

SPECIAL 500TH ISSUE

Looking forward to the next revolution

BY DANIEL P. COLLINS

Asia, water, big data, intellectual property and commodities that have not been invented yet will likely be the leading markets in the next 20 years, according to Richard Sandor, who has a pretty good track record on these things.

For many in the Futures industry the opportunity (or threat) brought by computers in trading was not really seriously contemplated until 1987 when the Chicago Mercantile Exchange launched the concept of creating an after-hours electronic trading venue. CME Group Chairman Emeritus Leo Melamed—who a decade earlier wrote an article for Hofstra University stating that open outcry was the only way for a futures market to operate—called electronic trading “the camel’s nose under the tent.”

Melamed eventually acknowledged his mistake.

Inventing markets Water futures

Of course, computers had already played a big part in the futures arena as the revolution of the personal computer at the beginning of the 1980s allowed for the proliferation of technical trading systems. However, for the average industry insider computers were not a big part of the industry then, let alone in 1972.

Futures magazine has always thrived to be a resource for traders. That is why it was founded. Nowhere is that more clear than in the very first issue of *Commodities* magazine when Richard Sandor and Lance L.

Hoffman wrote the article, “Computers and Commodity Trading.”

The focus of the article was on the use of computers in designing trading strategies and even included a trading model. The article, which included a description of a trading strategy that produced a 73% return over a 10-year period, concluded, “The ultimate value of the computer depends on the ability of those individuals who are supplying it with information and programming the models tested. But the capability to describe in a quantitative fashion the relationship with a variable and then combine this with a trading strategy and then test this strategy for a 10-year period—all in a matter of a few seconds—certainly holds the promise of a great future in futures for computers.”

This was certainly an understatement and was so prescient that we decided to go back to Doc Sandor—the inventor of the first interest rate futures contract and environmental markets—to get an idea of what he sees for the industry in the next 40 years.

“This revolution will continue,” Sandor says. “We have access to big data, we have big changes coming around. The ability to extract information from big data has the potential for being very significant in electronic trading. The amount of com-



For more on Sandor go to futuresmag.com/Sandor500

puting power, the cloud, big data—we are at a whole new level of information that can be aligned with computers.”

While a professor at UC Berkeley in the 1960s, Sandor began working on computers when they were in their infancy.

“The next 20 years will be very rich because of advancements in behavioral economics, finance and big data,” Sandor says. “The future will be very robust for those who manage to get a lead in using those tools to analyze and predict markets.”

While technology will play a major role, Sandor says the growth in the industry is going to be driven by new geographies.

“You now have access, vis-à-vis the computer, to not only established markets in Asia but to new market-making out of that continent. The computer has now made it possible for a trader in Mumbai or Shanghai to develop forecasting models that they never would have thought about without the web and cloud computing,” Sandor says.

Back to bonds and regs

He is helping regulators and central bank’s in China and India develop bond contracts and is putting in place the

proper regulatory structure, which he has said was key in the development of U.S. financial futures decades ago.

“The thing that is most important when you launch these new markets is the need to educate,” he says. “Academics, students, lawyers, accountants, regulators. Unless all of those constituencies are properly educated these markets will face risk. The biggest risk is that people begin markets and they’re not informed of what is required for success.”

As for U.S. markets, he says the important thing is for effective international regulation and coordination. “We are doing it with Europe, but are not doing it with Asia in any great degree.”

He cautions that what is needed is effective regulation, but not necessarily more regulation. “The danger is that there will be less than intelligent regulation as a backlash to some event that might occur. The important thing is for regulators to be fully appraised and be in dialogue with those that are being regulated— and that they understand the technology and not be reactive. Reaction will generally swing the pendulum too far.”

That may be the case with the implementation of Dodd-Frank. “There is inflation in legislation,” Sandor says. “Dodd-Frank is longer than the New Testament, Old Testament and Koran combined. That in itself is opaque and difficult to deal with. I would have wished for simpler legislation. The bill that created the Commodity Futures Trading Commission was 155 pages. Dodd-Frank, with the amendments, is 2,300 pages. There were no problems with Futures markets with a 155-page enabling act. I don’t get why you need 15-times the number of words. Nobody reads it and nobody understands it. I want legislation to be simpler and more transparent,” he says.

Carbon trading

Sandor’s most recent innovation is related to carbon trading—he founded the Climate Exchange PLC (CLE) family of companies before eventually selling to the Intercontinental Exchange. It was a commercial success for him personally, but not a success in the United States in terms of creating a vibrant market for carbon emissions.

Sandor is still convinced the cap and



trade methodology is the best way to handle pollution.

“China has seven pilot programs for trading emissions, and India just started a renewable energy program, which has gotten off to a fantastic start this year,” Sandor says. “You are going to see growth in both the capital markets and in environmental markets in China and India.”

As for as the United States, he says regional environmental markets will take the lead. “The leaders in these markets will be California and China. California, for good or bad, is the source for more innovative activity and disruptive technology and behaviors,” he says. “Bear in mind that California is the eighth biggest economy in the world and we have a very successful cap and trade program going on there. You cannot look to Washington, you’ve got to look at the states.”

He points out that both California and The Regional Greenhouse Gas Initiative (RGGI), a market based regulatory greenhouse gas initiative that includes nine Eastern and Mid-Atlantic states, are leading the way in the use of markets to solve social and environmental problems.

Sandor says that has always been the way of innovation—markets are developed regionally and then grow. “You will find one to two years from now the revolution in California at the state level coupled with the Asian governments is really going to be the defining characteristic of our time when we look at it in 2030,” he says. “The people who focus on a Federal solution in the United States are missing the point — innovation is occurring at the state and local

levels and the federal government will imitate the success of the state and locals and not be the driver of policy. It is a mistake to look at Washington’s progress and see it as indicative of U.S. progress.”

Great recession

On the great recession he says it is unclear whether Dodd-Frank rules will work. “We learned one important thing: No exchange failed, no counterparty risk; 78 exchanges in 35 countries no risk whatsoever from counterparties,” he says. “The question is how effectively government can take the model that has been developed by the futures industry and seamlessly and cost effectively implement it. The danger is if regulation and cost imposed will prevent or limit new entrants into the market and favor the big players over small players and new players.”

This is important as the growth of financial futures is proof that the leaders in finance at the time were not the ones with the innovative ideas for the future.

New markets

What Sandor has done over the years is show an ability to understand risk and forecast what risks we will face in the future, and then invent markets to handle that risk. As for the next 20 years he says water is going to be one of the big ones. “In the next decade you will see the recognition that water is the most important commodity in the world and markets are best suited for solving scarcity and quality of water issues.”

Sandor serves on the board for the Center for Financial stability, which is holding a conference in same location as Bretton Woods. “Bretton Woods created a new environment and the collapse of it created a new environment. We will look at what is needed in the next 20 years,” Sandor says.

When *Futures* published its initial issue in February 1972 it was apparent to Sandor that computers were the issue. He says, “What is apparent now is Asia, water [and] the development of markets in commodities that haven’t been invented yet, [like] intellectual property. It took 20 years after the invention of the personal computer to get to the web. If I look out now like I did in 1972 I would be looking at big data, computers, water and Asia. Those are the sound bites of the 21st century. ■