FORTUNE

FEBRUARY 1, 1988

MONEY & MARKETS/COVER STORY

THE BATTLE OVER MARKET REFORM

A profound change in investor psychology caused Black Monday. Increased regulation won't necessarily cure that—or prevent another crash.

■ *by Robert E. Norton*

BID FAREWELL to 1987, the year of the stock market's boom and bust, but don't imagine that you've heard the last of Black Monday. Reverberations from the Brady Commission's recently released report to President Reagan are still shaking Wall Street, presaging cannonades to come. Continuing studies by the Securities and Exchange Commission, the Commodity Futures Trading Commission, the General Accounting Office, various congressional committees, and academics by the busload hark back to another era when the famed Pecora investigation met to weigh the evidence in the aftermath of the Crash of 1929. From that came the regulations enshrined in the Securities Acts of 1933 and 1934, which define the markets as we now know them. The outcome of today's battle over market reform may be every bit as significant for capital raising and investors as the rules laid down in the New Deal.

The Brady report cites a well-worn catalogue of reasons why investors were skittish before Black Monday: the disappointing trade deficit figures, the dollar's gyrations, the spike in Treasury bond rates, and the threat of a corporate takeover tax. But the best and most obvious explanation for the crash is the same one that triggers all declines. Investors, collectively deluded, bid stocks up too high, panicked, and bid them down too fast. Presidential commissions and congressional investigations don't want to hear this. They want someone to blame. The great danger now is that the well-intentioned debate over market reform will become a lynching party.

The reformers are getting support from some unlikely allies. Listen to John Phelan, chairman of the New York Stock Exchange, explaining the need for additional regulation of the Chicago commodities markets where index futures and futures options trade: "Free markets eventually destroy themselves." The Chicagoans, in turn, want to blame Black Monday on the "specialists" who work on the stock exchange floor and are supposed to keep trading "orderly."

The search for quick regulatory fixes will almost certainly deflect attention from the larger lessons of Black Monday. As the empirical evidence emerges, two themes stand out. First, the cause of the crash was a simple but profound change in investor psychology, which fed on itself and turned into panic that Monday afternoon. Second, the nature of the crash reflected the growing dominance of institutions such as pension funds and mutual funds, and the speed and ease with which investment decisions can be translated into action. When the interaction of these phenomena caused everybody to rush for the door at once, the markets' machinery could not handle the volume.

You have read a lot about October 19, but it will pay to take one more look at what happened. The day started out badly, though it was worse in degree, not in kind, than the series of bad days that preceded it. The Dow Jones industrial average had dropped 261 points on the three days before Black Monday. It fell a further 200 points in an hour and a half Monday morning on heavy volume of 154 million shares, nearly the volume of a normal day, but then rallied. Only in the afternoon did the market take fright. At 2:45 the Dow hovered around 2000, according to the Brady Commission. The final plunge to 1738 took just 75 minutes and sucked the average down one point every 17 seconds as some 125 million shares came pouring in.

What was on investors' minds? Fleet-footed research by Robert J. Shiller, professor of economics at Yale University, helps answer the question. Shiller had been surveying investor behavior both in general and during market drops for more than a year. His study of Black Monday, conducted within four days of the crash, polled 1,000 individual and institutional investors. What he found to be uppermost in their minds that day was not the economy, bond rates, or the dollar: It was the 200-point drop that morning following the substantial declines of the days before.

Investors who were selling stock before the crash told Shiller they did so because they thought the market was overvalued. Rational behavior, for sure. But he also discovered that two-thirds of the individuals and 93% of the institutions that were buying before the crash said they thought the market overvalued too. Many of these simply reckoned they could get out before a collapse. They discovered too late that the collapse was at hand and panicked. Their behavior may have been irrational, but it was hardly illegal, and there is no way to regulate greed and overconfidence out of humanity.

People are disinclined to take the long, philosophical view when they have lost a lot of money. The search for culprits includes computerized trading; the futures markets and the trading activities that make use of them, such as program trading, index arbitrage, and portfolio insurance; the NYSE specialists; and the mechanical functioning of the over-the-counter market. continued

The Brady Commission's most sweeping conclusion is that the crash was exacerbated by the lack of any central regulatory authority to monitor the markets—stocks, futures, and options. It proposes that a superagency should be set up to oversee regulatory issues that cut across markets, and that the Federal Reserve Board is best suited to assume that role.

One market, says the report, should have one regulator. Had there been this kind of centralized scrutiny on Black Monday, the report implies, the crisis would have been better handled.

But do the markets need oversight from yet another government agency? Black Monday was, after all, the first market crash since the creation of financial futures, and the regulators were caught flat-footed. They nevertheless did their jobs pretty well. The SEC watched the brokers; only a few small ones failed. No defaults occurred on the Chicago commodities exchanges, monitored by the CFTC. And the Fed pumped money into the system as it is supposed to. Officials of the three agencies collaborated during the crash and have done so since. Brady's superagency was greeted coolly by the White House.

Though the report does not lambaste the Chicago commodities exchanges, they are the prime targets of many other reformers. Over the past decade the Board of Trade and the Mercantile Exchange have given birth to a googolplex of futures and options contracts designed to appeal to professional investors. Index futures allow money managers to hedge their stock portfolios almost the way a farmer hedges his wheat with a commodities contract. The futures replicate a basket of securities in a well-known index, such as the Standard & Poor's 500, protecting an investor against a market decline by allowing him to sell at a fixed price at a future date. The contracts also open up possibilities for arbitrage between the "cash" market—that is, the stocks in the portfolio—and the forward market of index futures.

SOME REFORMERS believe the arbitrage between index futures and stocks contributed heavily to the market decline. When stocks fell, this argument goes, managers automatically sold futures, which drove down stock prices, which triggered further selling of futures, and so on. Phelan raised the possibility of this kind of "market meltdown" in a speech a year ago. On Black Monday he and many others concluded that a meltdown was in process.

The two futures-related activities that many reformers were quick to blame for Black Monday were program trading and portfolio insurance. "It was a witch hunt," snapped Leo Melamed, chairman of the executive committee of the Merc and one of the architects of the S&P 500 index future. How quickly program trading was blamed for the collapse was brought home forcefully to William J. Breck, who is in charge of index arbitrage at Shearson Lehman Brothers. On the Friday evening after the crash, Breck ducked into a tavern near his suburban Connecticut home and was confronted with, "You goddamn program traders, you started this. I hope they send you to jail." There was an expectant hush in the barroom. "He was a stockbroker, a guy I knew," recalls Breck with some astonishment. "*A guy in the business!*" Breck prudently departed.

Program trading in its broadest sense is simply the purchase or sale of baskets of securities instead of single issues. Pension funds and other institutional investors buy these baskets routinely, and the trades often involve as much as $100 million of stocks. But the term is now used almost exclusively to describe arbitrage between the stock market and the index futures market. If, for instance, the price of the S&P 500 futures contract rises above that of the S&P 500 index itself, selling the futures contracts and buying an equivalent amount of S&P stocks will guarantee a profit.

Portfolio insurance is an extreme example of hedging with index futures. It is an investment strategy by which an investor attempts to shift more of his portfolio into stocks when the market is rising, and shift out of stocks—into cash or bonds—when it is falling. Portfolio insurers implement the strategy with index futures rather than the stocks themselves to get the transaction done faster and hold down commission costs.

Come Black Monday, program trading and portfolio insurance worked together at times to speed the downward spiral. But the futures and stock markets were so out of kilter during much of the day that most portfolio insurers and index arbitragers were forced onto the sidelines to wait out the decline. Futures traders have been saying ever since that there was little if any causal relationship between futures and stocks that day.

In December the New York Stock Exchange released its own study of program trading written by former Attorney General

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Nicholas deB. Katzenbach, which tended to confirm this view. Although highly critical of futures markets, the Katzenbach report estimated that only 7% of Black Monday's trading volume reflected program trading or portfolio insurance. While this figure was nearly double the norm, it was well below the 19% peak in June.

Fixing some things is easy. Portfolio insurance is likely to go the way of the many hoary stock-picking strategies it resembles. For it did not perform as advertised: Investors were not fully protected. Consequently, the amount of money that portfolio insurers have under management has dropped from an estimated $80 billion on Black Monday to less than $40 billion.

The Chicago exchanges have taken another step to assuage fears of panic selling. Shortly after the crash, they imposed the same kinds of price limits on index futures that exist in traditional commodities contracts. If the price rises or falls to the limit, trading must be halted for the day. Should the S&P 500 contract, for example, drop 30 points—it dropped 80 points on Black Monday—the Merc is now obliged to suspend trading until the orders can be brought into balance or until the next morning.

A notion rapidly gaining respectability is that the futures exchanges should raise their margins on index futures to the same 50% level as those on stocks. Because lower margin requirements make futures "cheap" to buy, reformers fear that futures attract money that would otherwise go into stocks, which they view as less speculative and more worthy. But the effect would be to make futures contracts prohibitively expensive and kill off the market—quite possibly the intention of some opponents.

In judging this debate, it is important to note that margin plays a different role in futures trading than in stock trading. When a buyer margins a stock, the brokerage firm lends him up to half the money to buy it. By contrast, the margin on a futures contract is not a loan; it is a good-faith deposit that the contract will be performed.

While the 50% limit on stock margin loans is designed to keep investors from getting in over their heads, margins on futures contracts protect the financial integrity not of the buyer or seller but of the commodities exchange itself. At the end of each day, the profit or loss on the contract is tallied; the buyer or the seller, whichever has lost money, pays the exchange. If payment can't be made, the exchange sells out the loser's position. When trading is volatile, payment is required periodically during the day.

Index futures margins usually range up to 10% of the value of the contract, which is typically $125,000. But they must be posted by both buyer and seller. The exchanges set their own requirements and frequently raise or lower margins to reflect the volatility of trading in the contract. The Chicago Merc raised its margins on the S&P 500 contract four times in late October, from 5% to 17%. By contrast, stock margins, set by the Federal Reserve, have been at 50% since 1974.

Commodity traders think they can do it better. Says Karsten "Cash" Mahlmann, chairman of the Chicago Board of Trade: "This year our exchange has changed margin requirements some 60 times on various contracts. If you delegate that authority to a federal agency, there is no way it can react as fast."

While the margin rules should be examined to see that they don't make any one market much more attractive to customers than another, arbitrarily equalizing percentages makes no sense. In addition, any overhaul of margin requirements should at least blow the dust off the stock margin rules. Who knows if the current 50% is better than, say, 40% or 60%?

Draconian reform usually has perverse effects. Leo Melamed at the Merc warns that regulatory meddling could drive the futures markets offshore. He's an interested party, but has a point. "Information moves on these screens," he says with a significant glance at the six that flank his desk. "Punish the efficient market in this country, and it will simply move to another country." Those who think that a vibrant index futures market could not develop in, say, Tokyo, should remember the Eurobond market. American taxes and regulation fostered its growth—in London rather than in New York. The taxes and regulations were lifted years ago, but the market stayed put.

REFORMERS are on surer ground when they look for Black Monday's culprits in the mechanisms of the New York Stock Exchange and the over-the-counter markets. Most scrutiny has been correctly focused on the lapses of the NYSE specialists (see box at left). But the exchange faced two other problems: Its computers were not capacious enough to handle the heavy volume of trading, and it is still geared to handling many small trades rather than the huge blocks that have become today's standard.

Phelan has been rightly hailed for anticipating the need for more computer muscle ten years ago and lobbying exchange members to pay for it. Even so, the exchange was so underpowered that before trading opened on Tuesday, October 20, he was forced to ask that program traders stop using SuperDot (the "dot" stands for designated order turnaround), the computerized order execution system that executes program trades and much of the exchange's regular trading—half the total volume normally and as much as 80% on busy days. Although Phelan said he was trying to prevent a market meltdown, he was really trying to prevent a SuperDot meltdown.

SUPERDOT ORDERS are usually executed within 60 seconds of being entered; by the afternoon of Black Monday, there were delays of up to 40 minutes. The worst snags were with limit orders, which are instructions to a broker to buy or sell a stock if it hits a certain price. Limit orders require more computer memory and are in the system longer than orders to buy at the market. In the rapidly dropping market, stocks breezed past their limit prices so fast that orders could not be executed, and people who wanted to sell at, say, 45 were still owning the stock when it hit 26. By Monday afternoon the system was straining, gasping, and threatening to crash.

The mechanical problems are exacerbated by the exchange's continuing to function as a retail marketplace as if institutional block trading had never arrived. The big brokerage houses typically bypass the exchange when they handle blocks of stocks for their institutional clients, merely reporting the price at which the transaction took place to the floor of the exchange. On Black Monday, unwilling to risk their own capital to buy their clients' shares when there were no other institutional buyers, the brokers pulled back, and the exchange suddenly found itself handling unprecedented institutional selling.

As a result, it could not fulfill its commitment to provide a market where each stock trades at a price as close as possible to its last trade. Heavy selling and a growing backlog of orders caused prices to plunge in the afternoon. Trades in the same stock occurred within minutes of each other at prices that were miles apart. Nervous investors and their brokers believed that if they could only get out *immediately*, they would get a higher price than the market in fact was able to offer because stocks were falling so fast. The dynamics were in place for a classic panic.

The NYSE claims that SuperDot's glitches have been fixed; it did in fact function smoothly throughout the following weeks of high volume. The computer experts say they are ready for more 600-million-share days, should they recur, but reformers have their own ideas about coping with a balky market. The most drastic is an idea borrowed from the futures exchanges: that daily price limits on individual stocks or on a market average be imposed. If the Dow dropped, say, 300 points, trading would cease for the day.

Indeed, a report in the *Wall Street Journal* that the Brady Commission would recommend such limits provoked howls of outrage from brokers as well as investors. It makes no sense to extend this long-established commodities practice to the stock market, where it has never been used. And in fact, when finally unveiled, the Brady report stopped well short of this reform. But the concept still has supporters. Says Max C. Chapman Jr., president of Kidder Peabody and a backer of the idea: "Limits would give the market time to assimilate information and take out the violent swings."

The danger is that limits could become self-fulfilling: In a panic comparable to Black Monday's, traders might try to exit at any price as the market approached the limit. The market could jerk down its limit again as soon as it opened the next day. Days might pass before everyone who wanted to sell would be able to. As disruptive as Black Monday's decline was, the stock exchanges were all open for business and trading shares fairly continuously the very next day. Says Fischer Black, a market strategist at Goldman Sachs: "Why do it? Why pretend? During the silver crisis in 1981 there were 17 successive days when the price dropped to its limit. Limits didn't prevent the price from declining."

Better ways exist to help the market function more efficiently. The solution to the price dislocations of the once dreaded triple witching hour suggests an avenue for exploration. Triple witching hours occurred just before 4 P.M. on Fridays once a quarter when stock index futures, index options, and options on individual stocks expired simultaneously. The NYSE was hit with selling tsunamis in the few minutes before the close of business, posing problems similar to those of Black Monday's.

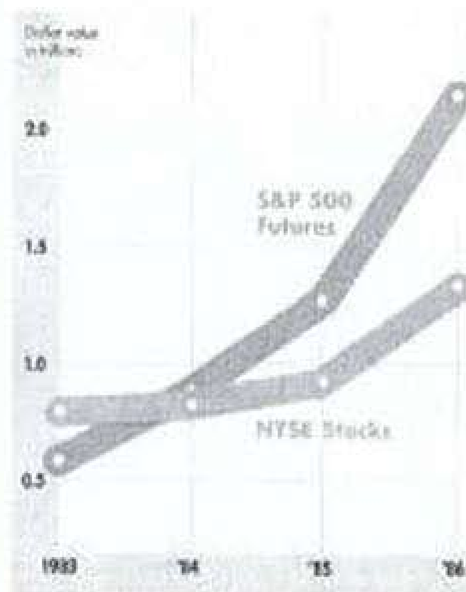
Last June, after prodding from the SEC and the CFTC, the Merc moved the settlement time of the futures contracts from the afternoon to the morning, and the NYSE required that buy and sell orders be placed with specialists before the market opened. This enabled the specialists to advertise, in effect, for buyers and sellers at the new prices indicated by the orders. Brokers could then change their orders if they didn't like the proposed price, and in this process, brokers and specialists hammered out an opening bid.

An extension of this principle could be adopted to handle sudden selling waves. The exchanges could call a brief halt in trading to allow prices to be worked out. If it were carried out in conjunction with the commodities exchanges—where prices of index futures tend to rise and fall more quickly than stock prices—a halt in trading would help keep prices in the two markets from diverging as radically as they did on Black Monday. The Brady Commission called for something along these lines, although in only the vaguest language, referring to limits and trading halts as "circuit breakers." Asked for an example of how they might work, Brady said: "We did not get into the particulars of that. You can't in 60 days."

John Phelan defends the performance of his exchange and its specialists during the crash by pointing to the chaos that occurred in the over-the-counter markets. Unlike the NYSE's specialists, the 540 brokers who make markets in OTC stocks are not obliged to keep the market orderly. They simply advertise prices at which they are willing to transact business on terminals hooked into a computer network of the National Association of Securities Dealers (NASD). This is the system known as Nasdaq.

Futures Trading Booms

The turnover of stocks represented by index futures contracts is substantially higher than stock trading on the NYSE.



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IN ONE SENSE, Black Monday tested the relative merits of these over-the-counter market makers vs. the exchange's specialists. The OTC system crashed utterly, while the specialists merely ran for cover. Most OTC trades have to be made orally, and telephones were either jammed with calls or went unanswered by dealers who didn't want to buy in a falling market. There were mechanical problems as well, as OTC dealers could not update their prices fast enough on the aging computer system. Some were offering to sell stock at a *lower* price than other dealers were offering to buy it. When advertised prices are out of whack like this, Nasdaq's automatic execution service rejects the order. The only way to get it executed is . . . on the telephone.

The NASD's own proposal for reform is a tough one and is likely to be all that is needed. Market makers will have to have more capital, they will be required to hook up to the automated order system (this is optional now), and they will be obliged to accept any order under 1,000 shares. The computer will execute small trades even if the advertised prices are out of line, forcing dealers to update quotes constantly. The market maker will be charged with performing a public service, as the NYSE specialists do: standing ready to buy or sell stocks at all times. Spreads between the bid and offered prices are likely to widen to compensate the dealers for the risks of mandatory market making.

Beyond the specific issues, reformers are really fighting a rear guard action against two perceived changes in the markets. The first is the growing role of institutions at the expense of the much romanticized "little guy." Indeed, a shotgun blast of institutional selling hit the market on Black Monday. Yet for the whole day institutions accounted for only 48% of trading, the same as on a normal day. The average for the past year and a half has been 50%. Seven years ago, on any given day the big boys' share of trading volume was less than 30%.

No cabal is responsible for this change. Institutional trading is done on behalf of the 76 million individuals who are enrolled in pension and mutual funds. In 1980 some 24 million individuals directly owned stocks traded on the Big Board. By 1985, the most recent year for which the exchange has figures, the number had inched up 4% to just over 25 million. During the same time, the number owning mutual funds increased 28% annually, from just six million to 22 million. Admittedly, the professionals that manage the mutual and pension funds trade more aggressively than individuals, helping to fuel a boom in trading volume.

It is a myth that this institutional trading is responsible for "unprecedented volatility," in the markets. Careful studies have shown that markets were just as volatile in prior decades—as measured, for instance, by the number of days the Dow went up or down by more than 1%—as in recent years. The Brady report confirmed that volatility has not been high by historic standards. Since Black Monday, of course, the markets have been more volatile than at any time since the 1930s. But don't blame institutions for that. Look to the plummeting dollar, confusion over the state of the world economy, and fear engendered by the crash itself.

The second concern woven through the reformers' agendas is fear of speculation. The Katzenbach report, for instance, concludes that there is no evidence that futures trading has increased volatility in the equity markets or that it played a significant role on Black Monday. Yet the author asks rhetorically: "Is it sound public policy to convert financial markets from focusing upon investment and longer-term profits into mechanisms for trading with an eye to the immediate trading profit?"

Futures markets have been fighting their casino image for years, even as cold-blooded analysis has shown that they serve important functions in the transfer of risk. Several studies, including one by the staff of the Federal Reserve system, have found them useful additions to the markets because futures improve liquidity. The portfolio managers and traders who use futures contracts to hedge have seconded that opinion.

What reformers are trying to do is legislate investor psychology to flatten out the cycles of fear and greed. In December, Representative Edward J. Markey (D-Massachusetts) held hearings to investigate complaints that small investors had been pushed into unsuitable investments by rapacious brokers. The commissioner of the North American Securities Administrators Association presented complaints he had received over a hotline. The chief horror story was a gruesome tale of a paraplegic woman who reportedly lost her savings when her broker encouraged her to trade naked options on index futures. But the hearing fizzled when Utah Republican Howard Nielson's questions revealed that the hotline information was unreliable. Furthermore, Nielson calculated that the average "small investor" who used the hotline had a precrash portfolio of $850,000.

The larger argument of those who disapprove of speculation is that it will undermine investors' confidence in the markets, imperiling the ability of companies to raise capital. Yet the number of individuals entering the market, at least through mutual funds, has been growing rapidly through the recent "speculative" era, as have new securities issues, which have increased 360% between 1980 and 1986.

DEFENDERS of free markets, like Merton H. Miller of the University of Chicago, who with Franco Modigliani formulated models of capital structure and dividend policy that are the basis of much modern financial theory, are suspicious of such opposition to speculation. Says Miller: "These are social workers' arguments with a lot of learned economists' names attached to them." The proponents, he says, "are basically aristocratic people who think that the peasants shouldn't be gambling."

That does not mean the markets are free to ignore the lessons of Black Monday. They must come to terms with the fact that today's institutions can respond to changes in investor psychology with more suddenness and force than characterized the markets of earlier decades. The different exchanges had better learn to work together before they discover the Brady report's superagency knocking their heads together.

But more regulation really isn't necessary. "The catalyst for change has to be the forces within the industry itself," says George Ball, chief executive of Prudential-Bache. The government should continue to protect investors from abuse and require companies to provide adequate and accurate shareholder information. In most ways, though, the evolution of the market is best left to the market itself. ■

An inventor *of the S&P 500 index future, Leo Melamed of the Merc, warns that overzealous regulation could drive the futures market offshore, just as it did Eurobonds.*