

For release on delivery
10:00 A.M., E.D.T.
May 25, 1988

Statement by

Wayne D. Angell

Board of Governors of the Federal Reserve System

before the

Subcommittee on Domestic Monetary Policy

of the

Committee on Banking, Finance and Urban Affairs

of the

House of Representatives

May 25, 1988

Mr. Chairman, thank you for this opportunity to present the views of the Federal Reserve Board on the application of federal margin regulations to equities and equity-related futures and options. The Report of the Brady Task Force and other major studies of the stock market crash have emphasized that these markets are, in effect, one market and that regulatory structures must be made consistent with this economic reality. In particular, these reports identified margin regulation as a critical intermarket regulatory issue on which greater consistency is needed. Margin regulation also was reviewed carefully by the Presidential Working Group on Financial Markets.

At the Federal Reserve we fully endorse the need for a consistent approach to setting margin requirements in the cash, futures, and options markets for equities. Indeed, we have been concerned about this issue since the introduction of stock-index futures in 1982. Shortly thereafter, the Board instructed its staff to prepare a thorough review and evaluation of federal margin regulations. The staff study was presented to Congress early in 1985, along with a letter from the Board containing conclusions drawn from the study and recommendations regarding the appropriate regulatory structure for margins.

We have reviewed these recommendations in light of last October's stock market break and have found that our views have changed little. The Board continues to believe that the primary objective of federal margin regulation should be to ensure the financial integrity of the markets, and thereby ensure contract performance, by limiting credit exposures of brokers, banks, other lenders, and, importantly, clearinghouses. The Board does not believe that higher margins should be imposed in an attempt to limit stock price volatility. In the Board's view, a link between financial leverage and stock price volatility has not been firmly established. The Board is concerned that the imposition of higher margins to control speculation in futures and options could significantly reduce liquidity in these markets and thus diminish the economic benefits they provide in terms of hedging opportunities and price discovery.

In the wake of the October plunge, the various futures and options exchanges raised margins on equity-related instruments to levels that generally appear adequate to preserve market integrity. Although margins in the stock-index futures and options markets remain lower than those in the cash markets, they, nonetheless, provide protection against credit losses against all but the most extreme price movements. Lower margins in the derivative markets can

provide such protection because futures investors are required to meet daily variation margin calls and because stock price indexes tend to be less volatile than prices of individual stocks. The various exchanges also have addressed the risks of extreme price movements by actions such as increasing clearing-fund guarantee deposits and enhancing their systems for collecting and paying intraday variation margin calls.

Nevertheless, the Board supports the expansion of the scope of federal oversight of margin policies to cover equity-related futures and options on futures. The integrity of the clearinghouses was maintained during the crash and credit losses to brokers in these markets proved manageable. In the months prior to the stock market crash, however, margins in the stock-index futures and options markets provided less protection against potential credit losses than those in the cash markets. There is sufficient possibility that at some point self-regulatory organizations (SROs) might establish margins that were inconsistent enough to present market problems or set them at levels that might present potential costs to other parties. Therefore, the Board believes that federal oversight is appropriate for ensuring that margins in the cash, futures, and options markets remain adequate and consistent.

The Board continues to believe, however, that the objective of maintaining market integrity can best be attained by delegating authority for setting margins to the various SROs--not only in the futures and options markets, but also in the cash markets. The role of federal authorities should be to monitor the actions of the SROs and to discourage actions that may pose a threat to market integrity. Should moral suasion prove unsuccessful, federal authorities should have the authority to veto such actions. The Board believes that the SEC and CFTC are in the best positions to monitor the margin-setting actions of the exchanges and clearinghouses they oversee. Both agencies have developed considerable expertise in the markets they regulate.

The regulation of margins clearly is a controversial issue. Some industry experts, federal regulators, and members of Congress have made quite different recommendations for reform. This lack of consensus appears primarily to reflect differences in objectives. Consequently, the next part of my testimony will elaborate on the Board's views regarding the appropriate objectives in the current economic environment. I will then outline the implications of those objectives for appropriate levels of margins in the cash, futures, and options markets. Finally, I will discuss the Board's views on how margin regulations

should be administered to ensure that the appropriate margins are established, and maintained.

Objectives of Federal Margin Regulation

The Securities Exchange Act of 1934 gave the Federal Reserve Board the authority to regulate margins on all corporate securities. At that time, the Congress sought to achieve three main objectives through margin regulations: (1) to constrain the diversion of credit from productive uses in commerce, industry, and agriculture to speculation in the stock market; (2) to protect unsophisticated investors from using margin credit to establish excessively risky positions; and (3) to forestall excessive fluctuations in stock prices.

The Board has reviewed each of the main objectives sought by Congress and is skeptical about either the need for, or the effectiveness of, margin regulations for these purposes. With regard to the first objective, the diversion of credit, the Board has concluded that margin regulations are not needed. The use of credit to finance purchases of stock does not reduce the amount of credit available to industry, commerce, or agriculture. The borrowed funds do not disappear; rather, they are transferred to the seller, who then reinvests the proceeds. If margin borrowings were very large, frictions in the credit markets might nonetheless have a small effect on the cost or availability

of credit. But margin borrowings today are much smaller relative to the size of the economy or credit markets than they were in the early 1930s. For example, at year-end 1987, margin and other securities loans together accounted for little more than one percent of total credit outstanding in U.S. financial markets.

The Board acknowledges that margin requirements probably have contributed to achievement of the second objective, the protection of unsophisticated investors from overly aggressive brokers. Margin requirements, however, seem a very crude tool for this purpose; they constrain sophisticated as well as unsophisticated investors and hedging as well as speculation. The Board believes that continuing and legitimate concerns about broker misconduct can and should be addressed more directly and more effectively by rigorous enforcement of existing rules of conduct for brokers. In particular, the provisions that require brokers to "know" their customers and to ensure that investments are "suitable" for their customers should be strictly enforced.

In any event, these first two objectives do not appear to be the focus of public concerns about margin regulation. Disagreements about appropriate levels of margins appear primarily to reflect disagreements about the third objective, the moderation of excessive stock price

fluctuations by limiting the leveraging of equity holdings. If the objective of margin regulation is to equalize the leverage obtainable in the cash, futures, and options markets for equities, futures margins would need to be raised to levels required in the cash markets and a complex schedule would need to be created for margins on options. On the other hand, if preserving market integrity is the primary objective of margin regulation, lower margins in the derivative markets than in the cash markets generally would be adequate.

Proponents of the use of margin requirements to limit leverage argue that there is an important relationship between the availability of leverage and the volatility of stock prices. However, existing studies of stock price behavior provide no persuasive evidence of such a relationship. With regard to leverage in the cash markets, the enactment of margin regulations does not appear to have reduced stock price volatility. Statistical analyses have not found any significant relationships between changes in initial margin requirements and stock prices. It is worth noting that credit-financed cash holdings of stock have remained a very small fraction of the value of outstanding shares; the ratio of margin credit to stock values has fluctuated in a narrow range between one and two percent over the past 30 years.

Of course, recent concerns about leveraged stock holdings have focused on the substantial leverage obtainable through index futures and options. Here too, though, there is no clear evidence that greater leverage has produced greater stock price volatility. Indeed, available evidence indicates that the principal users of such derivative products do not actually hold leveraged positions. Specifically, data from the CFTC's large trader reporting system indicate that prior to the crash about 70 percent of the open interest in the S&P 500 futures contracts was held by institutional investors that held offsetting positions via stocks or other derivative instruments. More generally, a vast literature has examined the effects of futures trading on cash market prices of commodities and other financial instruments and found little evidence of heightened price volatility.

The Board is concerned that attempts to reduce stock price volatility by substantially raising margins on equity-related futures and options could reduce liquidity in the markets for these instruments. In particular, the floor traders or so-called "locals" in the futures market likely would find their costs increased by higher margin requirements and might be forced to curtail their activities. To the extent liquidity were reduced, higher margins could actually increase the magnitude of short-term

price movements in both the derivative markets and the cash markets. In any event,, any reduction in liquidity would diminish the usefulness of the derivative instruments for hedging and price discovery.

In the Board's view, the primary objective of margin requirements for equities and equity-related futures and options should be to ensure that market integrity is not jeopardized by credit losses suffered by brokers, banks, or other lenders including, in particular, the exchanges' clearinghouses. In today's world, the Board believes the importance of this objective simply cannot be overstated. Because these markets are so tightly interconnected, the failure or financial impairment of any one of the major participants in the clearing system would promptly place great stress on all of the others. And as we saw last fall, problems in the equity markets are quickly transmitted to other financial markets, both in the United States and throughout the world.

Appropriate Levels of Margins

The Board's conclusion that the primary objective of margin requirements should be the protection of the integrity of the marketplace has strong implications regarding the analytical framework appropriate for evaluating the adequacy and consistency of margin levels in the cash and derivative markets for equities. The adequacy

of the margin should be measured by the probability that an adverse price movement would result in losses that exhaust the margin. Margins in two markets should be considered consistent if they provide equal protection against losses from adverse price movements.

Within this framework, consistency of margins does not imply equality of margins. In the cash, futures, and options markets for equities, in particular, equal margins imply very different degrees of protection, because of significant structural differences in the markets. One difference between the cash, futures, and options segments of the equity market that strongly affects the adequacy of margins is the relative volatility of prices. A basic principle underlying the establishment of adequate margin levels is that the lower the volatility of prices, the lower the level of margin needed for protection. Because stock indexes tend to be less volatile than prices of individual stocks, margins on index-based options and futures generally can be a smaller percentage of the value of the contract than margins on individual stocks and margins on options on individual stocks.

Another important consideration in determining the appropriate level of margin requirements is the period of time that investors are allowed to meet margin calls. The shorter this period, the smaller the size of price movements

that can be anticipated between the margin call and its response, and hence the lower the required level of margins. In futures markets, where investors are subject to daily settlement and mark-to-market procedures and can be expected to have liquid assets readily available to meet variation margin calls, margins need to be sufficient to cover all but the most extreme one-day moves in price. In cash markets, however, where investors are accustomed to five-day settlement periods and tend to be less liquid, adequate margins should be set to cover price movements over periods as long as five days.

The Board's staff has evaluated the implications of these differences in the cash and futures markets for the adequacy and consistency of margins. The staff calculated the percentage of daily changes in the S&P 500 index for recent periods that would have been covered by maintenance margins currently required by the Chicago Mercantile Exchange. They also calculated the percentage of five-day price changes of individual NYSE stocks covered by maintenance margins established by the New York Stock Exchange. These calculations suggest that, after adjusting for differences in the margin collection period and price volatility, the level of margins on index futures that are now in place would provide roughly the same or even greater protection against loss as the margins on stocks.

Specifically, margins provided under current requirements by the SROs on both futures and stocks would cover 99 percent of price movements even in the recent volatile period. If the pattern of price movements in the future returns to that typical of the pre-October 1987 period, some lowering of margins would be acceptable. But if price volatility were to rise, higher margins would be called for.

Setting margins to cover 99 percent of expected price movements clearly will not provide coverage for those rare, extraordinary price moves such as occurred on October 19. Because margin levels sufficient to provide protection against all possible price movements would impose unacceptable costs to market participants and the liquidity and efficiency of markets, the Board recognizes that mechanisms, other than margins, must be used to address the risk of large price movements. Indeed, there are safety mechanisms currently in place that address this risk, such as capital requirements, clearing-fund guarantee deposits, and intra-day variation margin payments. Moreover, the recommendations of the Working Group on Financial Markets concerning a circuit-breaker mechanism and credit, clearing, and settlement improvements should add other significant protections against financial system risks from extreme price movements.

Margin levels on stock-index futures and options products were increased substantially during the crash and remain elevated. In addition, the options exchanges will soon impose further increases in margins for options on individual stocks and stock indexes. And the Chicago Mercantile Exchange and the Chicago Board of Trade have established coordinated procedures for routine collection and payment of intra-day variation margins. The Board believes that these actions should significantly enhance both the financial integrity and the liquidity of the derivative markets in periods of stress.

Scope and Structure of Federal Margin Regulation

The Board's conclusion that protection of the marketplace should be the primary objective of margin regulation also strongly influences its views on the appropriate scope and structure of regulation. Because the cash, futures, and options markets for equities are so closely interrelated, a threat to the financial integrity of any one market is a threat to all of them. Consequently, if federal margin regulations are to ensure the integrity of the cash markets for equities, their scope should be extended to cover the markets for equity-related futures as well.

With regard to the structure of regulation, the Board believes that federal authority over margins in the equity-related futures markets should be delegated to the exchanges' self-regulatory organizations. Moreover, we also think that authority for setting margins in the cash markets should be delegated to the SROs. These organizations quite clearly have a strong economic interest in maintaining the integrity of their marketplaces. Moreover, in those areas where they have already been delegated authority, they have taken a more flexible and sophisticated approach to setting margins. If given authority to set initial margins in the cash markets, they might, for example, adjust initial margin requirements to reflect differences in the price volatility of individual stocks.

Nonetheless, the Board believes that federal oversight of the SROs would provide important benefits. First, federal authorities would review the process by which an SRO sets margins to ensure that margins are designed to provide protection against losses from all but the most extreme price movements. If margins do not appear to provide such protection, the federal authorities should have the power to veto the SROs' actions and impose higher margins. Second, federal oversight would foster coordination among the SROs in the cash, futures, and options markets.

The Board believes that the SEC and CFTC are the federal agencies best suited to provide oversight of margin policies in the markets they regulate. The SEC has long overseen the setting of maintenance margin requirements in the cash markets and margins in the options markets. The CFTC, by virtue of its broad experience in the regulation of futures markets, is best able to oversee the setting of margins on stock-index futures products. Although the Board also has some expertise in the area of margin regulation, it does not feel comfortable with proposals to extend its margin authority to cover equity-related futures contracts. Oversight of margins requires an agency intimately involved with, and aware of, the day-to-day workings of the particular market being regulated. It would be difficult, costly, and, in the final analysis, wasteful for the Board to replicate the expertise developed by the SEC and CFTC in their respective areas. Furthermore, active oversight of margins might distract the Board from its primary responsibilities: the conduct of monetary policy and the establishment of regulations conducive to the safety and soundness of the banking system. The Board anticipates, however, that it will continue to participate in future discussions about regulatory reforms such as those currently being conducted through the Working Group on Financial Markets.

Thank you again for this opportunity to present the Federal Reserve's views on federal margin regulation.