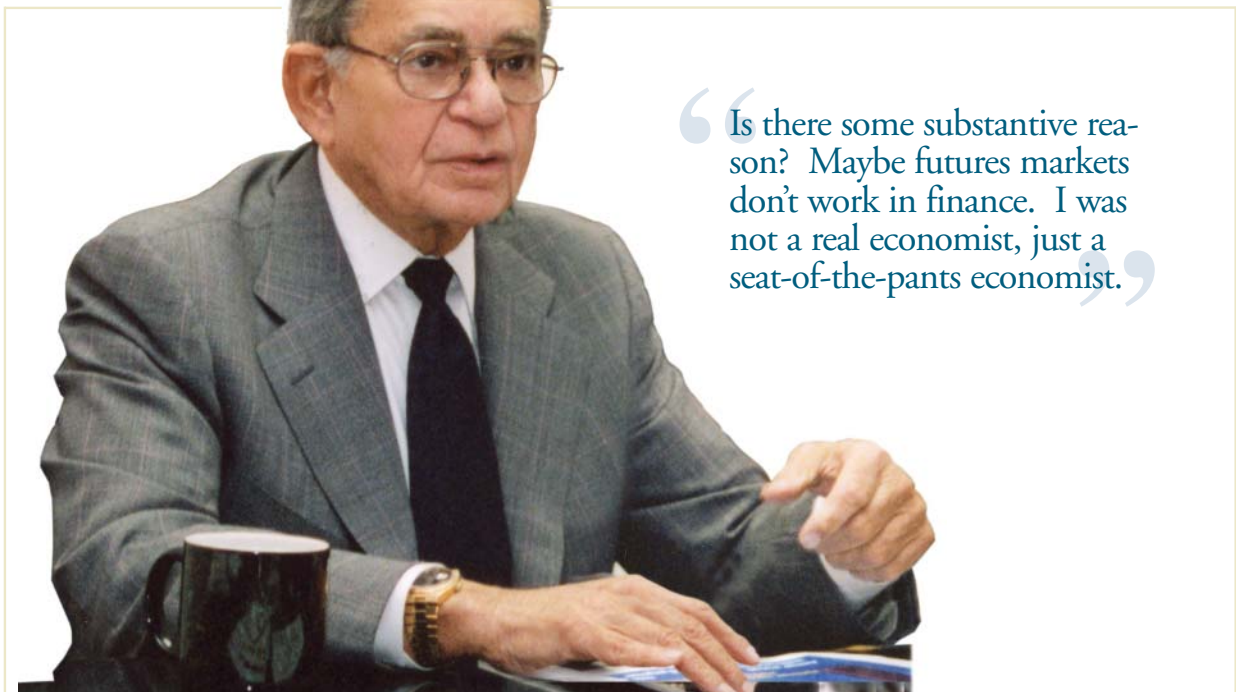
LM: Well, that was financial instruments. Currencies just happened to be the right first instrument, but the idea was bigger than just the currency market.

RW: *Currencies today, of course, are a very active set of the financial instrument area, but why those first?*

LM: There are a number of reasons why I was attracted to currencies, but probably one of the biggest reasons was Milton Friedman. By then I had become very much a seat-of-the-pants economist myself even though I had graduated as an attorney, practiced law and was steeped in law. I was a good attorney, but what I was doing now had to do with economics. Economics had always appealed to me, even from my days in high school. I really loved the rules of economics and the feel of economics—what it means and what it doesn't mean. So, it was easy for me to begin to study it again. And, of course as soon as I did, I ran into Milton Friedman's books, and that became my holy grail. I started to attend classes at the University of Chicago. Interestingly, even though I wasn't a student there – they didn't take attendance then – you could just walk in the classroom, go to the back of the room and listen to Milton Friedman in the evening sometimes, after the markets. He became my personal "god" in economics. One of the things that he kept saying was that the Bretton Woods system of fixed exchange rates was no longer any good in today's world [then the early 1970s].

RW: *Well, at one time Bretton Woods made sense, but by the '60s or '70s, it no longer made economic sense.*

LM: Right, and he was referring to the world of 1945 when Bretton Woods was first organized as a system to establish rates between the world currencies – where everything was fixed off the dollar. So, the Japanese yen was so much to the dollar, and



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Deutschemerk was so much to the dollar, and Swiss francs and British pounds, and so forth. It was fixed by virtue of decision by the finance ministers, who would meet once a year to decide what the rate should be. Now, that was okay in 1945. In fact, that was probably the only thing you could do in 1945 after World War II. The only country that meant anything was the United States. Twenty years later, that was all different. Germany was its own economic power. Japan was, Switzerland, Great Britain and France—all these countries.

RW: *And technology had made information flow dramatically faster than in the 1940s as well.*

LM: We now could learn of an act in Japan almost overnight, whereas in 1945 if something of economic value happened in Japan to affect the currency value of the yen, you might not know for a couple of weeks or a month. In 1970, that information was flowing if not to the second as it is today, pretty close to the minute. That meant that the impact of change, relative to an event occurring in either Great Britain or Germany or Japan, was instantaneously felt by the marketplace. And, yet, the finance ministers hadn't met to change the value of the currency based on this impact. You'd have to wait until they said, "this had an impact on the dollar, and we've got to change it relative to yen or relative to Great Britain." There are events as a consequence of a movement of economics between nations that constantly impact the value of currencies. But, there was no way to accommodate that in real life. In other words, the Bretton Woods fixed exchange rates system was extremely dysfunctional. In fact, according to Milton Friedman's philosophy, which I embraced, fixed exchange rates could not exist in a globalized world where information flows traveled at nanosecond speed as they do today. And what you needed was a system that adjusted itself without some finance minister's decision or some government's decision of what the value is. The marketplace was the only one that could make that decision, and adjust the value.

RW: *There had to be enormous risk at that time for multinational corporations that were subjected to these shifts in currency values.*

LM: It was enormous risk, but the funny thing is that there was an international system of rate adjustment that multinationals could use in the banks. So, the banks would allow a commercial to do something about currency change.

RW: *How efficient and transparent was it for the companies?*

LM: It wasn't very efficient, but it did exist. But it

didn't exist in the openness of the world screen where speculators and users and hedgers and commercials could interact to determine what the price, in fact, should be in an open forum. And, there were great risks involved because multinationals always went in the same direction. So, even if they understood the change between the British pound and the dollar and wanted to do something about it, they would all move in the same direction, and there wasn't anybody to take the other side. Could you imagine that kind of market? And that's what they had until, of course, the Chicago Mercantile Exchange created the International Monetary Market for the purpose of trading in currencies. But, it didn't come all that quickly. In 1971, even when I recognized the potential of this currency market, I had to step back and ask myself the question, "Why hasn't anybody done anything in finance? Why has it always been in agriculture?" I was very young, in my late 30s, and it was kind of an epiphany. Why has agriculture always been the risk profile for futures markets? Is there some substantive reason? Maybe futures markets don't work in finance. I was not a *real* economist, as I said, just a seat-of-the-pants economist. I didn't have the right answer. So, before I went and launched a currency market, what if there was something really wrong with that idea that I didn't understand? As a matter of fact to me when I examined the uses and how futures markets work and who uses them and how they use them, I thought with financial products, it would be *better* than in agriculture.

RW: *Why did you believe the rationale for currency futures would be better than for the ags?*

LM: There were a lot of good reasons why it should be better. You don't have weather to contend with. That's an unknown variable that changes and has an effect on agricultural price. You don't have transportation. You don't have to bring the cattle from the market—that costs money. And that has an impact. If there's a strike in transportation, it causes another impact on value of the product. But, in finance, you don't have any of that. So, theoretically, I thought, financial futures ought to work very, very well—better than in agriculture. But I thought I must be wrong, because no one had done it. And, clearly to me, the one to launch was currency.

RW: *How did you resolve the questions?*

LM: The only one who could answer the question in my mind was my economic demi-god, Milton Friedman—so eventually I went to him, told him of the idea and asked him if it was a nutty idea. Well, he embraced me, tears literally came to his eyes, and he said, "It's a wonderful idea. It's great! Go do it. This

is exactly what we need.” We, being the world. I said, “Would you put that in writing because I’ve got to be able to point to something that shows that Milton Friedman thinks this is a good idea. That’ll mean something.” He advised me that he was a capitalist, first, and I said, “How much?” And he said, “\$5,000.” And I said, “Done.” He was at the University of Chicago as a professor at this point, a few years before he received his Nobel Laureate, and he wrote us a feasibility study on why the world could use a currency market in futures in currencies. We paid the \$5,000 for the study, and the rest is history.

RW: *Fascinating story. The currency market has had an enormous impact on the way business is done multi-nationally. So, what do you think is the greatest innovation that has occurred in the derivatives industry? Are currencies it?*

LM: That’s a most difficult question. You’re talking about watershed events, and whether one is greater than the other is a nearly impossible task. I’ve always rated the idea of financial products in futures as the greatest because from that emanated everything else. So,

you’ve got to say that the birth of financial futures in 1972, given that it started with currencies, was the greatest innovation. Without that, there wouldn’t be all the others, because they all lined up. I was like a kid in a candy store racing with everyone, I thought. Actually, there wasn’t anybody racing with me in the beginning, and they probably all thought I was a little bit crazy. In fact, they thought currency futures would never work. But I felt that there was a race going on to pick the next instrument to trade, and then the next and the next. But none of that could have happened without the breakthrough of finance into futures, which today, of course, is 99 percent of all futures.

RW: *Sure. A natural evolution? By trading the currencies, you have a need for interest rate futures?*

LM: Yes, it immediately led to interest rate futures, you’re right, and that was the next – well, actually, there was a small stopover in gold, because at that time gold was very much related to currency as a value determinant. But clearly, interest rates was the next obvious

product line. But the question wasn’t simply interest rates, like in currencies, because in interest rates you had to choose between a variety of instruments. They could be Treasury bills, certificates of deposit, bonds or notes. What instrument would be the most likely to be successful? And, that was the trick – finding the right instrument of trade in interest rates. And, at the Merc, we chose Treasury bills, which began trading in 1976. Treasury bills, at the short end of the yield curve, were ideal for that instrument of trade, we thought. At that time, you couldn’t be without physical delivery, so we picked Treasury bills, which could be delivered.

RW: *And that followed shortly on the heels of the Chicago Board of Trade’s introduction of Ginnie Mae (GNMA) futures in 1975 – I think the bills and Ginnies were within a few months of each other. Then there were Treasury bonds at the CBOT, after a tepid response to commercial paper, and then, I believe, came Eurodollars at the CME.*

LM: Of course, I think the best of them all is the Eurodollar market, but that didn’t happen until 1981. It was five years later when in fact the Commodity Futures Trading Commission authorized cash settlement. Once cash settlement was authorized, then we knew we could go to the ultimate short-term interest rate product, which was Eurodollars. That’s the one that I was always after. In my mind’s eye I knew Eurodollar futures was the biggie, but I couldn’t use the biggie until it became legal to do so by virtue of cash settlement. And there was one more component – I needed an economist who could figure out how, in fact, to find a settlement procedure in something that you’re not going to deliver, but you’re going to cash settle. And how do you find a settlement procedure that the world will accept as kosher? Yes, this is the price for settlement. Well, that’s not easy to do, and it was an economist named Fred Arditti who devised the specifications for the Eurodollar market itself and the settlement procedure. And that was a work of genius, in my view.

RW: *At the beginning, the futures months in the Eurodollar went out just one year whereas today they go out ten years.*

LM: Correct. There were stages. First, we did Treasury bills, then certificates of deposit, and then finally Eurodollars. Eurodollars was the big prize, and everybody could recognize that. It wasn’t hard to see. But both Treasury bills and certificates of deposit were four contracts, but one year. So, the natural launching of Eurodollars was also one year. It wasn’t until Eurodollars became really established, and that took about four years, no easy make. Even then, I always believed it would be the biggest market of

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them all as it turned out to be. But I practically had to beg and borrow brokers to stand in that pit and conduct trade in Eurodollars in the beginning, because it was so difficult. So, not until it finally got some traction and some real liquidity did we consider then advancing it beyond the one year that originally was established.

RW: *Commercial paper was launched by the Board of Trade also in the mid-'70s. Did you ever consider that contract since you were going for the short end of the yield curve? I always felt that the reason the commercial paper contract didn't get off the ground was because they actually traded the yield.*

LM: Well, that's how I felt, too. No, the Merc never traded commercial paper.

RW: *One of the interesting things that was part and parcel to the creation of Treasury bill futures was, I guess you'd call it the IMM Index, where you take the interest rate and subtract it from 100...*

LM: Yes. It was called the IMM Index, and the innovation was brilliant. We recognized that the interest rate market works in reverse of the usual market where the bid is below the offer. In interest rates, it's just the opposite. If the yield is higher, the price goes down. In any other market, when the yield goes higher, the price goes up. In cattle and pork bellies and most other markets, you'd bid higher and higher, and the

price would be moving *up* with you, whereas in interest rates it's the other way around. And I didn't think a market like that would work.

RW: *Well, unless you know what you're doing, it's hard to switch in the middle of the stream. It's not intuitive, a lot of room for inadvertent mistakes.*

LM: Yes, and we felt our traders would have a problem. In order to move the price higher they would have to sell the market. Are you kidding? So, how do you make the bid below the offer in interest rates? Mel Unterman, a former banker and an older gentleman on our committee who obviously had been mentally wrestling with this issue, called me in the middle of the night and said, "I think I've got it." And, he did. What he did was just subtract it from 100. I mean, this was simplicity in itself. And, it works, and, of course, that's how all the Mercantile Exchange's interest rates at the short end work. That's not true, though, for the bonds at the Board of Trade.

RW: *Let's talk about the future. You've accomplished so much with the innovations you brought to this industry. What do you see happening in the next three years? Where do you see this industry going?*

“Market globalization will continue over the next three years as will the effect of movement to electronic trade. The trend is unmistakable. In Europe, it's already been accomplished.”



LM: There's a factor of globalization and consolidation that continues to pressure the world of markets and will continue to do so. As you can see by the recent announcement between the Board of Trade and the Chicago Mercantile Exchange, there clearly is a consolidation of clearing here in Chicago—something that the Merc has always thought was the right thing to do, and many at the Board of Trade did, too. It took many years to make this happen. But that consolidation is probably a sign of pressures and the times that we live in where it is more efficient when you've consolidated two entities. And there are certain cost and capital benefits that accrue as a consequence. And that's what you're trying to achieve in a very competitive globalized world. That pressure will probably continue and cause further consolidation. It will continue to cause either mergers or acquisitions and will foster a great deal of competition.

RW: *And Eurex, which has literally come out of the woodwork over the past several years, is bound to be part of the competition of which you speak.*

LM: Eurex has indicated that it is coming to the United States to try to compete in the Treasury bond market to start with, and also the options market. So, that, too, is an event that is indicative of a continuing competitive trend today.

RW: *But, turnabout is fair play, and the U.S. exchanges can play at the same game, can they not?*

LM: Sure. The CME has an Asian strategy that is in development because we believe that the biggest potential of new business will come from Asia. You don't have to be a genius to figure how many people are involved in that part of the world. China has just recently entered the WTO [World Trade Organization], and their rules are quickly changing to a market economic stance. They may still claim to be under Communist rule, but it's *much* more capitalistic than they want to believe. So, I do think that in the next three years you're going to see further development in Asia, at least through the Chicago Mercantile Exchange and its counterparts. But, it won't be limited strictly to Asia. We've got to look at South America, at Eastern Europe and, possibly, the Middle East. Market globalization will continue over the next three years as will the effect of movement to electronic trade. The trend is unmistakable. In Europe, it's already been accomplished. In the United States, it's not fully accomplished, but even our market is now nearly 50-percent electronic on Globex. So, it's a direction that's unmistakable, whether it's in the next three years or in the next five years or in the next ten years. I don't know a specific date, and I don't even want to know a specific date because there is no such thing as a specific date. There's a trend, and that

trend takes time. But it will happen.

RW: *You mentioned Globex earlier, and clearly you were deeply involved in the innovation of that electronic platform. Did you see Globex becoming the force that it is today?*

LM: By 1987 I have no doubt that I did. But to me, it clearly was the most obvious thing. Once a computer is capable of creating a marketplace that can give you first in, first out, that can give you immediate execution and immediate confirmation without the necessity of sending a runner into the pit and the voice brokers being involved in bidding and offering, the efficiencies and the capital savings involved are enormous. It [electronic trading] is a very attractive, almost "seductive" way to do business. It isn't easy to achieve, but as a venue, I thought Globex was going to be as big as it's becoming.

RW: *You also mentioned the consolidation. One of the things that seems to be a logical outcome of the Chicago Merc clearing the business for the Chicago Board of Trade is that you could actually have the possibility of having exchange contracts trading on different platforms. For instance, if the Board of Trade is clearing at the Merc, then could Globex offer Chicago Board of Trade products?*

LM: Well, that's never been a problem. That's always been doable. We trade New York Mercantile Exchange products on Globex. As a matter of fact, we made a deal with Nymex to trade their mini versions of energy products on our screen, and we've offered that facility to others. But, the Board of Trade chose a different electronic venue, LiffeConnect.

RW: *What I am asking is, like the stock market where you actually have the stock market traded on various ECNs, you could actually have Globex trading some Board of Trade products as well as the Euronext platform—to actually have the same product from the same exchange trading on different electronic platforms.*

LM: In theory, that's possible today. But are you referring to fungibility of clearing?

RW: *No, the fungibility of clearing is another important question because it's something that I think is definitely necessary when you're looking at single stock futures, for instance. Fungibility of clearing becomes an important issue for individuals that are trading those markets. The Globex platform is a very efficient platform used around the world by more institutions than anyone else. There are more Globex screens by virtue of online trading out there, so it would make sense to me*

that if the Board of Trade, for example, wanted to get greater distribution of their product lines, that they would want to offer it on more than one platform.

LM: But in practice it doesn't work very well because by putting the same product on more than one electronic system, you end up splitting liquidity. That doesn't make sense, and it doesn't help the product. Therefore, an exchange would usually choose one electronic system for its product. It would choose the system that is the most efficient technologically and the one that has the most distribution. We like to think that Globex provides both.

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Globex, theoretically. But, it's a far cry from fungibility where we are adamantly opposed to making CME products fungible for clearing purposes. We would never go that route because that is our patent, in effect, although we didn't get it granted from the U.S. patent office. We got it by virtue of a lot of work, thought, capital and a lot of people; and we invented a product that's not like an IBM share. Futures contracts aren't a share of stock that is generic. The product and liquidity that we created is ours. So, we're not going to give that away. There's that distinction that I'm making.

RW: *Well, and you've made the separation...single stock futures certainly make sense – to have that ability.*

LM: I don't deny it, because that's the same share of stock everywhere in the world. It doesn't matter where you trade. That's true.

RW: *We haven't talked very much about the stock index futures, in my mind one of the greatest innovations, especially if you team it with electronic platforms. I know that there's an interesting history here. Stock index futures have certainly become one of your most important products here at the Merc. Even though you*

weren't the first ones to launch stock index futures, being first really didn't matter in this instance, because you ultimately became the leader in that venue. What contributed to the stock index futures being such an important market here at the Merc and what made it such a liquid market?

LM: First, let me straighten the record out. The Chicago Mercantile Exchange really was the first. The Kansas City Board of Trade applied to the CFTC for the right to trade a stock index product that was deliverable based on the Value Line Index. It was an invention of theirs, and it required delivery. It was before cash settlement. We waited until after cash settlement was approved and applied for a cash-settled S&P contract. That meant that if the CFTC was to approve in order of application, they would approve the Kansas City one first and ours second or third, or whatever it was. But the ones above us that were waiting for approval were physically delivered contracts. All of those markets, including Kansas City, recognized that they wouldn't have a chance against the cash-settled markets, so they all revised their applications and reapplied—withdraw, in fact, their original application to reapply in a cash settled form. Susan Philips, who was chairperson of the CFTC at that time, called me up and said, “Listen, I'm going to ask you for a very big favor. The Kansas City application is going to be withdrawn in favor of a cash-settled contract, which would put them behind you in approval. They're a small exchange, and they wanted to have a chance. They wanted to be first. If you let them be ahead of you in the application process, I will feel good about it. Would you do that?” And our Board said, “sure” because it didn't matter. I knew who would win that game. So, that's how it came about. But, we were first in applying for a cash-settled index product. No doubt about that.

RW: *So, why has it been so successful?*

LM: Because it's the right product. It's not a question of being first in this respect because we were all so close to each other that time had no meaning... I mean within two weeks, everybody had been approved, so big deal. Two weeks was not enough of a determinant at the time. A year is a determinant of time, but not two weeks, or even a month or two months. Standard & Poor's 500 is the benchmark for the industry that uses equity index products. The CME was the most capable of creating liquidity. Our people flock to that pit because of the influence of our board members, myself and others like Jack Sandner, who was chairman during that time. We all were very influential in marketing that product to our members to come and help us to create the bids and offers to create liquidity. We had a marketing campaign that was truly a marvelous thing. The

idea came up in an airplane. Jack and I were coming back from London from a conference when I said to him, “We can’t ask our members to give up their whole day from a successful marketplace—they’re trading either in Eurodollars or in currencies or cattle—to leave those pits where they’re making money and have trading expertise. To ask them to come to this new, untried index market and spend a month there is very hard.” So we came up with the novel idea of asking them for 15 minutes. Jack and I stood at the door of the Merc with buttons that said, “Fifteen minutes, please.” And gave each member a lapel button. And all they had to do was give us 15 minutes of trade in the S&P pit. It really was a most successful marketing program. Every member figured, well, what the hell? I’ll invest my 15 minutes of time. But think about it. When you get 3,000 people every day doing 15 minutes, pretty soon, you have a marketplace. And that’s what we had, and we just ran away with the ball.

RW: *This one might be harder for you to answer. What do you think is the greatest missed opportunity in the futures industry?*

LM: That’s hard to answer. My feeling is that we didn’t do enough to capture the over-the-counter market. It grew so big. Today it is many times as big as we are. It’s huge. Of maybe two hundred trillion notional value outstanding contracts in derivatives in the world, only one third are exchange-traded derivatives—two thirds are over-the-counter, mostly in Swaps. So, somehow, we were so busy creating the benchmarks of products on which all of the other derivatives over-the-counter, in fact, depend. I don’t think they could have grown to the extent that *they* did except that they had the coverage and convenience of the Eurodollar market whenever they needed to offset their own risks. That gave them a comfort level that was sort of an all-inclusive umbrella, and that’s why they were able to really grow in over-the-counter derivatives. Interest rates are 70 percent of over-the-counter derivatives, by the way. So, our interest rate market in Eurodollars gave them that cover. But we were so busy with that success and doing the things that we were doing and that we knew just to create the benchmark product—stock indexes, Eurodollars, currencies—that we didn’t spend enough time in looking at the smaller versions of the same thing, which is what over-the-counter derivatives are. They are tailor-made derivative products that don’t apply as a benchmark to everybody. They apply more or less on a case-by-case basis. Sometimes that’s worth 100 clients, sometimes it’s worth 1,000 clients. Maybe sometimes it’s worth 5,000 clients. And that, I would say, was a missed opportunity.

RW: *Do you think we do a good enough job of telling*

the world how the safeguards of a regulated exchange reduce counterparty risk? Is that one of the reasons the over-the-counter market is so much stronger?

LM: I think our market is much stronger than theirs, but we don’t do a good job in explaining. The reason regulated derivatives are used less by the general public is because the natural broker is the guy that devised the over-the-counter product, and he’s the guy that makes more money from that than using our market. So, if Goldman Sachs or Merrill Lynch invents an over-the-counter swap and sells it to a group of, say 1,000 of their clients, they’re going to make a lot more money than if we had a market doing the same thing. That’s the real reason that we didn’t do as well as we might have. But I don’t know even if we had concentrated on it, whether we could have achieved any better than we did. I think we’re making inroads now, because Enron and the post-Enron world underscored the strength of the centralized exchange clearing, and removing the single counterparty risk involved made a big difference. I think the C M E ’ s open interest since the Enron failure has grown by something in excess of 40 percent. Futures trading volumes

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have grown proportionally as well. So, somebody’s recognizing that you are much less at risk when there’s a central clearing system than if you’re doing it with single counterparty risk.

RW: *We tend to talk about the economic function of the futures market, because it’s so important—the hedging functions and risk management. Most of the readers of SFO magazine are individual traders. Why should they trade futures?*

LM: Well, of course, it’s not for everybody. The pace is very, very fast. You have to be really tuned into it. It’s not like trading stocks, and there’s a huge distinction. With stock, you buy or sell, and you can sit on it for a while; and you can take a look at it or look at it daily, but you won’t act again necessarily for a week, two weeks, a month or a year. You can’t do that in futures. The dynamics of the futures trade is so fast-paced that you have to be tuned in minute to minute because the change in price is so dramatic. I’m not talking about single

stock futures now; I'm talking about the real futures markets in currencies or stock indexes or Eurodollars or agriculture. Remember also that many of the futures products are not geared for the individual. There was a big distinction made when we launched the E-mini contract, which, in fact, is for the retail market. Until then, our products were designed for the hedger, the commercial. Look, you trade S&P futures, you're trading an instrument that even today each contract is \$250,000. How many people have a portfolio of \$250,000? I would say it's very few. And when you trade currencies, you're trading on average a \$100,000 contract. How many people do that? Commercial interests do, but individual traders generally don't.

“The E-mini market in S&P futures broke the mold. And I think now you're seeing a wave of mini contracts geared for the retail market. Single stock futures are also leading in that direction.”

RW: *And, of course, the Eurodollars are even larger.*

LM: Yes, each contract is \$1,000,000. Who trades that but commercials? So, our futures markets were as a rule created for the commercial interest. And, sure, individuals like to participate because, hey, there's big money there and there's a big buck to be made if you're right. Of course there is. But, it's a very selective crowd now. It's a crowd that can afford that kind of risk capital in the first place and, secondly, a crowd that knows a lot more than simply saying, "I like IBM. I'll buy some of their shares." That's not how this works. So, you've got to know a

lot more, or you've got to have a broker that knows a lot more. And, you really have to be tuned in.

RW: *But, you're right, the E-mini S&P futures contract was really a breakthrough and far different than a Eurodollar contract or the big S&P 500 contract.*

LM: The E-mini market in S&P futures broke the mold. And I think now you're seeing a wave of mini contracts geared for the retail market. Single stock futures are also leading in that direction. I think you asked me before what do I see three years out, and I neglected to mention that we're moving towards the retail user and participant and speculator or, in some cases, the investor to use our markets. We really were not headed in that direction in the last 30 years, and I think it's going to change. And the E-minis prove that because, today, they are the most successful electronic market of its kind, and who trades it? It's the individu-

als that are trading it to a very large extent. The commercials are still using the \$250,000 unit of the S&P pit. But the E-mini S&P is only a \$50,000 unit, one-fifth the size of the big guy. The individual can use that. I mean today, the E-minis actually trade about a million a day—a million contracts a day.

RW: *You've looked into your crystal ball and foreseen a number of innovations becoming successes. What about this one?*

LM: Yes and no. Bill Shepard and I had a lot to do with the launching of the E-minis, but I didn't see it becoming so attractive so quickly to so many people, which proved the idea. The idea was that there was a retail user of our markets out there that was hungry for this kind of market and could apply himself to this kind of market. And that if we provided an instrument of trade that was geared to his or her pocketbook...I'll tell you, in Korea, the most successful product is the Kospi Index product. It created a very small index, and it trades more than any other product in the world.

RW: *Who are the users?*

LM: Homemakers. They love to sit and trade. It's an Eastern mentality that likes to trade, and they're very successful at it. That product is enormously successful. Clearly, it's retail trade. And today, rest assured that every place is looking for E-minis to create as an offshoot of their large commercial contract. That's what's happening. And in three years, you're going to see a lot more of that all the way around.

RW: *I would assume then that you're pretty optimistic about single stock futures?*

LM: I am. Unfortunately, it was lacking in the one element it couldn't control—a bull market in stocks. It was launched at, by far, the worst moment in the historical timeframe, counter when a market ought to be launched which is in a bull environment. For the most part that bear market is still with us. And, so, until that straightens itself out, single stock futures have to sort of limp along but clearly, I'm very bullish on it. I believe that the future is very, very bright.

RW: *OneChicago, a joint effort between the Chicago Mercantile Exchange, Board of Trade and the CBOE and, now, joint clearing at the CME on behalf of the CBOT, perhaps gives a possible early indication of future consolidation moves that we can expect. Do you see a time when the Board of Trade and the Merc become one exchange?*

LM: Well, I certainly cannot speak about that

because that would be in violation of all the rules of which have been applied to me as a director of a public company. So, I can't talk prospectively, except in the broad brush of things like I said about Asia or South America. I frankly don't know. But everything is possible in time.

RW: *I can tell you it would be an appealing prospect – seeing a “super exchange” with greater efficiencies developed here in Chicago. Certainly with the overseas competition developing, that direction makes abundant sense. But I can understand your reticence to answer. So, let me quickly switch gears. Do you see the futures industry becoming more consumer palatable—in other words, you seem to hint or suggest that Mom and Pop may get more involved in futures trading by virtue of these E-mini contracts, etc. But, do you envision the futures industry going through a type of evolution where it becomes as common for individuals to use futures markets as they now use the securities markets?*

LM: Well, that's a tall order. As common or popular, I would find that a difficult order. But *more* common than in the past, certainly true. And, yes, we are moving in that direction, and you will see great inroads being made to the individual user or potential user of our markets. But usage of futures doesn't have to be equal to the security markets to have a great deal of potential, because our markets are utilized by a very small segment of the commercial world. It's the risk managers of the major corporate entities and the intermediaries, and that's a very small segment of the marketplace. On the other hand, retail trade holds huge, huge potential. And even if we only captured 10 or 20 percent of retail, it would be very meaningful in the growth of our marketplace.

RW: *And, over time of course, that certainly could happen, and having a bullish or volatile market would help as well. One final question —Now that the Iraqi War is over, do you envision market uncertainty and*

volatility to be somewhat quelled...and then, how might that affect business?

LM: A good deal of our market is a consequence of uncertainty. And when uncertainty occurs in the world, be it a war or be it whatever—upheaval—it creates additional trade. But what's interesting is that we've been on a growth track that had nothing to do with the war. We've been on a growth track for 30 years. It's almost ubiquitous, unstoppable. I remember during the '80s being asked questions about inflation, something similar to, “Now that we're licking inflation, won't futures trading volume fall as a consequence?” Well, no. At the same time, there was another bit of magic going on—the magic of the understanding of using risk management in the marketplace, which is *still* growing. It was a moment in 1990 when Merton Miller became a Nobel Laureate for explaining to the business world how risk management should be applied in their everyday business...and that futures were a great tool for that application. That potential is so huge that we haven't even scratched that surface. I just saw a statistic of the number of corporate entities that use futures, and it's frighteningly small. So, the potential is out there and will continue to grow as upheavals come and go, but the growth of the market is ever continuing. And, with the new leadership under Terry Duffy, I'm very happy.

RW: *Thank you, Leo. This interview will give readers a very close look at derivatives innovations over the years and what that might portend for the future.*

LM: My pleasure, Russ.

Russell Wasendorf, Sr., is chairman and CEO of PFG, Inc., a futures commission merchant. He also heads Wasendorf & Associates, Inc., a research firm which is devoted to trader education. He has authored five books, and his sixth book is scheduled for release soon.

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