TESTIMONY OF

DAVID S. RUDER
CHAIRMAN
U.S. SECURITIES AND EXCHANGE COMMISSION

BEFORE THE SENATE COMMITTEE ON
AGRICULTURE, NUTRITION AND FORESTRY

CONCERNING THE OCTOBER MARKET BREAK

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I. INTRODUCTION

The October market break was one of the most dramatic events in the history of the U.S. financial markets. The steep and abrupt decline in the markets sent tremors through the investment community and individual investors. On October 21, I directed the Commission's Division of Market Regulation to prepare a comprehensive study of these events. The Commission's Staff Report, released on February 2, 1988, is a thorough account and analysis of the market break. On February 3, in my testimony before the Senate Banking, Housing and Urban Affairs Committee I set forth the Commission's recommendations. I am pleased to present this testimony describing the market break, setting forth the Commission's February 3 conclusions and recommendations, and reporting progress in implementing those recommendations.

II. SUMMARY OF OCTOBER MARKET BREAK

During October 1987, the nation's securities and stock index futures markets experienced an extraordinary surge of volume and price volatility. The most widely followed indicator of the U.S. stock market's movements, the Dow Jones Industrial Average ("DJIA") index of 30 stocks listed on the New York Stock Exchange ("NYSE"), declined on October 20 to its 1987 low of 1708.70. That market low was more than 1,000 points (37%) below the DJIA's August 25 high of 2722.42. After erratic trading over the next few trading sessions, the DJIA stood at 1,994 on October 30, down over 26% from its August high point, although still above its December 31, 1986 level of 1895.95.

The second half of October was marked by extreme volatility and volume:

	DJIA PRICE CHANGE	VOLUME (MILLIONS OF SHARES)
Wednesday, October 14	-95.46	210
Thursday, October 15	-57.61	266
Friday, October 16	-108.35	344
Monday, October 19	-508.32	608
Tuesday, October 20	+102.27	613.7
Wednesday, October 21	+186.84	452

Thursday, October 22	-77.42	395
Friday, October 23	+0.33	247.5
Monday, October 26	-156.83	308.8
Tuesday, October 27	+52.56	260.2
Wednesday, October 28	+0.33	279.4
Thursday, October 29	+91.51	258.4
Friday, October 30	+55.20	303.4

Large price movements occurred to a greater or lesser extent in all of the nation's securities and index futures markets during the second half of October. In particular, prices for the most actively traded index futures -- the S&P 500 December futures contract ("SPZ") traded on the Chicago Mercantile Exchange ("CME") -- fluctuated even more widely than those for the underlying stocks (termed the index's "cash" price). During the weeks of October 19 and 26, the SPZ futures experienced an unprecedented period of trading significantly below the index stock prices. Although the theoretical value for index futures normally is slightly above the price of the underlying stock (a so-called "premium"), from October 19 to October 28 the normal price relationship between the futures and stocks was inverted. With a few brief exceptions, the futures traded at a discount to the stocks. Although the discount eventually disappeared, by the end of October the price of an SPZ contract had fallen to 259.35, down 24% from its August 25 high of 341.25.

The staff reviewed trading patterns during the period from October 6 to October 21, and reconstructed program trading[1] activities, including stock index arbitrage[2] and portfolio insurance.[3] The staff concluded that no single factor -- economic, structural, or psychological -- was responsible for the size and breadth of the October 1987 market break. To the contrary, the staff suggests that a variety of factors came into play during the key trading days that affected investment and trading decisions.

The staff analysis of trading suggests that the initial decline that immediately preceded the October 19 market break was triggered by changes in investor perceptions regarding investment fundamentals and economic conditions. Although these changes acted as the "trigger," institutional stock selling was the largest single direct factor responsible for the initial opening decline on October 19. Thereafter, panic selling in a broad range of stocks, caused by a variety of factors, coupled with an absence of buyers (except at distressed levels), primarily was

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1 Program trading is the trading of a whole portfolio or basket of stocks.

2 Index arbitrage is the simultaneous purchase (or sale) of stocks that comprise or closely track a stock index and the sale (or purchase) of either futures or options on that index.

3 Portfolio insurance is a hedging strategy designed to control market risk for a broad based portfolio. Typically, stock index futures are sold when the value of the portfolio decreases a certain percentage, and are repurchased when the portfolio regains this loss. If the futures market becomes congested and too costly, some portfolio insurance plans call for the direct sale of stock to supplement sales of futures.

responsible for the free-fall decline that characterized the final hour of trading on the NYSE on October 19.

In addition, rapid, large stock and futures sales by institutions, while not the "sole cause" of the market break, were a significant factor in accelerating and exacerbating the declines. On October 19, index arbitrage and substitution[4] program sales were 37.6 million shares, portfolio insurance sales were at least 39.9 million additional shares, and other program sales were an additional 11.8 million shares. Together they comprised 14.7% of total NYSE volume and 21% of total volume in S&P 500 stocks. During certain critical trading periods, index arbitrage or portfolio insurance -- or both -- accounted for between 30% and 65% of total NYSE volume in the S&P 500 stocks.

Moreover, during specific critical time periods, total program selling represented an even more significant portion of total S&P 500 stock volume. Between 1:00 and 2:00 p.m. on October 19, the combination of selling from portfolio insurance and index arbitrage totalled more than 40% of volume in the stocks comprising the S&P 500 index, and more than 60% in three different 10 minute intervals within that hour. Portfolio insurance selling in stocks and futures was particularly significant on October 20, with much of that selling being done by a single large institutional investor that executed large portfolio insurance trades in both the stock and futures markets.

In addition to direct effects, the existence of futures trading and the use of derivative products in program trading strategies had a significant negative psychological impact on the markets, particularly on October 19. A market "overhang" effect in both the futures and stock markets, demonstrated by large futures discounts, discouraged buying by market participants. In particular, institutional traders were discouraged from participating in the stock market on the buy side, specialists from committing capital to maintain fair and orderly markets, and block positioning firms from maintaining normal levels of activity.

The effects of the October market break have not been confined solely to a one time dramatic change in the level of stock prices. The aftershocks of October 19 have continued to affect the markets. For several months, quote spreads continued to be wider, and liquidity and continuity substantially lower than before the October market break, and market volatility was substantially higher than it was before October. As recently as January 8, 1988, the Dow Jones Industrial Average declined 140 points in one day.

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[4] Index substitution is the sale of a portfolio of stocks by an institution that owns the portfolio and the substitution for the portfolio with purchases of futures on an index that the institution's portfolio replicates. The strategy is designed to improve the portfolio's performance by capturing arbitrage profits.

III. COMMISSION'S CONCLUSIONS

Foremost among the conclusions to be derived from the Staff Report is that the markets for stocks, stock index futures, and stock index options form a linked market.[5] Although the three markets are physically distinct, marketplace boundaries are crossed to such an extent and with such frequency that these markets are unified. This unified market is most clearly evident for NYSE stocks. Stock index futures and stock index options are used as economic substitutes for NYSE stocks, and, under ordinary circumstances, arbitrage links the prices in these three markets.

The conclusion that the three markets are linked does not dictate that the regulations governing each individual market should be identical. The Commission recognizes that each market appropriately has its own distinctive products, regulations, procedures, and systems of trading.[6] The speed with which capital moves among these markets and the high degree of pricing correlation among them, however, require that regulations governing each individual market take into account the numerous intricate relationships among the markets and the impact that trading in any one market can have on trading in the others.

A second important conclusion is that new trading mechanisms cause extraordinary peak volume and volatility that at times can overwhelm the capacity of the markets. Further, certain institutional strategies increasingly rely upon basket or portfolio trading rather than upon judgments as to the investment value of individual stocks. There is nothing intrinsically undesirable about portfolio trading. For large investors, holding a large portfolio of securities is a means of diversifying investments in order to protect against market movements in a single security. When portfolios grow to the size where billions of dollars are allocated to the equity market, an individual stock approach may no longer be a safe or efficient method of equity investing. As a result many large institutions view the equity market as a single investment. Instead of valuing individual securities, they balance their portfolios among equity, debt, and other broad investment categories using stock indexes as a means of investing in equities. The task of setting relative prices among the individual securities that compose the equity indexes is left to other investors.

In addition, the futures market, because of its lower transaction costs (including lower margins), speedier executions, and at times greater liquidity, has become the market of choice for large institutional investors seeking to reallocate or hedge their stock portfolios. Because large portfolio traders may choose to enter the futures market first, and because the nature of futures trading allows futures prices to change more rapidly than their corresponding equity prices, futures prices often lead equity prices. As a consequence of these factors, price discovery for portfolios of stocks now sometimes occurs in the futures markets, with prices transmitted to the

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[5] In this respect, the Commission's conclusions are similar to those of the Presidential Task Force on Market Mechanisms. See Report of the Presidential Task Force on Market Mechanisms ("Task Force Report"), at vi.

[6] Cf. Section 11A of the Securities Exchange Act of 1934 ("1934 Act"), which specifically endorses different subsystems within a national market system.

stock market either directly through arbitrage or indirectly through the signals created by spreads between the futures and stock prices.

On October 19 and 20 the amount of portfolio selling was so large, and so far beyond the substantial liquidity that is generally available in the futures and stock markets, that market mechanisms adequate for the vast majority of trading situations failed. The serious liquidity problems that became apparent as traders attempted a rapid rebalance of multi-billion dollar portfolios were exacerbated by information failures that made it difficult for traders to estimate prevailing prices and caused concern over the financial stability of major market participants. The combination of intense selling pressure, market mechanism failures, and lack of information exhausted much of the available liquidity, caused substantial uncertainty, drove down prices, and generated unprecedented volatility in all the linked markets. This unprecedented volatility appears to have been greater than can be accounted for by fundamental economic factors. It clearly signals that our capital markets must improve.

While limited price volatility that reflects fundamental changes in buying and selling interest is not inherently bad or damaging to the markets, extreme price movements in short periods of time can have a number of damaging effects. First, extreme price volatility can increase substantially the risk encountered by market makers and may have long term effects on market liquidity. Second, more volatile markets can decrease the ability of broker-dealers to use their capital effectively. To the extent risk of loss increases substantially, firms may be required to maintain greater capital reserves to satisfy both creditors and regulators. Finally, such volatility may make it more difficult for corporations to raise equity capital by decreasing the willingness of the public to invest directly in the stock market.

The two fundamental conclusions -- that a unified market exists and that new trading mechanisms can cause extraordinary peak volume and volatility that overwhelm the capacity of markets -- suggest at least three types of operational reforms and several regulatory changes. The three types of reforms for the operation of the markets include, first, changes to increase the capacity of each of the individual markets to respond to new market structures and trading strategies; second, changes to improve coordination among the markets; and third, changes that may retard, at least during crisis periods, the increased velocity and volume of intermarket and intramarket trading.

The Commission believes that the primary focus should be on expanding the capacity of the markets through operational reforms and on coordination measures. The Commission recognizes, however, that even with operational reforms and better coordination, it simply is not realistic in the immediate future to expect sufficient liquidity to exist to satisfy liquidity demands created when a $3 trillion market experiences massive and concentrated selling pressure.

Accordingly, the Commission believes that, as temporary supplements to capacity expanding and coordinating measures, it may be prudent to adopt narrowly tailored measures designed to reduce liquidity demands. The Commission believes that the greater leverage available in the stock index futures market may at times contribute to increased volatility and volume and that, therefore, the futures exchanges should reduce the amount of futures market leverage, at least temporarily, by increasing stock index futures margin for non-floor traders.

This temporary increase would provide the regulatory agencies time to study whether more permanent reforms might be appropriate. These more permanent reforms might include steps such as emergency increases of margin only for stock index futures selling in a rapidly declining market or direct limits on the pace of institutional sales during a market crisis.

Other regulatory changes also are suggested by the two conclusions of linked markets and increased volume and volatility. These include increased agency authority to deal with market crises and adoption of additional reporting requirements for large trader and program trading transactions.[7] More fundamentally, these conclusions suggest that consideration must be given to changes in supervisory structures so that all equity-related products are regulated through mandated coordinated regulation, if not by one agency.

A third conclusion reached by the Commission is that there are weaknesses in areas such as specialist and market maker performance, capital adequacy, and clearing and settlement that must be remedied. The Commission is recommending improvements in each of these areas.

A fourth Commission conclusion that emerges based on the Staff Report is that the events of October 19 and 20 dramatically confirmed the internationalization of the securities markets.[8] Trading in the U.S. markets clearly affects trading in foreign markets, and vice-versa, although the U.S. more often leads than follows other stock markets. In a sense, the market for United States equities can be viewed as including not only the domestic futures, options, and stock markets, but the major foreign markets as well. However, while this interdependence of the world's markets should be recognized, it should not paralyze efforts at domestic reform. Indeed, reforms to maintain the stability and fairness of U.S. markets may well avoid flight from the domestic markets to foreign markets.

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[7] As noted in the Staff Report at 3-26, the staff is examining the desirability of requiring broker-dealers to regularly report their program trades. This would facilitate the staff's ability to quickly and accurately reconstruct trading and improve SRO surveillance capabilities. In addition, the staff is examining the possibility of developing a system, similar to the CFTC's large trader reporting system, that would permit immediate identification of large institutions that are not broker-dealers.

[8] The October market break highlighted the growing interconnections among securities markets internationally. The Staff's Report suggests that the major world markets responded quickly and dramatically to each other's price movements and that, for the most part, U.S. markets led foreign markets. These markets included strong, well capitalized markets such as London, where the Financial Times-Stock Exchange 100-Share Index fell 500 points (almost 22%) on October 19 and 20, closing the month at 1749.8, down 26.04%, and Tokyo, where the Nikkei index declines 4456.7 points (16.9%) on October 19 and 20, closing on October 30 at 23,328.91, down 10.31%. As of March 8, 1988, the Nikkei index's value is 25,465.73 and the FTSE 100 index's value was 1,815. The impact of the U.S. market break was even greater on fast growing, more speculative markets, such as the Hong Kong Stock Exchange, which closed operations for a week.

IV. COMMISSION RECOMMENDATIONS AND DEVELOPMENTS SINCE FEBRUARY 3, 1988

Since my testimony before Chairman Proxmire and the Senate Banking Committee on February 3, 1988, the securities self-regulatory organizations ("SROs") have taken significant action in certain areas, particularly regarding operational capacity and enhancements and contingency planning and coordination. Indeed, only yesterday, the securities and futures SROs met to discuss enhanced coordination efforts. In addition, I have personally met with a variety of government and industry officials to ensure that efforts to coordinate a regulatory response receive the highest consideration. The following summarizes the Commission's recommendations and steps which have been taken to address these areas.[9]

A. Stock Market Enhancements

The 600 million share volume on the NYSE on October 19 and again on October 20 was nearly double the previous one-day high for trading volume. Prior projections that trading volume on the NYSE would increase steadily from daily averages of less than 200 million shares to daily averages of about 300 million shares have been shattered, and we have been put on notice that systems must be expanded to cope with large volume.

The key to improvement will be expansion of the stock exchange systems that are designed to receive orders electronically from brokerage firms and in some cases to execute these orders automatically. With the exception of basket trades, most of the orders handled by these systems are small orders for retail customers.

The Commission has recommended that the exchanges modify order routing and support systems to improve the efficiency of their systems during peak volume periods and enhance the capacities of their automation facilities so that markets do not falter due to lack of physical capacity. I am pleased to report that a number of the stock exchanges already have increased the number of trades their automatic order routing and execution systems believe they can accommodate, or will do so shortly. All equity exchanges which currently employ order routing and execution systems believe they have increased their capacities to be capable of processing the volume of orders received during the week of October 19-20 without any problem or delay.[10] In addition, they also have indicated that they are continuing system enhancement plans to increase further their processing capabilities.

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[9] The actions by the securities SROs since the October market break are described in more detail in the March 4, 1988, memorandum prepared by the Commission's Division of Market Regulation. See Appendix A.

[10] At the present time, the NYSE, American ("Amex"), Cincinnati ("CSE"), Midwest ("MSE"), Philadelphia ("Phlx") and Pacific ("PSE") Stock Exchanges all have small order routing or automatic execution systems in operation. The CSE is in the process of increasing its system's capacity by 50% and the NYSE has increased its system's capacity already by 50% and notes further enhancement will be in place by June. The PSE states that it has doubled its system's capacity since October and the Phlx also states that it has increased its system's capacity significantly.

1. DOT Enhancements

The NYSE's Designated Order Turnaround, or DOT, system accounts for over two-thirds of the average daily share volume at the NYSE. In addition to being used to route small orders, DOT is used by institutions to route very large stock orders associated with program trading and index arbitrage. During October 19 and 20, the automated systems on the NYSE were clogged by the increased volume. DOT also is heavily used to facilitate the sale of stock portfolios through program trading. DOT should be expanded not only to avoid printing queues that developed on October 19 and 20,[11] but also to accommodate block or program trading.[12]

Since October, the NYSE has made improvements to virtually every exchange order processing system. The NYSE has created an Operations Advisory Committee with the objective of synchronizing planning and operational efforts to provide the capacity to handle routinely a 600 million share day by the end of 1988. The NYSE has doubled the number of stocks on electronic display books and is taking steps to route both market and limit order traffic to the display books via a new communication switch, thus averting backlogs at the universal floor device controller switch ("UFDC") and reducing the number of orders which must physically be printed. In addition, the NYSE has increased substantially the number of printers on the floor and has implemented enhancements to all its printers. By April 1988 the NYSE plans to have completed its upgrading of the limit order system, resulting in a 50% increase in capacity. We also understand that, in response to a General Accounting Office ("GAO") recommendation, the NYSE has agreed to hire an outside entity to examine in detail and assess the NYSE's order routing and other computer facilities.

The DOT system, a key operational link between futures and stock markets, should not encumber market linkage because of technical or capacity problems. DOT capacity should be expanded so that the system can provide continuing market access to both large and small orders, even in times of market stress. In any event, the criteria for cutting off the major means of routing orders to the NYSE floor should not be adopted without regulatory review.

The NYSE has submitted a proposed rule change to the Commission that would restrict, for six months, member firms' ability to use DOT for effecting index arbitrage program trades for customer and proprietary accounts if the DJIA moves from the previous day's close by 50 or

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11 See Staff Report at pp. 7-21 - 7-23.

12 See N. Katzenbach, An Overview of Program Trading and its Impact on Current Market Practices ("Katzenbach Report") (December 21, 1987) at 30. The Commission notes that the NYSE and the other securities markets have increased automation in their markets dramatically over the past 15 years and could not reasonably be expected to predict the extreme peak volumes that occurred in October. Automation enhancements, together with the other measures the Commission is recommending, should help the markets be better prepared operationally for these peaks.

more points.[13] If approved, this rule change would make index arbitrage more difficult after the market moves more than 50 points. For a NYSE member firm to effect index arbitrage trades in these circumstances, it would have to execute the stock transactions through a floor broker. Because this rule change proposal is before the Commission, it would be inappropriate for me to address the merits of the proposal.

2. Market Baskets

The Commission has also noted that the NYSE should consider the creation of posts for trading baskets of stocks. As the Staff Report suggests, the creation of such posts might alter the dynamics of program trading.[14] While some arbitrage programs would continue to flow directly to the specialists in the individual stocks to maintain pricing efficiency, other institutional program trades could be focused on the basket post where the specialist and the crowd, perhaps supplemented by block positioners, could provide additional liquidity to the system. The existence of a basket trading post might help cushion individual stocks from the intraday volatility caused by arbitrage between futures and stocks and nonarbitrage program activity.[15] The Commission appreciates that there are considerable questions that need to be examined concerning the feasibility and design of basket trading on the NYSE. The Commission recognizes that the ultimate success of this concept depends on the ability of such a trading post to pass a market test in competition with other index-based financial instruments, but it believes that the proposal deserves serious consideration.

Although the NYSE has yet to submit a specific market basket plan, we understand that its staff is currently evaluating the concept. In addition, the Options Clearing Corporation ("OCC"), in conjunction with the Phlx, has submitted proposed rule changes to the Commission that would establish a Cash Index Participation Unit (a so-called "CIP") , which attempts to create a market basket of stocks that investors can buy and sell as a unit. In addition, the MSE has informally discussed creation of stock baskets that would trade as a separate unit on the MSE equity floor.

3. Increased Specialist Capital

It is unlikely that increased levels of specialist capital would alone have prevented the steep price declines that occurred on October 19 and the morning of October 20. It is unrealistic to expect any one group of market participants to have or to commit sufficient capital to retard

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[13] See File No. SR-NYSE-88-02. Securities Exchange Act Release No. 25400 (February 26, 1988), 53 FR 7273 (March 7, 1988). We also note that, if approved by the Commission, we would expect the NYSE to establish appropriate surveillance procedures to ensure that violations are detected.

[14] See Staff Report at 3-17 - 3-18. The Katzenbach Report recommends a similar measure. See Katzenbach Report at 29.

[15] See Staff Report at 3-18.

extraordinary selling pressures in $3 trillion markets.[16] It is also true that a specialist system designed for a market composed of individual stocks may be strained in a volatile market dominated by portfolio trading. The events of October 19 and 20 demonstrate that the financial position of many specialist firms can become critically strained during a major market break. While specialist capital appears sufficient in normal trading situations, the Commission is not confident that specialist capital is sufficient if the markets are to continue at their present volatility levels. Thus, increased specialist capital may be helpful in any future market crisis by averting situations in which specialists reach the limits of their buying power or are in danger of failing.[17] For these reasons, minimum specialist capital requirements should be increased. The NYSE, Amex, Phlx, MSE, and PSE all currently are reviewing the adequacy of their respective specialists' capital.[18]

Further, specialists who self-clear should be required either to establish committed lines of bank credit or otherwise to satisfy higher capital requirements.[19] Over the next several weeks, the NYSE staff will meet with a number of its member firms to discuss their credit and banking arrangements, including the number and types of banking relationships they have and how to improve their ability to obtain financing.

In addition, a private emergency dealer capital fund might be considered. Such a fund could serve as a safety net for the specialist system.[20] While the details and mechanics of such an approach need careful consideration, the concept merits review.

4. Improved Specialist Performance

The performance of most NYSE specialists was satisfactory on October 19, although instances of questionable individual performance did occur.[21] Performance on October 20, when risk positions were exceedingly high was generally weaker. Improved performance of individual specialists' affirmative obligations should result in increased commitments of specialist capital. In order to improve specialist performance the NYSE must more vigorously exercise its authority to reallocate specialists' stocks.

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[16] As the Staff Report points out, starting the week of October 19, NYSE specialists had buying power of over $2.3 billion of capital. See Staff Study at 4-54.

[17] See Staff Report at 4-58.

[18] The BSE, effective December 31, 1987, increased specialists' equity capital requirements from $80,000 to $100,000 and effective June 30, 1988, will increase the requirements to $125,000.

[19] The NYSE also should improve its surveillance of specialist capital. See Staff Report at 4-68.

[20] See Staff Report at 4-67.

[21] See Staff Report at 4-6 - 4-29.

The NYSE currently has two mechanisms to reallocate stocks: (1) disciplinary procedures for violations of the specialist's obligation to maintain fair and orderly markets; and (2) reallocation procedures under NYSE Rule 103A based upon quarterly evaluations of the specialist's performance by floor brokers. The NYSE should not be reluctant to use the disciplinary process[22] to sanction a specialist in appropriate circumstances for failure to maintain fair and orderly markets. The Commission believes, however, that a vigorous evaluation program under NYSE Rule 103A is critical to improving NYSE specialist performance. The NYSE needs to continue its efforts to improve its evaluation standards and process by adopting relative performance measures.[23] In evaluating specialist performance the NYSE also should take into account the impact of the futures markets on stock market volatility, particularly at the opening.[24]

The NYSE has proposed to add specific objective standards to measure specialist performance in a variety of areas. This will supplement their current specialist evaluation system which bases performance on specialist evaluation questionnaires ("SPEQ") filled out quarterly by floor brokers. While the NYSE continues to believe relative standard of performance raise difficult issues, it has agreed to review the feasibility and desirability of developing relative measures of performance.

With regard to the recommendation concerning disciplinary action and stock reallocations, the NYSE and Amex have been conducting detailed reviews of individual specialist performance during the October market break. To date NYSE investigations into specialist performance during the market break have resulted in the reallocation of six stocks from five specialist units (the stocks are J.P. Morgan & Co., Gould, Inc., Neiman Marcus Group, E.F. Hutton Group, Inc., A.G. Edwards, Inc. and Carter-Wallace). The NYSE has indicated that it is continuing to review specialist activity during the October market break period, and is focusing particularly on those areas of concern outlined in the Division's Report such as proprietary

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[22] See 1976 NYSE Report of the Committee to Study the Stock Allocation System. The report suggests that disciplinary proceedings may not be the most effective tool to enforce the specialists' affirmative obligations because those obligations are somewhat subjective.

[23] See Staff Report at 4-28 - 4-29. The Commission also believes that poor specialist performance should weigh heavily against the specialist in allocation determinations for new or reallocated listings. Id. at 4-29, note 75. The Commission emphasizes, however, that incentives to obtain new listings are not sufficient to ensure improved specialist performance and that the additional deterrence provided by a vigorous reallocation program is critical.

[24] This problem might be ameliorated by coordinated opening procedures. See Section IV. D. (1), infra.

activity during gap openings (opening at a price significantly away from the previous last sale), delayed openings, and trading halts. To date the Amex has reallocated two stocks, the Washington Post and Continental Materials Corporation, to new specialist units.[25]

5. Intermarket Circuit Breakers

The Commission believes that individual stock price limits are inconsistent with a continuous auction market concept. Such limits may deprive small and large investors of the ability to liquidate positions precisely when these investors need to do so. Moreover, individual limits may be overbroad as a measure to address marketwide crises because they result in trading halts in individual stocks even in the absence of marketwide problems. The NYSE's existing procedures for order imbalances are generally adequate to address isolated liquidity problems in individual stocks.

The Commission also believes that mechanistic marketwide price limits, under which the entire stock market would close for the day if some market-wide measure exceeds certain pre-set limits, should not be pursued at this time. The limits might be set so high as to be ineffective, or so low as to be unnecessarily disruptive. Moreover, the existence of such limits, rather than calming markets as some have suggested,[26] might induce panic and accelerate trading as the limits approach. The Commission believes that particularized judgments, based on the actual conditions in the market, are a preferable way to deal with the complicated issues of closing the stock market. The markets should, however, be assured that trading will not be halted absent truly extraordinary circumstances that warrant such intervention.

B. OTC MARKET

During the week of the market break, the prevalence of unreliable quotations, delayed transaction reports, reduced market maker participation, and increased manual order handling, coupled with greater telephone inquiries, undermined the liquidity and orderliness of the over-the-counter ("OTC") market.

The OTC market suffered from a combination of extreme downward volatility and unusually high share volume. An extraordinarily high number of locked and crossed markets disabled the automated small order execution systems operated by the National Association of Securities Dealers ("NASD") and by individual market makers, forcing market makers to

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[25] The Amex has examined trading in every security traded on the exchange during the market break period. The Amex has identified 70 securities involving 16 specialist units with potentially inadequate performance. The operation of these units has been referred to a Subcommittee of the exchange's Performance Committee for review. Four additional units are also in the process of being referred to the Subcommittee for review. The Amex expects that either disciplinary action or reallocation proceedings will be instituted in a number of the questionable situations identified. The Amex has promised to keep the Commission informed of developments in this area.

[26] See the Task Force Report at 66.

execute small transactions manually. Because of the difficulty in reaching other market makers by telephone, customer orders often were not executed in a timely manner, not executed at all, or executed at prices that reflected only a securities firm's best estimate of the prevailing market. In addition, market making was mixed, with some firms providing liquidity and others remaining relatively inactive.[27]

The NASD has responded to problems it encountered during the market break by proposing a number of initiatives. These initiatives include raising the penalty for unexcused withdrawals by market makers from NASDAQ; requiring all NASDAQ market makers to participate in Small Order Execution System ("SOES"); providing that SOES executions will continue in an OTC/National Market System security when quotes are locked or crossed; eliminating preferencing of market makers when a locked or crossed market exists; and establishing the Order Confirmation Transaction ("OCT") service that will permit firms to access market makers over the computer without voice contact.[28]

C. Options Exchanges

The options exchanges experienced serious problems throughout the week of October 19 due to extreme volatility in the market for the underlying securities, the periodic absence of useful information concerning the equity and futures markets, and market makers' difficulty in hedging their options positions. The impact of these factors was reflected in the numerous and protracted trading halts; in the fact that prices, or "premiums," charged for option contracts, particularly put contracts, were inconsistent, highly variable, and often unrelated to price movements in the underlying index; and in the unwillingness of some options market makers to foster liquidity by trading on a continuous basis. In particular, the options markets did not provide an effective, continuous market for the most actively traded index options classes at certain times on October 19 and for virtually all of October 20. Accordingly, the Commission believes there are a number of areas that require review by the options exchanges.

First, the exchanges should reconsider the effects of permitting options on indexes of securities to open prior to the opening of some percentage of component securities in the underlying market as well as the effects of continuing trading for a certain time even though underlying component securities are not trading. Second, the options exchanges, particularly the Chicago Board Options Exchange ("CBOE"), should examine methods to accelerate opening

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[27] See Staff Study at 9-19 - 9-24.

[28] OCT allows NASDAQ subscribers with Level 3 service to send orders in NASDAQ securities to market makers over the computer, without voice contact and is designed to provide an effective means of accessing market makers in high volume, fast-moving markets. The NASD has filed these initiatives as a proposed rule change (SR-NASD-87-54). The Commission granted temporary approval on a limited pilot basis for 90 days and solicited public comment. See Securities Exchange Act Release No. 25263 (January 11, 1988), 53 FR 1430 (January 19, 1988). Because these proposals are currently before the Commission for permanent approval, it would be inappropriate to comment further at this time.

rotations. Index option opening rotations were excessively long on October 20, limiting the ability of options customers to receive timely executions. These delays contributed to higher premiums in some options series. Third, the options exchanges and market information vendors should develop a plan to reduce proliferation of options series or to delist options series from vendor quotation services in the event that vendor data base capacity threatens to be outstripped. Fourth, options markets using small order execution systems should revisit their rules governing market maker participation in these systems. Fifth, options exchanges should closely examine the performance of index options market makers, particularly on October 20, to determine whether they met their obligations to maintain fair and orderly markets to the extent practicable. The responses by the exchanges to these recommendations are as follows.

1. Delayed Openings for Index Options

The options exchanges continue to review their current rules that (a) authorize the commencement of index option trading when the underlying stock market opens and (b) permit trading to continue for 90 minutes regardless of the number of component stocks trading . The exchanges also continue to review their rules that require index option trading to halt if securities that account for more than 20% of the index's value are not trading.

2. Modifications to Opening Rotations

The CBOE and Amex also have been reviewing their opening rotations procedures since October.[29] Since December, CBOE's Standard & Poor's 100 index option ("OEX") opening rotation has been informally modified by dividing OEX series into three groups which then are opened separately and simultaneously. These procedures, combined with recent low volume and volatility levels, have resulted in opening rotations of no longer than 10 to 15 minutes. In February the CBOE Board of Directors approved in principle a plan to divide OEX into seven zones, six of which would be opened simultaneously, with one or more lead market makers charged with establishing opening prices and facilitating imbalances. The CBOE is working with Commission staff to develop an exchange rule filing that would implement this measure.

The Amex also has stated that it is examining the feasibility of introducing an opening rotation in its Major Market index option ("XMI") that would allow for the quick opening of free trading of more actively traded series by first opening the series which qualify for the Amex's automatic execution system, AutoEx.[30] Upon completion of the opening rotation in the five or six calls and puts that generally are nearest the current index value, AutoEx will be turned on so that it will then be possible to execute market and marketable limit orders up to ten contracts instantaneously. Opening rotations in other series then will proceed in a normal manner.

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[29] The PSE and Phlx also support implementing steps to facilitate completion of opening rotations so that free trading in all series can begin as expeditiously as possible.

[30] AutoEx is an automated execution system that enables member firms to route public customer market and marketable limit orders in options for automatic execution at the best bid or offer at the time the order is entered.

3. Proliferation of New Option Series

Precipitous market movements create unique problems for derivative options markets that do not necessarily relate to increased trading volume. As the price of the underlying instrument increases or decreases significantly, new option series are added to reflect the current value of the underlying instrument. Moreover, each new strike price added causes the creation of at least four new series, one for each expiration cycle being traded.

In October 1987 this proliferation of new strike prices created capacity problems for vendors who were unable to list all option series. As a result, the options exchanges have encouraged securities information vendors to increase their system capacity. More specifically, the exchanges, through the Options Price Reporting Authority ("OPRA"), have been working with vendors to address current capacity problems, plan for future capacity expansion, increase message capacity, and devise contingency plans for future problems.

In an attempt to limit the proliferation of new strike prices that necessarily accompany dramatic price changes in the underlying instrument, both the CBOE and Amex are considering the possibility of introducing strike prices only at levels immediately surrounding the market price of the index or underlying stock during a dramatic market break. This would reduce the number of new option series that would have to be listed, facilitate the listing of new series by OPRA, and permit vendors to display continuously current quotations for all series.

4. Options Automatic Execution Systems

The Amex and CBOE also currently are reviewing methods to ensure high levels of market maker participation in their automatic execution systems, AutoEx and Retail Automatic Execution System ("RAES"),[31] respectively, during volatile market conditions. In particular, CBOE is focusing on reducing disincentives to continued participation in RAES and establishing sanctions for leaving the System. To this end, CBOE has submitted to the Commission a proposed rule change that would provide the Exchange authority to require market maker participation in RAES in designated equity options classes under certain conditions.[32] Similarly, Amex is seeking to broaden registered option trader ("ROT") participation in its AutoEx system at the present time.[33]

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[31] RAES is CBOE's automated execution system. It executes public customer market and marketable limit orders at the best bid or offer at the time the order is entered.

[32] See SR-CBOE-88-3.

[33] Neither the PSE nor the Phlx currently has an automatic execution system for options orders. The Phlx, however, has indicated to the Commission staff that it expects to submit a proposed rule filing in the near future that would establish a pilot program in which the Phlx would introduce an automatic execution system for a limited number of equity options.

5. Option Market Maker Performance

A special panel of CBOE members and persons associated with CBOE member firms has reviewed October 20, 1987, OEX pricing. The panel report characterized options pricing on the morning of the 20th as extreme but understandable in light of the chaos and extreme volatility then prevailing in all markets. The CBOE notes that as a "goodwill gesture" it will make refunds to member firms based on the difference between the premiums actually paid by public customers for certain November OEX options during the market break and the prices they would have paid if premiums had been based on an implied volatility of 300. The total amount to be paid (approximately $1.2 million) will be recovered through a voluntary contribution of $.01 per contract on market makers' future OEX transactions. As a result of a number of customer and member firm complaints, the CBOE regulatory staff also is reviewing market maker performance during the market break, with special emphasis on October 20. The CBOE expects to complete this review in the near future.

The Amex has noted that upon review of XMI trading on October 20, 1987, it was unable to conclude that overall specialist and ROT performance constituted a course of dealings that the Amex believed was fair and orderly. More specifically, the Amex found that various XMI put transactions involving the specialist unit were not priced fairly. The Amex admonished the specialist for substandard performance and noted that any recurrence would result in a reallocation. The Amex also specifically instructed the specialist to develop a plan that would ensure adequate performance in the future and prevent a recurrence. Similar to the CBOE, the XMI specialist and member firms representing customer executions will make certain refund payments for XMI options priced excessively during the market break. The Amex determined that XMI options with a volatility factor exceeding 325 were priced excessively.

D. Clearance and Settlement

During October 1987, clearing agencies, broker-dealers, and securities markets cooperated successfully to compare, clear, and settle unprecedented sustained daily trading volume. Although the volume placed tremendous strain on personnel and systems, approximately 95% of the trading volume was cleared and settled within routine time frames. Volume and record price volatility also dramatically increased the financial risk to clearing agencies and their members. Although some losses were suffered, clearing agency safeguards were effective in preventing significant or widespread losses.

The record volume and volatility suggest, however, the need for improvements in two primary aspects of the clearance and settlement process: post-execution trade processing; and clearing agency safeguards against member default.

The NYSE, Amex, and NASD should consider accelerating efforts to compare all trades on the trade date. Currently, over 50% of share volume is compared through two-sided traded input that results in compared trades several days or longer after the trade date. The October 1987 experience indicates that the current two-sided comparison process cannot be completed fully on a timely basis when sustained daily trading volume becomes extremely high. Automated clearing and settlement systems should be expanded to facilitate comparison at or

near the time of trade execution.

Since October, the NYSE has indicated that its Operations Advisory Committee is working on (1) a shortened comparison cycle and (2) an automated Questioned Trade process and, further, that the exchange is developing an electronic Floor Derived Comparison ("FDC") system to accomplish these objectives. The NYSE plans to implement FDC in three phases during 1988. The Amex also has begun development of electronic systems that would allow same day floor-derived point of sale comparison for both equities and options and that it currently plans to begin their implementation during the last quarter of 1988. Finally, as discussed previously, the NASD has implemented its OCT service on a pilot basis. In conjunction with SOES and the Trade Acceptance and Reconciliation Service, implementation of OCT should provide an almost total same-day comparison capability for the NASDAQ market.

Individual clearing agencies also should consider a variety of enhancements to their risk management systems to reflect increased risks resulting from increased price volatility and trading volume. Those considerations should include enhanced member monitoring systems to enable clearing agencies to obtain better and more up-to-date information about members' financial strength, activity in other markets, and customer activity. Clearing agencies also should consider whether risks posed by individual members require increased capital requirements or the deposit of additional assets with the clearing agency.

Options clearing systems and market participants also should reexamine safeguards and consider improvements. As demonstrated in October, equity price volatility can generate geometric increases in options price volatility. The Options Clearing Corporation ("OCC") should enhance member monitoring techniques in order to provide better early warning of risks and it should increase measures to guard against those risks when they appear. Additionally, basic volatility assumptions and margin formulas should be reassessed. When OCC margin is insufficient to cover intra-day volatility, OCC resorts to variation margin calls to protect itself. Events in October suggest that OCC should reassess the manner and timing of variation margin calls to determine whether it can obtain earlier warning of and protection from potential member insolvency, especially for volatility that occurs late in the trading day near the close of banking hours. Finally, as noted below, initiatives to achieve a more coordinated credit, clearing, and settlement system across markets should have a very high priority.[34]

IV. The Stock Index Futures Markets

Under the current regulatory scheme, initiatives to improve the operation of the futures markets are for the most part the responsibility of the Commodity Futures Trading Commission ("CFTC") and the relevant contract markets. Nevertheless, the operation of stock index futures markets has a substantial impact on the operation of the stock markets, as dramatically demonstrated during the market break. It is appropriate, therefore, for the Commission to discuss changes to the futures markets that might help improve futures market liquidity and alleviate, to some extent, the transmission of massive selling pressure to the stock markets.

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[34] Attention to clearing problems in the futures markets also should have a high priority. See Task Force Report and CFTC Staff Follow-up Report on Financial Oversight of Stock Index Futures Markets During October 1987 (January 6, 1988).

A. Capacity Expanding Measures

The Commission believes that the creation of block trading procedures, similar to those used in the stock markets, might allow the futures markets to accommodate futures blocks in a more liquid and orderly way.[35] In the listed stock markets, blocks generally are negotiated upstairs and then crossed on the floor, using specialized procedures to give priority to public limit orders without allowing the crowd or the specialist to interfere unduly with the cross.[36] The effect of such a procedure is to allow block sales to be accomplished without causing severe price disruptions. Block trading procedures offer significant potential efficiencies for futures trading, and should be examined. If concerns are raised regarding the Commodity Exchange Act's ("CEA") prohibition against prearranged trading,[37] legislative changes should be considered.

B. Reducing Liquidity Demands

As discussed at the outset, the Staff Report, as well as the President's Task Force Report, suggests that new trading strategies and market structures are creating greater volume and velocity of trading and imposing greater liquidity demands on the futures and stock market places. Until the capacity of these markets expands sufficiently, measures to reduce sudden peak demands placed on the markets by new trading strategies and market structures should be considered.

1. Margin Requirements

Futures products enjoy greater leverage in part because they are cash-settled and have lower margins.[38] This greater leverage permits major long futures positions to be established with relatively small initial capital. This greater futures leverage also permits the rapid liquidation of large positions in the futures market, or at least encourages the perception that such rapid liquidations may be possible.

In simplest terms, an example may help to highlight the differences between futures and stock margin. If an institution purchases $1 million worth of stock, it generally will pay the full $1 million within 5 days, although, if permitted by its charter to trade on margin, it only would

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[35] The Commission notes that a "sunshine trading" rule proposal by the New York Futures Exchange that would have a similar purpose is pending before the CFTC. See 52 FR 2575 (January 23, 1987).

[36] See NYSE Rule 127.

[37] See, e.g., CEA Section 4c, 7 U.S.C. Section 6c; 17 CFR 155.2(f).

[38] See Staff Report at 3-19 - 3-20.

be required to post $500,000. In contrast, if that same institution sought to purchase $1 million worth of S&P 500 futures, it only would be required to post $133,200,[39] although it would be subject to daily variation margin calls.

The extent to which high futures market leverage contributed to the market break is uncertain. Nevertheless, there is sufficient concern about high futures leverage, and, as a corollary, serious overestimates of the degree of liquidity in the futures markets, to warrant temporary increases by the futures exchanges in initial margin levels for stock index futures for market participants, other than non-floor traders (called futures locals).[40] A temporary margin increase for a specific class of traders could be effected by agreement of the futures exchanges.

A temporary increase would permit additional opportunity to review the effects of different margin levels in the stock and futures markets.[41] It also would provide an opportunity to evaluate any resulting loss of futures market liquidity during periods of normal activity. In addition, the costs or benefits of more limited margin changes -- such as increasing initial margin requirements in times of extreme downward price volatility for futures sales only -- could be considered.

In recommending temporary margin increases for futures trading the Commission is not suggesting that the level of initial margin on stock index futures be raised to the same level as initial margin on equities. The Commission does not believe that equivalent margins are necessary. The mark-to-market requirements for futures dampen leverage by requiring future traders to have cash available to meet margin calls during periods of high volatility. Because of this existing dampening effect, margin levels on stock index futures for non-floor traders should be increased by the futures exchanges only to make them comparable to levels available in the stock market for market professionals, levels which are approximately 20-25%.[42] At the same

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[39] This hypothetical assumes the S&P 500 futures is trading at 270 and that the initial speculative margin is $18,000.

[40] A "futures local" is roughly comparable to a floor trader on an Exchange floor.

[41] Because the underlying concern is leverage, the leveraging effects of cash-settlement and the costs and benefits of requiring physical settlement also should be evaluated. See Staff Report at 3-19 - 3-20.

[42] Regulation T and Regulation U of the Federal Reserve Board provide that specialists on the floor of an exchange and OTC market makers may obtain loans collateralized by their specialty or market-making securities on a "good faith" basis, without regard to the normal margin requirements. The loans may be obtained either from another broker-dealer or from a bank. The banks and broker-dealers usually require margin in the 20-25% range as collateral for these loans. At current index levels (@ 270), the value of one S&P 500 stock index futures contract is $135,000, and 20% initial margin would be $27,000. The current margin requirement for this contract is $18,000 (13.33% of the contract's value) ($10,000 for hedgers). Effective March 9, 1988, the CME increased initial speculative margin from $15,000 to $18,000. Hedge and maintenance margin, however, remain at $10,000.

time, however, in the securities markets the only entities receiving 20-25% margin treatment are specialists or market makers in their designated securities. Institutions that purchase securities on margin must provide, at a minimum, 50% of the purchase price. That same institution effecting a stock index future transaction, however, is required to deposit only $18,000 for a speculative position or $10,000 for a hedged position.

The Commission recognizes that higher margin requirements will increase the cost of futures trading. Moreover, selling by futures locals does not appear to have been a significant factor in the market break. Thus, the Commission is not recommending that initial margin increases apply to futures locals. Since lower margin requirements for market makers enhance market liquidity, the margins for locals should continue to be based upon levels designed by the futures exchanges to protect the clearing agencies from default.[43]

2. Restrictions on Large Rapid Liquidations

Another means to reduce temporary peak demands on liquidity that the market currently cannot absorb would rely on procedures analogous to the bracketing procedure employed by the Chicago Mercantile Exchange ("CME") during the week of October 19. In situations of particular market stress, the CME "began to limit requests by major market participants for higher levels of position exemptions. . . . [T]his action allowed the CME to examine each request to execute a substantial volume against the ability of the market to absorb such volume at one time without dramatically and perhaps artificially affecting prices."[44] In addition, "[t]he CME also required larger hedgers to spread their sell orders out across time brackets, thus reducing the potential concentration of these orders."[45]

This approach may deserve consideration if applied equitably across all capital markets and very carefully restricted so that it applies only in rare situations when cooperative behavior by potential sellers, to avoid large, clustered sell orders that rapidly exhaust liquidity, is in the

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[43] Immediately following the market break, the options exchanges filed proposed rule changes, which the Commission approved, increasing index margin requirements for short index positions to 100% of the premium plus 10% of the index value. The previous requirement was premium plus 5% of the index value. In addition, on February 29, 1988, the options exchanges met with SEC staff to discuss additional margin proposals in detail. These proposals include, among other matters, the possibility of increasing index and equity options margin to premium plus 15% and premium plus 20%, respectively, as well as establishing procedures to reevaluate existing margin levels on a quarterly basis. The Commission expects to receive final proposals soon.

[44] Miller, M.H., J.D. Hawkes, Jr., B. Malkiel, M. Scholes, Preliminary Report of the Committee of Inquiry Appointed to the Chicago Mercantile Exchange to Examine the Events Surrounding October 19, 1987, Dec. 22, 1987, at 52-53.

[45] The CME concluded that the "bracket rationing' effect of tightening position limits on an emergency basis appeared to have an ameliorating impact in allowing the CME to regulate the flow of large sell orders." Id. at 53.

best interest of the markets and of those traders as a group. Such bracketing procedures could be fashioned to affect only large hedgers and only after tangible indications that liquidity is relatively scarce. Significantly, unlike price limits on trading halts, they would permit continuing liquidations, but in a more orderly manner. Also, as noted, they would not limit small transactions.

In addition to its similarity in concept with the "bracket rationing" adopted by the CME during the market break, such an approach would be similar to the exercise limits that currently apply in the options markets.[46] Reducing the ability of large institutions to liquidate large positions over short periods of time would discourage portfolio insurers and other large traders from assuming that large positions can quickly be revised at low cost. Thus, it would deflate "illusions of liquidity"[47] and could reduce liquidity demands. Requiring a more orderly liquidation of positions may also contribute generally to the perceived orderliness of markets.

On the other hand, such a restriction would not address rapid selling by a wide group of institutions none of which singly might be selling enough to trigger the restriction. The Commission believes the costs and benefits of this suggestion for spreading out liquidation of large hedging positions merit careful review.

C. Customer Protection

The market relationships dramatically revealed during the market break demonstrate the need for common protections in these markets against "frontrunning." Frontrunning generally involves trading a stock, option, or future while in possession of non-public information regarding an imminent block transaction that is likely to affect significantly the price of the stock, option, or future.[48] The securities exchanges expressly prohibit frontrunning.[49] The futures markets do not have rules directly prohibiting frontrunning, although the Commission understands that the CFTC and futures markets believe that the CEA and exchange rules prohibit frontrunning in the futures markets.[50] To prevent firms trading against the interest of their customers, this prohibition should be made express, strengthened if necessary, and effectively enforced. In this regard, the Commission is committed to working with the CFTC as well as the futures and securities SROs to ensure that adequate intermarket information is available to pursue such matters.

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[46] Options exercise limits restrict the number of options contracts that may be exercised over a five day period. See, e.g., Chicago Board Options Exchange Rule 4.12.

[47] See Task Force Report at 57.

[48] As a matter of policy, the Commission does not comment on the existence or absence of investigations.

[49] See, e.g., CBOE Circular No. 23, revised July 1987; and Staff Study at 3-30.

[50] See Staff Report at 3-31.

D. Intermarket Coordination

1. Coordinated Openings and Closings

The events of October suggest the need to consider greater coordination between the stock and futures markets to deal with disparities and instability, particularly at openings and closings.

During the market break, pricing disparities and instability were particularly acute at the openings. With the futures markets contributing to price discovery, this point of stress is likely to remain even if measures to expand markets and limit large liquidations are put in place. Allowing futures to open before stocks[51] can put great stress on specialists, as shown by the openings on October 19 and 20. If index futures open at a large discount to the opening cash index prices,[52] a specialist in an individual stock is unlikely to absorb imbalances aggressively because the discount implies that prices of stocks will go down.[53] The discount may also exacerbate any sell pressure otherwise existing in the stock market.

To the extent that non-simultaneous openings are determined to be a problem, one remedy might be to delay the opening of index futures until a certain percentage of the underlying stocks can be opened.[54] Such an approach could be supported on the rationale that both markets should open for trading simultaneously. The futures markets should not trade an index until that index is also effectively trading in its cash amount. There are conflicting considerations involved in the proposal, however, that must be balanced. It has been argued, for example, that delayed index openings prevent futures from playing a price discovery function. Accordingly, the Commission believes that the issue of delayed openings merits further evaluation before recommendations can be made.

Similarly, measures to coordinate or impose market closings also require further consideration. Authority already exists in both the stock and futures exchanges to close the markets if conditions warrant. Stock exchanges also have power to close trading on individual stocks if conditions warrant. These powers should be retained. Additionally, halting trading on

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[51] One stock index futures contract, the Chicago Board of Trade's Major Market Index contract, opens 15 minutes before the NYSE. In addition, in times of market stress, the futures will open before stocks are opened in the specialist system because stock index futures open immediately without price stabilization efforts.

[52] These prices will be based upon the previous day's closing prices and the prices of stocks that open quickly.

[53] When there are large discounts, arbitrageurs usually will buy index futures and sell baskets of stocks comprising the index. See Staff Study at 1-4 - 1-5.

[54] The CFTC has approved a rule change by the Chicago Mercantile Exchange to halt trading in the S&P 500 future for a brief period if the future moves five points in the first 10 minutes of trading.

futures or stock markets temporarily if a certain number of stocks are closed, or closing both markets temporarily if a market-wide price or volatility index reaches preset levels, may increase information flows, alleviate credit concerns, reduce panic, and provide time for contra-interest to enter the market. Such actions, however, could exacerbate uncertainty, cause a rush to sell in anticipation of the halt, and limit the ability of investors and traders to eliminate risk by closing out positions. Thus, the effects of imposing individual or coordinated market closings need further review before recommendations can be made.[55]

2. Coordinated Credit, Clearing, and Settlement

The Commission believes that a more coordinated credit, clearing, and settlement system across markets would be beneficial.[56] Such a system would decrease uncertainty about total risk exposures of participants in the stock, options, and futures markets, and would facilitate the more efficient flow of credit between markets, thus improving liquidity. In particular, the SEC and CFTC, in conjunction with the stock, options, and futures clearing corporations, should immediately develop measures to coordinate credit, clearing, and settlement for market professionals involved in securities, options, and futures market activity. While there are practical obstacles that need to be resolved, the benefits are substantial, and progress on such initiatives should have a very high priority.

V. Regulatory Authority and Structure

A. Emergency Authority

The Commission believes that it needs authority, in addition to that provided by Section 12(k) of the 1934 Act,[57] to take a variety of steps in a market emergency. The Commission contemplates that the SROs will remain the primary decision makers in an emergency. The SROs have first hand knowledge of the conditions in their markets and can be expected to act responsibly. Nonetheless, in light of new trading strategies and market structures, the Commission should have the authority, roughly equivalent to the CFTC's current emergency

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[55] For the reasons discussed below, the Commission does not believe price limits, which close trading for the day after a certain price is reached, are advisable for stocks, either individually or marketwide.

[56] See Task Force Report at 64.

[57] 15 U.S.C. § 781. Among other things, Section 12(k) authorizes the Commission, with the President's approval, to suspend trading on all exchanges or OTC in non-exempt securities for up to 90 days under certain circumstances.

authority, to act in an emergency to implement a variety of measures, including margin changes, delayed openings, early market closings, and temporary trading halts.[58]

The Commission already has begun discussions concerning a coordinated emergency plan with the CFTC and the Federal Reserve Board. While ultimately the Commission believes that the solution in this area, as in other intermarket areas, may be more formal regulatory consolidation,[59] in the near term the expansion of the SEC's emergency powers and continued efforts at interagency planning are necessary short-term objectives.

B. Regulatory Coordination and Consolidation

1. Background — SEC/CFTC Accord

In December 1981, the SEC and the CFTC announced the SEC/CFTC Jurisdictional Accord ("Accord"). The Accord resolved certain jurisdictional issues raised by the introduction of new derivative financial products into the marketplace. The Accord, which was enacted into law in 1982 and 1983, allocated between the two agencies jurisdiction over derivative financial instruments such as options, financial futures, and options on financial futures.

A major goal of the Accord was to avoid the possibility that competing new options and futures products could be subject to significantly different regulation. In addition, it appeared possible that CFTC approval of the stock index futures proposals that were before it would introduce products into the marketplace that could, by avoiding SEC regulation, lead to possible manipulation of stock prices.

Another critical area of the Accord involved the question of jurisdiction over futures on indexes of corporate securities. The SEC was concerned that futures indexes, particularly narrow-based indexes, could be used to evade the SEC's regulatory scheme and, in particular, that trading in them could result in price manipulation and could provide an incentive for manipulation in the underlying securities. The Accord legislation attempted to address the SEC's concerns by providing that the CFTC would authorize trading in futures, or options on futures, only on indexes of corporate debt or equity securities that are (1) settled in cash, (2) not readily susceptible to manipulation, and (3) broad-based and widely published.

In addition, the Accord legislation provided the SEC a significant role with respect to the review of applications for the designation of contract markets for the trading of index futures. The CFTC may not approve an application received after December 9, 1982, if the SEC determines that the application fails to meet the minimum statutory qualifications just mentioned.

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[58] See Section 8(a)(9) of the CEA, 7 U.S.C. § 12a(9). Section 8(a)(9) empowers the CFTC to direct contract markets to take appropriate action to maintain or restore orderly trading, including increasing margin, whenever the CFTC believes an emergency exists. An emergency is defined generally as a situation in which market disturbances prevent the market from accurately reflecting supply and demand.

[59] See Section V.B.2., infra.

Thus, the Accord criteria for stock index futures have the limited purposes of addressing manipulative concerns and preventing evasion of the regulatory structure applicable to the securities markets.

2. Implications of Market Changes Since 1982[60]

The stock, options, and futures markets have changed fundamentally since 1982 when the Accord was signed. The markets are linked to a degree that was not anticipated at the time of the Accord. At the time of the Accord, it also was not anticipated that the stock index futures markets would have the dominant price discovery role. In light of these fundamentally changed circumstances, the current regulatory scheme needs modification. Neither as a matter of regulatory efficiency nor as a matter of public confidence does it make sense to maintain separate authority over the stock index futures and the stock markets. Thus, we agree with the President's Task Force and Katzenbach Reports that regulatory authority over these markets should be more coordinated or perhaps united.[61]

The Commission recognizes that futures products and stocks trade in different systems and that the regulations governing these systems cannot be identical. Nevertheless, as the Staff Report demonstrates, the primary use of stock index futures by most institutions is to execute transactions in which futures are used as a direct substitute for buying or selling a basket of stocks.[62] When a derivative stock product trades in markets that are linked with and have substantial impact upon the markets for stocks, the operation and rationale for the derivative product market itself provides a basis for regulation that is coordinated with the underlying equity market.[63]

3. Coordination

As a first step, the agencies must increase their coordination of regulation over these

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60 Commissioners Grundfest and Fleischman do not join in parts V.B.2. and 4. of the Commission's testimony to the extent they suggest that improved coordination is not the appropriate approach to intermarket regulatory issues and that the Commission alone possesses adequate and responsible expertise.

61 See Task Force Report at 59; Katzenbach Report at 31.

62 As the Commission's regulation of standardized stock options markets since 1973 proves, the fact that futures are different from stocks does not mean that it would be more efficient to continue to develop separate expertise in these products through separate regulators. Moreover, as has been proved by the SEC's regulation of both the OTC and exchange markets since 1938, differences in trading systems are not an obstacle to effective consolidated regulation.

63 The markets for stock, stock index options and stock index futures are so linked that the regulation of all three must take into account the capital formation purposes of our national equity markets.

united markets. The Commission and the CFTC already have agreed to initiate and have initiated steps to coordinate regulation of the stock, options, and futures markets, and to coordinate credit considerations relevant to those markets with the Federal Reserve Board. This coordination should continue on an expanded basis. Specifically, the Commission urges three steps, some of which already have been initiated.

First, the SROs for the stock, options, and securities markets should coordinate in order to initiate joint plans to meet volatility problems. Their meetings should be attended by staff members of both the Commission and the CFTC.

All the markets support the need to develop better intermarket cooperation in some form. The following list sets forth the recent initiatives that have taken place to develop contingency plans for a market emergency.

- On January 11, heads of the SROs met at the NYSE to discuss methods of improving communications.

- On February 10, heads of the Chicago Mercantile Exchange ("CME") and NYSE met with Chairman Ruder of the SEC, and Acting Chairman Hineman of the CFTC.

- On February 24, all exchanges, including equity, options, and futures markets, met in New York to consider various issues in cooperation and sharing of information.

- On March 16, all exchanges, including equity, options and futures markets, the Commission, and the CFTC, met to discuss issues relating to inter-exchange coordination and information sharing.

Second, the Commission and the CFTC have directed their staffs to meet in order to review the various regulatory proposals made by the Commission, the CFTC, the Presidential Task Force, and others which affect the markets supervised by them. The Chairman of the Commission and the Chairman of the CFTC should review the results of these meetings, and take steps necessary to implement the recommendations and, where necessary, to resolve differences. On several occasions in February 1988, I and senior Commission staff met with Acting Chairman Hineman and his senior staff to discuss these issues and attempt to resolve differences. I expect to be meeting in the near future with Chairman Gramm to pursue further these matters.

Third, consultation by the Commission and the CFTC with the Federal Reserve Board and the Federal Reserve Banks of New York and Chicago regarding credit, capital, and liquidity matters should continue. In February I met with Chairman Greenspan, Chairman Gramm, and Commissioner Hineman to discuss these issues.

4. Consolidation

The increased linkage of stock index futures and stock markets indicates that greater interagency coordination may not be enough and that more formal regulatory consolidation is necessary. The Commission believes that attempted coordination of regulation with respect to equity-related products may produce irreconcilable disagreements and that measures to resolve disagreements between the Commission and the CFTC must be created by new legislation.

The Commission does not believe that it is desirable to provide the Federal Reserve Board with jurisdiction over significant intermarket matters. The Federal Reserve Board lacks the necessary expertise regarding both equity and futures markets. Giving it jurisdiction over intermarket matters would require the Board to duplicate the SEC's existing expertise regarding these markets.[64] A more efficient and practical intermediate step would be to provide the SEC, the agency with expertise and direct responsibility for the equity markets, final regulatory authority for equity-related products, with respect to critical "intermarket" decisions such as coordinated trading halts, anti-manipulative and frontrunning rules, and other matters. In addition, the Commission's present authority to review proposed index futures contracts to ensure that they are not susceptible to manipulative activity should be expanded to include review of both new and existing contracts and to permit consideration of the impact of these products on the maintenance of fair and orderly stock markets and investor protection.

The Commission believes that limited power vested in the SEC to resolve agency disagreements may be adequate. The October market events dramatically reaffirm, however, that the stock index futures markets have become part of a single larger market that is currently subject to SEC and CFTC regulation. These events suggest that the most logical and efficient result would be the regulation of these markets by the SEC. The Commission currently has the responsibility and expertise regarding the underlying equity markets and, through its cooperation with the CFTC, its review of stock index futures under the Accord, and its various studies of index arbitrage and portfolio insurance trading, has acquired substantial expertise in futures markets. It is the agency most capable of exercising overall regulatory power.

5. International Coordination

The October market break provided dramatic confirmation of the internationalization of the global markets, although at the same time it emphasized the continuing leadership of the U.S. markets.

The Commission, for several years, has pursued actively greater cooperation and coordination with foreign regulators in a variety of ways, including negotiation of bilateral enforcement agreements and participation in multilateral forums such as the International Organization of Securities Commissions. The Commission believes that the October events

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[64] The Board clearly does have the necessary expertise for margin regulation, and would be an appropriate agency to have authority over margin for all equity-related products, including stock index futures.

underscore the need to continue and, indeed, to intensify these efforts.[65]

In addition, the inter-relationship of the world's securities markets underlines the importance of enhancing the safety and efficiency of those markets. The Commission intends to respond to these developments by working with other regulators to develop trading, clearance and settlement linkages, international trade and quote mechanisms, and adequate financial oversight systems.

In this regard, I have just returned from Tokyo and London, where I had constructive conversations with Japanese and U.K. regulatory officials about the need for greater coordination. While in Japan and the U.K., I stated that the key to sound international capital markets is to adapt the best rules and policies of all nations to new market structures and trading strategies. In that regard, I recommended that the following regulatory principles be considered by market regulators throughout the world:

1. Sound standards for disclosure, including mutually agreeable auditing and accounting standards;

2. Promotion of market fairness, including prohibitions against insider trading, market manipulation, and misrepresentations to the market place;

3. The widespread availability of quotation and price information;

4. Efficient and compatible national and international clearance and settlement systems;

5. Broker-dealer registration qualifications and conduct requirements designed to promote integrity and honesty in the profession;

6. Improvement of capital adequacy standards in order to provide greater stability and liquidity for national and international markets; and

7. Establishment of international surveillance and enforcement agreements.

VI. PREVIOUS RECOMMENDATIONS PRESENTED TO THE SENATE BANKING COMMITTEE NOT SPECIFICALLY DISCUSSED

I also briefly would note that when I testified before the Senate Banking Committee on February 3, 1988 I discussed several Commission recommendations that I have not described in this testimony. The Commission continues to consider a variety of recommendations involving the issues listed below.

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[65] In this connection, we note that Senator Riegle has made similar recommendations.

(1) Reassessment of the capital adequacy of upstairs firms;

(2) Modifications to the Intermarket Trading System;

(3) Reevaluation of the short sale rule in light of contemporary market conditions;

(4) Reporting program trades to the consolidated tape as they occur; and

(5) Reporting of program and other large trading activity to the SROs and the Commission for surveillance purposes.

VII. CONCLUSION

The events of October and since have demonstrated both the remarkable resiliency of our markets and the need to make improvements. The Commission will continue to work with the SROs, the CFTC, the FRB, the Administration, and the Congress to maintain the fairness, orderliness and competitiveness of our markets.