# A FIRST-CLASS CATASTROPHE

By Diana B. Henriques

Sometime before 8:30 am on Monday, October 19, 1987, New York Stock Exchange Chairman John Phelan asked a secretary to track down Leo Melamed, chairman of the executive committee at the Chicago Mercantile Exchange, which traded the wildly popular futures contracts that were pegged to the Standard & Poor's 500 stock market index. Phelan, who had cut his vacation short and flown home on Saturday, could see how the day was shaping up, and it made even the worst fears of Friday night look optimistic.

Traders were predicting the Dow could drop that morning by at least 9%, a staggering percentage figure that was twice the record-setting 108-point loss on Friday, October 16, and almost within reach of the historic daily losses in October 1929. Tokyo had fallen sharply overnight, as traders reacted to Friday's epic decline in New York. The Hong Kong markets had plunged so far and so fast that officials there decided to close their doors completely, to forestall total panic and widespread defaults. London was already down 10%, in part because of $90 million worth of sell orders from the trading desk at Fidelity Investments in Boston. Fidelity's $9 billion Magellan Fund was the largest stock mutual fund in the country; it was chilling to think how much it would try to sell when the Big Board opened.

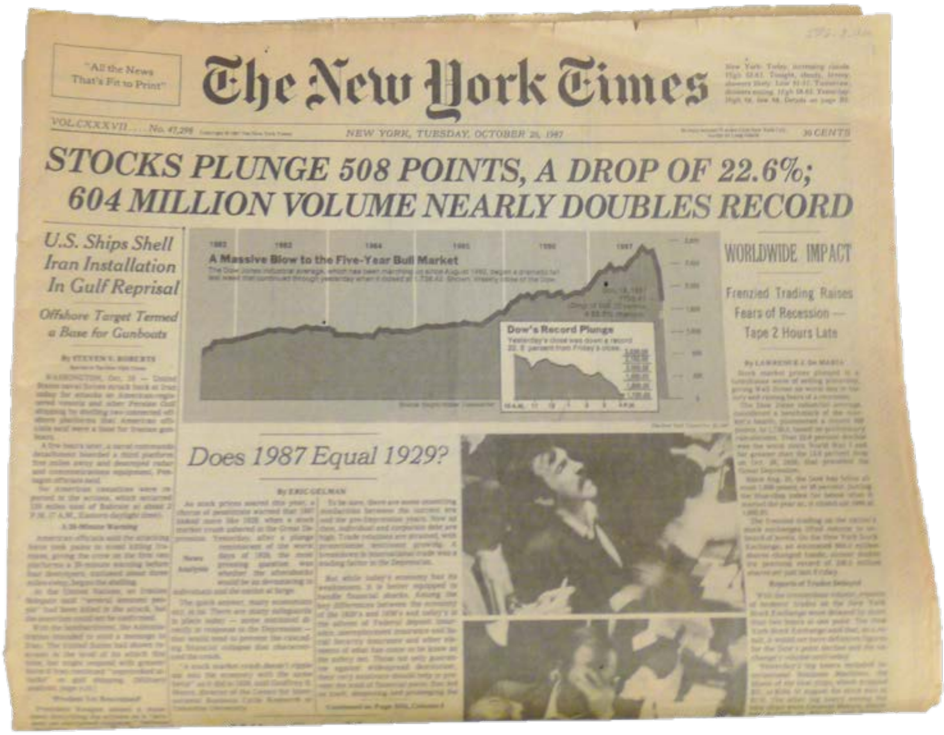
The New York Stock Exchange's DOT system, which automatically delivered orders to the trading floor, was being swamped with orders, many of them apparently from index arbitrageurs, who profited by exploiting differences in the price of a stock index and the price of the futures contract pegged

A trader on the floor of the New York Stock Exchange shouts orders as stocks are devastated during one of the most frantic days in the exchange's history, October 19, 1987.

to that index. Specialists downstairs on the NYSE trading floor were struggling to find a price at which they could open trading in their blue-chip stocks, a task that suddenly had become as difficult as dealing with a deluge of closing bell orders.

Phelan connected with Melamed and briefed him on the viciously lopsided orders piling up in the DOT system. "We're seeing 'sell' orders like never before," Phelan said, adding, "It looks like a very bad market." And then, he said, "Everyone loves a free market, but we need to slow volatility on the down side. If no action is taken, the industry stands to lose something it wants."

It's not clear what Phelan thought Melamed could do about the market's wild swings. The portfolio insurers — giant institutional investors who used futures contracts to hedge against falling stock prices — were going to sell, no matter what the local traders did in the S&P 500 futures pit. And if such selling made the futures contracts in Chicago cheaper than the cash market for the stocks on the NYSE, the index arbitrageurs would keep dumping stocks and buying futures.


"All the News That's Fit to Print"

The New York Times

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NEW YORK, TUESDAY, OCTOBER 20, 1987

30 CENTS

STOCKS PLUNGE 508 POINTS, A DROP OF 22.6%; 604 MILLION VOLUME NEARLY DOUBLES RECORD

U.S. Ships Shell Iran Installation In Gulf Reprisal

Offshore Target Termed a Base for Gunboats

A Massive Blow to the Five-Year Bull Market

Dow's Record Plunge

WORLDWIDE IMPACT

Frenzied Trading Raises Fears of Recession — Tape 2 Hours Late

Does 1987 Equal 1929?

Collection of the Museum of American Finance

Front page of *The New York Times* on the day following Black Monday, October 20, 1987.

MARIA BASTONE/AFP/Getty Images

Neither Melamed nor Phelan could prevent that from happening so long as these two linked markets were open. Then Phelan checked his calendar: a young White House aide was scheduled to visit that day, and Phelan planned to show him around; he expected to be back in his office around noon.

Many of the other men who would have to cope with the day's developments, some of them still new to their regulatory duties, were scattered from Sweden to Venezuela.

Federal Reserve Chairman Alan Greenspan was at his Washington office on Monday, but was packed for a midday flight to Dallas. David Ruder, chairman of the Securities and Exchange Commission, also was in his Washington office, but he had been in it for barely ten weeks, and his more experienced aide, Trading and Markets Director Rick Ketchum, had taken a 6:45 AM shuttle to New York. Treasury Secretary James A. Baker III was on a flight to Stockholm, by way of Frankfurt. White House chief of staff Howard Baker had never before dealt with a financial crisis from the Oval Office. And New York Federal Reserve Bank President E. Gerald Corrigan was in Caracas.

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In a foggy rain, John O'Brien, one of three partners in LOR Associates, the firm that had first devised and marketed the portfolio insurance hedging strategy, followed the curves of Route 18 out of the mountains north of San Bernardino. It was around 7 AM, Pacific time, on Monday, October 19. He had spent the weekend helping his wife unpack at their new home at Lake Arrowhead. About halfway down the mountain, he turned on the car radio for the news. The stock market had opened sharply lower, and was still falling. Feeling a jolt of concern, he pulled up to a roadside restaurant and called the office from its pay phone. He recalled later being told the market was off 200 points; there were lots of calls from worried clients. He got back in the car, speeding south and west toward Los Angeles, still an hour away.

The market had not yet opened in New York when Berkeley professor Hayne Leland, one of O'Brien's two partners, boarded a 6:30 AM flight to Los Angeles. Before the plane took off, a flight attendant announced that the market was down 60 points—"serious, but less than catastrophic," Leland thought. When he landed, he got in a cab and asked the driver to turn the radio to the stock report. The market was down hundreds of points by then. "Oh God," Leland said. The taxi wove through the growing traffic to the First Interstate Tower.

Up north in Marin County, the third LOR partner, Berkeley professor Mark Rubinstein, called a taxi when the market decline hit 200 points, and headed for the airport. He got to the LOR offices in Los Angeles around 10 AM (1 PM in New York), just as the stock market was chewing up the last of a fragile hour-long rally.

Leland was already there, hovering anxiously around the firm's harried trader, who had telephone receivers in both hands and a computer monitor in front of him showing the growing disaster. In Chicago, he and other portfolio insurers had been selling for the last hour in larger volumes than they had all morning.

Around 11 AM (2 PM in New York), the trader looked up at Hayne Leland. "I'm getting behind," he said. He still needed to sell even more heavily in Chicago to carry out the hedging strategy, he added, "but I think the market would go to zero if I did that."

Shocked, Leland instantly replied, "No! Don't do that!"

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Alerted by his staff to the morning's sell-off, New York Fed president Jerry Corrigan immediately booked a seat on an earlier flight home from Caracas, and spent the time before he left for the airport


James Marshall

A commuter reads the *New York Post's* rundown of the 1987 Stock Market Crash.

making calls to New York and Washington from an office in the presidential palace, where he had been scheduled to have breakfast.

In Chicago, the S&P 500 futures pit had opened on time, and the tension was fierce. The subdued crowd in the normally seething pit was smaller than usual. Melamed waited for the opening bell and saw the opening price. At first, he couldn't believe it. The spooz (the traders' nickname for the popular contract) had dropped 7% on the first trade, a staggering decline.

"There were blank stares. No one could believe it was happening. Some people began to leave the pit," a senior Merc trader later recalled.

Portfolio insurers sold more than three thousand spooz contracts in the first thirty minutes, and the futures price seemed to be falling more steeply than the S&P index itself.

This was an illusion. When Chicago opened at 8:30 AM (9:30 AM in New York), many of the S&P 500 stocks had not yet actually started trading on the floor of the NYSE because there were no buyers. In that interval, the S&P 500 index was being calculated with stale prices from Friday, making the stocks seem far more expensive than the futures contracts—far more expensive, in fact, than they actually were.

Nevertheless, index arbitrageurs began their familiar dance, with a slight but devastating variation. As usual, they sold stocks heavily in New York, and in the first 90 minutes, the Dow dropped 208 points, more than 9%, the loss predicted for the entire day. However, instead of immediately buying the S&P 500 futures, a number of index arbitrageurs held back, waiting for even lower prices in Chicago. And by not buying, of course, they helped guarantee that prices in Chicago would continue to fall.

By 11 AM in New York, most of the stocks on the Big Board were open for trading, and there was a brief rally. After 40 minutes, though, it was snuffed out. With the S&P 500 futures still dropping in Chicago, the Dow now sank under wave after wave of sell orders from all kinds of professional investors — mutual fund managers, index arbitrageurs, and Wall Street's own proprietary trading desks.

By then SEC Chairman David Ruder had returned to his office from the Mayflower Hotel after giving a half-hour speech at a conference there sponsored by the American Stock Exchange.

Needless to say, it had been an uneasy audience; people were slipping out to the pay phones in the hall to check on the market. The SEC chairman had been surrounded by a scrum of journalists the minute he stepped from the podium. They pressed him to know if any steps had been taken to close the plunging market—perhaps because, two weeks earlier, Ruder had given a speech saying that a brief trading halt might be wise during a disorderly market collapse. With professorial caution, he told them that no discussions had been held but "anything is possible… There is some point, and I don't know what that point is, that I would be interested in talking to the NYSE about a temporary, very temporary halt in trading."

Trading halts in individual stocks were the cornerstone of Phelan's last-gasp plan to preserve the exchange. He had mentioned the plan in a call with Ruder that morning, and described it months earlier in a magazine article. At that point, however, Phelan himself had not suggested closing the exchange as a whole. A more experienced regulator than Ruder likely would have been more cautious about even mentioning the issue in public at such a stressful moment. After 15 minutes of questions, Ruder hurried out to his waiting car.

Upon returning to his office, he almost immediately got a call from Rick Ketchum. Ketchum had raced downtown to the NYSE following his early appearance at a conference in Midtown Manhattan and had met with Phelan moments after the Big Board chairman wrapped up a meeting with the CEOs of the biggest Wall Street firms.

Ketchum said Phelan had told him that the executives "didn't seem to have any inkling of how bad the situation really was."

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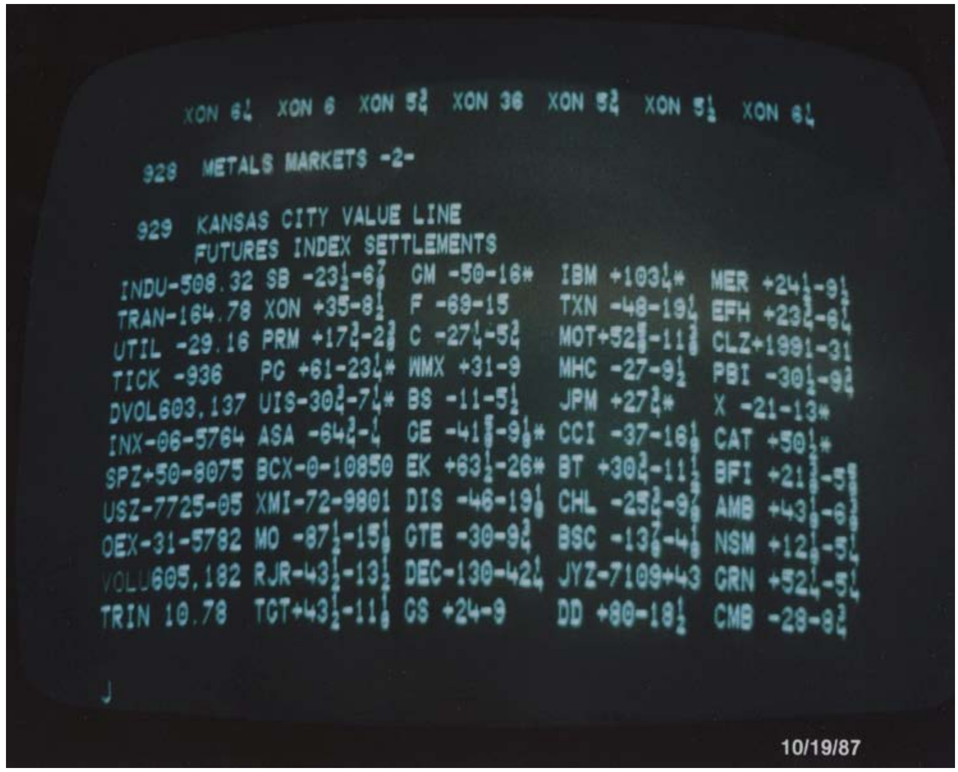
The computer monitors on the credenza behind corporate pension fund manager Gordon Binns's desk on the 25th floor of the General Motors Building in Manhattan were as bleak as anything he had ever seen — it was already a market crash on a par with 1929.

Binns, who ran the massive GM retirement fund, may have thought back to his childhood in Richmond, to a powerful story his mother had told him about finding a little slip of paper in their basement, on which their worried housekeeper had carefully itemized every penny of her tiny $12 budget.

His mother, already pinched by the gathering Depression, had sat on the basement steps and wept at her housekeeper's far more desperate plight. She resolved that the family would do everything they could to avoid letting the woman go in the hard times ahead. Binns, a public-spirited man, had been raised to think of others.

He never talked about the decisions he made that dark Monday afternoon, but the facts are intriguing. On his fund's behalf, Wells Fargo Investment Advisors had been sending enormous sell orders to the Big Board's DOT system all morning, every hour on the hour. Instead of selling futures contracts in the disorderly spooz pits in Chicago, the firm had started selling the actual stocks out of GM's vast $33 billion portfolio, in thirteen separate transactions of 2 million shares each, for a total of almost $1.1 billion.




Collection of the Museum of American Finance

Photograph of a Quotron screen from Black Monday, October 19, 1987.

Specialists on the NYSE trading floor would never forget that relentless bombardment. One regulator recalled how a specialist had described it to him: "Boom, another sell order, then boom, another sell order, like it would never stop."

At 2 PM, for some reason, it stopped. The portfolio insurance specialists at Wells Fargo never conceded any concern; top executives at that firm would argue for decades that portfolio insurance was an innocent scapegoat in this crisis. It is unlikely that the hedging sales required for GM's portfolio had been completed by 2 PM, with no need for further selling. Indeed, by one account, Wells Fargo had another 27 million shares to sell for GM before the closing bell.

Nevertheless, at 2 PM in New York — the same hour that LOR's chief trader in Los Angeles was worrying that the markets would "go to zero" — this specific barrage of sell orders hitting the NYSE just… stopped.

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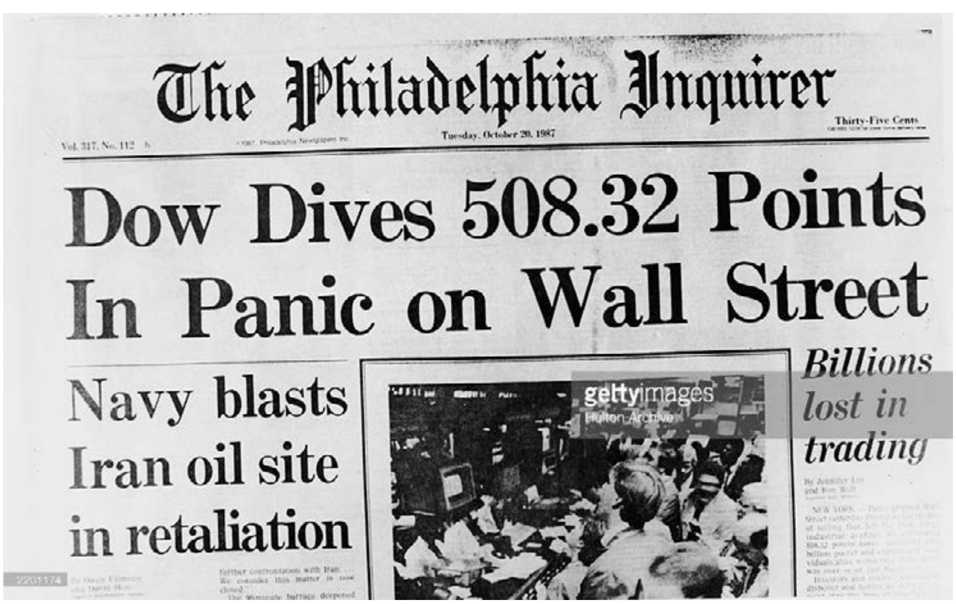
A little after 1 PM, a newswire sent out a story reporting Ruder's comments about a "very temporary" trading halt. In the next hour, the Dow fell 112 points. The SEC quickly denied discussing any closure of the exchange, but the uncertainty was enough. Index arbitrageurs stopped buying in Chicago, afraid they would not be able to execute the other side of their trades if the Big Board closed. As a consequence, the gap between the cash index and the futures price now widened to unprecedented — indeed, unthinkable — levels.

Panic was flickering in the eyes of traders in New York and Chicago. The alarmed gossip hurtling between the two trading floors was becoming as dangerous as the investment strategies tying them together. No trading halt could unplug this lightning-fast rumor mill. Both markets dropped further and further, under selling from all quarters. By 2:30 PM, the Dow's loss, about 13%, had eclipsed the worst day of the 1929 crash. The market was falling into history now, and no one knew where the new bottom would be.

New Jersey's state pension fund manager, Roland Machold, had $6 billion worth of South Africa–related stocks that he was obligated to sell before the middle of 1988, under New Jersey's anti-apartheid divestment law. His staff had regularly been selling between $100 million and $200 million worth of stock a day. "Our


MARIA BASTONE

A New York Stock Exchange trader reacts to the Crash of 1987.


The Philadelphia Inquirer

Vol. 317, No. 112

Tuesday, October 20, 1987

Thirty-Five Cents

# Dow Dives 508.32 Points In Panic on Wall Street

## Navy blasts Iran oil site in retaliation

## Billions lost in trading



Front page of *The Philadelphia Inquirer* the day of after the crash, October 20, 1987.

noses were to the South African grindstone," he later recalled. But Machold had grown increasingly wary of the market and had put the cash from these sales into safer investments.

Sometime after 2 PM on Monday, October 19, one of his colleagues came into his Trenton office and told him what was happening at the NYSE. He hurried to the room that served as the fund's trading desk. In one corner was a small Knight Ridder newswire printer, perched on a flimsy tripod, spewing out four-inch-wide strips of newsprint with barely an eye blink between updates. The market was down almost 300 points.

Machold looked at the individual stock prices spooling out of the machine. He instantly asked, "How much cash do we have?" His team found about $200 million that could be quickly deployed, and they started trying to get through to brokers to buy some of the dirt-cheap blue chips going begging. Working against the clock, they put the whole $200 million to work, plucking up bargains as fast as they could.

They were the bargain hunters the Berkeley professors who had designed portfolio insurance had been counting on to take the other side of the trades required by their hedging strategy. But with no way of knowing that the avalanche of sell orders was coming, Machold's team had limited time and limited cash, compared to the giant institutions lining up to sell at any price. "Nothing would slow that market," Machold said. As the clock's hand moved toward 4 PM, the market dropped like a bouncing boulder, smashing through the 300-point loss line, plunging past the 400-point loss line. A strange hilarity seized Machold and his staff. They began to perversely applaud each new negative milestone, even though it meant their own stock portfolio's value was shrinking.

When the index was down 492 points, it bounced back up a bit—and the little squad in the trading room groaned. Then, in a final rush, the Dow broke the 500 level and finished down a staggering 508 points. "We all cheered," Machold said. "What else could we do?"

When Phelan saw his Washington visitor out the door and returned to his desk in the early afternoon, the Dow was already down a historic 200 points. Then, as he watched, the market simply "melted away." At the close, the Dow stood at

1,738.74 points; it had fallen 22.6% since the opening bell. That was twice as bad as the worst day of the fearsome 1929 crash, and the point loss was almost five times worse than Friday's epic decline. In its speed and scale — an unprecedented 604 million shares had been traded, twice as many as on Friday — it was the most apocalyptic one-day crash the market had ever seen. Monday, October 19, 1987, would thereafter be known as Black Monday. $

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This article was adapted from *A First-Class Catastrophe: The Road to Black Monday, the Worst Day in Wall Street History,* by Diana Henriques (Henry Holt and Co., 2017).

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