COMMODITY FUTURES TRADING COMMISSION
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Wendy L. Gramm
Chairman

March 18, 1988

The Honorable William Proxmire
Chairman, Committee on Banking, Housing
and Urban Affairs
The United States Senate
SD-534 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Proxmire:

At the February 3, 1988, hearing before the Committee, you requested the views of the Commodity Futures Trading Commission (CFTC) on possible legislative initiatives in response to the October 1987 events in the securities and derivative markets. As Acting Chairman Hineman stated at the time, the Commission does not believe legislative changes are warranted with respect to the Commission's regulatory authority. We believe our existing statutory and regulatory powers provide adequate leeway for fashioning an appropriate response to the October market events, and we would like to take this opportunity to report to the Committee with respect to the initiatives that have been taken in this area.

First, the CFTC and the futures exchanges have taken a number of regulatory and self-regulatory actions in response to

concerns arising out of the October market events. These actions strengthen those systems which protect the financial integrity of futures markets, including during periods of extreme price volatility, improve financial information sharing, upgrade information systems, and implement circuit breaker mechanisms to cushion the market impact of drastic price changes. This first section also includes a description of the CFTC's broad emergency powers which underlie the basic regulatory structure for futures and commodity option markets.

Second, we wish to report on the substantial ongoing interagency and interexchange coordination and contingency planning actions, including international coordination efforts, that have taken place since October 19.

Finally, we wish to clarify certain issues concerning program trading, differential leverage between stocks and futures, and frontrunning. All of these topics were the subject of confusing and sometimes contradictory testimony in the February hearings before the Committee.

REGULATORY AND SELF-REGULATORY CHANGES SINCE OCTOBER 19

Actions by Exchanges--Financial Integrity of Futures Markets

Since October 19, 1987, the futures exchanges have taken a number of actions that are responsive to recommendations made by

the Commission's staff in the Follow-up Report on Financial Oversight of Stock Index Futures Markets During October 1987 (Financial Follow-up Report) and in the Final Report on Stock Index Futures and Cash Market Activity During October 1987 (Final Report). These actions should enhance the financial security of the futures markets, particularly during periods of substantial volatility, and should advance related objectives, such as increasing the efficiency of and coordination among clearing and settlement facilities that are recommended in other reports on the stock market events of October 1987. These actions include the following:

- Margin pay and collect data-sharing system. In accordance with previous CFTC staff recommendations, as of October 21, 1987, all futures exchanges and clearing organizations had entered into a formal agreement for the routine, electronic exchange of margin pay and collect data with respect to dual and multiple clearing members. Such a system should enhance self-regulatory and CFTC financial surveillance over participants in multiple futures markets. Following the October market break, CFTC staff recommended implementation of this system on a priority basis. The system is currently expected to be fully implemented by the end of March 1988 for all futures clearing organizations and is expected to include option premium data from the Options Clearing Corporation (OCC) in the near future. In addition, also in accordance with Commission staff recommendations, discussions are underway concerning the inclusion of securities data from the National Securities Clearing Corporation in this system.

- Clarification of contractual relationships between clearing organizations and clearing banks. The CFTC staff's Financial Follow-up Report recommended that the contractual relationships between clearing organizations and their settlement banks be clarified. To the extent that settlement bank confirmations of variation margin payments are recognized to be final and irrevocable, the flow of variation funds through the clearing system should be facilitated, as the clearing system operates principally as a conduit for the transfer of funds from clearing firms making net variation payments to clearing firms receiving net variation collects. The Chicago Mercantile Exchange (CME)

Clearing House, the Chicago Board of Trade Clearing Corporation (BOTCC) and the OCC are currently reviewing a draft agreement designed to afford additional clarity and standardization in clearing organization and settlement bank contractual relationships.

o Enhanced margin security against risks of extreme volatility. The CFTC's staff review indicated that no margin defaults occurred at the clearing level, that a low level of customer defaults occurred at the commodity broker or future commission merchant (FCM) level, and that margin levels established by the futures self-regulatory organizations (SROs) were sufficient for financial integrity purposes during the week of October 19-23. Nonetheless, CFTC staff recommended that the futures SROs review the adequacy of margin levels and consider measures to increase the security afforded by the margin system against aberrant price spikes and extreme volatility.

Responsive SRO actions include:

-- CME margins on the Standard & Poor's 500 futures contract have been increased to $18,000 initial margin ($10,000 maintenance) for speculative positions and to $10,000 (initial and maintenance) for hedge positions. The CME also has established a policy of resetting its initial speculative margins for stock index futures to approximately 15 percent of the value of the contract on a quarterly basis. Chicago Board of Trade (CBT) margins on the Major Market Index (MMI) futures contract have also been increased to $15,000 initial margin ($10,000 maintenance) for speculative positions and to $10,000 (initial and maintenance) for hedge positions.

-- The CME Clearing House also has taken measures to enhance its own liquidity. The Clearing House is in the process of acquiring a $250,000,000 line of credit to be used in the event of a clearing firm's default. The CME also has adopted a rule change to increase clearing members' security deposits (which are standing security that is in addition to margin deposits). The rule is designed to increase the available pool of security deposits more than ten-fold from approximately $4,000,000 to $40,000,000. The CME also plans to adopt rules requiring the parent company of a CME clearing member to guarantee losses on non-customer positions carried by such clearing member.

-- The CME has proposed a rule change to impose additional financial requirements on clearing member firms maintaining 16 or more branch offices or a combination of 32 or more branch offices and guaranteed introducing brokers.

-- Also in response to CFTC staff recommendations following the market break, the CME has submitted a rule proposal designed to establish a margin system for option positions that identifies more effectively positions that carry greater risk and that, therefore, should incur higher margins. This new option margin system, which was submitted in early February, is currently under review by the Commission. The BOTCC also has taken action with regard to option margins, increasing the amount of margin collected for deep out-of-the-money options.

o <u>Increased use of intra-day margin calls</u>. The CFTC's <u>Financial Follow-up Report</u> reflects that the futures margin system functioned effectively as a protection of the financial integrity of futures transactions during the week of October 19-23. Nonetheless, the Commission staff's analysis indicated that the potential burdens imposed upon the clearance and settlement system by the necessity to effect variation margin transfers of the magnitude called for during the week of October 19-23 warrants consideration of the use of intra-day margin calls on a routine or more frequent basis by all clearing organizations. Previously, only the BOTCC routinely made intra-day margin calls.

The CME has recently adopted a rule amendment to facilitate implementation of a new policy of its Board of Governors to make intra-day margin calls on a daily basis, when a specified dollar threshold is crossed, and to facilitate the flow of funds by paying out gains as well as collecting payments for losses on an intra-day basis. New procedures promulgated by the CME for the collection and payment of variation margin on an intra-day basis provide for issuance of intra-day calls for settlement variation to any clearing member owing more than $500,000 and for intra-day payments of up to 80 percent of gains when $1,000,000 or more is owed a clearing member. The CME also has stated its intention to coordinate the timing of intra-day margin calls with other clearing organizations in order to alleviate potential burdens on clearing member firms that have related positions in different markets. The CME also has adopted a rule amendment to provide greater flexibility to the clearing organization with regard to the timing of daily settlement payments.

The BOTCC, which had a pre-existing policy of making routine intra-day margin calls based on the open interest at the previous day's close, adopted additional margin collection procedures following the October market events to enhance its margin collection process. Under these new procedures, the previous evening's trades and all trades submitted to the BOTCC by approximately 1:30 p.m. each day are matched, and appropriate variation margins are collected by 2:30 p.m. each day on all open positions as of 2:00 p.m. In addition, the BOTCC established procedures to ensure that afternoon variation margin payments are

paid only to a clearing member if the clearing member's required margins, based on intra-day positions, are sufficient to cover the newly calculated risk of those positions.

o Enhanced clearing and settlement bank financial data. In accordance with Commission staff recommendations, the CME Clearing House has augmented its risk management audit procedures, expanded the range of "large-trader" financial information that will be available on a short-term basis, and will be requiring additional intra-day mark-to-market calculations to assess the impact of price moves on positions held by clearing members. The CME also has scheduled a round-table discussion in April 1988 with representatives of the BOTCC, OCC, Federal Reserve Bank of Chicago, and the four clearing banks used by the BOTCC and the CME Clearing House to address subjects including CME emergency plans and procedures, the appropriateness of expanding Fedwire hours, improving coordination among the exchanges and settlement banks, and revisions to agreements between clearing organizations and settlement banks. Some of these settlement refinements were also suggested for further consideration by the CFTC staff in the Financial Follow-up Report and the Final Report.

o Clearing member capital. The CME has stated that it intends to enhance the security of its Clearing House by establishing additional minimum capital prerequisites for membership in the CME Clearing House.

Actions by Exchanges--Price Limits

One of the circuit breakers discussed most frequently since the events of mid-October is daily price fluctuation limits. Generally, futures price limits prohibit trading at prices a specified level above or below the previous day's settlement price. As discussed in more detail in the CFTC's Final Report (pp. 182-86), proponents of limits contend that they prevent the markets from overreacting during periods of uncertainty and constrain the daily financial exposure of FCMs and clearing members. The disadvantage of such limits is that, when they are reached and markets are prevented from finding the market clearing price, large amounts of orders can remain unexecuted or be

diverted to other markets. In addition, limits impede the price discovery process of futures markets and can result in intermarket distortions when comparable limits do not exist for related markets.

Although price limits were at one time uniformly in effect for every actively traded futures contract, in recent years there has been a tendency toward relaxation or removal of price limits in many futures markets. On October 19, 1987, there were no price limits in effect for any actively traded stock index futures contract. By October 23, however, the CME, New York Futures Exchange (NYFE), and Kansas City Board of Trade (KCBT), by emergency actions, had put into effect price fluctuation limits for their actively traded stock index contracts. The fourth exchange with stock index futures trading activity, the CBT, did not implement limits on an emergency basis. Subsequently, the Commission approved permanent limits for the CBT's, CME's, and KCBT's actively traded stock index contracts. More recently both the CME and CBT proposed further rule amendments that were approved by the Commission in February 1988. A summary of the current price limit rules, by exchange, follows:

<u>Chicago Mercantile Exchange</u>. The CME's daily price fluctuation limits for the S&P 500 futures contract are contingent upon the level of futures prices as determined by the settlement price of the near-by future at the end of the prior calendar month as follows:

Lead Month Settlement Price on Last Business Day of the Preceding Month	Daily Futures Price Limit for the Current Calendar Month
(index points)	
0.00 up to 275.00	15.00
275.05 to 325.00	20.00
325.05 and above	25.00

The CME's S&P 500 futures rules also provide for a narrower opening period price limit of 5.00 index points, above or below the previous day's settlement price, which applies during the first ten minutes of trading. When any of the aforementioned price limits for the S&P 500 futures contract are in effect, the CME rules provide for the suspension of trading in the option on the S&P 500 future as well. 1/

Chicago Board of Trade. The rules of the CBT regarding the MMI futures contract specify a daily price fluctuation limit of 20 points above or below the previous day's settlement price. This limit is expanded to 30 points the next day in the event that

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1/ The Commission is currently reviewing additional rule amendments proposed by the CME that would refine these opening period price limits and redefine the lead month. The proposed amendments generally would provide that the opening period price limit would cease to be in effect if the futures contract trades off the limit prior to the end of the first ten minutes of trading. Further, there would be a two-minute trading halt if the futures contract remains bid or offered at the five-point limit at the end of the first ten minutes of trading. Under the proposal, the lead month would be the most actively traded future.

three or more contract months close at the limit. There is no option on the MMI traded on the CBT.

Kansas City Board of Trade. The rules of the KCBT for the Value Line Average (VLA) futures contract specify a daily price fluctuation limit of 35 points. This limit also contains an expansion factor to 50 points after two consecutive daily price limit moves in the same direction in the lead month. The option on the VLA future is not actively traded.

New York Futures Exchange. The emergency action taken by NYFE in mid-October regarding price limits expired in January, and no permanent rules have been implemented to replace those limits for the NYSE Composite futures contract. Currently, the open interest in this contract, although second to the CME's S&P 500 futures contract, accounts for less than three percent of the total face value of open contracts in stock index futures.

In analyzing the price limits imposed by the exchanges on various stock index contracts, the Commission focused on the recent experience of stock market prices--including the period of mid-October 1987. Based on that analysis, the specified levels appear to represent an appropriate balance between the positive and negative aspects of price limits described above. For instance, for the actively traded S&P 500 futures contract, which accounts for about ninety-five percent of the total market value of all open stock index futures contracts, the analysis shows

that the multi-level limits now in place would have been in effect infrequently during the thirteen-month period from January 1987 through January 1988. However, these price limits would have had a substantial impact on futures settlement prices in mid-October 1987, and on those days when the daily price limits would have been reached, those limits would have constrained stock index futures prices significantly relative to the prices that prevailed at the end of those trading days. In addition, the CME's new price limit for the opening of the S&P 500 futures contract would have been reached each day during the week of October 19-23.

Actions by the CFTC--Financial Integrity of Futures Markets

Subsequent to October 19, the Commission took immediate action to assess the operation of regulatory and self-regulatory financial protection systems during the October market break. The staff's preliminary financial oversight analysis is summarized in the Interim Report on Stock Index Futures and Cash Market Activity During October 1987 (Interim Report), which was prepared on an expedited basis and presented to the Commission on November 9, 1987. Thereafter, the Commission took a number of other actions to assess the operation of CFTC and futures SRO financial regulatory systems during the market break, to identify measures that could be taken to reinforce the capacity of existing financial systems to respond to extreme market volatility, and to stimulate self-regulatory organizations to review and

enhance their own programs to augment available financial protections. These actions include the following:

o Development of follow-up data concerning the financial impact of the October market break upon futures firms and futures customers. To assess the effectiveness of financial protection systems during the October market break, the Commission's staff issued a special call, pursuant to CFTC Regulation 1.10(b)(4), for financial reports by all FCMs as of October 31, 1987, collected survey data from twenty-three FCMs, which carried approximately two-thirds of total futures customer equities, concerning such matters as customer defaults and position liquidations, and analyzed notices filed by FCMs pursuant to the Commission's financial early warning reporting system. 2/ The staff's findings based upon these data are summarized in the Financial Follow-up Report.

o Review of the operation of clearing organization systems for the collection and payment of margin. As part of its post-market break financial oversight review, the Commission's staff also reviewed the operation of clearing organization systems for the collection and payment of margin. This analysis included a review of the amount, frequency, and results of daily and intra-day margin calls issued by the CME Clearing House and by the BOTCC, a review of contractual relationships between clearing organizations and their settlement banks, and an inquiry into the operation of settlement and banking systems relevant to the flow of margin funds during the week of October 19-23. The staff's findings based upon these data are summarized in the Financial Follow-up Report.

o Review of customer complaint data. The Commission's staff also surveyed those futures exchanges which trade stock index contracts, the National Futures Association, and the Commission's Complaints Section to collect data concerning customer complaints relating to futures activity during the

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2/ CFTC Regulation 1.12 establishes a financial early warning system which requires, among other things, that FCMs notify the Commission and their designated self-regulatory organizations of capital impairment and other specified conditions that constitute or could lead to financial deficiencies, including a failure to maintain adjusted net capital equal to at least 150 percent of the greater of the required minimum of the applicable self-regulatory organization or of the Commission.

market break. The staff's findings based upon these data are summarized in the Financial Follow-up Report.

o Issuance of financial oversight conclusions and recommendations. Based upon its analysis of financial data collected following the market break, the Commission's staff prepared the Financial Follow-up Report summarizing its findings and recommendations relating to federal regulatory and industry self-regulatory financial protections in the futures markets. The staff's recommendations addressed several measures, including implementation of the margin pay and collect information-sharing system, increased use of intra-day margin calls, and clarification of contractual relationships between clearing organizations and clearing banks, which are reflected in the exchange actions previously summarized.

o Self-regulatory program reviews. Following the market break, the Commission's staff initiated a review by the futures SROs to identify measures that could be taken to reinforce existing financial protections against extreme market volatility. In correspondence with each exchange and clearing organization, CFTC staff requested that each SRO consider potential program enhancements to strengthen protections against future periods of volatility and preliminarily identified seven program areas for priority consideration. These program areas included such matters as implementation of the pay and collect data-sharing system, integration of market surveillance data into SRO computerized financial surveillance systems, and enhancement of SRO audit programs to ensure that member firms have the capability to monitor and maintain continuous capital compliance. Commission staff subsequently met with the Joint Audit Group, a self-regulatory council on which all futures exchanges and the National Futures Association are represented, to discuss the staff's recommendations in each program area. SRO responses to the Commission staff's recommendations have generally been positive. The Commission and its staff continue to consult with the SROs to stimulate progress toward program enhancements recommended following the market break and to monitor SRO responses to the Commission's financial recommendations.

o Establishment of centralized computer base for FCM financial data. In the Financial Follow-up Report, Commission staff recommended that FCM financial data be maintained routinely in a computerized data base that would be accessible to CFTC staff as well as to all SRO financial surveillance staffs. The Commission currently maintains financial information filed by FCMs in hard copy and computerizes a limited portion of such data. Currently, discussions with the futures SROs concerning establishment of such a data base are underway, and Commission staff is developing appropriate computer systems.

o Enhancement of financial surveillance data systems. The Commission's staff is also assessing measures that could be

taken to refine existing data, including large-trader data and exchange clearing member position data that are collected and used by the Commission and the futures exchanges for market and financial surveillance, to facilitate more effective financial surveillance. Such measures include enhancement of existing systems to produce aggregate intermarket position data for CFTC-regulated markets. Such aggregate data could be made available to exchanges and other regulators during periods of volatile markets to identify concentrations of similar or related positions in futures held by customers and/or by clearing firms on multiple exchanges that could pose a financial threat to a clearing firm. Such intermarket position data would be useful not only to the futures SROs but, where firms or customers also are involved in the securities markets, to the Securities and Exchange Commission (SEC) and the securities SROs. Once established, such a program could provide a model for routine compilation of data to permit ongoing, daily assessments of full intermarket exposures, including domestic and foreign securities as well as futures positions.

Actions by the CFTC--Surveillance Data

The Commission is moving on several fronts to ensure that more complete and timely data are available for analysis in the event of continued volatility in the stock market. First, each commodity exchange currently maintains a daily record of each trade (trade register) with certain identifying information. This information includes the name of the firm clearing the trade and a customer-type indicator (CTI) that shows the type of account for which the trade was executed. 3/ Commission staff is exploring ways to use this daily record of trades to identify

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3/ The CTI code identifies whether a trade was executed for the floor broker making the trade, the firm clearing the trade, another floor broker or member, or a customer.

more rapidly and accurately specific types of transactions involving both futures and stock trades, such as index arbitrage.

In the short run, consideration is being given to requiring additional CTI codes for stock index futures transactions to identify various types of transactions. The advantages of this approach are the short time required for implementation and the low cost due to the slight changes to current computerized records that would be required.

For the longer term, the Commission is exploring with the exchanges and FCMs changes and additions to account-number information. It may be possible, for example, to require that the account number for a trader be recorded on the trade register and that this number be the same as the number provided to the Commission and the exchanges for their respective large-trader reporting systems. While some exchanges currently have account numbers in their trade register data, the exchanges do not have specific requirements regarding such use of account numbers. Such requirements would allow the rapid identification of traders' timed transactions and the integration of those data with other information collected through the Commission's or the exchanges' large-trader reporting systems. Preliminary discussions with several exchanges indicate, however, that this latter approach requires significant preparatory analysis since it could necessitate industry-wide changes to existing accounting systems.

With respect to the CFTC's large-trader reporting system, Commission staff has implemented a special identification system for tracking institutional accounts. The staff also is reviewing the levels at which the positions of large traders in stock index futures currently are reported to the Commission in terms of the proportion of open interest represented by reporting traders and the numbers of traders being reported. If appropriate, proposals to lower these reporting levels will be published in the Federal Register for public comment.

THE COMMISSION'S EMERGENCY POWERS

In addition to the authority to support the foregoing regulatory initiatives, the Commission also has broad statutory authority to take emergency action in extraordinary circumstances. This authority includes the power to halt trading in one or more futures contracts or to resume trading if the Commission determines it is appropriate to do so.

In 1974, Congress enacted Section 8a(9) of the Commodity Exchange Act, which authorizes the Commission

> to direct [a commodity exchange] whenever it has reason to believe that an emergency exists, to take such action as, in the Commission's judgment, is necessary to maintain or restore orderly trading in, or liquidation of, any futures contract.

In approving this compromise version of Section 8a(9) which was enacted into law, the House and Senate conferees emphasized that "[t]he effective use of the emergency powers requires the careful exercise of expert and impartial judgment by the Commission." 4/

The Commission's long-standing policy in emergency situations is that the exchanges should act in the first instance. As a result, the Commission has found it necessary to take emergency action on only four occasions. Thus, the Commission has acted consistent with the Congress's intent that it balance various broad public interests--including the desire for minimal government intervention in the markets--against the need for carefully selected but effective federal action to assure a sound and viable marketplace.

In reauthorizing the Commission in 1978, 1982, and 1986, the Congress has favorably reviewed the Commission's approach to the use of its emergency authority. In 1982, the Congress expanded Section 8a(9) expressly to confirm that the Commission's emergency powers included, but were not limited to, "the setting of temporary emergency margin levels on any futures contract, and the fixing of limits that may apply to a market position acquired in good faith prior to the effective date of the Commission's action." 7 U.S.C. 12a(9)(1982).

4/ Senate Report No. 1194, 93d Cong., 2d Sess. 38 (1974).

In addition to empowering the Commission to take "such action" as the Commission judges will restore or maintain orderly trading, the Congress also has provided a broad definition of an emergency in Section 8a(9). Specifically,

> The term 'emergency' as used herein shall mean, in addition to threatened or actual market manipulations and corners, any act of the United States or a foreign government affecting a commodity or other major market disturbance which prevents the market from accurately reflecting the forces of supply and demand for such commodity . . . .

In deciding whether to invoke its emergency powers under this definition, the Commission has paid particular attention to price and other factors in the cash markets for the underlying commodities on which the futures contracts are based.

While previous Commission emergency actions have involved agricultural products, it is clear that the Act's definition of emergency extends to developments in the underlying markets for financial commodities, such as government securities and cash-settled equities indexes. In this regard, in 1978, the Congress added Section 2(a)(8)(B) to the Act to specify that the Commission, in considering possible emergency action under Section 8a(9) affecting futures contracts involving any security issued or guaranteed by the United States, should evaluate the comments it receives from the Treasury Department and the Board of Governors of the Federal Reserve System. The Commission also would apply this policy to comments received from these agencies,

as well as the SEC, if the Commission were to consider emergency action involving stock index futures contracts.

COORDINATION EFFORTS SINCE OCTOBER 19, 1987

Communication and coordination among the CFTC, the SEC, the Federal Reserve Board and other financial regulatory agencies, as well as among the securities and futures exchanges, was already well established prior to October 19. Building upon that foundation, interagency and interexchange coordination was excellent during the week of October 19, as noted in both the Report of the President's Task Force on Market Mechanisms and the General Accounting Office's preliminary report. 5/ Of course, any system-wide shock is likely to suggest areas where enhancements can be made. In the weeks and months since October 19, a variety of efforts have been undertaken to enhance coordination mechanisms and formalize communications systems that worked well on an *ad hoc* basis during the market break and to develop contingency plans to deal with possible market crisis situations that may arise in the future.

On October 27, 1987, Acting Chairman Hineman, Chairman Ruder and members of their senior staffs met to discuss improved

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5/ For details concerning the CFTC's part in these coordination efforts, see pp. 29-34 of the CFTC's Interim Report on the October market events.

interagency liaison. The next meeting among the same parties, on November 12, 1987, resulted in an agreement to increase the frequency of meetings among SEC and CFTC senior staff members to discuss matters of mutual interest and the preparation and distribution of a "crisis management phone book" listing the names and phone numbers of key persons at the securities and futures exchanges and financial regulatory agencies.

Acting Chairman Hineman met again with Chairman Ruder on December 23 and with Chairman Greenspan on January 8 to discuss interagency coordination issues. On January 13, Acting Chairman Hineman met with the leadership of the Chicago Mercantile Exchange and the Chicago Board of Trade to discuss issues related to the October market events, including ways of enhancing interagency and interexchange coordination. On January 21, Acting Chairman Hineman discussed the same issues, particularly better coordination among the exchanges and institutional users, with the President of the New York Futures Exchange, the President of the New York Stock Exchange, and the Chairman of the Futures Industry Association. Also, on January 11, the heads of the securities and futures SRO's met in New York to discuss methods of improving communications.

Chairman Ruder, Acting Chairman Hineman and staff members of the two Commissions met again on February 9. Items on the agenda included contingency plans for market emergencies, information sharing, margins, circuit-breaker mechanisms, intermarket front

running and participation of futures exchanges in the Intermarket Surveillance Group (ISG).

On February 10, Acting Chairman Hineman and Chairman Ruder met with John Phelan, Chairman of the New York Stock Exchange and Leo Melamed, Chairman of the Executive Committee of the Chicago Mercantile Exchange. Based on discussions at this meeting, the CFTC and SEC wrote to their respective exchanges asking them to give immediate consideration to the related areas of inter-exchange information sharing on a routine or continuing basis and flexible contingency planning for emergency situations. The CFTC request was sent to the four futures exchanges that have active stock index futures contracts. That request asked the futures exchanges to advise the Commission concerning

> [W]here you believe improved procedures are needed to facilitate the prompt sharing of accurate market and financial information among the securities and derivative market self-regulatory organizations.

All of the responses of the futures exchanges noted that a substantial amount of interexchange coordination already exists, particularly regarding surveillance of the financial condition of FCMs and broker/dealers. Nevertheless, the four futures exchanges also saw the need for additional efforts by futures and securities exchanges to enhance interexchange information sharing and emergency coordination. Several exchanges offered specific suggestions to achieve that end, including the prompt convening

of meetings among the exchanges to discuss these issues and the development of a formal interexchange group through which they could address financial and market surveillance issues on a routine basis.

There are two specific areas in which the futures exchanges believe improvements are needed. One is in obtaining prompt access to relevant securities position and transaction information to be used in conjunction with available futures market surveillance data to augment the futures exchanges' financial and market surveillance. The futures exchanges also noted their need for advance notice of emergency actions by other exchanges, particularly market closings, and of the facts necessitating those actions so that coordinated responses can be implemented when appropriate. On February 24, representatives of securities, options and futures exchanges trading stock index products met to discuss technical issues related to cooperation and information sharing. These exchanges are currently exploring a "hotline" system involving dedicated telephone lines which would allow any exchange to communicate with all other exchanges simultaneously.

On March 16, SEC and CFTC staff led a meeting of representatives of securities exchanges and futures exchanges that trade stock index products, to discuss areas where better interexchange sharing of market information is needed. Additional interexchange meetings that have been scheduled include: a March 24 meeting, hosted by CBOE, to discuss improved information

dissemination such as wider automatic availability of data on the status of individual NYSE stocks; a March 25 meeting of exchange clearing organizations to discuss the types of financial data that should be shared regularly and otherwise; and a meeting among exchanges and banks the first week of April to discuss flow of funds and credit questions relating to exchange margin calls.

On February 26, a meeting was held at the Federal Reserve Board among Chairman Greenspan and Vice Chairman Manuel Johnson; Chairman Ruder of the SEC; Commissioner Hineman and myself, as Chairman of the CFTC (I had been sworn in earlier that week); and senior staff members of the respective agencies. The discussion covered, among other issues, plans to formalize the ad hoc communications procedures that worked well during the October market break and enhanced information sharing. The agency Chairmen appointed staff members to an interagency group that would meet to work out the details of improving coordination and information sharing procedures. That staff group held its initial meeting on March 7.

In addition, as previously mentioned, there have been a series of meetings and letters aimed at enhancing futures exchanges' participation in the ISG. Futures exchanges have participated informally in meetings of an ISG subcommittee for several years. On January 15, 1988, Acting Chairman Hineman wrote to the outgoing Chairman of the ISG in support of greater futures exchange participation in the deliberations of the ISG,

whether through formal membership or otherwise. In a January 25 letter, the ISG Chairman responded that futures exchanges and CFTC representatives had been invited to, and would attend, the ISG's January 28 annual meeting. On February 4, the new Chairman of the ISG wrote to the presidents of those futures exchanges that trade stock index futures enclosing a copy of the ISG's basic operating agreement for their review as a prelude to exploring a more formal affiliation between the futures exchanges and the ISG. In addition, on February 12, Chairman Ruder wrote to the Chairman of the ISG to encourage him to facilitate participation by futures market self-regulatory organizations in relevant ISG subcommittees. Recently all four of the futures exchanges which trade stock index futures have indicated a willingness to join ISG. The next ISG meeting is in Washington on April 5.

The agencies are continuing to encourage enhanced communication among the exchanges, including particularly the sharing of information on market conditions and financial risk related to intermarket positions. Further interagency meetings not listed here have taken place at the staff level to discuss, among other issues, intermarket frontrunning.

The Commission also recognizes that futures markets are international markets and is continuing its efforts to improve regulatory cooperation and information sharing on the international level as well. Commission senior staff members attended

an international meeting of regulators having responsibility for securities and derivative products (the "Wilton Park Group") in the United Kingdom on February 17-19. Participants discussed market events and enhanced cooperative enforcement and information exchange. On March 9, the Commission's senior staff and I, as Chairman, hosted an international futures regulators meeting in Boca Raton. Officials representing regulatory agencies from the United Kingdom, France, Switzerland, Hong Kong, Malaysia, Australia and Canada were present. The agenda included the Commission's new foreign futures and option regulations, the events of October 19 and the need for enhanced financial and market information sharing, as well as enforcement-related information sharing. As futures trading has developed in other nations, foreign government regulators have spent much time with the CFTC learning how our regulatory system functions. The March 9 meeting is one of regularly scheduled twice-yearly international meetings among futures and option regulators which have been going on for several years.

CLARIFICATION OF CERTAIN ISSUES DISCUSSED AT THE HEARINGS

Program Trading and Index Arbitrage

Despite all that has been written and said about the events of October 1987, there is still apparent disagreement as to the characterization of various trading strategies prevalent at the time. A variety of disparate strategies have been labeled as

"program trading," and it has been asserted erroneously that all or most of such trading is related to stock index futures markets.

In fact, program trading is simply the simultaneous purchase or sale of a basket of stocks. As such, it is not a new concept, although recent advances in automated order routing systems have facilitated the rapid transmission and execution of orders for baskets of stocks in normal market circumstances. For example, if a mutual fund or a pension fund wished to sell a portion of its diversified equity portfolio, it could do so through a sell program on the New York Stock Exchange (NYSE), often using the NYSE's automated routing system called "Super DOT."

"Index arbitrage" is a special form of program trading that involves related trades in stocks and stock index futures or options. Such strategies, which are most commonly executed by or for pension or endowment funds and large securities broker/dealers, involve nearly simultaneous purchases or sales of baskets of stocks and the taking of equal and opposite positions in stock index futures or option contracts. Arbitrage activity is designed to capture a profit from price disparities between the stock market and the related index contract; arbitrage functions to reduce intermarket price disparities, thereby maintaining a proper economic relationship between the stock and index derivative markets.

Another form of program trading has been termed "portfolio insurance." This trading strategy is a specialized type of portfolio hedging that is designed to shift the allocation of a fund's portfolio out of stocks and into cash or bonds to protect the portfolio from a decline in stock market prices. Portfolio insurance has been characterized as a disciplined form of entering stop-loss orders that can be carried out in either the securities or derivative markets. The strategy calls for increasing short positions in stock index futures or the sale of stocks after the market begins to fall, and calls for offsets of short futures positions or purchases of stock when the stock market rises to replicate the risk-return characteristics of a purchased put. While portfolio insurance originally was designed for execution in the stock market, during the two or three years preceding October 1987 the low transaction costs and high level of liquidity in the stock index futures market resulted in most portfolio insurance being executed in the futures rather than the stock market.

In sum, program trading is first and foremost a stock market strategy and is not restricted to index arbitrage or other futures-related trading strategies. The Commission staff's Final Report carefully distinguishes the different forms of program trading to assess their relative importance during that period. The Final Report focused on the potential interaction in the futures market of index arbitrage and portfolio insurance trading to determine whether there was any evidence that the price

volatility in the stock market was caused by the much publicized "cascade scenario."

As described in the CFTC Final Report, index arbitrage accounted for only about 6 percent of total NYSE volume on October 19, a relatively low amount in comparison with previous days of stock market declines that have been studied. The greatest concentration of index arbitrage sell programs occurred during the first hour of trading that day. Despite large reported futures price discounts and rapidly falling stock prices after 2 p.m., index arbitrage trades diminished significantly after that time. In the days following October 19, index arbitrage was an insignificant percentage of NYSE volume due to NYSE actions to curtail that type of trading. Despite such curtailment, stock prices remained volatile during the following days, and no substantial sustained price recovery occurred, supporting the finding that index arbitrage was not the cause of the stock market's collapse.

Although portfolio insurance and other hedging activities in stock index futures were substantial on October 19, there was no correlation among high concentrations of index arbitrage, portfolio hedging and the largest intraday periods of price weakness. While index arbitrage sell programs were concentrated during the first hours of trading on October 19, portfolio hedging using futures was relatively constant throughout the day.

Furthermore, program trading of stocks without a futures market counterpart, i.e., non-arbitrage sales of baskets of stocks, accounted for a larger proportion of total stock sales on October 19 than did futures-related program trading of stocks, i.e., index arbitrage. During the first half hour of trading, for example, one mutual fund group entered stock sell orders for 17.5 million shares; this compares to 6.2 million shares of index arbitrage sell programs entered during the same time period. For the day, that mutual fund group sold 25.8 million shares of stock, compared to 37.5 million shares sold for all index arbitrage programs and a total NYSE volume of 608 million shares. In addition, for the entire day other program sales of stocks, without futures market counterparts, totalled nearly 52 million shares, and those other program stock sales were larger than index arbitrage for every half-hour interval after 10:30 a.m. Clearly, contrary to some reports, futures-related program trading was not the dominant selling pressure on the NYSE on October 19. The timing and magnitude of index arbitrage and portfolio insurance activities in the futures market during the October market break do not provide evidence to support the cascade hypothesis.

Differential Leverage Between Stocks and Futures

The purpose of futures margins is to protect the financial integrity of the futures markets, and during the October market break the futures margining system served its purpose well, as

attested to by all of the official commentaries on stock market events during mid-October. Nevertheless, the Securities and Exchange Commission and others have asserted that stock index futures margins should be raised. Although a variety of reasons for that proposal have been advanced, the most prevalent argument has been that margins for stock index futures, as well as for stock index options, permit greater leverage than do the margins applicable to stock purchases and short sales.

First, there is no evidence that leveraged futures positions contributed to the collapse of stock prices in mid-October. If the CME's S&P 500 futures market in mid-October had consisted of many large, leveraged long positions, such positions theoretically could have contributed to the price collapse. This could have arisen if futures traders had been forced to liquidate their outstanding long futures positions instead of meeting large variation margin calls. However, neither the Commission's large trader data nor the Commission's review of the financial events accompanying the October market break indicate such liquidations.

On October 19, 1987, open interest in the S&P 500 futures contract increased by about 26,000 contracts, rather than decreased. The number of reporting futures traders, the vast majority of whom are broker/dealers or institutional investors, also increased from 148 on October 15 to 186 at the close of business on October 19. These statistics do not support the occurrence of forced liquidations of leveraged positions.

Second, as the CFTC's large-trader data indicate, the S&P 500 futures contract is primarily an institutional market, and its principal users do not have leveraged positions. On October 19, reporting commercial traders 6/ held about 70 percent of the total open interest. Most commercial traders in stock index futures markets are institutional investors, principally pension funds or broker/dealers, that are engaged in index arbitrage or are hedging their stock market risk. In contrast, large speculators, who are subject to position limits in the S&P 500 futures market as in all futures markets, held less than 5 percent of the total open interest in mid-October 1987. Thus, in the stock index futures market there is a notable absence of large speculative positions that could be indicative of differential leverage between the stock and futures markets.

On the other hand, the futures positions of hedgers and other commercial users of stock index futures generally are not leveraged. Most have equivalent offsetting positions, normally in the stock market but also in other derivative markets. Thus, a rapid change in stock prices would be offset by an offsetting change in the value of the related futures positions and, as a result, should not create a significant deficit in the combined

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6/ Under CFTC regulations a reporting commercial trader in the S&P 500 futures market is one who has a position exceeding 300 contracts and who has indicated that use of the contract is for hedging or arbitrage purposes.

stock and derivative market positions of commercial traders. Under such circumstances, futures margin calls may create at most short-term liquidity demands, not solvency concerns. Consequently, it makes no sense from the standpoint of either financial integrity or leverage to adopt a Federal policy of higher initial margins for the stock index futures positions of institutions which have offsetting stock positions.

Further, since the stock index futures market is primarily an institutional market, the 50 percent initial margin requirement of the Federal Reserve Board for public customers is not generally the pertinent figure for comparison to futures margin levels from the standpoint of relative market leverage. In this regard, it is noteworthy that stock exchange specialists and other equities market makers are exempt from the Federal Reserve Board's 50 percent stock margin requirement. Instead, they pay a good faith margin, set by their creditors and related to financial (rather than leverage) requirements. Such deposits are normally 20 to 30 percent (but can be lower) of the current market value of the stocks they are carrying. Furthermore, when the specific mechanics of the futures and securities margining systems are compared, taking into account the futures industry's requirement of daily payments of all contract price changes, one can view the futures margining system as more rigorous during periods of market volatility than the credit system that applies to securities transactions.

Customer margins for futures contracts, which apply to both long and short positions, have two elements, initial margin deposits and variation margin payments. Initial and maintenance margin levels determine the amount of good faith deposit that, respectively, is paid upon taking the position and is maintained on deposit with the FCM while the futures contract is open. If the equity in the customer's account falls below the maintenance margin level, the futures customer receives a margin call to deposit additional funds to restore the account's net equity to the initial margin level. In addition, variation margin must be paid to the clearinghouse by each trader's clearing member to cover any losses on a daily, pay-as-you-go basis. Thus, to maintain a futures position a customer must always have on deposit with his or her FCM an amount equal to at least the maintenance margin level, and that firm must be able to pay out, each day and in cash, 100 percent of all losses in the value of the contract to the clearinghouse.

In contrast, securities customers have only to make a down payment on the purchase price of the stock and can finance the rest of the purchase. The customer may be able to wait as long as five days to make his down payment and does not have to make good on losses daily. For stocks, maintenance margin calls are made only after the value of the stock has dropped so that there remains only a 25 percent, as opposed to a 50 percent, down payment. Because of these essential differences between the futures and securities margining systems, a simplistic comparison

of initial margin requirements for securities and futures positions of roughly comparable value can lead to erroneous conclusions.

For example, under the securities margining rules, an investor/speculator not eligible for an exemption under Regulations T or U would be required to deposit $75,000 to purchase a $150,000 portfolio of stocks. Under these rules the firm carrying the stock purchaser need not make a downpayment until the settlement date, which is the fifth business day after the trade date. Thus, the stock trader may not have to deposit any money for the first four days, and no further margin payments would be required unless the stock portfolio's value declined below $100,000. In the event that occurred, the securities trader would normally have five business days to provide funds (although this could be up to fifteen days under special circumstances) equal to the decline in the value of the stock position below $100,000.

In contrast, in October 1987 a long speculative futures position in the S&P 500 futures contract with, for example, a face value of $150,000, would have required an immediate deposit of $15,000 initial margin. A 33-1/3 percent decline in the contract's value to $100,000 would lead to total margin collection of $65,000, i.e., variation margin calls of $50,000 plus the initial margin of $15,000, and the futures margin calls would require payment as the losses were realized. Clearly, payments

against a losing futures position can be substantially more than the initial futures margin, and the immediacy of the futures margin system makes it a financially secure one.

Frontrunning

Futures, securities, and securities option exchanges have rules that generally prohibit acts in violation of "just and equitable principles of trade." The futures exchanges that trade stock index contracts, as well as the securities and securities option exchanges, take the position that frontrunning involving such contracts can constitute a violation of those exchange rules. The antifraud and antimanipulation provisions of the Commodity Exchange Act and the Federal securities laws also may be applicable to particular instances of frontrunning.

The CFTC believes the ISG is an appropriate forum for facilitating the timely and effective communication of market surveillance data related to trading patterns of possible frontrunning activity among all exchanges with common self-regulatory interests. In addition, CFTC staff is considering the possibility of a regulation establishing a more specific futures industry standard for the prohibition of intermarket frontrunning activity involving transactions on futures exchanges.

CFTC staff has reviewed the "Manipulation and Frontrunning" section of the SEC staff's report, The October 1987 Market Break (SEC Report, pp. 3-28 - 3-34) and has obtained from SEC staff the related data considered by that staff. Basically, that section of the SEC Report addresses three types of trading activity involving futures markets. Although CFTC staff continues to review this information, the following are brief preliminary comments regarding each of the three types of activity referred to by SEC staff. The first type of trading activity discussed by the SEC staff involving market manipulation is based solely upon a hypothetical scenario. No data were provided by the SEC, and the CFTC staff was informed that this analysis was not based on observations by the SEC of specific trading activity.

Second, the SEC staff refers to certain "Frontrunning of Customer Futures Sales." The referenced activity did not occur in two markets and therefore would not constitute intermarket frontrunning. Instead, the activity described and the data related thereto pertain to possible trading ahead of customer orders by proprietary accounts within a single futures market. Trading ahead of customer orders in futures markets long has been prohibited by rules of all futures exchanges, as required by CFTC regulations, and by the antifraud provisions of the Commodity Exchange Act, and such activity has been prosecuted by futures exchanges and the Commission. Further, CFTC staff's review of the SEC data thus far raises questions regarding whether trading ahead in fact occurred.

Lastly, SEC staff discusses "Firm Selling at the Opening," that is, proprietary trading in stock index futures markets before the opening of component stocks. The SEC staff, noting that the activity cited in its report was not "classic frontrunning," indicated to CFTC staff the limited futures market trading data the SEC staff had reviewed, but they did not provide data reflecting or identifying any related stock market activity. Nonetheless, CFTC staff continues to review all of the futures trading specifically referenced by the SEC to determine if any violative activity occurred.

CONCLUSION

The members of the Commodity Futures Trading Commission believe that additional legislative authority is not necessary to enable this agency to respond to problems of the type that occurred during the October 1987 market break. The Commission's existing regulatory authority, under which a number of initiatives already have been taken, and its broad statutory emergency powers are sufficient to allow it to respond to problems arising in futures markets.

With respect to intermarket and/or interagency concerns, we believe those issues are most appropriately addressed by the regulatory and self-regulatory agencies directly involved. Intermarket and interagency cooperation and contingency planning in addressing these issues is progressing well. The Congress,

and particularly the committees with jurisdiction over the agencies involved, have already provided a healthy impetus to this process and can help to assure its ultimate success by lending their full support and encouragement to these interagency, interexchange coordination efforts.

I trust you will find this document responsive to the Committee's concerns. As we indicated to your staff by telephone, I will be appearing before the Committee on March 31.

Sincerely,

Wendy L. Gramm
Chairman