

**Holocaust survivor leads the CME through new product development: introducing equity, currency, and interest rate futures, ending open outcry, and using cash settlement for indices.
What Happens Next – 12.19.2021**

Larry Bernstein:

Welcome to What Happens Next.

My name is Larry Bernstein.

What Happens Next is a podcast where an expert is given just SIX minutes to present his argument. This is followed by a Q&A period for deeper engagement.

Today's topic is managing new product development in futures trading and financial markets.

Our guest is Leo Melamed.

Leo is the retired Chairman of the Board of the Chicago Mercantile Exchange which is the largest futures trading exchange in the world.

Leo has an incredible personal story to tell. He was born in Bialystok Poland, and his family escaped from the Nazis through a very circuitous route. First to Lithuania, then across Russia on the Trans-Siberian Railroad, and then to Japan before emigrating to Chicago. He was saved by a member of the Japanese consulate in Vilnius who provided visas to Jews in violation of his government's policies.

Leo joined the CME as a young man and proceeded to take over its leadership. He led new product development and introduced futures on currencies, stocks, and interest rates. He also introduced cash settlement in lieu of physical delivery which really opened up the full gamut of possible index choices. Another critical innovation that Leo fought for was getting rid of open outcry and replacing it with electronic trading.

When Leo arrived at the CME, it was a downtrodden exchange focusing on butter and eggs. Those contracts are long gone and have been replaced with currency, S&P500 and Eurodollar interest rate futures which are the most heavily traded contracts in the world.

So, with that I turn to Leo Melamed, please begin your Six Minute Presentation.

Leo Melamed:

I was seven years old when World War II began, when the Germans captured the city of Bialystok, Poland, where I was born. When the Nazis came to get my father, he was nowhere to be found. All they could do was beat up my mother and ransack our house. My father's decision to run and later to have my mother take the last train out of Bialystok was heroic and unique. It began a miraculous escape which outwitted the Nazis and the KGB and took two years, spanned three continents, six languages, the Trans-Siberian Railroad and Japan, courtesy of a lifesaving transit visa from Japanese Consulate General, Chiune Sugihara.

We ended in Chicago. I grew up as an American kid and graduated from John Marshall Law School, became a lawyer. I successfully practiced for several years, but I didn't love it.

Before law school I answered an ad from Merrill Lynch, Pierce, Fenner & Beane thinking it was a law firm advertising for a runner. I took the job for \$25 a week on the Chicago Mercantile Exchange floor. The instant I showed up on the Merc, I was smitten. I had found my destiny. At the time, the Merc was a downtrodden, total unlawful exchange with a terrible reputation. Where its board of directors ruled for their own benefit. I became a leader in the membership and initiated a takeover. In 1969, I became the Merc Chairman. By then, I had immersed myself in futures trading and its true value in developing strong capital markets. In those days, the financial news was mostly about foreign exchange. The world was still operating under the Bretton Woods Fixed Exchange Rate System, where values in foreign exchange were determined by finance ministers.

I had become a hardened believer in the free market. My mentor, Milton Friedman, advocated that value should be determined by supply and demand, not finance ministers. I began thinking about a futures market in currency. When I broached the idea to the Merc's board of directors, they laughed me out of the room. "You are a lawyer, Mr. Melamed, not an economist. Futures are for agriculture. Soybeans, and pork bellies." But I wondered why. Was there an economic principal involved? My idea needed validation. I went to the great man, Friedman. "It's a wonderful idea," he said, "do it." I was thrilled and gratified, but I needed it in writing. We agreed on a price of \$5,000 for him to write a feasibility study.

I took that paper and ran with it. First, to our board of directors and then to every corner of the globe. It changed the world of finance. I went from currency futures to interest rates. 20 years later, Nobel laureate Merton Miller called financial futures the greatest invention of the past two decades. As an encore, I introduced cash settlement in place of physical delivery, bringing on S&P futures. Then I dared to transform open outcry to an electronic venue known as Globex. It seems so obvious today, but it was anything but. It gave us the ability in 2002 to go public and then to merge with our rival, the Chicago Board of Trade. Five years later, we were the largest exchange in the world. Our future lies in embracing technology and globalization and staying open to new ideas.

Larry Bernstein:

Leo, in your book you discuss two corruption scandals at the CME. The first was when a speculator cornered the onion market. And the second was a case of insider trading in eggs by a CME board member. Can you give us a little background about those two scandals?

Leo Melamed:

The onion scandal changed the futures market. It ended up as a law against listing onions on a futures market. The only commodity that has a bill in Congress against it. Signed by President Gerald Ford. But the idea of using the market for the benefit of the (laughs) board of directors is arcane. It's ridiculous and that's the exchange I took over. My mission was to write and enforce the rules and advance new products through the exchange, which was limited to butter and eggs.

Larry Bernstein:

My first job in the financial market, I was a runner for Henry Shatkin at the Chicago Board of Trade in the Treasury Bond futures pit in the summer of 1984, when I was 17. I ran the orders to a broker. When he went to lift the offer side, instead of buying the securities from the entire pit, he bought the futures from his four best friends that were right around him. There was this relationship between the broker and certain pit traders, and this was unfair to the other traders in the pit or the public who had orders with different brokers. How did you think about this smaller form of corruption?

Leo Melamed:

The open outcry system lent itself to exactly what you described. Clearly, if the markets were to grow and function, they had to be open to competition. Competition could only happen if we went electronic. That was just a terrible thought in those days because electronic trading would take away a lotta jobs, but I also know that it would make the markets fairer and better and in time would create new jobs. Just as it actually did, but of course you can't prove that in the beginning. It was a long, long fight with the broker community. Lasted over 10 years and I had death threats. I had to hire a policeman to guard my door (laughs) in the office.

Larry Bernstein:

Whenever there is a change in an organization, there will be winners and losers. And we should expect the losers to fight. At the CME, Floor traders would lose if there was an end to open outcry because they would lose their edge in the pit. Yet, you gave the floor traders a veto right to change. Why did you do that?

Leo Melamed:

There was no way that anybody could institute electronic trade in those days. You could forget about it. That was like poison. This was not something you could even talk in mixed company. You never mentioned electronic trade. I knew that it was coming. I knew that that was a hopeless argument and so I created a committee of people that I thought understood technology and were traders. I said to them, "Look, we've got to come out with a report that tells the board the truth that electronic trade is coming, and unless we're there before the rest of the crowd, we're going to lose the business."

Everyone on that committee was smart. They knew, "Leo, you can't do this kind of thing without a referendum. You know that." I said, "There is only one way you can win a referendum and get electronics going, and that is if we guarantee that it only will apply to new contracts so it doesn't affect any of their income. In fact, it expands their income with new contracts," That's the only way they'll pass. I have to add a codicil that we will not change that except by referendum.

We won it big because everybody recognized that it doesn't cost them a dime and it gives them the chance for new markets and let it be electronics. So what? As long as their income was not affected, they voted for it. Later in time, we had to change that if we were going to compete internationally, we had to.

Larry Bernstein:

When the CME was owned by its trading members, you led the new product development effort. I think your success in part was due to your interaction with CME members who were both clever and entrepreneurial. Today, the CME is a large public corporation owned by shareholders. And since the CME's IPO, the exchange has had little to no new product development? Does new product development depend on entrepreneurial individuals outside of public companies?

Leo Melamed:

It's a serious question. And I did consider it. You hit the nail on the head. Many of the ideas grew out of conversations by the members in the pits.

I thought that I would create a council of very prominent and knowledgeable people, Nobel laureates, as well as financial experts. But you're right, you don't get 100% of what you want.

Larry Bernstein:

Leo, we are both very good friends of Myron Scholes, the Nobel Prize winning economist. I worked with Myron at Salomon 30 years ago. What was your strategy on how to use Myron's incredible talents to benefit the CME?

Leo Melamed:

He is brilliant and I wanted him as well as several others, Gary Becker, and in 2006 we discussed the idea of a think tank that would include a number of Nobel laureates. And we created the Competitive Market Advisory Council, CMAC. And included Gary Becker and Myron Scholes and Robert Merton, including a bunch of other very accomplished experts in markets.

And it's the only corporate entity in the world that has a think tank of this caliber, and I owe much of it to Myron who helped me create it.

Larry Bernstein:

Leo, we got a question from the audience. This question is from Kevin Lennon, who runs real estate for the CME. Kevin said that when you started the S&P Futures contract that it was so successful that you decided to go back to S&P and proactively renegotiate the license agreement in their favor, which cost the CME more money in the near term but paid off massively in the long run. Tell us what you did and why it worked out for the better.

Leo Melamed:

When I first thought of the idea of stock futures, I had to choose between the Dow or the S&P, I chose the S&P. Our attorney said to me that the price of the S&P is public and we don't need to bother with a license. I believe in intellectual property, and I said to him, "No, Jerry, this doesn't feel right. I want to go and get license."

So, we met in New York, Jerry and I, and the Chairman of S&P. And it was awkward, because the Chairman said, "You mean to tell me you want to pay me for something that I'm giving away free." And I think his attorney sitting next to him gave him an elbow, "Yes, yes." And I smiled but I said, "I do, because it's your intellectual property. Besides, I want an exclusive license on this." and they said, "What do you want to pay?" This had never been done, Larry. You always were trading in public instruments that you could deliver and you didn't need license to trade in cows or pigs or whatever and here we were being asked, "Well, how much do you want to pay?"

The biggest volume that we've ever seen in any contract was 10,000 contracts a day. That was off the wall. So I said to him, "What we'll do is pay you 10 cents a trade up to 10,000. Anything over 10,000, that's ours without pay." They looked at each other and they said, "Pretty fair. Okay." And I explained we never had a trade over 10,000. So that was signed and a 10-year deal was made. It turned out that it is intellectual property, and when the Board of Trade wanted to list the Dow, the Dow people went to court and got an injunction and for the next 15 years we were the only exchange in the world that traded equities in futures. Now, I knew it wasn't a fair deal after the first week of trading, because we went well over 10,000 almost immediately. This was the biggest winner I've ever seen.

I tore up the contract and made it fair. We made a new deal for another 20 years and McGraw-Hill, they were ecstatic. We put S&P on the board.

Larry Bernstein:

In your prepared remarks, you talked about the advent of cash settlement as a critical innovation for financial futures. When I worked at Salomon Brothers, I was one of the most active traders in the CBOT's municipal bond futures contract which was cash settled. Salomon was the largest investor on the long side and Susquehanna was usually on the short side. And I was very concerned that the cash settlement procedure would be abused to our detriment.

How do you prevent corruption of the cash settlement process?

Leo Melamed:

Yeah, well, it was uppermost in my mind. You can create an index, because it was cash settled at the end. You know, it took a long time before the CFTC agreed to cash settle, but it opened up the market. I could have never had a stock index future, how could I deliver whether it's 30 or 500? How do you do that? Whereas an index, easy enough.

And that problem you correctly pointed to happened in the Eurodollar contract, when LIBOR took over the cash settlement. And the corruption that ended LIBOR. It was a bad decision of the exchange, to give the Eurodollar pricing over to LIBOR.

Larry Bernstein:

I want to mention my own personal interaction with the LIBOR scandal. In 1996, I was working at Salomon Brothers and I was upset that the CME was handing over the cash settlement process of LIBOR to the British Bankers Association.

I met with Marcy Engel, who was a senior lawyer at Salomon at that time. Marcy helped me draft a letter to the CFTC asking them to reject the CME's modification to the Eurodollar contract because of our fears of market manipulation.

Leo Melamed:

Yeah, well, first, (laughs) I want to tell you I wasn't present for the decision to give it over to LIBOR, I had retired when this deed was history. And, I couldn't believe that that was happening, but it was. We had to depend on the bankers to give an honest evaluation. And, I'm afraid that it created the biggest scandal in the history of markets, so many banks getting fined over billions of dollars. And it didn't work, and for that reason, we had the scandal.

Larry Bernstein:

Let's talk about the CME as a too big to fail institution. One of the chapters in your book describes your involvement in the 1987 stock market crash.

For the CME to function, after the crash the losers in equity futures had to pay in aggregate \$2.5 billion in cash to the winners by the next morning, otherwise you're out of business. One dealer, Morgan Stanley owed the CME more than a billion dollars. The Chairman of Morgan Stanley had a tough day, and he went to sleep early, but that wouldn't stop you. Leo, tell us what happened after the crash.

Leo Melamed:

You're talking about the scariest day of my life. Uh well, we were used to a change in value in the hundreds of millions of dollars as a norm, and here on this day, \$2.5 billion changed hands between the longs and the shorts. And as you said, we could not open the next morning unless every dollar was paid

for. I slept in the clearing house watching and waiting. I had talked to Alan Greenspan before the markets closed, then he said to me, he said, "Will you open the next morning?" Alan Greenspan knew what I knew because he had been a trader before on his own, and I had to be honest with him. I said, "I don't know. We've got to wait and see what happens, does the money come in or not?" He says, "Call me as soon as you know, because if it doesn't come in, we may have the next end of the world." And you're talking about the scariest part of my life. And two in the morning, we knew that the Morgan Stanley was lacking. I had the private number of the chairman of Morgan Stanley, and called and said to him, "You don't know me, but you owe us a billion dollars and we're waiting to see how it comes in."

The money came in 20 minutes to the opening when I was talking to our banker, it was the Continental Bank which was the biggest bank in Chicago at the time. She said to me, "Leo, we're in except for a couple of hundred million dollars is still missing." I said, "A couple of hundred million? My God, that's terrific. What? We were talking about \$2.5 billion."

She says, "Yeah, Leo, but my authority's only good for \$10 million. And just then, the chairman of Continental Bank walked in, and she said, "Wait a minute, let me talk to the chairman." She came back, she says, "Leo, were all right, he said you guys are good for a couple of hundred million." And they put up the money.

So that's how close it came.

Larry Bernstein:

My take away is that the CME needs an enormous line of credit. The exchange and our financial system can't be dependent on the solvency of a couple of firms after a stock market crash.

Do you agree with the Dodd-Frank determination that the CME is a too big to fail institution?

Leo Melamed:

Yeah, well, in '87, we didn't have, the system that we have today. I can't give you the chapter and verse of what the rule is today. Very complex, but also very solid and with the highest approval by the Federal Reserve. I have no doubt it is as distant from what it was in 1987 as you can imagine.

Larry Bernstein:

Let's talk about Asia next. When you wanted to trade CME products around the clock, you needed to work with an Asian exchange. Why did you decide to partner with Singapore?

Leo Melamed:

I ended up in Singapore because Lee Kuan Yew, the person that created Singapore, was probably one of the most brilliant people I've ever met. And, he asked me, what was holding me up from helping them create an exchange? And I said, "Well, you guys have no rules. He said, "Who makes the rules?" I said, "Well, in the United States, the exchange makes the rules, and the regulatory authority, the CFTC approves the rules of the exchange."

And he says, "Does the CFTC have a book?" And I said, (laughs) "Well, of course it has a book." He said, "Send me the book." (laughs) And they copied the CFTC rules and the SIMEX was born in Asia.

Larry Bernstein:

In your opening remarks you mentioned that your family was saved by Chiune Sugihara, who was responsible for visas at the Japanese consulate in Lithuania in 1939. Sugihara knew of the genocide of the Jews and decided to act unilaterally giving Jewish refugees visas to Japan. What motivated him? Why was he successful? How did he get around the Japanese bureaucracy who opposed what he was doing? And why did he risk his career to save people he didn't know?

Leo Melamed:

Well, 30 years later, I was giving a seminar in Tokyo when a Japanese gentleman came up to me, and said I am Hiroki Sugihara, the oldest son of Chiune Sugihara. Hiroki was five years old when I was eight. I never met him at the consulate, but we became great friends and we both agreed to make sure that the world understood the humanitarian acts of his father.

He told me that his father had called his wife and the three children together, and said to them, "You know, the government of Japan, the foreign affairs does not want me to issue visas to these people who are trapped here and their only crime is that they were Jews. And I am inclined to give them the visa and save their lives. If I follow the dictates of my government, I will violate the dictates of my God." By then, Sugihara had become a Christian, and Hiroki said, "I was the first to raise my hand," he was five years old, "to give them the visas."

And he was one great man. He represented a lifeline to 6,000 of us who otherwise were surely going to be murdered and decided to violate the edicts of his government in favor of doing the right thing. And the world recognized him as one of the righteous of the world. He was a great humanitarian.

Larry Bernstein:

You took the Trans-Siberian Railway across Russia, and then caught a boat from the Russian port of Vladivostok and traveled to Japan before the attack on Pearl Harbor. What was that voyage like?

Leo Melamed:

We were almost three weeks on one train, and we had a small cabin to ourselves that turned into a sleeping-quarters at night. It made many, many stops because it was one-track, and so it would bring on all kinds of goods. My father would leave, and my mother was always afraid it was the last we will see of him. He would leave to bring in milk and, and bread and things to eat.

It was a horrifying experience. But one thing that I remember is that my father tried to explain to me the difference between Fahrenheit and Centigrade. He told me that Fahrenheit and Centigrade meet at 40 below zero, they're both the same. In an hour, we're going to be in Birobidzhan where it will be 40 below zero, and I'm gonna show you what it's like at 40 below zero." And they bundled me up, and I came on to the station, and my breath fell as a piece of ice from my mouth.

We ended in Vladivostok where it was the last chance for the KGB to stop us. My father was an anti-communist rabble-rouser, and he was afraid that they would figure out that, I mean, the whole thing was so much luck that I can't describe it.

Larry Bernstein:

Your wartime journey reminds me of my mother and grandparents' escape from Nazi Europe. My family was stuck in Marseille in 1942 desperate to get out and go to America. My family depended on contributions made to the Joint, the Jewish Joint Distribution Committee that paid my grandfather's

salary when he worked at a Jewish medical clinic in Marseille. Leo, your family was supported by the Hebrew Immigrant Aid Society and the Joint. How do you think about these organizations, and their success getting Jews out of Europe?

Leo Melamed:

Well, so thankful that they existed, and that their money was available to those of us who were stuck (laughs) And thank God that the Jewish history is loaded with organizations of aid. I don't know of any other culture that is so giving in terms of helping its own brothers and others. And, the Joint was enormously important when we had to pay off the Russian officials to buy a train ticket to Vladivostok from Moscow. As you can imagine, they charged Jews five times the regular price. Fortunately, my parents got the money from friends and organizations like the Joint.

Larry Bernstein:

You were born in Bialystok Poland, one of the great Jewish communities. Before the war over 100,000 Jews living there and now there are no Jews left. What was it like for you to visit Bialystok?

Leo Melamed:

Well, it was difficult because my parents would not come. After the war, my father said to me, "There is nothing there for us." And he was right, and he was always right, one of the smartest people I've ever met who knew to run instead of stay. And although I know that every country in Europe is trying to overcome its history with respect to Jews, I think it'll take a long, long time before that happens, because of antisemitism throughout Europe and the world, they have yet a long way to go.

Larry Bernstein:

Leo, one of the tasks that you've still have with the CME is your constant contact with senior leadership of China. Tell me about your relationship with the Chinese, where they're going with their financial futures and innovation, and how do you expect the relationship between US and China to change especially in the world of finance?

Leo Melamed:

That's the biggest question that we have today, how do we handle our relationship in China and the US? I'm a big admirer of the people of China. So that when I approached the government of China in the early 2000s that they needed markets in foreign exchange, oil as well as financial products.

I'm a capitalist. The biggest difference that will make the United States the winner in this competition is that we can think freely. There is no limitation on our ideas. Any nation that has the rule of dictatorship can't say that, and it doesn't work.

I know many of the Chinese that came here to the universities and they loved what they learned, and they loved to be able to think freely. And it's that difference. Over 70% of the innovations and inventions in the world occurred by Americans in America, because we think freely, and if we failed, it isn't a total failure. We could try again without the stigma of failure. In most nations, if you try something and it doesn't work that's your end.

it's the freedom to think that makes the difference, and I think it will win out in the long run against China, although I try and help them grow and open their markets to competition, because that's the key market strength. They still have not opened their markets the way they should, and they ignore intellectual property, but I still love the people.

Larry Bernstein:

We end each episode on a note of optimism. What are you optimistic about?

Leo Melamed:

We will innovate, find ways to win in an honest fashion. I am an ultimate optimist. How could I be anything less than an optimist after the escape I described from the death camps? So once an optimist as a child remains an optimist as an adult. And one more thing, you think anyone but an optimist could've created an exchange such as the CME? I don't think so.

Larry Bernstein:

Leo Melamed, thank you so much for joining us today.

That ends today's session. Let me make a plug for next week's program.

Our speaker will be David Kronfeld who is a former venture capitalist, Booz Allen consultant, and corporate executive at Ameritech.

David has a new book entitled Remarkable: Proven Insights to Accelerate Your Career. David uses his real-life experiences to teach negotiation, find common ground, and learn your counterpart's perspective to solve problems.

You are going to love David Kronfeld's insights, because it will help you improve your performance at work and in life.

If you are interested in listening to a replay of today's What Happens Next program or any of our previous episodes or if you wish to read a transcript, you can find them on our website Whathappensnextin6minutes.com. Replays are also available on Apple Podcasts, Podbean and Spotify.

I would like to thank our listeners for their time and for engaging with these complex issues. Good bye.