RATING GAME

As Housing Boomed, Moody's Opened Up

By Aaron Lucchetti

Bond-rating agency Moody's Investors Service used to be an ivory tower of finance. Analysts were discouraged from having a drink with a client. Phone calls from bankers went unanswered if they rang during intense, almost academic debates about credit ratings.

A decade ago, as the housing market was just beginning to take off, Moody's was a small player in analyzing complex securities based on home mortgages. Then, Moody's joined Wall Street and many investors in partaking of the punch bowl.

A firm once known for a bookish culture began to focus on the market share that affected its own revenue and profit. The rating firm became willing, on occasion, to switch analysts if clients complained. An executive overseeing mortgage ratings went skydiving with a client. By the height of the mortgage-securities frenzy in 2006, Moody's had pulled even with its largest competitor, rating nine out of every 10 dollars raised in these instruments. It gave many of the bonds its coveted triple-A rating.

Profits at the 99-year-old firm, which John Moody started to rate railroad bonds, rose 375% in six years. The share price quintupled.

Now, Moody's and the other two major rating firms, the Standard & Poor's unit of McGraw-Hill Cos. and the Fitch Ratings unit of Fimalac SA, are under fire for putting top ratings on securities that ultimately collapsed in value. Investors, many of whom relied on ratings to signal which securities were safe to buy, have lost more than $100 billion in market value. The credibility of the ratings system is in tatters as new downgrades of mortgage securities come almost weekly. In-

Please turn to page A15

Boom Times

Portion of subprime mortgage-backed securities rated by each agency

Source: Asset Backed Alert

Moody's Opened Up as Housing Boomed

Continued from Page One

vestigators from Congress, the Securities and Exchange Commission and several state attorneys general are examining the rating firms' practices.

Moody's acknowledges it sometimes got things wrong in judging mortgage bonds, but says these were honest mistakes and not the result of efforts to garner market share. It says it has maintained its rigor and objectivity in a rating process that is still adversarial toward big investment banks.

Of the three big rating agencies, Moody's underwent the deepest cultural change amid the housing boom. At the heart of the firm's gradual transformation into a player in the mortgage game was Brian Clarkson, 51 years old, who joined the company as an analyst in 1991 and became president last August. Mr. Clarkson maintains that his focus on making Moody's friendlier to Wall Street was what the company needed early this decade. "We're in a service business," he says. "I don't apologize for that."

Brian Clarkson

When Mr. Clarkson first joined Moody's, the agency was known as a place where analysts often didn't even promptly pick up their phones, much less talk extensively to companies whose bonds they were rating. A magazine story in the mid '90s attempted to answer the question "Why Everyone Hates Moody's."

Mr. Clarkson himself had dealt with Moody's as an outsider, and been frustrated with its manner. As he began to rise within the firm, he set out to make it more client-friendly and focused on market share.

Firms like Moody's are hired by companies, governments and other organizations that seek to sell bonds. The firms rate bonds based on the likelihood they'll default—and, in Moody's case, also based on how much of their principal bondholders are likely to get back.

Top-rated triple-A bonds rarely miss payments, and even if they do, investors can expect to get nearly all of their money back. Bonds rated B and C are more likely to lose money for their owners. To compensate for the added risk, they pay higher interest rates. Bond buyers depend heavily on the ratings, and conservative investors often buy only triple-A bonds.

Bond issuers, knowing that a higher rating means they pay a lower interest rate, have an incentive to shop around among rating agencies. And they have clout as they shop: They're the ones paying the bill.

Moody's toughness gave issuers reason to go elsewhere, and back in the mid-1990s, Fitch and S&P were both rating more mortgage bonds than Moody's, in large part because their standards were considered easier. For instance, in commercial mortgage-backed securities, Moody's trailed its two main competitors by 30 percentage points in market coverage in 1996.

That year, Mr. Clarkson took over the group at Moody's that analyzed such securities. The firm added new analysts and overhauled its ratings approach, allowing for higher ratings in the area. Within a year, Moody's moved ahead of both Fitch and S&P in the sector. Rivals said Moody's had cut its standards. Mr. Clarkson was quoted as calling this "sour grapes." He says now that the change in the ratings approach was the right call.

In 1999 Mr. Clarkson took over the part of the firm's "structured finance" business that oversaw bonds and complex securities based on home mortgages. Moody's rated just 14% of high-quality "prime" bonds in that area in the year before he took over, compared with 51% that Fitch rated and 89% that S&P rated, as calculated by the publication Asset-Backed Alert. (The same bond often gets a rating from two different firms.)

Moody's top home-mortgage analyst at the time, Mark Adelson, took a cautious approach that resulted in fewer triple-A ratings. Mr. Clarkson shook things up, firing or reassigning about two dozen analysts and hiring new ones who started giving higher grades under a new methodology. Mr. Adelson left for an investment bank. In 2001, Moody's market coverage was up to 64%.

Mr. Adelson says "the world thought differently than I did" about mortgage bonds in 1998 and 1999. He isn't critical of Mr. Clarkson's management. Mr. Clarkson "is what Moody's needs," Mr. Adelson says. "He's very smart, capable and driven."

By 2001, Moody's was an independent company. It had long been tucked inside financial publisher Dun & Bradstreet Corp., but D&B spun it off as a new public company in 2000. Just before it did so, Warren Buffett saw the growth and profitability of Moody's business and had his Berkshire Hathaway Inc. raise its stake in D&B. Berkshire is now Moody's biggest shareholder, with a 19% interest.

In some areas, Moody's continued to make it hard to get a high rating, with the result that it didn't do much business in those areas; these areas included the riskier part of home-mortgage bonds and products known as net-interest margin securities.

Customer-Service Coaches

Mr. Clarkson encouraged his people to be more responsive—picking up the phone when in the office—and to find ways deals could get done within Moody's methodologies. Customer-service coaches gave sessions on improving relationships with bond issuers and investors.

"Brian [Clarkson] created a dialogue between Moody's and the Street that was good," says Paul Stevenson, a former Moody's executive who now works at BMO Financial Group. But "the most recent problem," he says, "is that the rating process became a negotiation."

Consider a Bank of America mortgage deal in early 2001. As in most such deals, the vast majority of the securities based on the pool of mortgages would be rated triple-A. The question was how big a chunk would be rated lower—paying a higher interest rate and bearing the brunt of any defaults that occurred.

Raymond McDaniel

A rating committee at Moody's voted to require that the issuer put about 4.25% of the deal's value in the lower-rated section, to provide extra protection for buyers of the top-rated section. But after Bank of America complained and said it might go with a different rating firm, Moody's reduced the size of the lower-rated chunk slightly—saving the issuer some interest costs—according to people with knowledge of the matter.

Linda Stesney, a Moody's managing director who was then co-head of mortgage-backed securities, says she doesn't recall the deal. She says Moody's reconsidered its view on deals when issuers presented new information affecting credit quality. She adds that Moody's mortgage ratings at the time held up well.

In 2002, Mr. Clarkson's realm extended to the fast-growing business of CDOs. In this complex product, already-sliced-up bonds are further sliced into new pieces, based on risk and potential return. Moody's was already rating 90% of the dollar value of CDOs. Mr. Clarkson told an analyst he didn't want bad service to cause that to slip, say people familiar with the matter.

"There was never an explicit directive to subordinate rating quality to market share," says Mark Froeba, a former Moody's analyst who recently started a bond valuation company that may compete with rating firms. "There was, rather, a palpable erosion of institutional support for rating analysis that threatened market share." An example would be raising too many legal issues on deals, slowing them down unnecessarily.

Mr. Clarkson says the goal was maintaining consistency about the issues Moody's raised on deals. "I have no problem losing deals for the right reasons," he says. "We don't change methodology to garner market share."

Some supporters say that while Mr. Clarkson cared about market share, he cared more about the quality of Moody's ratings. Bill May, a Moody's managing director, recalls Mr. Clarkson warning him in 2002 about the things that could get a managing director fired. He says inaccurate ratings topped the list, followed by "arrogant or rude" behavior toward market participants.

On occasion, Moody's agreed to switch analysts on deals after bankers complained. Among banks that requested that a different analyst look at their deals were Credit Suisse Group, UBS AG and Goldman Sachs Group Inc., according to a person familiar with the matter. The banks declined to comment. Mr. May says analysts were switched on "rare" occasions to accommodate such a request.

Mr. Clarkson stressed relationships, in a break with tradition at the firm, whose office in Lower Manhattan is adorned with sepia-toned pictures of its founder. John Bohn, Moody's president from 1989 to 1996, says he used to tell recruits that Moody's was a "special business" where "you can't go out for beers" with friends who worked for investment banks.

Mr. Clarkson's view is that "it's important to socialize." The onetime mountain climber and recreational weightlifter met with investment-bank officials and gave speeches at industry conferences peppered with movie quotes and references to television shows like "Survivor."

When Moody's sought to rate more deals for GMAC's residential-finance unit in the late 1990s, Moody's officials traveled to the company's Minneapolis offices several times. Mr. Clarkson and several others from Moody's accepted an invitation to go skydiving with officials of the GMAC unit. "We paid our own way," Mr. Clarkson recalls.

Some analysts say they occasionally would attend the dinners that celebrated the launch of a new CDO Moody's had just rated. Moody's says it has rules to prevent conflicts, including a $50 limit on gifts, and that building better relationships with Wall Street officials was part of its effort to be more transparent in its rating methodologies.

Wrestling in Fat Suits

As Moody's staff grew to accommodate the surging mortgage market, Mr. Clarkson arranged off-site meetings for employees to get to know each other better. At one, he sung as a Blues Brother, while at another, two Moody's executives entertained by wrestling in fat suits.

Mr. Clarkson's structured-finance group grew to account for about 43% of Moody's revenue in 2006, up from 28% in 1998. By 2006, the firm had more revenue from structured finance—$881 million—than its entire revenue had been in 2001.

Employees, though paid a fraction of what they could earn on Wall Street, sometimes grew wealthy from Moody's surging share price and their stock options. According to a regulatory filing, Mr. Clarkson's compensation totaled $3.8 million in 2006. The firm's chief executive, Raymond McDaniel, earned $8.2 million that year, more than twice what his predecessor made in 2000. Moody's says the rise in their compensation reflected growth in the overall business, not just the mortgage area, and that much of the rise came from the increasing value of stock options that had been granted years before.

By early 2007, some Moody's analysts were growing worried about the market for securities backed by subprime mortgages. But Mr. McDaniel told a group of investors in May 2007: "The good-news story for us" includes "very strong growth coming out of our largest business, which is the structured-finance business. It is both large and a significant growth engine for the company."

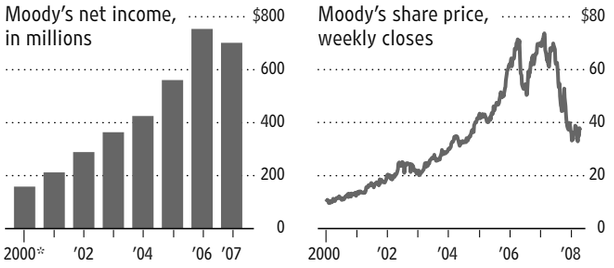
Despite some analysts' concerns, Moody's rated about 94% of the $190 billion in mortgage-related and other structured-finance CDOs issued in 2007, the second busiest year ever.

Many of those CDOs have since been downgraded, some from triple-A to levels that suggest investors will have significant losses. Moody's says some bonds it rated were backed by fraudulent loans. It also notes that it wasn't alone in being surprised by the depth of the housing decline. "We were preparing for a rainstorm and it was a tsunami," Mr. Clarkson says.

Since becoming Moody's president in August, he is spending up to half of some weeks dealing with regulators. "They want the same things we do," he says. Some options that Moody's is considering to improve its process—such as adding new labels to structured-finance ratings to convey the products' unique attributes and risks—were earlier raised by regulators.

Mr. Clarkson says analysts have kept their "adversarial" approach, but adds, "One of the things we have to do going forward is be more skeptical."

Trailing Off



*Pro forma number, assuming Moody's was a stand-alone company for the entire year. It was spun off from Dun & Bradstreet in the second half of 2000.

Sources: the company (net income); Thomson Datastream (share price)

Merrill Upped Ante as Boom In Mortgage Bonds Fizzled

Fresh $6 Billion Hit Is Expected as Toll Of CDO Push Rises

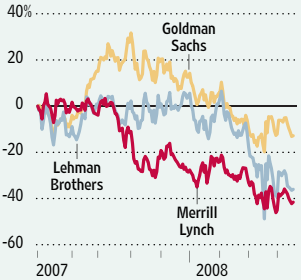
By Susan Pulliam, Serena Ng And Randall Smith

John Thain, CEO since December

Associated Press

Stumbling Herd

The mortgage mess has posed a tough challenge for Merrill; share performance since July



Source: WSJ Market Data Group

Some 10 months after the mortgage hurricane made landfall, Merrill Lynch & Co. is still trying to dig out.

On Thursday Merrill will report $6 billion to $8 billion in new write-downs, according to a person familiar with the matter. The latest would bring its total since October to more than $30 billion and mean that Merrill reports a third straight quarterly net loss, the longest losing streak in its 94-year history.

Now the firm is readying a cost-saving plan that includes job cuts of 10% to 15% in some areas where business is off, such as bond finance, people familiar with the firm say.

While Merrill is far from alone in suffering, a look at how it got in so deep and its flawed efforts to recover sheds light on why the credit squeeze is proving so deep and persistent. Merrill aggressively continued to create new mortgage securities after doing so became riskier. Among those keenly interested in knowing what went wrong is the Securities and Exchange Commission, which is examining whether Merrill and other firms should have told investors sooner about the stumbling mortgage business last year.

When housing boomed earlier this decade, Merrill profited by turning mortgage-backed bonds into complex securities. Initially, it was well protected from credit risk in this underwriting. The protection frayed at the start of 2006. But Merrill kept playing the game.

By early 2007, as cracks in the housing and mortgage markets widened, Merrill again missed a chance to scale back. In fact, it revved up its production of complex debt securities—despite a shortage of buyers for them—in what turned out to be a misguided effort to limit its losses.

Its torrid underwriting loaded Merrill with exposure to mortgage securities, whose top credit rating provided scant protection when investors fled. Then Merrill made another fateful move: trying to hedge some of its massive mortgage risk through bond insurers whose strength was questionable.

Merrill, asked to respond to this account of its troubles, declined to offer a statement.

Merrill has made progress in getting its house in order. It has reduced its exposure to certain

Please turn to page A14

FROM PAGE ONE

Merrill Upped the Ante as Boom in Mortgage Bonds Fizzled

Continued from Page One

risky mortgage securities to $7.5 billion from $40.9 billion in June, mostly by writing down their value or paying another party to take on their credit risk.

New chief executive John Thain has said that, having recently raised $12.8 billion in fresh capital, Merrill won't need to seek more in the foreseeable future. Mr. Thain has increased the importance of weekly risk-management meetings by requiring the heads of trading businesses to attend and by having the top risk managers report directly to him. Since taking over in December, he also has reduced executives' incentive to swing for the fences by tying more of their pay to the firm's overall results and less to how businesses do individually.

Yet as of year end, Merrill still appeared to be taking large risks. Its "leverage ratio"—how many times assets exceed equity—stood at 31.9 to 1, higher than most other Wall Street firms. Heavy borrowing like this magnifies both profits and losses.

Jeffrey Kronthal

The first tremor that rattled Merrill's profitable business of underwriting mortgage securities came at the end of 2005. As it repackaged mortgage bonds into securities called collateralized debt obligations, or CDOs, Merrill had a key partner in insurer American International Group Inc. An AIG unit bore the default risk of the CDOs' largest and highest-rated chunk, known as the "super-senior" tranche, normally sold to big investors such as foreign banks.

But AIG was keeping a close eye on the housing boom because it had another unit that made subprime loans, those to home buyers with weak credit. AIG did a review of the market. Concerned that home-lending standards were getting too lax, AIG at the end of 2005 stopped insuring mortgage securities.

Merrill was used to having to keep lots of mortgage bonds and pieces of CDOs on its books temporarily before selling them. But without a firm like AIG providing credit insurance, Merrill had to bear the risk of default itself.

Instead of scaling back its underwriting of CDOs, however, Merrill put the business in overdrive. It began holding on its own books large chunks of the highest-rated parts of CDOs whose risk it couldn't offload.

Tops in CDOs

Merrill was able to hang onto the top spot in Wall Street's CDO-underwriting ranks. It generated $44 billion in CDOs in 2006—triple its 2004 output. Although not able to sell some of the CDOs, it collected about $700 million for underwriting and trading these and other structured products. And its top ranking was considered in the calculation of executives' bonuses.

Risk controls at the firm, then run by CEO Stan O'Neal, were beginning to loosen. A senior risk manager, John Breit, was ignored when he objected to certain risks taken in underwriting Canadian deals, according to people familiar with the matter. Mr. Breit, then head of market-risk management, told colleagues he had never been overruled like that before, say former Merrill executives.

Merrill lowered the status of Mr. Breit's job in its hierarchy. Mr. Breit sent a letter of resignation to Merrill's chief financial officer saying the job was too important to be diluted that much, says someone familiar with the matter. He was given a different job outside of the risk-management group and stayed at Merrill.

Some managers seen as impediments to the mortgage-securities strategy were pushed out. An example, some former Merrill executives say, is Jeffrey Kronthal, who had imposed informal limits on the amount of CDO exposure the firm could keep on its books ($3 billion to $4 billion) and on its risk of possible CDO losses (about $75 million a day). Merrill dismissed him and two other bond managers in mid-2006, a time when housing was still strong but was peaking.

To oversee the job of taking CDOs onto Merrill's own books, the firm tapped Ranodeb Roy, a senior trader but one without much experience in mortgage securities. CDO holdings on Merrill's books were soon piling up at a rate of $5 billion to $6 billion per quarter. This led to an inside joke at Merrill. Mr. Roy is known as Ronnie. Some employees took to saying that if they couldn't find a specialized bond insurer, known as a "monoline," to take Merrill's risk on the deal, they could resort to a "Ronoline."

Mr. Roy, whom Merrill asked to leave five months ago, says he was simply following orders in loading the books with mortgage securities and that he objected to the practice. He is now at Morgan Stanley.

In August 2006, one Merrill trader fought back when managers pushed to have the firm retain $975 million of a new $1.5 billion CDO named Octans. In a meeting in the office of a risk manager, the trader argued against keeping the securities on the books.

The result was a heated phone conversation with Merrill's CDO co-chief, Harin De Silva, who was out of the office. Mr. De Silva urged the trader to accept the securities, while the trader said he didn't know enough about the CDO to feel comfortable doing that, say people familiar with the meeting. Mr. De Silva reasoned that Merrill would bear less risk by taking on the super-senior tranche because it had already found investors to take on the riskier slices. The alternative was to let the deal fall apart, which would leave Merrill holding the risk of all the securities that would have backed the CDO.

In the end, Mr. Roy's group took the $975 million of securities on the firm's books. That meant Merrill could complete the underwriting of the Octans CDO, a step that helped the firm hold its top rank in CDO underwriting and led to an estimated $15 million in fee revenue for the deal, according to people close to the situation. It's unclear whether Merrill took losses on the deal. The firm later paid Morgan Stanley to take on the credit risk of the securities through a swap transaction.

Leaky Bubble

Pressures rose in early 2007 as the housing bubble lost air. Merrill set out to reduce its exposure, in an effort referred to innocuously as "de-risking."

It could have sold off billions of dollars' worth of mortgage-backed bonds that it had stockpiled with the intention of packaging them into more CDOs. But with the market for such bonds slipping, Merrill would have had to record losses of $1.5 billion to $3 billion on the bonds, says a person familiar with the matter.

Instead, Merrill tried a different strategy: quickly turn the bonds into more CDOs.

Doing so was no longer a profitable enterprise. Demand was weakening for the lower-rated CDO slices, normally sold to risk-tolerant investors such as hedge funds. Often, Merrill could move these only at discounted prices that all but eliminated its profit.

Still, executives believed that so long as all they retained on their books were super-senior tranches, they would be shielded from falls in the prices of mortgage securities. And they wouldn't have to sell off their mortgage bonds at a loss.

In the first seven months of 2007, Merrill created more than $30 billion in mortgage CDOs, according to Dealogic, keeping Merrill No. 1 in Wall Street underwriting for this type of security.

By June, the market for mortgage securities was weakening faster. Two Bear Stearns Cos. hedge funds that invested in them were being forced by creditors—which included Merrill—to sell securities. That set prices tumbling across the credit markets. One Merrill trader recalls Dale Lattanzio, then co-manager of Merrill's bond business, hustling around the firm's football-field-sized trading floor ordering his traders to "sell everything—we're too long."

'Mitigation Strategy'

As the CDO business slid, Merrill's top managers embarked on a new plan, referred to as the "mitigation strategy." The aim was to find ways to hedge exposure through deals with bond insurers. This would reduce the size of write-downs Merrill would otherwise have to take.

Through August, Merrill insured $3.1 billion of CDOs against losses in a series of transactions with bond insurer XL Capital Assurance Inc.

Ranodeb 'Ronnie' Roy

In August, Merrill proposed that XL insure about $20 billion more of its CDO exposure, according to papers XL filed in court after their relationship deteriorated. "Pick your size. It's a very nice deal for XL and a big help for ML," a Merrill salesman told an XL employee, according to the papers XL filed in federal court in New York. XL declined the additional business.

Merrill turned to another bond insurer, MBIA Inc. MBIA agreed to insure around $5 billion of the securities. But it wouldn't cover interest payments; it would only cover principal payments when they come due in more than 40 years.

Continuing to scramble, Merrill got a tiny insurer called ACA Financial Guaranty Corp. to insure about $6.7 billion of its CDOs. The problem was that ACA was poorly capitalized. It was insuring more than $60 billion of debt securities—a third of which were mortgage-related—yet had only about $400 million of capital and few other resources to cover claims.

Some other firms, including Lehman Brothers Holdings Inc., had already set aside reserves against their hedges with ACA, concerned that ACA would be unable to cover losses on the bonds it insured. Lehman wrote down its exposure to ACA during the first half of 2007.

Net Loss

Merrill's deals with the insurers helped it to show a reduction of about $11 billion in its CDO exposure in last year's third quarter. Coupled with CDO-related write-downs of $6.9 billion in the quarter, this brought Merrill's CDO exposure down to $15.8 billion, from $33.9 billion in June. The bond-insurer deals thus helped reduce Merrill's third-quarter net loss, although it was a still-hefty $2.3 billion.

Even so, the numbers were worse than Merrill had previously indicated. In a late-October conference call with investors, Mr. O'Neal said that "we got it wrong by being overexposed to subprime" and that "both our assessment of the potential risk and mitigation strategies were inadequate." Within days, he resigned as CEO.

In December, Standard & Poor's cut its financial-strength rating of ACA to junk level. That forced Merrill to write down its CDO hedge with ACA by $1.9 billion in the fourth quarter, leaving questions about why it had turned to such a thinly capitalized partner.

XL Capital's agreement to insure Merrill CDOs is embroiled in litigation. XL sought to walk away from the deal, contending Merrill had violated the terms. Merrill sued last month to force XL to honor the agreement.

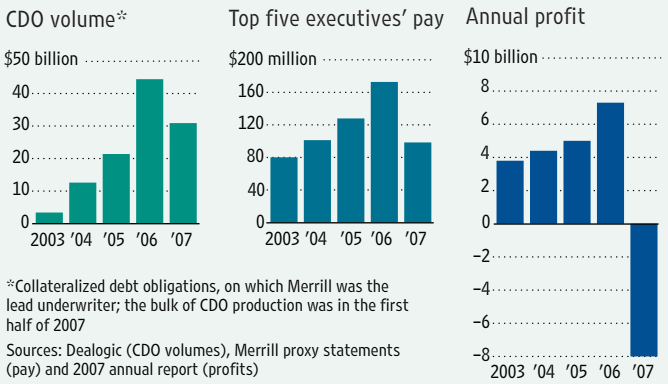
In a countersuit, XL said the purpose of the bond-insurance deal was simply to enable Merrill to report that its CDO exposure was lower. "Merrill Lynch undertook a rushed campaign to find parties willing to hedge or provide protection on its remaining CDO positions," the suit said. A spokesman for Merrill says XL "makes assumptions that are, very simply, wrong."

Merrill's new CEO, Mr. Thain, is seeking to regain investors' trust by upgrading the firm's risk controls. In one move, the firm in December rehired Mr. Kronthal, the risk-conscious bond executive Merrill had let go in 2006 when it was determined to increase its bet on CDOs. His new job: to help Merrill clean up its CDO mess.

—Kate Kelly contributed to this article.

Eye on the Bull

Merrill Lynch is expected to report its third straight quarterly net loss on Thursday.

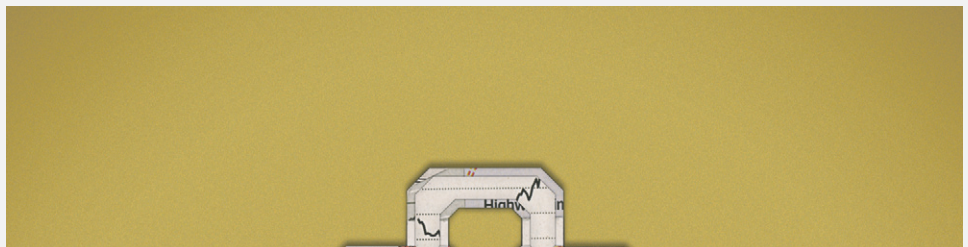


*Collateralized debt obligations, on which Merrill was the lead underwriter; the bulk of CDO production was in the first half of 2007

Sources: Dealogic (CDO volumes), Merrill proxy statements (pay) and 2007 annual report (profits)

Mortgage Scars

- **More Losses:** Merrill Lynch & Co. is expected to report another quarterly loss Thursday and billions of dollars in new mortgage-related write-downs.
- **In Deep:** The losses reflect the way Merrill amassed a large mortgage exposure by continuing to create CDOs even as demand for them was slowing.
- **Turnaround:** Under new leadership, Merrill is putting new emphasis on risk management.



The Two Faces of Lehman's Fall

Private Talks of Raising Capital Belied Firm's Public Optimism

In the weeks before it collapsed, Lehman Brothers Holdings Inc. went to great lengths to conceal how fast it was careening toward the financial precipice.

The ailing securities firm quietly tapped the European Central Bank and the Federal Reserve as financial lifelines. On Sept. 10, one day after Lehman executives calculated the firm needed at least $3 billion in fresh capital, the firm assured investors on a conference call it needed no new capital at all. Lehman said its massive real-estate portfolio was valued properly, but Wall Street executives who have seen it say it was overvalued by more than $10 billion. As hedge-fund clients began yanking their money from Lehman, the firm assured them it was on solid financial footing.

By ***Carrick Mollenkamp, Susanne Craig, Jeffrey McCracken*** *and* ***Jon Hilsenrath***

On Sept. 11, J.P. Morgan Chase & Co. effectively ended Lehman's campaign to appear strong. In its capacity as a middleman between Lehman and its clients, J.P. Morgan knew more about Lehman's predicament than most outsiders, and it didn't like what it saw. J.P. Morgan demanded from Lehman $5 billion in additional collateral—easy-to-sell securities to cover lending positions that J.P. Morgan's clients had with Lehman—repeating an unmet request from a week earlier, people familiar with the situation say.

Richard Fuld Jr.

It was a knockout blow. That $5 billion collateral call, coupled with a huge outflow of money from Lehman's hedge-fund clients, so weakened the 158-year-old Wall Street firm that it sought Chapter 11 bankruptcy protection four days later.

During the credit crisis, financial firms have been squeezed between conflicting pressures: to tell the public the painful truth, but also not to ignite panic. The story of Lehman's desperate effort to survive—pieced together from securities filings, bankruptcy-court documents and more than two dozen interviews with participants in the drama—reveals for the first time how far Lehman went to save itself. The firm's behind-the-scenes maneuvering raises questions about whether it crossed the line into misleading clients and investors.

To an extraordinary degree, investment banks depend for their survival on trust—from

Please turn to page A15

FROM PAGE ONE

Two Faces of Lehman: Private Talks, Public Optimism

Continued from Page One

lenders and investors, from hedge funds and other big clients, and especially from other large banks that are their trading partners. Their businesses are so complex, their balance sheets so massive and opaque, that hardly anyone outside the tent can know for sure how much trouble a firm is in. When outsiders sense weakness, they are quick to bail out.

On Monday, the House Oversight and Government Reform Committee is holding hearings to examine the regulatory mistakes and financial excesses that led to Lehman's bankruptcy filing. Among those testifying will be Richard Fuld Jr., Lehman's chief executive officer.

Robert Caplin For The Wall Street Journal

Lehman Brothers World Headquarters in New York. Lehman Brothers, burdened by soured real-estate holdings, filed a Chapter 11 bankruptcy petition in U.S. Bankruptcy Court on Sept. 15.

FBI Inquiry

The Federal Bureau of Investigation has launched a preliminary inquiry into whether Lehman or its executives committed fraud by misrepresenting the firm's condition to investors. Prosecutors from the U.S. Attorney's office in New York's Eastern District are examining, among other things, whether Lehman executives misled investors by making upbeat comments to investors and research analysts on Sept. 10—five days before the firm filed for bankruptcy protection, according to people familiar with the investigation.

Former prosecutors say severe financial pressure can put executives at investment banks in a tough spot, given how important it is for them to maintain customer confidence.

"It's a dance all these executives do when your company is built on trust and you can't show weakness," says Peter Henning, a former lawyer at the Justice Department and the Securities and Exchange Commission, who now teaches at Wayne State University law school in Detroit. "But public statements of strength were used against" top executives at Enron Corp. by criminal prosecutors to show they were misleading investors, he notes. "You can look like you are talking out of both sides of your mouth."

Ian Lowitt

Lehman's collapse was a decisive moment in the 13-month-old credit crisis. The government's decision not to bail out the firm set off a near panic among investors and lenders world-wide, forcing the U.S. to push through a historic rescue plan for the financial system.

Over the summer, Mr. Fuld came under pressure to replenish capital depleted by mounting real-estate losses. In August, as investors pushed down Lehman's stock, rumors began swirling that the firm was in trouble.

Mr. Fuld and his bankers contacted Bank of America Corp., MetLife Inc., HSBC Holdings PLC in the U.K., investors representing Dubai ruler Sheik Mohammed bin Rashid Al Maktoum, and China's main sovereign-wealth fund, China Investment Corp., people familiar with the matter say. The effort went nowhere. Spokespeople for the banks either declined to comment or weren't available.

Crunch Deepens

As the credit crunch deepened, the Fed had set up a new lending facility for investment banks. Although the central bank doesn't reveal who borrows from it, the market generally figures it out, and there's a stigma associated with it. Lehman didn't do so over the summer, because it didn't want to be seen as needing Fed money, says one person familiar with the matter.

Lehman went elsewhere, stepping up its borrowing from the European Central Bank. The borrowing, at least some of it by a Lehman operation in Frankfurt, drew no attention in the market. By the time Lehman sought bankruptcy protection, it owed between €8 billion and €9 billion. An ECB spokeswoman declined to comment.

As concerns about Lehman spread through the market, its executives began hearing from clients. None of them wanted to have money tied up with Lehman if it filed for bankruptcy protection. Christian Lawless, a senior vice president in Lehman's European mortgage operation, says he fielded numerous calls from investors seeking to pull out assets. "You guys are financial professionals," he recalls telling some skittish clients. "Our balance sheet is better than ever."

In early September, GLG Partners, a large London hedge fund in which Lehman holds a stake, grew increasingly concerned. In a series of calls, Mr. Fuld and other Lehman executives assured GLG managers that Lehman would survive. But managers at the hedge fund, which had been trimming exposure to Lehman for months, decided to move more assets out of the firm anyway.

Shortly before Labor Day, Lehman's talks to raise capital from the Korea Development Bank fell through. On Sept. 9, after that news surfaced, Lehman's stock plunged 45%—its largest daily percentage decline ever.

Demanding Collateral

Lehman still had superior ratings on its bonds. J.P. Morgan, however, was growing concerned. As Lehman's "clearing bank," J.P. Morgan acted as the financial middleman between Lehman and its clients. Steven Black, co-CEO of J.P. Morgan's investment bank, phoned Mr. Fuld just after lunch that day. He told the Lehman chief that in order to protect itself and its clients, J.P. Morgan needed $5 billion in additional collateral—over and above the $5 billion J.P. Morgan had demanded five days earlier, which had yet to be paid.

Mr. Fuld managed to persuade Mr. Black to settle for $3 billion right away, leaving the prior $5 billion request unresolved. Mr. Black dispatched two J.P. Morgan investment bankers to discuss a capital-raising plan.

Meanwhile, Lehman executives arranged a conference call for the next day to announce earnings ahead of schedule and to disclose plans for a restructuring. That evening, discussions with outside bankers about possible capital raising ended without any formal plan. The bankers counseled Lehman against holding the call, warning there were too many open questions about the firm's finances.

That evening, top Lehman executives discussed the need to raise between $3 billion and $5 billion to shore up capital by early 2009, according to one person familiar with the meeting. Documents that discussed this need were circulated to senior executives, this person says.

Early the next morning, Sept. 10, Lehman hosted the conference call for investors. The firm announced that it expected its largest quarterly loss ever, $3.9 billion, driven largely by declines in real-estate valuations. Mr. Fuld said the firm intended to sell a majority stake in its investment-management division and would cut its dividend.

Lehman executives didn't say anything about needing to raise capital.

Mike Mayo, a Deutsche Bank AG bank analyst, asked whether Lehman would need to raise $4 billion as part of the plan, according to a transcript of the call. Lehman's chief financial officer, Ian Lowitt, replied: "We don't feel that we need to raise that extra amount." At another point, Mr. Lowitt said: "Our capital position at the moment is strong."

Messrs. Fuld and Lowitt declined to comment. One Lehman executive says the firm determined sometime the prior night that additional capital wouldn't be needed because Lehman hoped to raise more money by selling additional assets.

By the following day, Sept. 11, the price of Lehman's credit-default swaps—the cost to protect against losses on $10 million of its debt for five years—had soared to $800,000 a year, from $219,000 at the end of May. Clients began calling and emailing Lehman to get their money out. Lehman scrambled to comply so as not to betray weakness.

But J.P. Morgan was worried about holding lending positions with Lehman if the firm collapsed. Jane Buyers Russo, head of J.P. Morgan's broker-dealer unit, phoned Lehman's treasurer, Paolo Tonucci. She told him Lehman would have to turn over the $5 billion in collateral that J.P. Morgan had asked for days earlier.

Fulfilling the request temporarily froze Lehman's computerized trading systems. It nearly left the firm with insufficient capital to fund its trading and other operations.

Lehman's unsecured creditors now say J.P. Morgan helped to spark a "liquidity crisis." J.P. Morgan calls that "unfounded conjecture."

Fed officials, who were watching Lehman closely, saw that lenders and clients were pulling back. They were growing more worried that Lehman wasn't going to make it.

On Friday afternoon, Sept. 12, credit-ratings firms warned they would downgrade Lehman's debt on Monday if it didn't raise fresh capital.

Inside Lehman, there was growing panic. So many customers called to withdraw money that it couldn't properly process the requests. The firm's cash-management system—which each day is supposed to sweep up cash from offices such as London and redistribute it the next day—couldn't handle the surge. Lehman's New York arm couldn't properly get money to London accounts, which left Lehman's main European arm, based in London, essentially broke by Monday. Some $5 billion that was supposed to get to Lehman's London operations or its counterparties didn't arrive by Monday, estimates PricewaterhouseCoopers LLP, which was hired to help sort out the mess.

Surviving the Weekend

Fed officials worked at Lehman's headquarters with its executives to determine which of its assets weren't already pledged to other lenders, and could be used as collateral for a Fed loan. Officials were hoping to help the firm survive into the weekend. Lehman borrowed roughly $30 billion from the Fed, on an overnight basis, paying it back by Saturday, according to several people familiar with the matter. A Lehman executive says the firm didn't borrow from the Fed at that time.

The New York Fed arranged emergency discussions, which began on Friday night as Lehman's board consulted with bankers at Lazard Ltd. Lehman hoped to strike a deal to sell itself to Bank of America or Barclays PLC. Nevertheless, its lawyers began late Friday night to prepare a Chapter 11 bankruptcy filing, in the event that it was needed.

The New York Fed summoned Wall Street executives to try to work out a solution to Lehman's dilemma. Neither Barclays nor Bank of America was interested in buying Lehman's commercial real-estate operations. The Fed asked executives from a group of firms, including Goldman Sachs Group Inc. and Credit Suisse, to value Lehman's massive commercial-real-estate portfolio and to consider investing several billion dollars each to buy it.

The executives grilled Mark Walsh, then Lehman's commercial real-estate chief, according to several people who were there. They wanted to know why Lehman hadn't more aggressively "marked down," or cut in value, its $32.6 billion commercial-real-estate holdings, these people say. Securities firms are required to "mark to market" their holdings, meaning to value them on their books at the level at which they could sell them right away.

Executives looking at Lehman's books were surprised by Lehman's high valuations on real-estate assets. Two Wall Street executives who reviewed Lehman real-estate documents say they believe the firm's real-estate valuations are roughly 35% higher than they should be.

Some of its European real-estate loans raised particular concern. According to a Lehman document reviewed by The Wall Street Journal, Lehman "marked" some European securities backed by real-estate loans at 97.9% of par value, or nearly 98 cents on the dollar. Lehman valued similar U.S. assets at 56 cents on the dollar. While the European market for such securities has been slightly better than the U.S. market, it has also been hammered by the credit crisis.

These valuations are important to thousands of Lehman creditors who are owed tens of billions of dollars. These creditors may hold that real estate as collateral, or hope to see it sold, perhaps to the federal government through the recently approved bailout plan.

Lehman believes its real-estate portfolio is properly valued.

On the Sept. 10 conference call, Mr. Lowitt, the CFO, said the firm's recent sales of real-estate assets had been "in and around our marks."

By Sunday, Sept. 14, Fed officials believed Lehman had run out of options. Neither Barclays nor Bank of America would commit to a deal unless the government agreed to finance a transaction that would almost surely cost the taxpayers money. Treasury Secretary Henry Paulson insisted he wouldn't do such a deal, and Fed officials didn't feel they had a mandate to do one on their own. Meanwhile, insurance giant American International Group Inc. was teetering.

At a late-afternoon meeting with Lehman and its lawyers, officials from the New York Fed and elsewhere delivered a message: Lehman must file for bankruptcy.

Working with bankruptcy lawyer Harvey Miller, the firm put together its filing in about five hours. Shortly after midnight Sunday, Lehman sought Chapter 11 bankruptcy protection.

Mr. Lawless, the Lehman mortgage executive, emailed clients that night. "Words cannot express the sadness in the franchise that has been destroyed over the last few weeks, but I wanted to assure you that we will reappear in one form or another-stronger than ever."

The bankruptcy threw into disarray tens of billions of dollars of cash and securities entrusted to Lehman by hundreds of hedge funds that were customers of the firm's prime brokerage, which loans money and stock to hedge funds and processes their trades. Some of the world's best-known hedge funds, including D.E. Shaw & Co. and Och-Ziff Capital Management., have assets tied up in Lehman and its subsidiaries.

"I've seen some pretty significant and difficult situations, but nothing like this," says Tony Lomas, a PricewaterhouseCoopers partner.

That Monday, Lehman's broker-dealer arm, which had not itself sought bankruptcy protection, borrowed $45.5 billion from the Fed's special lending facility for investment banks. The central bank wanted to keep the unit going for at least a few days to try to preserve order in the markets while the operation unwound.

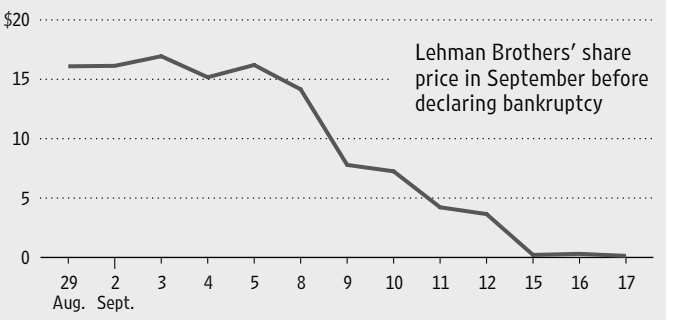
That same day, Barclays restarted talks with Lehman. The following day, the U.K. bank agreed to buy the bulk of Lehman's North American business, for $1.54 billion. To seal the deal, Barclays agreed to pay off the $45.5 billion loan that Lehman had gotten from the Fed, and to take from the Fed the collateral that backed the loan. The Fed didn't lose any money on the deal.

Back at Lehman, Mr. Fuld informed employees about the deal in a note. "I know that this has been very painful on all of you, both personally and financially," he said. "For this, I feel horrible."

—Ianthe Jeanne Dugan, Joellen Perry, Cassell Bryan-Low, Amir Efrati, Lingling Wei and Alex Frangos contributed to this article.

Shifting Sands

During the credit crisis, Lehman executives faced conflicting pressures: to tell the public the painful truth, but also not to ignite panic.



Private details

Inside Lehman, executives were discussing whether the firm had enough capital.

Sept. 9

J.P. Morgan, acting as a financial middleman, demands an additional $5 billion to back up Lehman transactions with trading partners.

Lehman executives arrange a restructuring plan to be announced in a conference call the next day.

In discussions that night, Lehman executives say the firm will soon need fresh capital. The amount is estimated at $3 billion to $5 billion

Investment bankers counsel Lehman not to hold the conference call, warning about too many open questions about the firm's finances.

Public statements

In a conference call for investors, Lehman executives were more reassuring.

Sept. 10

Lehman CEO Richard Fuld says the planned restructuring 'will create a very clean, liquid balance sheet.'

Mr. Fuld tells investors, 'We are on the right track to put these last two quarters behind us.'

Lehman CFO Ian Lowitt says, 'We have maintained our strong liquidity and capital profiles.'

When an analyst asks whether Lehman will need to raise $4 billion more in capital, Mr. Lowitt says, 'We don't feel that we need to raise that extra amount.'

Source: WSJ research; transcript of conference call

Behind AIG's Fall, Risk Models Failed to Pass Real-World Test

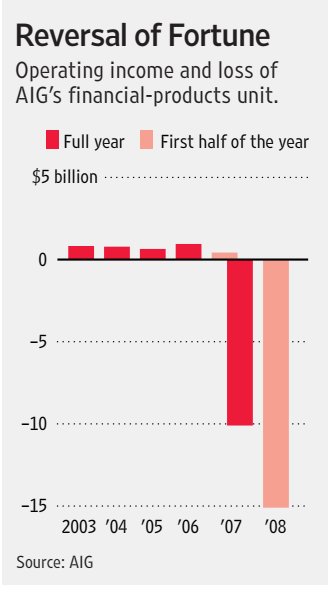
Gary Gorton, a 57-year-old finance professor and jazz buff, is emerging as an unlikely central figure in the near-collapse of American International Group Inc.

Mr. Gorton, who teaches at Yale School of Management, is best known for his influential academic papers, which have been cited in speeches by Federal Reserve Chairman Ben Bernanke.

*By **Carrick Mollenkamp, Serena Ng, Liam Pleven** and **Randall Smith***

But he also has a lucrative part-time gig: devising computer models used by the giant insurer to gauge risk in more than $400 billion of devilishly complicated deals called credit-default swaps.

AIG relied on those models to help figure out which swap deals were safe. But AIG didn't anticipate how market forces and contract terms not weighed by the models would turn the swaps, over the short term, into huge financial liabilities. AIG didn't assign Mr. Gorton to assess those threats, and knew that his models didn't consider them. Those risks have cost AIG tens of billions of dollars and pushed the federal government to rescue the company in September.



The global financial crisis is studded with tales of venerable financial firms failing to protect themselves against the unexpected. In the case of AIG, as with many other firms, the financial horrors were hidden in the enormous market for credit-default swaps, which are a form of insurance against defaults on all sorts of debts.

A close look at AIG's risk-management operations, and the rapid-fire chain of events that crippled the firm, raises questions about the run-up to the financial crisis: Did firms like AIG plunge into lucrative but perilous new markets without thoroughly understanding the pitfalls? Had the sheer complexity of the financial products made it all but impossible to fully calculate the risk? And did firms put too much faith in computer models to assess dangers?

The turmoil at AIG is likely to fan skepticism about the complicated, computer-driven modeling systems that many financial giants rely on to minimize risk. As chief executive of Berkshire Hathaway Inc., which owns insurance companies, Warren Buffett has been sounding the alarm about the issue for years. Recently, he told PBS interviewer Charlie Rose: "All I can say is, beware of geeks...bearing formulas."

Last December, at a meeting with investors, Martin Sullivan, then AIG's chief executive officer, told investors concerned about exposure to credit-default swaps that models helped give AIG "a very high level of comfort." Mr. Gorton explained at the meeting that "no transaction is approved" by the chief of AIG's financial-products unit "if it's not based on a model that we built."

Now, a federal criminal probe

Please turn to page A16

AIG's Risk Models Failed

Continued from Page One

in Washington is examining whether AIG executives misled investors at that meeting, and whether any of its executives misled its outside auditor last fall. AIG itself has been forced to post about $50 billion in collateral to its trading partners, largely to offset sharp drops in the value of securities it insured with the credit-default swaps. These payments have continued to balloon after the bailout—raising the specter that the government will eventually have to lend more taxpayer money to AIG.

This account of AIG's risk-management blunders is based on more than two dozen interviews with current and former AIG executives, AIG's trading partners and others with direct knowledge of the firm, as well as internal AIG documents, regulatory filings and congressional testimony. Mr. Gorton, who continues to be a paid AIG consultant, referred questions about his role to AIG. Mr. Sullivan declined to comment.

AIG's credit-default-swaps operation was run out of its AIG Financial Products Corp. unit, which had offices in London and Wilton, Conn. In essence, AIG sold insurance on billions of dollars of debt securities backed by everything from corporate loans to subprime mortgages to auto loans to credit-card receivables. It promised buyers of the swaps that if the debt securities defaulted, AIG would make good on them. AIG executives, not Mr. Gorton, decided which swaps to sell and how to price them.

The swaps expose AIG to three types of financial pain. If the debt securities default, AIG has to pay up. But there are two other financial risks as well. The buyers of the swaps—AIG's "counterparties" or trading partners on the deals—typically have the right to demand collateral from AIG if the securities being insured by the swaps decline in value, or if AIG's own corporate-debt rating is cut. In addition, AIG is obliged to account for the contracts on its own books based on their market values. If those values fall, AIG has to take write-downs.

Mr. Gorton's models harnessed mounds of historical data to focus on the likelihood of default, and his work may indeed prove accurate on that front. But as AIG was aware, his models didn't attempt to measure the risk of future collateral calls or write-downs, which have devastated AIG's finances.

The problem for AIG is that it didn't apply effective models for valuing the swaps and for collateral risk until the second half of 2007, long after the swaps were sold, AIG documents and investor presentations indicate. The firm left itself exposed to potentially large collateral calls because it had agreed to insure so much debt without protecting itself adequately through hedging.

The credit crisis hammered the markets for debt securities, sparking tough negotiations between AIG and its trading partners over how much more collateral AIG should have to post. Goldman Sachs Group Inc., for instance, has pried from AIG $8 billion to $9 billion, covering virtually all its exposure to AIG—most of it before the U.S. stepped in.

Such payments continued after the government bailout. AIG already has borrowed $83.5 billion from the Federal Reserve, a little more than two-thirds of the $123 billion in taxpayer loans made available to AIG so far. In addition, AIG affiliates recently obtained from the government as much as $21 billion in short-term loans called commercial paper. Much of the $83.5 billion has been used to meet the financial obligations of the financial-products unit. If turmoil in the markets causes prices of many assets to fall further, the government might have to cough up more money to help keep AIG afloat. Cutting it off would risk renewing the market upheaval the policy makers have struggled to tame.

Mr. Gorton, the son of a Phoenix psychiatrist, took a circuitous route to academia. He studied Mandarin, considered becoming an actor and briefly drove a cab in Cleveland, where he carried a gun for protection, he later told acquaintances. Eventually, he collected multiple degrees, including a Ph.D. in economics, and joined the faculty of the Wharton School of the University of Pennsylvania.

He drove an old Volkswagen Beetle, lived in a gritty North Philadelphia row house and accumulated a vast trove of jazz records, which he would cue up at night on two turntables to keep the music coming, recalls his wife at the time, Rachel Bliss.

He was passionate about mathematics, engaging in late-night conversations with fellow teachers, says Ms. Bliss. One of his academic interests was how banks could unload risk and sell loans to investors.

In 1987, AIG launched its financial-products unit with Howard Sosin, a math expert and former Drexel Burnham Lambert executive. Among his hires were Joseph Cassano, a former Drexel colleague. After Mr. Sosin left, Mr. Gorton joined as a consultant in the late 1990s. Mr. Cassano later took over the unit.

Early on, Mr. Gorton billed AIG about $250 an hour, which likely would have netted him about $200,000 a year, says a former senior executive at the unit. Eventually, his pay was far greater; another former colleague estimates it at $1 million a year.

Mr. Gorton collected vast amounts of data and built models to forecast losses on pools of assets such as home loans and corporate bonds. Speaking to investors last December, Mr. Cassano credited Mr. Gorton with "developing the intuition" that he and another top executive had "relied on in a great deal of the modeling that we've done and the business that we've created."

AIG began selling credit-default swaps around 1998. Mr. Gorton's work "helped convince Cassano that these things were only gold, that if anybody paid you to take on these risks, it was free money" because AIG would never have to make payments to cover actual defaults, according to the former senior executive at the unit. However, Mr. Gorton's work didn't address the potential write-downs or collateral payments to trading partners.

AIG became one of the largest sellers of credit-default-swap protection, according to a Moody's Investors Service report last week. For years, the business was extremely lucrative. In a 2006 SEC filing, AIG said none of the swap deals now causing it pain had ever experienced high enough defaults to consider the likelihood of making a payout more than "remote, even in severe recessionary market scenarios."

AIG charged its trading partners a fraction of a penny a year for every dollar of credit protection. The company realized, of course, that it might have to post collateral if the market values of the underlying securities declined. But AIG executives believed that such price moves were unlikely to occur, according to people familiar with AIG's operation.

As the debt securities created by Wall Street became more complicated, so did the swaps AIG offered. Around 2004, it began selling swaps designed to provide insurance on securities called collateralized-debt obligations, or CDOs, that were backed by securities such as mortgage bonds. Merrill Lynch & Co., then a major seller of the CDOs, was a big client.

So-called multisector CDOs, in particular, were exceptionally complex, involving more than 100 securities, each backed by multiple mortgages, auto loans or credit-card receivables. Their performance depended on tens of thousands of disparate loans whose value was hard to determine and performance difficult to systematically predict. In assessing their risk, Mr. Gorton constructed worst-case scenarios that factored in the probability of defaults on the underlying securities.

In late 2005, senior executives at the unit grew worried about loosening lending standards in the subprime-mortgage market. AIG decided to stop selling credit protection on multisector CDOs, partly due to "concerns that the model was not going to be able to handle declining underwriting standards," Mr. Gorton told investors last December. But by the time it stopped, in early 2006, its exposure to multisector CDOs had ballooned to $80 billion.

By mid-2007, as the housing slump took hold, the subprime mortgage market was weakening and many mortgage bonds were sinking in value. Ratings agencies began downgrading many mortgage securities, a departure from the historical pattern, Mr. Gorton later explained to investors. Concern began mounting about AIG's credit-default swaps, even though AIG didn't have large exposures to subprime-mortgage bonds issued in the worst years of 2006 and 2007.

AIG's trading partners were worried. Goldman Sachs held swaps from AIG that insured about $20 billion of securities. In August 2007, Goldman demanded $1.5 billion in collateral, arguing that the assets backing the securities were falling in value. AIG argued that the demand was excessive, and the two firms eventually agreed that AIG would post $450 million to Goldman, this person says.

Late last October, Goldman asked for even more collateral, $3 billion. Again, AIG disagreed, and it ultimately posted $1.5 billion. Goldman hedged its exposure by making a bearish bet on AIG, buying credit-default swaps on AIG's own debt, according to one person knowledgeable about this move.

When AIG's outside auditor, PricewaterhouseCoopers LLP, learned about Goldman's demands, it reviewed the value of the swaps, according to a Pricewaterhouse official cited in minutes of a meeting of the audit committee of AIG's board. Last November, when AIG reported third-quarter results, it took its first major write-down on the swaps, lowering their value by $352 million.

That same month, collateral calls came in from Merrill and Société Générale SA, says the person familiar with AIG's finances. It's not clear how much those two banks asked for, or how much they got.

AIG decided to talk to investors last Dec. 5 about the financial-product unit's exposure to the mortgage market. A Pricewaterhouse official said his firm told AIG's then-CEO, Mr. Sullivan, and a deputy six days before the event that AIG might have a "material weakness" in its risk management, according to minutes of a Jan. 15 meeting of AIG's audit committee. Pricewaterhouse declined to comment.

In his presentation to investors, held at New York's Metropolitan Club, Mr. Sullivan praised the unit's models as "very reliable" in analyzing many mortgages, saying they had helped give AIG "a very high level of comfort."

Mr. Gorton was introduced. "The models are all extremely simple," he said. "They're highly data intensive." He said he didn't rely on the default-risk predictions of credit-rating services, and instead came up with his own estimates of what was safe enough for AIG to insure.

Mr. Cassano, the unit's head, told investors: "We believe this is a money-good portfolio....As Gary said, the models we use are simple, they're specific and they're highly conservative."

But the collateral calls kept coming. By the end of 2007, at least four other banks that had purchased swaps from AIG—UBS AG, Barclays PLC, Credit Agricole SA's Calyon investment-banking unit and Royal Bank of Scotland Group PLC—had asked for money, according to people familiar with collateral calls. Deutsche Bank and Canadian banks CIBC and Bank of Montreal also have demanded collateral at various points, a person familiar with AIG's finances says.

In February, AIG disclosed that Pricewaterhouse had found a "material weakness" in its accounting controls. Late that month, AIG announced a $5.3 billion fourth-quarter loss, its largest ever, driven largely by write-downs on the swaps. It also said it was "possible" that actual losses on the swaps could be material.

Mr. Sullivan told investors that Mr. Cassano, the unit's head, was retiring. He remained a consultant, receiving, until recently, $1 million a month, according to a document later released by Congress.

In May, AIG announced another record quarterly loss, of $7.8 billion, largely driven by write-downs of the value of the swaps. That same month, Yale's School of Management announced it had hired Mr. Gorton away from Wharton.

Mr. Sullivan was ousted in June. As of July 31, AIG had handed over $16.5 billion in collateral on its swaps, according to a regulatory filing.

By August, AIG had increased its estimates for what it might ultimately lose on the swaps in the case of defaults to as high as $8.5 billion. (The estimates are distinct from potential losses on write-downs and collateral calls.) That same month, Mr. Gorton attended the Federal Reserve Bank of Kansas City's annual gathering in Jackson Hole, Wyo. He presented a 92-page paper, "The Panic of 2007," which explained how the financial markets came unglued after a series of unexpected events, such as when clients of financial firms suddenly sought to reclaim assets put up as collateral. "It is difficult to convey," he wrote, "the ferocity of the fights over collateral."

Credit markets worsened in late August and September, and AIG's trading partners demanded additional collateral. When Lehman Brothers Holdings Inc. filed for bankruptcy protection on Sept. 15, bond markets essentially froze. That same day, rating agencies slashed AIG's credit ratings. Company executives figured the downgrade would require AIG to post more than $18 billion in additional collateral to its trading partners, according to a person familiar with the matter. Worried that a bankruptcy filing could roil markets world-wide, the government stepped in with a bailout.

The rescue didn't stop the collateral calls, which have eaten up much of the government's initial $85 billion loan commitment, which on Oct. 8 it boosted to $123 billion.

On a rainy morning last week, Mr. Gorton briefly discussed with his Yale students how perplexing the struggles of the financial world have become. About 30 graduate students listened as Mr. Gorton lamented how problems in one sector caused investors to question value all across the board. Said Mr. Gorton: "There doesn't seem to be a fundamental reason why."

Collateral Damage

AIG had to post collateral to trading partners because of valuation declines and credit-rating downgrades.

August 2007 — Goldman Sachs asks AIG to post $1.5 billion in collateral on credit-default swaps; AIG eventually posts $450 million.

October — Goldman asks for $3 billion more in collateral; AIG eventually posts $1.5 billion.

November — Two other firms request collateral; AIG says it has clashed with some trading partners on collateral amounts.

December — Three more trading partners request collateral.

August 2008 — AIG says it has posted $16.5 billion in total collateral on swaps.

September — AIG's credit ratings are cut. Federal government rescues AIG with a loan. Much of AIG's borrowing goes to posting collateral.

Sources: WSJ Market Data Group; staff reports

WSJ.com

ONLINE TODAY: Learn more about Gary Gorton's thoughts on modeling, in his own words, at **WSJ.com/Markets**.

Anatomy of the Morgan Stanley Panic

Trading Records Tell Tale of How Rivals' Bearish Bets Pounded Stock in September

Two days after Lehman Brothers Holdings Inc. sought bankruptcy protection, an explosive rumor spread that another big Wall Street firm, Morgan Stanley, was on the brink of failure. The chatter on trading desks that Sept. 17 was that Deutsche Bank AG had yanked a $25 billion credit line to the firm.

*By **Susan Pulliam, Liz Rappaport, Aaron Lucchetti, Jenny Strasburg** and **Tom McGinty***

That wasn't true, but it helped trigger a cascade of bearish bets against Morgan Stanley. Chief Executive Officer John Mack complained bitterly that profit-hungry traders were sowing panic. Yet he lacked a critical piece of information: Who exactly was behind those damaging trades?

Trading records reviewed by The Wall Street Journal now provide a partial answer. It turns out that some of the biggest names on Wall Street—Merrill Lynch & Co., Citigroup Inc., Deutsche Bank and UBS AG—were placing large bets against Morgan Stanley, the records indicate. They did so using complicated financial instruments called credit-default swaps, a form of insurance against losses on loans and bonds.

A close examination by the Journal of that trading also reveals that the swaps played a critical role in magnifying bearish sentiment about Morgan Stanley, in turn prompting traders to bet against the firm's stock by selling it short. The interplay between swaps trading and short selling accelerated the firm's downward spiral.

John Mack

This account was pieced together from the trading documents and more than six dozen interviews with Wall Street executives, traders, brokers, hedge-fund managers, regulators and investigators.

For years, sales of credit-default swaps were a profit gold mine for Wall Street. But ironically, during those tumultuous few days in mid-September, the swaps market turned on Morgan Stanley like a financial Frankenstein. The market became a highly visible barometer of the Panic of 2008, fueling the crisis that ultimately prompted the government to intervene.

Other firms also were trading Morgan Stanley swaps on Sept. 17: Royal Bank of Canada, Swiss Re, and hedge funds including King Street Capital Management LLC and Owl Creek Asset Management LP.

Pressure also mounted on an-

Please turn to page A16

How Bearish Bets Hit Morgan Stanley

Continued from Page One

other front. There was a surge in "short sales"—bets against the price of Morgan Stanley's stock—by large hedge funds including Third Point LLC. By day's end, Morgan Stanley's shares were down 24%, fanning fears among regulators that predatory investors were targeting investment banks.

That pattern of trading, which previously had battered securities firms Bear Stearns Cos. and Lehman, now is dogging Citigroup, whose stock fell 60% last week to a 16-year low.

Investigators are attempting to unravel what produced the market mayhem in mid-September, and whether Morgan Stanley swaps or shares were traded improperly. New York Attorney General Andrew Cuomo, the U.S. Attorney's office in Manhattan and the Securities and Exchange Commission are looking into whether traders manipulated markets by intentionally disseminating false rumors in order to profit on their bets. The investigations also are examining whether traders bought swaps at high prices to spark fear about Morgan Stanley's stability in order to profit on other trading positions, and whether trading involved bogus price quotes and sham trades, people familiar with the probes say.

No evidence has emerged publicly that any firm trading in Morgan Stanley stock or credit-default swaps did anything wrong. Most of the firms say they purchased the credit-default swaps simply to protect themselves against potential losses on various types of business they were doing with Morgan Stanley. Some say their swap wagers were small, relative to all such trading that was done that day.

Proving that prices of any security have been manipulated is extraordinarily difficult. The swaps market is opaque: Trading is done by phone and email between dealers, without public price quotes.

Erik Sirri, the SEC's director of trading and markets, contends that the swaps market is vulnerable to manipulation. "Very small trades in a relatively thin market can be used to ... suggest that a credit is viewed by the market as weak," he said in congressional testimony last month. He said the SEC was concerned that swaps trading was triggering bearish bets against stocks.

James Chanos

Morgan Stanley had entered September in pretty good shape. It made money during its first two fiscal quarters, which ended May 31. It didn't have as much exposure to bad residential-mortgage assets as Lehman did, although it was exposed to commercial-real-estate and leveraged-loan markets. Mr. Mack knew that third-quarter earnings were going to be stronger than expected.

On Sept. 14, as Lehman was preparing to file for bankruptcy protection, Mr. Mack told employees in an internal memo that Morgan Stanley was "uniquely positioned to succeed in this challenging environment." The following day, the firm picked up some new hedge-fund clients who had fled Lehman.

But rumors were flying as traders worried which Wall Street firm could fall next. The chatter among hedge funds was that Morgan Stanley had $200 billion at risk as a trading partner with American International Group Inc., the big insurer on the brink of a bankruptcy filing, according to traders. That wasn't true. Morgan reported in an SEC filing that its exposure to AIG was "immaterial."

Some brokers at rival J.P. Morgan Chase & Co. were suggesting to Morgan Stanley clients it was risky to keep accounts at that firm, people familiar with the matter say. Mr. Mack complained to J.P. Morgan Chief Executive James Dimon, who put an end to the talk, these people say. Deutsche Bank, UBS and Credit Suisse also marketed to Morgan Stanley's hedge-fund clients, people familiar with the pitches say.

On Sept. 16, Morgan Stanley's stock fell sharply during the day, although it rebounded late. Some hedge funds yanked assets from the firm, worried that Morgan might follow Lehman into bankruptcy court, potentially tying up client assets. In an effort to quell concerns, Morgan Stanley released its earnings that afternoon at 4:10 p.m., one day early.

"It's very important to get some sanity back into the market," said Colm Kelleher, Morgan's chief financial officer, in a conference call with investors. "Things are frankly getting out of hand, and ridiculous rumors are being repeated."

UBS analyst Glenn Schorr asked Mr. Kelleher about the soaring cost of buying insurance in the swaps market against a Morgan Stanley debt default. Protection for $10 million of Morgan Stanley debt had risen to $727,900 a year, from $221,000 on September 10, according to CMA DataVision, a pricing service.

"Certain people are focusing on CDS as an excuse to look at the equity," Mr. Kelleher responded, implying that traders betting on swaps were also shorting Morgan Stanley shares, betting that the stock price would fall.

It's impossible to know for sure what was motivating buyers of Morgan Stanley credit-default swaps. The swap buyers stood to receive payments if Morgan Stanley defaulted on bonds and loans. Some buyers, no doubt, owned the firm's debt and were simply trying to protect themselves against defaults.

But swaps were also a good way to speculate for traders who didn't own the debt. Swap values rise on the fear of default. So traders who believed that fears about Morgan Stanley were likely to intensify could use swaps to try to turn a fast profit.

Amid the uncertainty that Sept. 16, Millennium Partners LP, a hedge fund with $13.5 billion in assets, asked to pull out $800 million of the more than $1 billion of assets it kept at Morgan Stanley, according to people familiar with the withdrawals. Separately, Millennium had also shorted Morgan Stanley's stock, part of a series of bearish bets on financial firms, said one of these people. In addition, the hedge fund bought "puts," which gave it the right to sell Morgan shares at a set price in the future.

"Listen, we have to protect our assets," Israel Englander, Millennium's head, told a Morgan Stanley executive, according to one person familiar with the conversation. "This is not a personal thing."

Those bearish bets, small compared to Millennium's overall size, rose in value as Morgan Stanley shares fell.

That same day, Sept. 16, Third Point LLC, a $5 billion hedge-fund firm run by Daniel Loeb, began to move $500 million in assets out of Morgan Stanley. The following day, Sept. 17, Third Point, after seeing the surge in swaps prices, made a substantial bearish bet, selling short about 100,000 Morgan Stanley shares, trading records indicate. Third Point quickly closed out that position for a profit of less than $10 million, says one person familiar with the trading.

Around the same time, hedge fund Owl Creek began asking to withdraw its assets, and ultimately took out more than $1 billion.

On the morning of Sept. 17, David "Tiger" Williams, head of Williams Trading LLC, which offers trading services to hedge funds, heard from one of his traders that a fund had moved an $800 million trading account from Morgan Stanley to a rival. His trader, who was on the phone with the fund manager who moved the money, asked why. Morgan Stanley was going bankrupt, his client responded.

Pressed for details, the fund manager repeated the rumor about Deutsche Bank yanking a $25 billion credit line. Mr. Williams hit the phones. His market sources told him they thought the rumor false.

Gary Lynch

But damage already was being done. By 7:10 that morning, a Deutsche Bank trader was quoting a price of $750,000 to buy protection on $10 million of Morgan Stanley debt. At 10 a.m., Citigroup and other dealers were quoting prices of $890,000.

As the rumor about Deutsche spread, Morgan shares fell sharply, from about $26 at 10 a.m. to near $16 at 11:30 a.m.

Before noon, swaps dealers began quoting the cost of insurance on Morgan in "points upfront"—Wall Street lingo for transactions where buyers must pay at least $1 million upfront, plus an annual premium, to insure $10 million of debt. In Morgan Stanley's case, some dealers were demanding more than $2 million upfront.

During the day, Merrill bought swaps covering $106.2 million in Morgan Stanley debt, according to the trading documents. King Street bought swaps covering $79.3 million; Deutsche Bank, $50.6 million; Swiss Re, $40 million; Owl Creek, $35.5 million; UBS and Citigroup, $35 million each; Royal Bank of Canada, $33 million; and ACM Global Credit, an investment fund operated by AllianceBernstein Holding, $28 million, according to the documents.

The following day, Sept. 18, some of those same names were back in the market. Merrill bought protection on another $43 million of Morgan Stanley debt; Royal Bank of Canada, $36 million; King Street, $30.7 million; and Citigroup, $20.7 million, the trading records indicate.

None of the firms will comment on how much they paid for the swaps, or whether they profited on the trades.

"The protection we bought was a simple hedge, not based on any negative view of Morgan Stanley," says John Meyers, a spokesman for AllianceBernstein. A Royal Bank of Canada spokesman says the bank bought the swaps to manage its Morgan Stanley "credit risk," and was not "betting against Morgan Stanley and conducted no bearish trades on its stock."

King Street, a $16.5 billion hedge fund, bought the swaps to hedge its exposure to Morgan Stanley, which included bond holdings, according to a person familiar with the fund. The fund didn't hold a short position in the stock, this person says.

Spokespeople for Deutsche Bank and Citigroup say their trading was relatively small and meant to protect against losses on other investments with Morgan, and to handle client orders. An Owl Creek spokesman says it bought the swaps "to insure collateral we had at Morgan Stanley at the time," and that it continues to do business with the firm.

Merrill, UBS and Swiss Re declined to comment on the trading.

As Morgan Stanley's stock tumbled, the number of shares sold short by bearish investors soared to 39 million on Sept. 17, nine times the daily average this year, adding to the 31 million shares shorted in the prior two days, according to trading records.

Mr. Mack sent a memo to employees on Sept. 17. "I know all of you are watching our stock price today, and so am I. ... we're in the midst of a market controlled by fear and rumors, and short sellers are driving our stock down."

The stock and swaps trading were feeding on each other. That afternoon, Mr. Schorr, the UBS analyst, wrote: "Stop the insanity—we need a time out." In an interview that day, he said "the negative feedback loop of stocks and CDS making each other crazy shouldn't be able to destroy the value of companies."

Scrambling to stop the crisis of confidence, Mr. Mack phoned Paul Calello, investment-banking chief at Credit Suisse, and asked whether he knew what was driving the cost of the swaps up so quickly, say people familiar with the call. Mr. Calello said he didn't.

Morgan Stanley's chief legal officer, Gary Lynch, once the SEC's enforcement chief, called New York Stock Exchange regulatory head Richard Ketchum. He said he was suspicious about manipulation of Morgan Stanley securities, and asked whether the NYSE would support a temporary ban on short selling, according to people familiar with the call.

Mr. Mack called SEC Chairman Christopher Cox, Treasury Secretary Henry Paulson and others. Trading in Morgan Stanley securities, he groused, was irrational and "outrageous," and "there's nothing to warrant this kind of reaction," says a person familiar with the calls. The steps already taken by the SEC to prevent certain types of abusive short selling, he argued, didn't go far enough.

In his memo to employees that day, Mr. Mack had made it clear that he intended to press regulators to rein in short sellers. When word about that got out, hedge-fund managers were up in arms. Some yanked business from Morgan Stanley, moving it to rivals including Credit Suisse, Deutsche Bank and J.P. Morgan. They said the trading represented legitimate protection and speculation.

Hedge-fund veteran Julian Robertson Jr. and James Chanos, a well-known short seller, both longtime Morgan Stanley clients, were both angry. Mr. Chanos says he "hit the roof" when he heard about Mr. Mack's memo.

After the stock market closed that day, Mr. Chanos decided that his hedge fund, Kynikos Associates, would pull more than $1 billion of its money from a Morgan Stanley account.

"It's one thing to complain, but another to put out a memo blaming your clients," says Mr. Chanos, who adds that the development all but ended a more-than-20-year relationship with Morgan Stanley. He says his fund hadn't bought any Morgan Stanley swaps or sold short its stock.

Other Wall Street executives, concerned about their stocks, were also calling regulators. At about 8:15 that night, the SEC said it would require more disclosure of short selling. Late the following day, Sept. 18, the SEC moved to temporarily ban short selling in financial stocks.

Mr. Mack contacted hedge-fund clients to tell them he hadn't single-handedly brought on the ban, and that he was primarily interested in giving the market a temporary "time out" from the volatile mix of rumors and trading.

But within days, more than three-quarters of Morgan Stanley's roughly 1,100 hedge-fund clients had put in requests to pull some or all of their assets from the firm, according to a person familiar with the operation. Even though most kept some money at the firm, Morgan Stanley couldn't process all the withdrawal requests at once, adding to market fear.

Morgan Stanley was in a precarious position. During the Sept. 17 trading frenzy, Mr. Mack had begun merger talks with Wachovia Corp. Four days later, Morgan Stanley shifted course, becoming a bank-holding company and gaining wider access to government funds. Last month, after raising $9 billion from a Japanese bank, it received a $10 billion capital injection from the federal government.

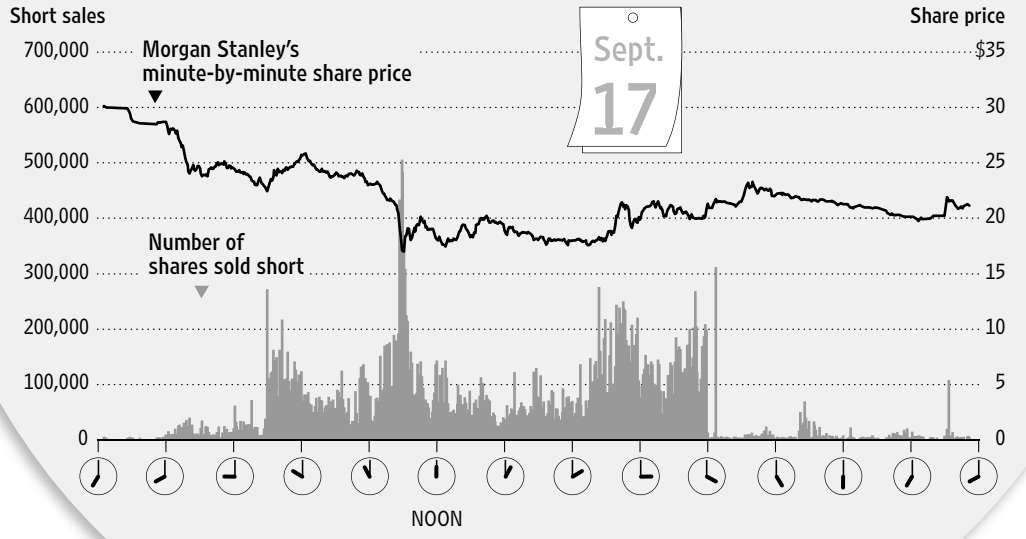
Morgan Stanley must now revise its business strategy to contend with a more risk-averse environment and the more stringent government oversight that comes with being a bank-holding company. Earlier this month, it announced it would fire about 2,300, or 5%, of its employees.

The cost of insuring its debt has come back down from its peak, but its stock remains in the doldrums. On Friday, it was trading at $10.05 a share in 4 p.m. composite trading on the New York Stock Exchange—less than half of the $21.75 close on Sept. 17.

A month after the mayhem, Mr. Mack said in an interview that he had all but given up trying to get to the bottom of what was driving the trading in his firm's securities during those chaotic days in mid-September. "It's difficult to say what's rumor and what's fact," he said.

Fear Factor

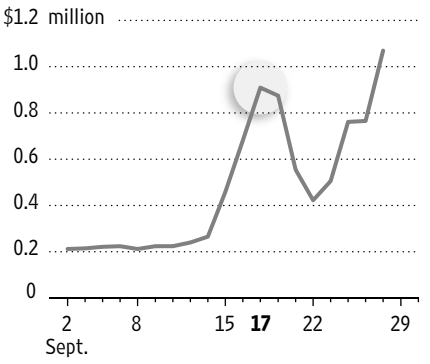
Over a few days in September, bearish bets against Morgan Stanley pushed it to the brink of collapse. The trading mayhem peaked on Sept. 17.



Denotes data for Sept. 17

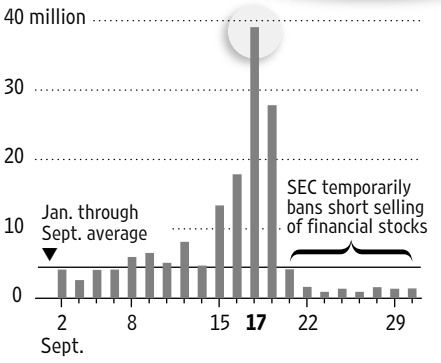
As traders bid up the price of credit-default swaps...

Annual cost to protect against default on $10 million in Morgan Stanley debt



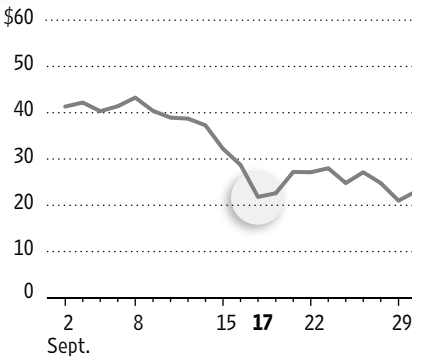
...Short sales surged

Total short sales, or bets that Morgan Stanley's stock would fall



...Contributing to a plunge in its stock price.

Daily closes of Morgan Stanley shares



Sources: NYSE and Nasdaq (short-sales transaction data); Markit (credit-default swaps prices); WSJ Market Data Group (closing prices)