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REVENGE OF THE BOND TRADERS

They produce a growing share of Wall Street revenue—and have gained an edge on their rivals, the investment bankers.

By David Wells

Robert Genirs, who retired as chief administrative officer of Lehman Brothers Holdings Inc. in 1998, says he still remembers standing on a baseball field in Massapequa, New York, almost 30 years ago. He was about to talk with the Little League team he was coaching, when an ice cream truck cruised by with its tinkling music. The whole team bolted—except for his 11-year-old second baseman, Michael Nierenberg. At that moment, Genirs says, he knew that that boy, whose family ran a meat business, could find success on Wall Street one day. “I knew he'd be a good trader because of his ability to always pay attention and ask questions,” says Genirs.

Nierenberg, now 40, has lived up to that potential. He heads the adjustable-rate-mortgage desk at Bear Stearns Cos., overseeing a 10-person team. He's become one of a new breed of fixed-income specialists who are bringing in precious revenue to their firms during some of Wall Street's darkest days. Many of them—armed with engineering, mathematics and physics degrees—possess technical skills that have transformed the job. “It used to be that the prerequisite to trade bonds on Wall Street was being a lacrosse player,” says Paul Calvetti, 36, head of Deutsche Bank AG's government bond desk. “The prerequisite now is to have a quantitative, analytical background. Without those skills, trading can be like trying to be a carpenter without a hammer."

The traders buy and sell corporate and government bonds, securities backed by assets such as credit card debt or airplane leases, currencies and exotic instruments such as derivatives tied to future weather patterns. Among the hottest markets for traders right now: securities backed by adjustable-rate mortgages and credit default swaps, which are contracts written by a bank that pays the full value of a specified company's bonds or loans if it defaults.

Bond traders are producing more revenue than the investment bankers who ruled during the bull market of the 1990s—thereby altering Wall Street's pecking order. The value of stock underwriting arranged globally fell 43 percent last year to $223.5 billion, from $394.4 billion at its peak in 2000. The value of corporate bond underwriting in the U.S. fell 21 percent to $641 billion, from $814.2 billion in 2000. And the value of mergers and acquisitions arranged globally in 2002 declined 60 percent to $1.17 trillion, from $2.91 trillion in 2000.

At Goldman Sachs Group Inc., the No. 1 arranger of mergers and stock sales, investment banking revenue shrank to $2.83 billion in 2002 from a record $5.37 billion in 2000. During the same period, revenue from the fixed-income, currencies and commodities unit grew 49 percent to a record $4.47 billion. At Morgan Stanley, the No. 2 mergers adviser, the fixed-income-trading division last year generated $3.27 billion of revenue, or more than three times the $962 million Morgan Stanley made from advising companies on acquisitions. In 2002, Bear Stearns had its most profitable year since going public in 1984. The firm gets 41 percent of its revenue from its fixed-income division—more than any rival does. The unit generated record revenue of $1.9 billion last year, more than double that of its investment banking unit.

Sanford C. Bernstein & Co. analyst Brad Hintz, a former chief financial officer at Lehman, says the boom in fixed-income trading has at least two more quarters to go, though the yield on the government's benchmark 4 percent note due in 2012 climbed 0.36 percent during the first 10 days of 2003—the worst start to a year for bonds since 1982. "The fixed-income traders have been subsidizing the equity people and investment bankers," says Genirs. "By the end of 2003, the investment bankers might be subsidizing the traders again."

Meanwhile, the traders have the upper hand in their long-standing rivalry with investment bankers. "They are different kinds of people," says Genirs. "If I talk to an investment banker and ask him a question, he says, 'Give me some time.' He wants to analyze it, think about it, talk to people, run some models. I talk to a trader, and five minutes later, they have an answer. They pull the trigger and then see if the gun is loaded."

At most firms, traders and bankers seldom work together, so a lack of familiarity helps fuel the rivalry. "When I was at Lehman, you almost never saw the investment bankers," says Scott Lasser, a former bond trader who published a Wall Street novel last year and is now a financial adviser at Edward Jones & Co. in Aspen, Colorado. "It seems like so much of what they do is, try to drum up business that doesn't exist."

Three decades ago, two leading Wall Street firms—First Boston Inc. and Morgan Stanley—honored a tradition dating back to J. Pierpont Morgan by treating traders as socially inferior to bankers. First Boston even called the offices of its underwriting business the "House of Lords," and the trading floor, the "House of Commons." Trading, considered a bastion of firms such as Salomon Brothers (which is now part of Citigroup Inc.) and Goldman Sachs, wasn't even a department at the white-shoe firm of Morgan Stanley until 1971. Now, the second-largest securities firm by capital has a global credit group with an electronic trading system for its cash business that supports about 2,000 users conducting about 110,000 trades each year for a total volume of $16.1 billion.

A perfect storm of market trends has helped expand fixed-income trading. Chief executives of U.S. companies, confronted with a slow economy and a bear market, have cut back on stock sales and acquisitions during the past two years. The Wilshire 5000 Index, the broadest measure of U.S. shares, has fallen 42 percent since peaking on March 24, 2000, meaning that U.S. stocks have shed about $7 trillion in market value. The Standard & Poor's 500 Index went down each of the past three years, posting an average annual decline of 16 percent.

To push the U.S. economy into faster growth, the Federal Reserve cut the benchmark rate charged by U.S. banks on overnight loans 12 times starting in January 2001, leaving borrowing levels at their lowest since July 1961. This caused the yield curve, a chart consisting of the yields of bonds of the same quality and different maturities, to become steep. When that happens, investors can borrow money for the short term at low rates and use it to buy higher-yielding long-term Treasuries, pocketing the money from the spread. As the government issued more debt to pay for spending and demand for Treasuries rose as investors sought to exploit the yield curve, the average daily volume of U.S. Treasury bond trading surged to about $373 billion a day in 2002 from $297 billion a year earlier.

Homeowners have taken advantage of low interest rates by refinancing their mortgages. This benefits traders like Nierenberg because the supply of the loans increases. On average, about $59 billion of adjustable-rate mortgages were created each month last year, Nierenberg says. "There's a ton of supply—supply we've never seen before," he says. "As a result, it's opened the market to many new buyers."

Nierenberg started trading for Bear Stearns nine years ago after the firm poached him from Lehman Brothers, where he'd been for seven years. His desk, on the seventh floor of Bear Stearns's new 45-story Manhattan headquarters building, is dominated by four flat-panel screens. The one personal touch is a picture of his son and daughter.

When he started at Bear Stearns, his team had two people. That number has quintupled because trading volume has increased so rapidly; Nierenberg's team often trades in one day more than $1 billion of mortgages packaged into bonds. His team buys mortgages from such issuers as Fannie Mae and Freddie Mac and then packages them into bonds. One trade in December involved buying $1.3 billion in mortgages and then carving them up into 10 tranches for resale. Most members of his staff are 30–40 years old and have been trading for eight to 10 years. "The volumes are huge," says Nierenberg, who's superstitious enough never to write with a red pen because the color implies financial loss. Though he wears a suit to work daily, he trades with his coat off and his sleeves rolled up.

Nierenberg almost didn't get hired by Lehman after graduating from Long Island University's C.W. Post campus with an undergraduate business degree in 1986. "They interviewed him at Lehman—must have been six or seven times—and it wasn't going well," says Genirs, who kept pestering Joe Gregory, now co–chief operating officer of Lehman, to hire Nierenberg. "Michael was persistent. He was finally hired, and in three years, he was the No. 1 mortgage trader."

Nierenberg, who says his family's meat business taught him customer service and the value of polite behavior, made it to the top because of his curiosity, says Genirs. "It took me some time in my career to not be afraid to ask questions," says Genirs, who still keeps an office at Lehman. "Michael never cared about that. He'd drive some of the senior traders crazy, because he'd ask, 'Why was that trade made?'"

To find people who ask the right questions, Deutsche Bank's Paul Calvetti recruits physics, math and engineering majors from top schools—including Carnegie Mellon University, Harvard University, Massachusetts Institute of Technology and Stanford University. "People who have been through that type of education for four to six years, you can tell them something about the market and they can write an equation to describe it," says Calvetti. "You can make more money with that in the toolbox."

Asking questions helps traders defray the risks they face, says Blythe Masters, head of the global credit portfolios at J.P. Morgan Securities Inc. in New York. Her team uses credit derivatives to juggle the risk of missed debt payments. "Less risk comes from having better information," says Masters, 33. "Information is not necessarily knowledge. You have to understand what is material and what is not."

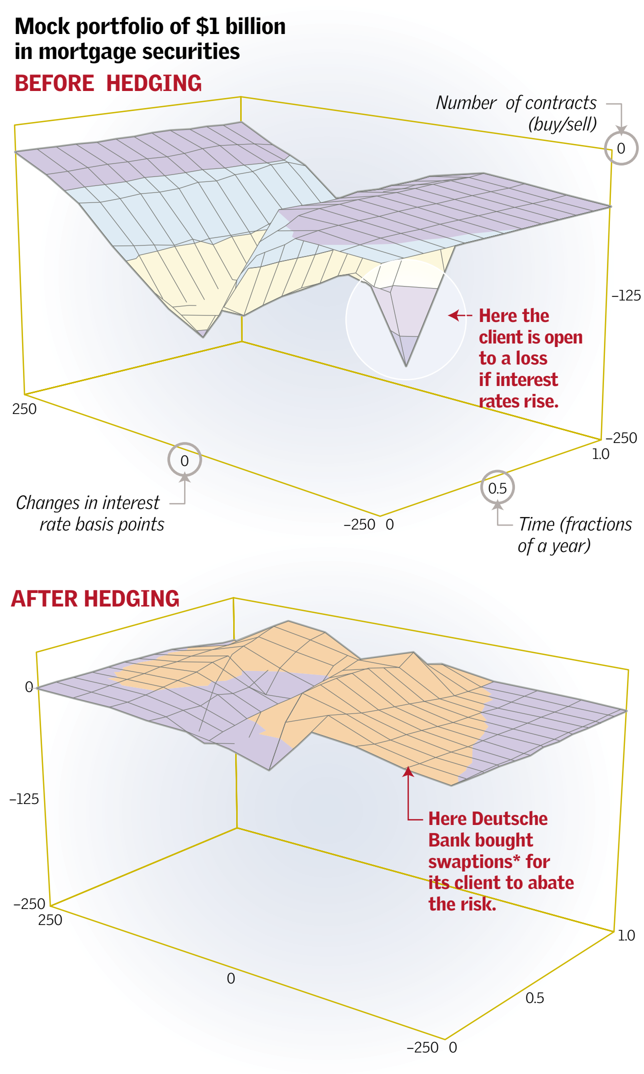
Masters says Angie Long, head of high-yield credit derivatives trading at J.P. Morgan Chase, has such skills. In some of her trades, Long, 28, exploits the differences between the equity and credit of a company. For example, while researching Level 3 Communications Inc., the data network operator in which Warren Buffett and two partners invested $500 million in July 2002, she realized the company had a lot of cash, it was reducing debt and the stock had been holding up well. The bonds were lagging, trading in mid-October at about 35 percent of par value—the stated amount, or face value. So she bought the bonds and sold the stock, then trading at about $4.75, against it. By December, the bonds were at 50 percent of par value and the stock had risen to about $5. The loss on the short position in the stock was less than the rise in the bonds, so she made money. That type of insight is key to trading success, says Masters, who acts as a mentor to Long.

Because fixed-income markets are hot these days, traders can ask for better compensation than in the past. "The demand is higher for these traders," says Barry Franklin, a recruiter with Integrated Management Resources in Arizona whose clients since 1989 have included Goldman and J.P. Morgan Chase. Higher demand and increased performance led to bonus increases of 5–10 percent last year, Franklin says. A junior trader can earn $100,000–$175,000 as a base salary and an equal amount in bonus; traders with more experience can earn as much as four times that; and a manager can make more than $5 million a year.

Alan Johnson, a Wall Street compensation consultant at Johnson Associates in New York, says junior investment bankers make $140,000 a year plus a bonus, and after four

RISKY BUSINESS

This is an illustration of a model $1 billion portfolio of mortgage securities created by Deutsche Bank. It's designed to show customers' risks and how various trades would minimize them.



*Options on interest rate swaps, which give the buyer the right to enter into interest-rate-swap agreements at a specified date in the future. They may reduce the risk of loss as rates change.
Source: Deutsche Bank

years, they will probably make about $400,000 plus a bonus. Senior bankers and managers can have pay packages of more than $5 million when times are good, he says. "What's happened in the last few years is that pay for traders has remained constant or risen slightly and pay for bankers has plummeted," Johnson says.

Traders generate revenue for their firms by putting the firm's money at risk—otherwise known as proprietary trading—or by helping clients put their money at risk. A trader's crucial talent is in synthesizing large amounts of information and determining what's relevant to a particular trade. The data can be fundamental, meaning, it's gleaned from researchers who are looking at earnings, cash flow and balance sheet issues. It can also be analytical or technical, meaning, it's related to the behavior of markets. "Traders make money out of understanding relative value," Masters says. "They might be completely agnostic as to where a market is headed, but they understand the relationship between markets, such as debt and equity, or the difference between the two- and five-year notes."

Traders are paid to identify relationships between financial instruments that over time can go out of sync, such as Long's Level 3 bet. "What today's traders do is, increasingly, quantitative analysis," says Masters. "Still, the element of judgment is just as important. A good trader will not blindly adhere to the results of the model."

Bond traders' rise to Wall Street prominence began in the 1960s, according to Genirs. The trend was intensified when inflation caused by spending on the Vietnam war forced pension funds, college endowments and insurance companies to more actively manage portfolios of bonds and stocks. Salespeople and traders were required to manage the new load of business. In those early days, traders tended to be valued more for their quickness with numbers than their social grace. Few were college graduates. By the late 1970s, the number of college graduates hired by trading departments picked up. A trickle of MBAs became a flood by the mid-1980s, as more fixed-income products got developed and trading became more complex, according to George Ellison, 44, head of global structured finance at Banc of America Securities LLC in Charlotte, North Carolina.

Ellison says trading floors have now become financial laboratories. He heads a team of more than 300 people who push the limits of what he calls financial engineering. "Whether predicting what will happen when chemicals mix or determining the speed people will prepay mortgages, the math is not that different," he says. "I am modeling random processes and predicting what's going to happen."

Ellison, whose thinning, dark hair is offset by a broom mustache, wears a suit to work every day and makes his staff do the same save for some Fridays in the summer. "Casual dress means casual work," he says. The flat-panel screens on his desk are flanked by pictures of his kids, friends—and Vice President Richard Cheney. "He's a guy behind the scenes who gets things done," says Ellison. His desk also bears various Pittsburgh Steelers memorabilia, including signed pictures of Jack Lambert, a Hall of Fame middle linebacker with missing teeth, and a signed helmet from four-time Super Bowl winner Terry Bradshaw. Ellison's desk also bears a picture of the Edgar Thompson Steel Works in Braddock, Pennsylvania. He spent his summers during college working at a steel mill furnace.

Ellison graduated from the University of Pittsburgh in 1981 with an engineering degree. He was in industrial sales in General Electric Co.'s power systems division for three years and then attended the Wharton School at the University of Pennsylvania from '84 to '86. After graduating with an MBA, he joined Salomon Brothers as an associate in the sales and trading department. The firm was hounding business schools in search of people who knew numbers and could sell. That's because Salomon's Robert Dall had in 1978 founded Wall Street's first mortgage securities department, and the firm needed people who could take the loans used to buy houses, pool them into bonds that paid interest plus a share of prepayments of principal from homeowners and then sell them to investors such as pension funds or banks.

Ellison says the creation of that mortgage trading desk ultimately led to the influx of technically knowledgeable people into trading departments—in part because of the math involved in determining prepayments, which convert mortgages into cash. These people got creative and developed new securities to trade and new ways to manage risk, he says. One such security is the credit derivative, used to juggle the risk of missed debt payments. Interest in the most common derivative, the credit default swap, is surging because the documentation for the deals has been streamlined and is becoming more standardized and also because the relatively nascent market was tested by defaults—including Enron Corp. and WorldCom Inc.—and survived because the contracts were honored. "Up until a year ago, we hadn't been tested as a market; now we know," says Andrew Palmer, who markets credit derivatives at J.P. Morgan Chase. "In each of these occurrences, the product came through with flying colors."

The instruments have even received the approval of Federal Reserve Chairman Alan Greenspan. "These increasingly complex financial instruments have been special contributors, particularly over the past couple of stressful years, to the development of a far more flexible, efficient and resilient financial system than existed just a quarter century ago," Greenspan said in a speech in London last September. The global market for credit derivatives should quadruple to $4.8 trillion by the end of 2004 as use spreads from banks to insurers and other investors, said a British Bankers' Association survey in September. "I'd buy it there," says J.P. Morgan Chase's Long. "I think it's going to be higher."

Long—dressed in a blouse and slacks and wearing gold earrings, her brown hair in a ponytail—can usually be found standing at her desk on an eighth-floor trading room of J.P. Morgan Chase's Park Avenue offices that's decorated with a

"Free Winona" poster—a satiric reference to last year's shoplifting trial of film star Winona Ryder. She spends her days buying from clients the credit derivatives of companies such as EchoStar Communications Corp., the second-largest U.S. satellite television broadcaster, and power producer Calpine Corp., a service that creates liquidity for the market. She then tries to sell later what she's bought for a profit.

Providing liquidity for clients sometimes means Long has to think on her feet to make money. In October, she bought a credit swap from a client that would provide protection if American Tower Corp., an owner of wireless communications towers, defaulted on its debt. Long didn't think there was much of a possibility that the company would default, so she hedged the position with the company's cheapest security at the time: convertible bonds. When American Tower bonds later rallied, she made a profit.

A shooting guard on a New York Urban League basketball team who loves to ski, Long graduated from Princeton University in 1997 with a degree in economics. As in trading, she likes adventure in her personal life. She and her husband went to the Chilean section of Patagonia in January. She says she wanted to be a trader after working as an intern in the pits at the Kansas City Board of Trade. Born and raised in Kansas, she has a ruby-red shoe on her desk, like the one worn by Dorothy in the movie *The Wizard of Oz*. When she started at J.P. Morgan in 1998, there were two traders and the market was brand-new. Now there are 10 traders, and the department is expanding.

Long's technical skills are typical of the new breed of bond traders. Commuters on the morning New Jersey Transit Main and Bergen County Line train to Manhattan on Fridays might confuse Deutsche Bank's Paul Calvetti, dressed in a golf shirt and khakis and writing equations on a laptop computer, for the electrical engineer he trained to be rather than the Wall Street trader he became. Calvetti studied engineering at Lehigh University before getting a master's degree in the field at Stanford University. He spent his first eight years on Wall Street as a bond trader at Lehman Brothers.

Calvetti's team makes money with the help of trading systems and models created in-house and in concert with systems created by rival banks, such as TradeWeb, which provides more than a million price updates a day for Treasury bills. On his desk sit six computer screens that at any given moment are tuned to live information about the shape of the yield curve or real-time profit and loss accounting. Or there might be a space to jot notes on trades or a chart showing the risks his traders are taking. "Paul is, to me, basically the design for how to trade Treasury bonds," says trader-turned-novelist Scott Lasser, who worked with Calvetti at Lehman Brothers. "There are trend guys, the 'If-it's-going-down-I-am-selling, and-going-up-I-am-buying' guys. And there are guys like Calvetti. He recognized that mean reversion was the key to life. If he could quantify what the mean was and what was statistically away from the mean, he could make money."

Calvetti uses the models he and his staff build to determine where bonds might be heading as well as to find bonds that are mispriced for whatever reason and will revert to their mean historical price over time. His trading systems bring together all of the brokers Deutsche Bank does business with, so he—or the computer—can hit the best bid. The computer picks the buyer or seller for trades of up to $50 million, though for some clients the limit stretches to $150 million. As soon as a trade is executed, it's booked and fed into a spreadsheet. "Because of our use of technology, we have a very small desk," says Calvetti, whose nine-person team includes a mathematician from Harvard and a computer scientist from MIT.

At home, he's wired into the same system, and he uses his laptop during his commute to Ridgewood, New Jersey, to work on equations that will improve his team's performance. "He's very methodical in trying to quantify what is going on, but he knows models aren't perfect," says Lasser. "He's always revising, trying to make things better." Calvetti says he wishes his computer had voice recognition software so that trades could be executed as he calls them out. The third-floor trading room at Deutsche's office on 52nd Street in New York—draped in old American flags, including one that says "Don't Tread on Me"—is actually quiet enough now for such software. While a few profane words are still heard and peers get razzed—on the wall past Calvetti's desk a golf shirt was tacked up to remind the trader who wore it to improve his sartorial style—the office no longer features the locker room atmosphere of old-style Wall Street trading floors.

The same goes for J.P. Morgan Chase. "A trading job in fixed income is one of the best-kept secrets as far as being satisfying for women, especially in a world where women are generally in the vast minority," says Masters. "While a trading floor was traditionally a testosterone-filled, angst-ridden environment, now it is very much driven by technology and intellect. A lot of young women are emerging as top talent."

Masters had a child when she was 24. She was in a trading role at the time. "I was able to juggle being a mother and flourishing at work," she says. "It still kills you every morning when you have to go to work and leave a kid at home, but that's not that different for guys."

One of the women who've chosen to be traders at

ROLE REVERSAL

Wall Street firms, including Goldman Sachs and Bear Stearns, are more dependent on fixed-income trading as investment banking slumps.

Type of revenue	Goldman Sachs			Bear Stearns		
	2000	2001	**2002**	2000	2001	**2002**
Fixed-income revenue	12.3%	13.0%	**19.6%**	20.0%	32.6%	**37.0%**
Investment banking revenue	16.3	12.3	**12.4**	13.0	15.3	**17.2**

Figures are expressed as percentages of total net revenue. Source: Bloomberg

J.P. Morgan Chase is Sara Strang, 29, who says she considers Masters to be her mentor. Strang says traders today, both female and male, have diverse goals. In addition to wanting money, the new breed of trader wants to learn how things work. She calls it being intellectually greedy. "I want to love my job every day and to be a little scared about what's going to happen," says Strang, who climbed the Inca trail in Peru in August 2001.

Strang started trading after studying economics and math at Barnard College in New York. Her plan was to go into public policy until a longtime interest in math led her to write her senior thesis on derivatives. She started interviewing for Wall Street trading jobs in 1995. "I loved the idea of putting a whole lot of options together and coming out with a loan," she says. J.P. Morgan Chase appealed to Strang because the firm had a young staff. "Every other place had Ph.D.'s, and I knew I wouldn't advance as fast," she says. Her grandfather was a research scientist who used to teach her math, and she says she always thought she'd pursue an academic career as well. Once she started working, she found she was getting more attention in her one-on-one lessons than any Ph.D. program would provide. "It was all for me," Strang says. "I was thinking I could go back to school and learn this or just sit here. You retain it better when money is on the line."

Strang heads a four-person team that trades options on interest rate swaps from the sixth floor of her Park Avenue building. The options allow clients to swap one stream of interest payments for another. For example, a client who's worried about falling interest rates could buy the option to receive interest at a fixed rate while paying interest at a floating rate. If interest rates do fall, the client gets paid at a higher level than it is paying out and therefore makes money.

Strang is at her desk in J.P. Morgan Chase's Park Avenue offices each morning by 7:15. She generally skips the morning meeting in favor of making client calls. The daily contact is paramount because her prices for her product are not publicly posted like the government bonds that Calvetti trades. "There's no screen for it," Strang says. "They have to trust me—that I am going to show them a fair price."

New customers are flocking to the market for fixed-income securities. Hedge funds are joining banks, insurers and pension funds. Money management companies buying the products include Pacific Investment Management Co., manager of the world's largest bond mutual fund. "This is not a zero-sum game, yet given the yield and volume, everyone can make money," says Strang.

It's not clear how long that will continue. When mergers activity heats up and more companies begin to seek initial public offerings, Wall Street's investment bankers will be ascendant once again. Nierenberg says that in the next two years, refinancing will slow and there will be fewer mortgages issued and a flatter yield curve. Still, he says, that doesn't mean the current boom in mortgage-backed securities will end abruptly. For the one-time Long Island Little Leaguer—and for the rest of the new generation of Wall Street bond traders—the party's not over yet.

DAVID WELLS covers Wall Street at Bloomberg News in New York. With additional reporting by STEPHEN COHEN.
dawells@bloomberg.net