

# Teaching Technicals

A handful of U.S. colleges are offering classes in technical analysis, part of a push by adherents to transform the field from art to science. **By JON ASMUNDSSON**



**Kamich's** course on technical analysis became a regular offering at Baruch in 2007.

**I**T'S A THURSDAY evening in February, a week into the spring semester at Baruch College in Manhattan. Eighty students are in a lecture room on the ninth floor of the school's Vertical Campus building for Professor Bruce Kamich's finance course on technical analysis. Kamich, an analyst at Morgan Stanley Smith Barney with 35 years in the securities business, is lecturing on Dow Theory, the set of ideas about stock price movements derived from Charles Dow's late-

19th-century *Wall Street Journal* editorials.

An hour into his talk, Kamich stops to check on how many people have picked a stock from a sign-up sheet that's making its way around the room. About a third of the students raise their hands.

The list has stalled in a row of Russian-speaking students. Kamich tells them it doesn't matter which stock they pick for the exercise. During the coming months, he says, they're going to plot the daily high, low and close of their stock on special graph paper he will provide. A student raises his hand. "Can we use Excel?" he asks, referring to the Microsoft spreadsheet program.

"No," Kamich replies. The point of the exercise, he says, is to gain the intimate familiarity with a stock's swings that comes with graphing its price by hand.

The do-it-yourself quality of technical analysis, the study of patterns in a security's price and volume data for clues about future movements, has been both part of the field's appeal and an obstacle to its wider acceptance. Because interpreting patterns in charts can involve a degree of subjectivity—one analyst's bearish pattern, for example, may be read by another as bullish—technical analysis has been viewed by some in the wider financial

community as more sorcery than science. Fundamental analysis, by contrast, focuses on data such as earnings and sales, while quantitative analysis applies mathematical tools to finance. "Technical analysis up until fairly recently has been more of a black art, and an art handed down from one generation to another rather than an institutionalized discipline," says Andrew Lo, a professor of finance at Massachusetts Institute of Technology and co-author of a book on technical analysis, *The Heretics of Finance* (Bloomberg Press, 2009).

That's been changing in the U.S. in recent years. The Market Technicians Association, a New York-based professional group that was incorporated in 1973, developed the Chartered Market Technician program partly to establish a standard for the body of knowledge that technical analysts should master. That's important, Lo, 49, says, if the field is to gain more legitimacy. To make technical analysis into more of a science than an art, practitioners need to have agreed-upon definitions and concepts that can be applied no matter who they are or where they are, Lo says. "That's happening, but it's happening slowly," he says.

THE FIRST CMT EXAM was administered in 1989; in 2005, the NASD, the New York Stock Exchange, and the Securities and Exchange Commission allowed technicians to qualify as analysts by passing the CMT exams instead of the Series 86 test, which is more focused on fundamentals such as earnings and balance sheets.

In another effort to make technical analysis more of an accepted discipline, the MTA Educational Foundation, which was started in 1993, has developed a course curriculum for colleges and provided people who can teach technical analysis. Kamich, president of the MTA Educational Foundation, says that classes in technical analysis have been offered at colleges such as New York's Fordham University; Atlanta's Georgia Institute of

Technology; the University of Richmond in Richmond, Virginia; and New Jersey's Rutgers University, among others. Often, Kamich says, a department head may decide to try out a technical analysis course, using a catchall designation such as "special topics in finance." Kamich's course, begun in 2000, became a regular offering in 2007 after being reviewed by Baruch's curriculum committee. "Not everybody wants to do that, though," Kamich, 58, says. "It depends on the local politics."

THE PROBLEM WITH incorporating technical analysis into college curriculums, Lo says, is that it runs up against the "efficient markets hypothesis," a widely accepted theory in academic finance that says technical analysis doesn't work.

The theory, formulated separately in the 1960s by University of Chicago economist Eugene Fama and MIT economist Paul Samuelson, posits that when market prices incorporate all available information, it's impossible to predict subsequent movements because a security's price is equally likely to go up or down. "The efficient markets hypothesis has become so popular largely because of the confluence of academic focus on it by economists as well as the practical significance of the implications: the whole field of indexation, passive management and the bias against stock-picking and in favor of diversification and portfolio theory," Lo says. "That's why it's taught in pretty much every course in economics that touches on financial markets."

Lo himself mounted a critique of the EMH early in his career, when he used some of the statistical

techniques of econometrics to analyze variances of stock returns over different periods. Under the EMH, he says, there's a strict linear relationship. "So a 12-month return should be 12 times as

variable as a one-month return," Lo says. "In the end, we had to acknowledge that according to the empirical evidence, markets did not work the way academics hypothesized."

In the past, the establishment of technical analysis courses on U.S. college campuses was driven more by individuals than by demand from the institutions, says Hank Pruden, a professor at Golden Gate University in San Francisco. That's what



Lo says that until recently technical analysis was more like a black art than an institutionalized discipline.

happened at Golden Gate, which is the only college in the U.S. to offer a certificate in technical analysis. "It's because I was on the campus," he says. Pruden was trading for his own account at the time using technical analysis and, with a Ph.D. in marketing from the University of Oregon, came to the university with mainstream academic credentials. He first taught a course at Golden Gate in 1976, he says.

Another early adopter was the University of Richmond. In 1996, Katie Stockton, then an undergraduate, was one of 13 students in the first technical analysis class the college offered. "They brought down people like Ralph Acampora to talk to the class," she says, referring to one of Wall Street's best-known technical analysts and a founder of the MTA. "I remember he stood up in front of the class and tore the *Wall Street Journal* in half and said, 'You don't need this.' It really caught my attention." After graduating, Stockton went on to work in technical analysis and is now chief market technician at MKM Holdings LLC in Greenwich, Connecticut.

It will take more than just dynamic lecturers for technical analysis to reach the next level, MIT's Lo says. The reason is in part a matter of numbers. "You have a huge number of fundamental analysts as well as the accountants who work with them: literally hundreds of thousands of people," Lo says. Likewise, in quantitative analysis, a critical mass has been reached and many academics are publishing papers in the field, he says. "Technical analysis has neither large numbers of practitioners nor large numbers of academics publishing papers that can have an impact on a much broader scale," Lo says. The MTA has more than 2,900 members, according to its Web site.

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Obsolete indicators may be hindering the field as well, Lo says. “What few technicians will acknowledge is that the technical patterns of yesterday were meant to be approximations,” he says. They were shorthand for certain types of market scenarios that today may not apply in the same way, he says. Thanks to the advent of computers that can crunch vast amounts of data quickly, those shorthand indicators aren’t needed as much for stocks. That’s not true in other areas, though, such as commodities or currencies, he says.

LO SAYS TECHNICAL ANALYSIS becomes important when prices are moved by unconscious or subconscious behavior of markets as a whole. For example, a typical human behavior is overreaction. When prices come down, people often sell too much. Eventually, when the price falls enough, the security reaches a level of “support” where it pulls in new money and prices rise again. “So that’s why you can see that mean reversion or support levels or resistance levels are actually fairly fundamental reflections of human behavior,” Lo says. “The academic discipline would be to say: ‘OK, that’s an interesting hypothesis. How would you go about testing it? What kind of data would you need? What sample size would you need to definitively accept or reject that hypothesis?’ I think that’s the discipline that’s going to be ultimately required for technical analysis to achieve the same level of respectability.”

Even as technical analysis seeks to gain legitimacy in academia, it’s gaining adherents among students who see practical applications, says Philip Roth, chief technical market analyst at Miller Tabak & Co., a brokerage firm in New York for institutional investors. He’s taught a technical analysis course at Fordham’s Graduate School of Business since 2002. “A lot of academics are opposed for old prejudicial reasons and never give it a chance,” Roth says. “I’ve had students come to me and say, ‘You know, professor, this is the only course I took in graduate school that was worth anything when I went to work.’” **B**

**Jon Asmundsson** is Strategies editor of BLOOMBERG MARKETS. [jasmundsson@bloomberg.net](mailto:jasmundsson@bloomberg.net)

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**David Adolf** and **Paul Schibell** are on the staff of the Bloomberg People department in Princeton. [dadolf@bloomberg.net](mailto:dadolf@bloomberg.net), [pschibell@bloomberg.net](mailto:pschibell@bloomberg.net)

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