



**COMMODITY FUTURES TRADING COMMISSION**

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**CHAIRMAN'S OFFICE  
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SEC. & EXCH. COMM.

Wendy L. Gramm  
Chairman

December 1, 1988

Honorable David S. Ruder  
Chairman  
Securities and Exchange Commission  
450 5th Street, N.W.  
Room 6000  
Washington, D.C. 20549

Dear Dave:

As you know, the Working Group's Interim Report on Financial Markets of May 1988 made a number of recommendations regarding the clearing and settlement process in order to promote the proper functioning of the financial markets. In this regard, I thought it appropriate to send you a CFTC status report which documents actions of the CFTC and its regulatees taken in response to the Working Group's recommendations.

Sincerely,

A handwritten signature in cursive script that reads "Wendy".

Wendy L. Gramm  
Chairman

Enclosure

cc: Richard Ketchum

**CFTC Status Report on Working Group Recommendations Regarding  
Clearing and Settlement (Interim Report, Appendix D)**

The President's Working Group on Financial Markets ("Working Group") in its Interim Report of May 1988 analyzed the market break of October 1987 and made several recommendations for improvement in the integrity of the financial markets. This report addresses the changes to clearing and settlement procedures recommended by the Working Group and the actions of the CFTC and its regulatees which have been taken in response. Section I of this report describes the significant changes to clearing systems which have been made or are planned to be made. Section II summarizes the steps which have been taken with respect to each of the Working Group's specific clearing and settlement recommendations.

**I. Summary of Significant Changes to Clearing Systems That Have  
Been Implemented or Proposed.**

**1. Intermarket Cross-Margining**

On June 1, 1988, the Commission approved a one-year pilot cross-margining program proposed by the Intermarket Clearing Corporation ("ICC"). That program permits the cross-margining of proprietary accounts containing positions in commodity futures and options at the ICC with proprietary accounts containing positions in related securities options at the Options Clearing Corporation ("OCC"). The Commission's approval of this pilot program is consistent with the Working Group's recommendation for implementation of a "cross-margining pilot program for non-customer accounts." <sup>1/</sup> The Securities and Exchange Commission ("SEC") approved a related OCC rule submission on October 3, 1988. <sup>2/</sup>

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<sup>1/</sup> Interim Report of the Working Group on Financial Markets ("Working Group Report") at p. 10 (May 1988).

<sup>2/</sup> See Securities Exchange Act Release No. 26153 (October 7, 1988), 53 Fed. Reg. 39567. The SEC also granted ICC an 18-month temporary registration as a clearing agency under the Securities Exchange Act of 1934. Securities Exchange Act Release No. 26154 (October 7, 1988) 53 Fed. Reg. 39556. Although the SEC did not impose any time limit on its approval of OCC's related rule proposal, the SEC did state that in light of the temporary nature of its approval of ICC's registration, the "cross-margining system is, in effect, a pilot program." Id.

The ICC-OCC cross-margining system permits the use of a single margin payment to support related futures and option positions where price movements on the option component tend to be offset by price movements on the futures component. When combined, the intermarket position is subject to a lower original margin requirement than would be the case if each position were margined separately. The reduced margin level is designed to reflect more accurately the total risk of the combined position. The primary benefit of cross-margining from the point of view of clearing members is that it decreases the cost of carrying certain linked positions. In addition, because positions linked under a cross-margining system likely will be a more stable financial asset than separate naked positions, banks may be more willing to finance cash flows due the holders of such linked positions. This is important as any losses on the futures leg of a cross-margined position must continue to be paid in cash based on the daily mark-to-market process. Therefore, if the value of the futures component falls, variation margin requirements generally would remain the same and cash flow reductions would not be substantial.

In September, 1988, the Chicago Mercantile Exchange ("CME") <sup>3/</sup> and the OCC entered into a letter of understanding with respect to the cross-margining of positions in OCC-cleared stock index options and CME-cleared stock index futures and options on stock index futures. This proposed cross-margining system initially would be available only for positions of participating clearing members that qualify as "proprietary" under the CFTC's regulations and would be offered only to joint OCC/CME clearing members and pairs of affiliated OCC-only and CME-only clearing members. Although not fully developed, the proposal contemplates separate cross-margining accounts and the cross-pledge of positions such that the positions in each cross-margin account secure the obligations of the pledgor or its affiliate to such clearing organization. In this connection, each clearing organization would assume for margining purposes that all cross-margined positions were being carried on its own books, but would charge only 50 percent of the margin it normally would require on such positions. It is expected that CME and OCC will also ask the Commission to address the feasibility of extending such a system to market makers who are treated as customers in the futures markets and as non-customers under the securities regime.

Since the announcement of the CME-OCC agreement, the operations and technical staffs of the two clearing organizations have been further developing how this cross-margining proposal

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<sup>3/</sup> CME, as henceforth referred to in this report, will be inclusive of all the separate divisions of the Exchange, including the CME Clearing House.

would be implemented. The participating clearing organizations would exchange position information about the positions in their respective cross-margining accounts between midnight and 2:00 a.m. Central Time ("CT"). For such accounts, each clearing organization then would combine its positions with the positions carried at the other organization and process the combined portfolio, affording spread margin treatment to those positions which have a leg in both markets. The margin amount calculated by each clearing organization would be reduced by 50 percent and the sum of the amounts carried at each clearing organization would constitute one margin requirement on a total cross-margined portfolio. Margin deposits, premium payments and settlement variation would be held and/or flow through joint/affiliated CME/OCC members' accounts at mutually agreed upon settlement banks. <sup>4/</sup> The CME and OCC expect to proceed expeditiously and to provide the details of this proposal to the appropriate regulatory agencies.

## 2. International Information Sharing

On September 15, 1988, the CFTC announced the conclusion of a financial information sharing memorandum of understanding ("FISMOU") with certain U.S. self-regulatory organizations ("SROs"), the Securities and Investments Board ("SIB") of the United Kingdom, and various U.K. SROs. <sup>5/</sup> The FISMOU provides for information sharing between the CFTC or U.S. SROs and the appropriate U.K. regulator or SRO regarding the financial condition of United States-domiciled futures commission merchants ("FCMs") which have branch offices in the U.K. Under the agreement, when a designated U.S. SRO for a U.S. FCM with a U.K. branch files its semi-annual 1-FR-FCM filing, the SRO will provide the appropriate U.K. regulator with the cover sheet from that filing, which provides a summary of the FCM's financial

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<sup>4/</sup> The CME-OCC cross-margining system would use the same four settlement banks currently used by the CME for settlement purposes--Harris Trust and Savings Bank, Northern Trust Company, Continental Illinois National Bank & Trust Company of Chicago, and First National Bank of Chicago.

<sup>5/</sup> As of November 30, 1988, U.S. parties to the FISMOU include the CME, the Chicago Board of Trade ("CBT"), the New York Mercantile Exchange ("NYMEX"), the Commodity Exchange, Inc. ("COMEX"), the Coffee, Sugar and Cocoa Exchange, Inc. ("CSC"), the New York Futures Exchange, Inc. ("NYFE"), and the National Futures Association ("NFA"). U.K. parties include the SIB, the Association of Futures Brokers and Dealers Limited, the Securities Association Limited, and the Investment Management Regulatory Organisation Limited.

condition. Designated U.S. SROs for U.S. FCMs with a U.K. branch also will provide to the relevant U.K. regulator copies of early warning financial notices from FCMs. The U.S. SRO further will inform the U.K. regulator if the firm is classified as "high risk."

In addition, the Commission undertakes to use its best efforts to notify the SIB of an event which has the potential to affect materially and adversely the financial or operational viability of a U.S. firm with a U.K. branch, especially during periods of extreme market volatility or other disruptions. The FISMOU also provides for reciprocal sharing of information between the SIB or the relevant U.K. SRO and the CFTC if there are substantial financial or operational problems at a U.K. branch of a U.S. firm or at a U.K. firm allowed to solicit U.S. customers for foreign futures and options pursuant to an exemption under CFTC Rule 30.10. There is also a supplemental letter to this agreement which establishes as a high priority the development of mechanisms for the sharing of financial information during market disruptions other than information specifically contemplated in the FISMOU, including information with respect to regulated subsidiaries or affiliates located in one jurisdiction whose related firms are regulated in the other.

The Commission also has made the sharing of financial surveillance information an aspect of general information sharing discussions and arrangements related to the implementation of its foreign futures and options program. <sup>6/</sup>

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6/ To date the Commission has issued, pursuant to Commission Regulation 30.3(a), three foreign option orders permitting the offer and sale to U.S. customers of certain option contracts traded on the Singapore International Monetary Exchange Limited, Montreal Exchange and Sydney Futures Exchange Limited ("SFE"). See 53 Fed. Reg. 28826 (July 29, 1988). Additionally, on November 1, 1988, the Commission issued an order granting the Regulation 30.10 petition filed by the SFE on behalf of its members. This order permits SFE members, under certain conditions, to offer and sell foreign futures and options products directly to U.S. customers by substituting compliance with the comparable regulatory requirements of New South Wales, Australia for certain requirements of Part 30 otherwise applicable to such offers and sales.

In addition, the sharing of financial information should facilitate oversight by the Commission of funds to be held in segregated accounts pursuant to an interpretation approved by the Commission on November 16, 1988, which will permit overseas foreign currency denominated segregation

### 3. Futures-style Margining

In July of this year, the CBT and the CME each submitted petitions to the CFTC to eliminate the requirement of Commission Regulation 33.4(a)(2) that the premium on exchange-traded options be paid in full. <sup>1/</sup> Further, if Regulation 33.4(a)(2) were amended, the clearing house would not need to hold for the life of an option the premium paid at the time of such option's purchase, and commodity exchanges would be able to transfer cash with respect to options from the losing to the gaining side of the market in much the same manner as they do with respect to futures. "Futures-style" margining would allow option purchasers to use the cash generated by the long side of an option position to margin a related futures or option position. CFTC staff is preparing a Federal Register release publishing the petitions for comment which should be issued in the near future.

Under a futures-style margin system an option's premium need not be fully paid by an option buyer at the time of purchase. Instead, original margin would be posted on behalf of both the buyer and seller upon entering their positions to assure their performance to each other, as is the case with futures margins. During the life of the option, the option premium would be marked-to-market daily for both the buyer and seller. Thus, based on changes in the premium value, longs and shorts would be subject to daily cash settlement variation obligations such as those applicable to futures, and would have access to any gains earned on their option positions. As with the stock-style margin system, however, the option buyer's obligations to make such payments could never exceed the value of the original option premium, although an option seller's potential for loss is unlimited. Of course, FCMs still could collect the full option premium amount from customers who purchase options even though such FCMs' clearing organizations would not require the full premium.

In the event that the buyer exercises the option because it is in-the-money, the buyer retains the mark-to-market gains

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(Footnote Continued)

accounts to facilitate the trading of certain U.S. futures contracts priced and settled in such foreign currencies.

<sup>1/</sup> Regulation 33.4(a)(2) requires that the full premium on a futures option contract be paid by each purchaser to the FCM which is carrying the customer's account at the time the option is purchased, be received by each clearing member from each person for whom it clears a commodity option, and be received by each clearing organization of a contract market from its clearing members for each option cleared by a clearing member. Such full payment of premiums is known as "stock-style" option margining.

received during the life of the option, is debited for the current value of the premium, and receives a futures position at the option strike price. The option seller would receive a credit for the current value of the premium as well as a futures position opposite the option buyer. Both futures positions then would be marked-to-market.

The Working Group has recommended that futures-style margining be explored as a means to reduce cash flows in the derivative markets. <sup>8/</sup> The proponents of futures-style margining assert that it should have a number of benefits. First, it should improve cash flow symmetry between options and futures and thereby eliminate the need to borrow against the long option value in order to fund cash flows required on related combination futures/option positions, including arbitrage positions such as conversions and box spreads. For example, a purchaser of a call option who shorts the underlying futures contract would be subjected to variation margin on the futures contract as its price rises. Under the current system of stock-style options, that trader would not be able to apply the gains on his call option position to offset his futures margin calls, and would have to use his own funds or borrow to make the futures margin payments. By contrast, under a futures-style margining system, a long option position would generate its own cash flow, and holders of such a position would not need to resort to third-party lenders in order to finance related positions.

Proponents of futures-style margining also argue that permitting margining of the premium could increase liquidity in options which move into-the-money. Under the stock-style margining system, as options move deeper into the money the premium increases and fewer new purchasers enter the market. Accordingly, sometimes the most efficient way for a person holding an option to access his gains is to elect early exercise. If the option was purchased as part of a combination position, that position may have to be restructured or liquidated as a result of the early exercises which are randomly assigned. Moreover, public customer purchasers of an option in this situation may be particularly averse to exercising into a futures position. Under futures-style margining, to the extent that the premium payment is margined and not paid in full at the time of purchase incentives to elect early exercise should be eliminated.

On the other hand, questions have been raised concerning possible effects of futures-style margining which may be problematic. Specifically, futures-style margining is likely to change the pricing of futures options such that current trading strategies, notably covered call writing programs, may be impaired. Any such pricing changes would appear to increase the need for uniform application of a single option margining

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<sup>8/</sup> Working Group Report at 10.

approach. Futures-style margining also could facilitate greater leverage in purchasing option positions and, thus, could enable purchasers to assume greater price risk. In the course of the public comment process, the CFTC expects to analyze the benefits, costs, and risks of futures-style margining to determine whether that system or some other modified approach should be permitted. In this connection, the CFTC expects to coordinate with other members of the Working Group.

## II. Discussion of Working Group Recommendations

### 1. Clarification of Clearing and Settlement Obligations

#### A. Clearing banks' obligations to honor their confirmation of variation payments.

The Working Group recommended that the CFTC and SEC monitor the progress of option and futures SROs toward finalizing revised settlement agreements with their clearing banks. As of October 21, 1988, the Board of Trade Clearing Corporation ("BOTCC"), the CME and each of the four Chicago settlement banks,<sup>9/</sup> all have entered into uniform agreements which clearly specify the obligations of the parties with respect to the honoring of settlement instructions received from the clearing organization and the timing and finality of payments between clearing members and the clearing houses. The agreement unambiguously requires each clearing bank either to pay member obligations through irrevocable credits to the respective clearing organization's account or to inform the respective organization that the payment cannot be processed.

The BOTCC and CME also are engaged in discussions with the New York futures clearing organizations regarding the adoption of a standard agreement for the futures industry. The BOTCC and the CME also have attempted, although unsuccessfully to date, to determine the extent to which the agreement developed by OCC and ICC is consistent with the agreement developed by BOTCC and CME.

Under these agreements, to the extent that a clearing bank has not received funds from a clearing member when it commits to honor settlement instructions it is making a credit decision. The clarification of that fact should cause clearing banks to assess the basis upon which they are conferring credit to particular clearing members. Both BOTCC and CME are exploring the costs and benefits, from a solvency and liquidity perspective, of using additional banks, including non-Chicago banks, as settlement banks.

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<sup>9/</sup> BOTCC uses the same four settlement banks used by CME. See footnote 4.

B. Clearing organization guarantees and timely payment.

The Working Group recommended that clearing organizations review their by-laws and rules to determine whether further specificity concerning payment guarantees and the timing of payments would be desirable. The Working Group further recommended that the CFTC and the SEC confirm that futures and option clearing organizations' guarantees assure that payments owed to collecting firms are being released in a timely fashion in accordance with the respective organization's rules and by-laws.

As discussed above in Section II.1.A., the BOTCC's and CME's agreements with their settlement banks are intended to eliminate ambiguities which may have existed as to the respective obligations of the settlement bank, the clearing member and the clearing organization which may result in the delayed release of payments.

To further assure timeliness of payments and to mitigate potential administrative difficulties in congested markets, BOTCC has instituted procedures whereby clearing members requesting the morning release of an excess cash margin deposit or the payment of an afternoon variation collect can do so by calling the BOTCC's Data Control Department. All such calls are recorded to corroborate the terms of the clearing member's request. Formerly, such requests had to be submitted to the BOTCC in writing.

The BOTCC's intraday pays and collects system has been automated for over ten years. Currently, the BOTCC is supplementing that system by installing an automated system in each of its clearing members' offices so that computer terminals can be used to call for the payment of afternoon variation pays and collects. This system eventually will provide for bank settlement through computers as the BOTCC's main-frame will be linked with the main-frames of the respective settlement banks.

CME automatically has released excess cash original margin on deposit to its clearing members daily since the early 1970s. Since introducing routine intraday pays and collects, CME has allowed its firms to call it to inquire as to the amount of intraday settlement variation they are owed and to request payment thereof. CME records any such requests made by telephone to guard against possible misunderstandings. CME also allows clearing firms to net settlement variation obligations within an account. This practice was extended to the payment of premiums when trading in futures options was introduced.

In June 1988, the CME was approved as a participant in the Society Worldwide Interbank Financial Telecommunications ("SWIFT") system as the first commodity exchange member. CME began its participation in the SWIFT system on November 21, 1988 and expects to participate fully in the system by January 1989. The SWIFT system provides for a common message format for all banks in the system. At present, there are approximately 12,000 banks participating worldwide including all of the major U.S.

money center banks. CME will be working with its settlement banks during the first quarter of 1989 to automate fully the transmission of payment instructions via the SWIFT network. This will allow CME to transmit intraday and end-of-day settlement variation instructions as well as end-of-day margin instructions from the CME main-frame computer to computers at the settlement banks. This enhancement should add security to the system, reduce the possibility of clerical error, and enable the settlement banks to view CME's payment instructions in the context of other information about their clearing member customers already present in their data bases. The SWIFT system is considered highly secure as all messages are fully encrypted to prevent unauthorized access to the system. <sup>10/</sup>

2. Facilitate Timely Payments

A. Review of arrangements to support payments by clearing members to settlement banks.

The Working Group recommended that federal regulators review current clearing organization and clearing member credit facilities and consider what further prudential measures are necessary, including requiring that the relevant market participants have secure facilities in place that will support large payments to clearing organizations.

Clearing organizations use a number of techniques to guard against clearing member defaults, including margin, clearing fund deposits, liens on memberships, parent guarantees, and continuous surveillance of member activity. The CFTC continues to review and discuss with clearing organizations the adequacy of these safeguards. In addition, as discussed below, the exchanges have taken actions to enhance the ability of clearing firms to meet their payment obligations.

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<sup>10/</sup> In this connection, the Commission notes that the Working Group also has recommended that circuit-breaker mechanisms be put in place to operate in a coordinated manner across all markets trading equity and equity-related products. See Working Group Report at 4-5. Among other things, the Working Group suggested that these mechanisms be set in order to support the ability of the payment and credit systems to keep pace with extraordinarily large market declines. On October 18, 1988, the Commission approved rule changes at the CME, CBT, NYFE and Kansas City Board of Trade ("KCBT") which establish initial price limits and trading halts currently in effect that are consistent with those recommended by the Working Group. The SEC also has approved comparable provisions for the equities markets which are in effect.

The CME, CBT, and KCBT each raised customer initial margin requirements for their respective stock index futures contracts immediately after the October 1987 market break. Increased customer initial speculative margin requirements are still in effect at these exchanges, although at a lower level, and maintenance margin has been reduced commensurate with prudential concerns. In addition, the CFTC has approved a rule submitted by the ICC which authorizes the Chairman or the President of the ICC to adjust normal margin requirements within prudential levels during "unusual" market conditions. The ICC would have to notify the Commission immediately upon the granting of such an adjustment. These procedures are intended to provide the ICC with the flexibility to respond to market disruptions. A corresponding OCC rule has been approved by the SEC.

The CFTC staff has discussed with the various commodity clearing organizations which accept letters of credit ("LOCs") the need to develop additional procedures to avoid an excessive concentration of LOCs at any one bank. The CFTC staff also has recommended that the overall exposure of issuing banks in related markets should be assessed, that clearing houses determine how such LOCs are collateralized at the issuing banks, and that clearing houses consider arrangements to reduce further the unlikely event that an issuing bank might attempt during a crisis to abrogate its obligation to perform immediately under an LOC.

In this connection, CME has implemented concentration limits which specify the cumulative amount of LOCs it will accept as margin from particular issuing banks. Currently, CME will accept no more than \$100 million in LOCs from any single bank or from any bank which has issued LOCs totalling more than 10 percent of that bank's capital level. <sup>11/</sup> CME clearing members also have slightly reduced their use of LOCs to meet margin obligations. <sup>12/</sup>

The BOTCC has taken measures to reduce the use of LOCs by clearing members in meeting their margin obligations. Specifically, the BOTCC will accept no more than \$100 million in LOCs from any single issuing bank. The BOTCC also limits the value of

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<sup>11/</sup> NYMEX, which has an in-house clearing department, and the Comex Clearing Association, Inc. ("COMEX Clearing"), which clears for COMEX, both have similar LOC concentration limits in place. NYMEX does not accept a cumulative level of LOCs from any one bank beyond 35 percent of that bank's capital, while COMEX Clearing does not accept LOCs beyond 25 percent of the issuing bank's capital.

<sup>12/</sup> For example, as of March 30, 1988, LOCs comprised 38.6 percent of \$4.3 billion in standing margin at CME, and as of September 30, 1988, the use of LOCs comprised 36.7 percent of a total of \$3.3 billion in standing margin.

LOCs which can be pledged as margin by a clearing member to 25 percent of the firm's capital. To monitor LOCs, the BOTCC has developed a daily print-out which shows LOCs as a percent of BOTCC clearing member original margin; the BOTCC reviews this print-out on a daily basis. The BOTCC estimates that, on the average, LOCs constitute 25 percent of original margin payments of BOTCC members.

Both CME (CME Rule 901.L.) and the BOTCC require certain parent companies to guarantee the proprietary obligations of their subsidiary clearing firms. <sup>13/</sup> These provisions are designed to provide significant added financial security for the portfolio of futures and options in the subsidiary's house account. <sup>14/</sup>

As noted in the Working Group Report, the CME also recently has implemented a rule amendment which assures that clearing firms with a large number of branch offices and guaranteed introducing brokers ("IBs") will have available additional

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13/ For the purposes of this discussion a subsidiary clearing firm's "proprietary obligations" include any obligation which a clearing firm has to its clearing organization for proprietary trading and otherwise, except obligations undertaken on behalf of customers.

14/ Under CME 901.L., both individuals who are active in a subsidiary's management, and parent companies, are required to guarantee fully the proprietary obligations of their subsidiary clearing member firm if their respective ownership interest in the subsidiary exceeds 50 percent. If either of these types of owners hold between a 5 and 50 percent ownership interest in the subsidiary firm, CME requires a guarantee of the subsidiary's proprietary obligations commensurate with the respective level of ownership. Finally, any individual who holds more than a 5 percent ownership interest in a subsidiary clearing firm but who takes no active role in its management is required to guarantee the subsidiary's proprietary obligations to a degree equal to his percentage of ownership. Also, the CME Clearing House Committee, which is empowered to grant exemptions to CME Rule 901.L., has granted an exemption from the parent guarantee requirement to subsidiary clearing members which have over \$300 million in adjusted net capital.

The BOTCC's parent guarantee provision requires parent companies to guarantee fully all their subsidiaries' proprietary obligations.

security to meet their margin obligations. <sup>15/</sup> Specifically, clearing members at CME that maintain 16 or more branch offices or a combination of 32 or more branch offices and guaranteed IBs must purchase either an additional CME or International Monetary Market Division membership, an additional three Index and Option Market Division memberships, or deposit Treasury securities with a market value of \$500,000 with CME. <sup>16/</sup>

To assess the ability of customers to make ready payment of their margin obligations, the CME's Audit Department recently conducted a study of 49 CME clearing members to determine the capacity of each member's large accounts to meet margin promptly. <sup>17/</sup> The study found that of the 45 clearing members carrying customer accounts with an initial margin requirement of \$1 million or more, each of them had domestic wire transfer facilities for the payment of margin obligations.

B. Increase the liquidity and security of clearing organizations.

- (1) Review the adequacy of clearing organization guarantee funds, and when appropriate, increase member contribution requirements.

The Working Group recommended that clearing organizations review the adequacy of clearing member guarantee fund contributions, in light of other financial protections and system safeguards. The Working Group also recommended that federal regulators assess the results of those reviews.

CME adopted rules in February 1988 which effectively increases clearing member security deposits from \$4.6 million to about \$35 million. In addition to this increase, CME changed the basis on which it requires security deposits from a single flat rate for every clearing member to a risk-based rate recalculated at least quarterly based upon the average daily margin requirements for that clearing firm at CME. Therefore, not only is the

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<sup>15/</sup> Working Group Report at 16.

<sup>16/</sup> The CME has represented that since the implementation of this rule nine clearing member firms have come into compliance with the provision by purchasing additional memberships, while two member firms complied by depositing \$500,000 in Treasury securities with the Exchange.

<sup>17/</sup> As of September 28, 1988, CME had 80 Class A clearing members which clear all types of commodity futures transactions and 9 Class B clearing members which clear proprietary arbitrage transactions in foreign currency futures.

overall security greater than was the case previously, but such deposits automatically are adjusted to reflect the risk of each clearing member to CME. <sup>18/</sup>

Both CME and the BOTCC also are in the process of securing lines of credit to serve as additional security. CME is attempting to secure a \$125 million committed line of credit from the four Chicago settlement banks to be used in the event of the default of a clearing member or a "gridlock" in the payments system. The final documents to establish this credit line are being drawn up and are expected to be executed prior to the end of the year. CME expects to obtain a second \$125 million on a committed basis from major international banks, the documents for which will be ready for execution late this year or early next year. The BOTCC also has secured from three of its settlement banks a total committed line of credit of \$90 million, consisting of \$30 million from each bank. While such increases in committed lines of credit appear beneficial, it may be appropriate for further consideration to be given to the degree to which committed credit lines are secured such that funding of those lines are assured in an emergency.

Since CME implemented routine intraday payments and collections of settlement variation, there has been a reduction in the end-of-day settlement variation amounts. CME reports that intraday variation amounts were 33 percent greater than end-of-day variation amounts on 65 percent of the business days between August 1 and October 7, 1988. Intraday amounts ranged from 7.26 percent to 85.18 percent of total daily settlement variation, reflecting differences in volatility levels. CME also has represented that its settlement bankers have confirmed that the intraday pays and collects reduce the period during which margin obligations remain unsatisfied and result in a smaller aggregate cash payment at morning settlement.

(2) Enhance the liquidity of guarantee funds.

The Working Group recommended that the Commission and the SEC encourage securities and futures SROs to explore converting portions of existing securities and futures clearing organizations' guarantee funds to cash or cash equivalents on an incremental basis.

In the event of a clearing member's default, a clearing organization would meet the defaulting member's obligations first by resorting to the member's posted margin and second by drawing upon the clearing organization's guarantee fund. If the clearing organization's members use a high proportion of LOCs to meet

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<sup>18/</sup> The BOTCC also has represented that it could resort to its capital of \$40 million or a \$10 million trust fund to meet clearing obligations.

their margin and guarantee fund requirements, this could cause issuing banks to have to fund many of the outstanding LOCs simultaneously, potentially causing liquidity problems for such banks and, in extreme cases, reducing access to guarantee funds. As discussed above in Section II.2.B.(1), both the BOTCC and CME attempt to limit the concentration of LOCs deposited to their account issued by individual banks. They also are attempting to decrease their clearing members' reliance on LOCs to meet margin obligations.

CME requires that the first \$200,000 of a clearing member's security deposit be in cash or Treasury securities. In addition, LOCs cannot exceed 75 percent of a clearing member's total security deposit. <sup>19/</sup> CME also has stated that it has adopted procedures under which it first will use Treasury securities when it draws upon the pool of security deposits. Notably, CME staff currently is developing a proposal which would eliminate LOCs from being used to meet security deposit obligations.

C. Increase the availability of payment-related information.

- (1) Maximize cross-market input into existing futures pay, collect, and margin surplus data system.

The Working Group recommended that procedures should be implemented for centralized collection and availability of pay and collect information. The Working Group noted that the BOTCC administers a system for the routine, electronic exchange of pay and collect data which includes all futures clearing organizations and, when negotiations are completed, could include OCC data. The Working Group recommended further that, subject to appropriate control, cost, confidentiality and oversight procedures, the National Securities Clearing Corporation and OCC should be encouraged to provide data to this pay and collect system and that appropriate software to accommodate such data should be developed. Moreover, the Working Group recommended that users of the system should consider, collectively, how the system should be operated and funded.

In accordance with the Working Group's recommendations, each of the futures clearing houses, as well as the OCC, have signed a Market Information Sharing Agreement with the BOTCC which provides for the sharing of pay and collect information among participants to the agreement. All futures clearing organizations, but not OCC, are now participating in the sharing of this

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<sup>19/</sup> In this connection, 87.5 percent of the current BOTCC capital account referred to in footnote 18 is made up of government securities.

information. In addition, the clearing houses also are considering a formal amendment to their agreement which would provide for the sharing of margin surplus and deficit information. <sup>20/</sup> Notwithstanding the fact that the surplus and deficit provision has not yet been completely executed, with one exception all of the futures clearing houses currently share this information. Neither the OCC nor its commodity subsidiary, ICC, currently shares surplus and deficit information with any of the futures clearing houses.

The Commission recently urged the ICC and OCC to revisit their decisions not to participate fully in the BOTCC's information sharing agreement <sup>21/</sup> and attempted to address the objections the OCC has raised to participating in the agreement. <sup>22/</sup> In particular, the OCC has stated that the information sharing agreement would give BOTCC a competitive advantage over the other participants to the agreement. However, BOTCC would have no greater access as a user or contributor to the data being shared than any other participant. Shared information would not be available to BOTCC in any greater detail than to OCC and is not currently available to BOTCC in any greater detail than to any other of the current futures exchange participants to the agreement. Further, the BOTCC has developed the dual-member information sharing system without cost to any participant and would make the system available "at cost" to OCC. Therefore, it does not appear that BOTCC would gain a competitive advantage with respect to OCC or to any other participant through the information sharing process. In that regard, the very stringent confidentiality provisions of the agreement should strictly limit the disclosure of information to those purposes established by the agreement.

The OCC also has indicated a concern that the sharing of pay and collect information is insufficient for financial surveillance and that the sharing of aggregate position data would be more useful. The CFTC collects position data daily and has invited the OCC to explore the software and procedures

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<sup>20/</sup> As of November 30, 1988, the BOTCC, COMEX Clearing, the CSC Clearing Corporation, the Commodity Clearing Corporation, NYMEX, KCBT, CME and the Minneapolis Grain Exchange ("MGE") were signatories to the agreement's surplus and deficit amendment.

<sup>21/</sup> See Letter from Wendy Gramm (Chairman of the CFTC) to Wayne Luthringshausen (Chairman and Chief Executive Officer of the OCC) (October 12, 1988).

<sup>22/</sup> See Letter from Wayne Luthringshausen (Chairman and Chief Executive Officer of the OCC) to Wendy Gramm (Chairman of the CFTC) (July 27, 1988).

necessary for its position data to be included in this system. Accordingly, the Commission continues to believe that OCC's objections to joining in the BOTCC's information sharing agreement can be addressed and that OCC's participation in the agreement would be beneficial.

- (2) Enhance trade matching capacity to supply increased data concerning intraday exposures and foster development of on-line trade matching systems.

The Working Group recommended that the Commission and the SEC foster progress toward on-line trade matching systems at securities, futures and option exchanges.

BOTCC is making efforts to improve its trade matching capabilities to recognize intraday exposure more rapidly. At the present time, BOTCC conducts two intraday trade reconciliations during its regular trading hours, and also matches trades every half-hour during its evening trading session. CBT is in the process of developing an electronic order routing system to be used, among other purposes, to speed the trade matching process. The CBT's proposal would enable a participating member firm to enter an order into one of its computer terminals and have it sent over the routing system to a printer on the CBT's floor associated with the broker the firm has chosen to execute the order. After the order is filled in the pit, the trade confirmation would be entered into the routing system via a computer terminal on the floor and would be sent back to the originating member firm. The confirmation also would be sent simultaneously to the BOTCC, computer to computer, for clearing and processing. CBT plans to test this system early next year and anticipates that it would be used first during evening session trading with eventual expansion to the regular trading session.

CME also is attempting to enhance its trade matching capacity. In March 1988, CME implemented its second intraday trade reconciliation, bringing to four the number of trade comparisons it performs during the trading day. <sup>23/</sup>

The CME's Operations Division currently is developing a Trade Order Processing System ("TOPS") to facilitate the electronic routing of orders between clearing member offices and the trading floor. One feature of this system would be a direct electronic interface to the clearing system. A pilot version of

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<sup>23/</sup> In addition to two intraday trade reconciliations, CME has two end-of-day reconciliations--one for all Standard and Poor's ("S&P") 500 stock index futures trades and the second for all other CME-trading activity.

the TOPS system is scheduled to be introduced during the first quarter of 1989.

Under the CME's proposed GLOBEX trading system, the Exchange would be able to match trades upon execution and to transmit them electronically to the CME clearing system as well as to the back office bookkeeping systems of its clearing members. These trades would be accessible immediately to the risk management systems of both the CME and its clearing members.

(3) Increase availability of securities position data.

The Working Group recommended, in the near term, development of a trial reporting system of large trader data for OCC positions, perhaps through incorporation in the existing Commission database with direct SEC access. The Working Group also recommended consideration of legislative changes to the securities laws necessary to obtain large trader data.

The CFTC believes some progress has been made in exploring mechanisms for the collection of large trader data for options and securities. On July 20, 1988, the CFTC offered to initiate a pilot project whereby the CFTC's data would be used to check on the accuracy of futures position data furnished on the special reports now filed with the OCC by its members with respect to futures positions. In this connection, OCC believes that certain confidentiality issues must be resolved in order for OCC to be able to submit such data to the CFTC. The CFTC is authorized in specified circumstances to share such information with securities SROs pursuant to the provisions of Section 8a(6) of the Commodity Exchange Act.

The CME and New York Stock Exchange, Inc. ("NYSE") recently entered into an information sharing agreement, whereby the two exchanges have agreed to share certain data sets to facilitate surveillance for intermarket trading abuses. Specifically, NYSE would provide CME with its daily program trading reports, which NYSE is attempting to automate. (NYSE defines program trading broadly as all transactions involving 15 or more stocks with an aggregate value of \$1 million or more). CME routinely would provide NYSE with information on the clearing firm, one-minute execution time, quantity, account number and type (house or customer), and order entry and exit time stamps for all S&P 500 stock index futures trades and groups of trades involving 100 contracts or more for a single account during a ten-minute time span. CME intends to allow NYSE to use these data without restriction. The arrangement, which likely will be finalized soon, should form the basis for similar agreements between other exchanges.

On June 8, 1988, the CFTC published a proposed rule to expand the Commission's required reporting of customer type indicators to identify two specified categories of transactions, specifically index arbitrage and substitution transactions. The proposed enhancements to exchange audit trail systems will

facilitate the compilation of accurate information concerning index trading without the necessity for special calls for information from traders or FCMs. CFTC staff currently is drafting rules which take into account the comments received. <sup>24/</sup> The staff also is exploring ways to use this daily record of trades to identify more rapidly and accurately specific types of transactions involving both futures and stock trades, such as index arbitrage.

D. Arrangements to support payments.

(1) Increase coordination of margin calls and settlements.

The Working Group recommended that the Commission and the SEC encourage OCC and futures clearing organizations to complete their system reviews with a view to a harmonized settlement time frame. In addition, the Working Group recommended that OCC should ensure that its procedures for intraday margin calls to the extent used are coordinated with intraday margin calls of futures clearing organizations.

U.S. futures exchanges historically have issued early morning settlement calls prior to the start of each trading day. This serves the purpose of apprising traders of their cleared trades and outrades and margin obligations prior to trading as well as making the time between the close of trading and margining of resultant positions as short as possible. Accordingly, at present daily morning settlement calls are issued at the CBOT and CME at 6:40 a.m. CT and at the KCBOT at 7:00 a.m. CT. BOTCC and CME also make routine intraday margin calls at 2:00 p.m. CT. ICC issues morning settlement calls for NYFE contracts at 8:00 a.m. CT, but makes no regular intraday margin calls. On the stock index option side, OCC continues to conduct its daily settlement at 9:00 a.m. CT and does not make regular intraday margin calls.

In this connection, the Commission continues to believe that to the extent futures and securities settlements can be made to follow more closely the time of trade executions the overall integrity of the financial marketplace would be benefitted.

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<sup>24/</sup> The SEC has stated that it supports this proposal as a "reasonable means of enhancing the timeliness and accuracy of collecting trading data for both routine surveillance and periodic studies of index-related trading during periods of unusual market activity." Letter from Jonathan G. Katz (Secretary of the SEC) to Jean A. Webb (Secretary of the CFTC) (October 24, 1988).

- (2) Increase Fedwire availability, at least in volatile markets, and coordinate operations during banking or market center holidays.

The Working Group made several recommendations concerning payment system operations. First, the Federal Reserve Board should explore earlier opening of the Fedwire as needed during volatile markets. That Group also said, however, that earlier opening of the Fedwire would be useful only to the extent that knowledgeable officers at banks are available to make credit decisions and approve funds transfers. The Working Group also recommended that futures and securities SROs should establish arrangements with member firms to ensure that early opening procedures can be used effectively. Further, SROs, regulators and market participants should review and augment existing mechanisms to assure smooth market operations when banks in one market center are closed but are open in other market centers and when markets are open but banks are not.

The clearing bank/clearing organization roundtable group discussed below in Section II.2.D.(3) has formed a subcommittee which is investigating the possibility of expanding the hours of operation of the Federal Reserve Board's Fedwire money and securities wire transfer system. Members of this group also have requested that the Federal Reserve and major banks be open for business on all days on which major exchanges are open for business. <sup>25/</sup> During these preliminary discussions certain banks have raised the concern that perhaps the cost of providing staff at banks and other organizations during early morning hours if Fedwire facilities were to open earlier would exceed the potential benefits associated with a limited number of payments to or from clearing organizations, especially in view of the reduction in pre-opening morning cash flows due to other modifications of the settlement process.

- (3) Establish framework for periodic meetings of clearing organizations, clearing banks, federal regulators and SROs.

The Working Group encouraged establishment of a regular schedule of meetings among participants in futures and securities clearing settlement processes and federal regulators.

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<sup>25/</sup> Currently, some clearing organizations handle this situation by assessing additional margin on the day previous to the bank holiday.

An Intermarket Financial Surveillance Group ("IFSG") has been formed to discuss certain financial issues. The IFSG <sup>26/</sup> recently has drafted a formal Information Sharing Agreement which currently is circulating among certain of its participants. The Agreement's aim is to share information with respect to "high risk" member firms as that term is defined therein. <sup>27/</sup> The parties to the Agreement would share information regarding capital; segregation; margins; liquidity problems; omnibus accounts carried and/or carrying brokers; and pay/collect data. The parties to the Agreement would include all of the principal commodity, security and options exchanges as well as NFA and NASD.

CME and the BOTCC have organized a clearing bank/clearing organization roundtable which meets on a periodic basis in order to maintain lines of communication among clearing organizations in the futures and securities industries, the banks which support settlement services for these clearing organizations, and their regulators. To date, the roundtable group has addressed a number of topics including the expansion of the Fedwire's hours of operation discussed above in Section II.2.D.(2). The roundtable group currently is compiling a directory of home and work phone numbers for the futures/securities bankers of all settlement banks and clearing organizations in the U.S. This directory should facilitate communications during volatile markets. As a result of the roundtable meetings there also have been discussions among the futures clearing organizations with respect to coordinating the timing of intraday settlements, and discussions between the CME and the OCC about working together to encourage New York banks to be available to support morning settlements at 8:00 a.m. Eastern Time.

The Intermarket Surveillance Group ("ISG"), originally a securities industry organization, has been expanded to include

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<sup>26/</sup> The IFSG is comprised of the American Stock Exchange, Inc. ("AMEX"), KCBT, CBT, Boston Stock Exchange, Inc., Chicago Board Options Exchange, Inc. ("CBOE"), CME, Chicago Rice & Cotton Exchange, CSC, COMEX, MidAmerica Commodity Exchange, Midwest Stock Exchange, Inc. ("MSE"), MGE, National Association of Securities Dealers ("NASD"), NFA, New York Cotton Exchange, Inc., NYFE, NYMEX, NYSE, Pacific Stock Exchange, Inc. ("PSE") and the Philadelphia Stock Exchange, Inc. ("PHLX").

<sup>27/</sup> The Information Sharing Agreement's tentative definition of a high risk member firm is a member firm of one or more of the parties to the Agreement which is either under early warning as that term is defined (1) under the Commodity Exchange Act, Securities Exchange Act or applicable regulation; or (2) by the Joint Audit Committee.

futures exchange participants/observers. In addition to all of the securities and option exchanges and the SEC, the CFTC, CME, CBT, KCBT, and NYFE have participated in ISG meetings. The central purpose of these ISG meetings has been to identify common surveillance concerns, to achieve definitional clarity as to prohibited conduct, and to determine the appropriate scope of information sharing agreements. To date, the topics discussed at the initial meetings have included market surveillance; trade practice investigation procedures; inter-market trading abuses including frontrunning; opening delays; and contingency plans for coordinated responses to volatile markets.

As a result of these meetings, the CME and the NYSE have issued a joint circular clarifying their frontrunning policies and prohibiting intermarket frontrunning. As of September 23, 1988, the CFTC had reviewed this circular and had authorized the CME to put it into effect. The SEC's approval of NYSE's circular is pending. In this connection, on November 16, 1988 the CFTC authorized NYFE to put into effect a rule prohibiting frontrunning which is similar to the CME's and NYSE's respective rules. Other futures exchanges are exploring similar action with their securities and option counterparts.

Certain exchanges also are participating in the Inter-exchange Communications Group which meets bi-annually to discuss methods of communication during extraordinary market circumstances. The Communications Group plans to install an inter-exchange hotline that will trigger an instantaneous conference call among all the participant exchanges once the receiver is lifted at one exchange. The hotline is expected to become operational in January 1989, and will link the CBT, CME, CBOE, NYSE, NYFE, NASD, AMEX, MSE, and PSE. In the interim, these same exchanges currently are linked by an alliance conferencing system which facilitates the placement of conference calls among the exchanges.

3. Explore Methods to Reduce Cash Flows and Simplify Settlement Systems

A. Explore the utility of cross-margining through a pilot program limited to non-customer funds.

The Working Group recommended that the Commission and the SEC expedite consideration of the rule proposal pending at that time which would have established a pilot program for the cross-margining of house positions cleared by the ICC for the Philadelphia Board of Trade and NYFE. The Working Group also encouraged other clearing organizations to permit cross-margining for stock index options and futures.

On June 1, 1988, the CFTC approved ICC rules which will implement the cross-margining of certain proprietary positions. The ICC's cross-margining proposal is fully discussed above in Section I.1. of this report. In addition, CME and OCC reached an agreement in principle and are engaged in discussions regarding

the implementation of different cross-margining rules. The CME-OCC cross margining proposal also is discussed above in Section I.1.

Some clearing houses grant special margin rates for intermarket positions on an individual contract basis. For example, the BOTCC grants special spread margin rates for spread positions involving the CBT's CBOE 250 futures contract against the CBOE's S&P 100 and 500 stock index options. Similarly, the CME grants a reduced spread margin for intermarket spreads involving the CME's S&P 500 futures contract and the AMEX's Major Market Index option, NYSE's NYSE Index option, the PSE's Financial News Composite Index option, PHLX's Value Line Index option, and the CBOE's S&P 100 and 500 options. These spreads are recognized on the basis of futures equivalents of the equity index option positions. This spread margin treatment is similar to margin methodology which traditionally has been employed for futures spread positions.

B. Explore use of futures-style margin settlements for options.

The Working Group urged exploration of the practical impediments to and risk implications of modifications of option margin systems in light of potential liquidity gains that might be achieved. The Working Group noted that this study should focus on the desirability of experimenting with futures-style margining of options as part of the development of pilot programs for coordinated clearing of professional positions in stock index options and futures products.

The CME and the CBOT have filed petitions for rulemaking which request the CFTC to change pertinent regulations to permit futures-style margins for options. Currently the Commission's staff is drafting a Federal Register release outlining the proposed changes and requesting public comment. See Section I.3. above for a more detailed discussion of futures-style margins.

C. Explore means of netting cash flows on a contractual basis.

The Working Group encouraged the SROs, in conjunction with clearing banks, to explore approaches to the netting of payment obligations.

CFTC staff has discussed this matter with futures exchanges, clearing organizations and the Chicago settlement banks. These discussions have indicated that the participants in the clearing process are hesitant to interfere with bank-customer relationships. Some clearing members are reluctant to have a single bank aware of all of their business on major exchanges. Another impediment to netting cash flows arises from legal distinctions among related but separate entities holding positions (e.g., affiliated corporations which are members of different exchanges).

The thrust of exchange efforts to date has been to identify and minimize cash flow problems at the exchange level with proposals such as cross-margining and risk-based and futures-style margining. For instance, the BOTCC has in place a Simulated Analysis of Financial Exposure ("SAFE") system for the analysis of risk exposure. This system has a number of features which identify position risk. First, it permits the BOTCC to develop a risk analysis for all large traders, in all commodity contracts, carried by its clearing members. Second, it permits BOTCC to provide a risk analysis of all large traders carried by individual clearing members at the request of the clearing member. Third, it permits a risk analysis to be provided to other clearing houses for their clearing members based on data submitted by the clearing houses. The KCBT currently is using the SAFE system.

In addition, the CFTC approved on November 18, 1988 the CME's Dollars at Risk ("DAR") margin proposal which would assess margin based upon the overall risk to various positions in an account. DAR's computer program would build a portfolio evaluation model by projecting the risks of various moves in price and volatility levels on positions held and would develop a combined maintenance level consistent with the prudential level suggested by the Working Group. To the extent that DAR or any other risk-based margining system facilitates the development of more sophisticated and accurate portfolio valuation programs it also enhances the financial surveillance capabilities of futures clearing organizations. Such systems may also reduce cash flows. To date, CSC and the CSC Clearing Corporation have agreed to use the DAR system while COMEX and NYMEX have expressed interest in adopting the CME's DAR program on a licensing basis.

As discussed above, the CFTC has approved an ICC cross-margining proposal (Section I.1.) and currently is reviewing a proposed change to its Regulations which would permit the use of futures-style margining of option premiums (Section I.3.). The Commission believes that both of these mechanisms could improve cash flows between the options and futures markets.

D. Integrated clearing of stock and related options and futures products.

The Working Group recommended that futures and securities clearing organizations should identify costs and benefits of integrated clearing and determine how integrated clearing could be achieved. This analysis may be facilitated by data generated by any cross-margining or netting pilot programs established by futures and option clearing organizations. The CFTC and the SEC were urged to monitor the progress of these studies and address public interest and competitive issues that any proposals for integrated clearing may raise.

No actions other than those summarized above have been taken on structurally integrating the clearing of stock and related option and futures products. Existing clearing organizations may

be reluctant to surrender management control to other clearing entities without the active support of their memberships. In addition, some clearing organizations have pointed out that the benefits of formal integrated clearing may be achieved largely by other improvements in clearing and settlement, such as those discussed above, which already have been undertaken. Some clearing organizations have contended that these new approaches are a direct result of competition among clearing organizations and are precisely the type of innovation which would be discouraged if the clearing process were to be consolidated or centralized. Clearing organizations also have pointed out that the distribution of clearing and settlement processes among different entities is preferable to having one entity performing all of these functions because such a distribution tends to diversify risk and isolate the consequences of insolvencies at both the clearing member and clearing organization levels.

Moreover, there is information available which suggests that integrated clearing may not result in materially reduced major funds transfers between clearing members. For instance, the BOTCC conducted a formal study of clearing cash flows during the last two weeks of October 1987 for the 60 firms which were clearing members of both the BOTCC and CME at that time. The study found that the firms engaged in approximately 1500 pay or collect transactions with the two clearing houses during that period. BOTCC further found that on only 70 occasions did a firm have both a collect from one clearing house and a pay to the other clearing house of over \$5 million. On only five occasions did a firm have both a collect from one clearing house and a pay to the other clearing house of over \$50 million. The largest number involved in any of these situations was \$88 million. <sup>28/</sup>

The Commission believes that the cash market activities of clearing firms which make pays and collects outside of recognized clearing systems also may have a significant impact on the futures clearing and settlement process.

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<sup>28/</sup> In this connection, the Commission notes that the BOTCC has been unsuccessful in obtaining from the OCC information necessary to performing a study of cash flows for firms which are clearing members at both the BOTCC and OCC. Therefore, the flow of funds found in the BOTCC study discussed here may not be as relevant to issues raised by the events of October 19 as the cash flows between futures clearing organizations and security options clearing organizations with respect to related contracts.

4. Refine Relevant Legal Frameworks

A. Develop bankruptcy framework for FCM/broker-dealers.

The Working Group recommended that the CFTC and SEC review existing bankruptcy laws and regulations to formulate a coordinated approach toward FCM/broker-dealer bankruptcies and to identify areas requiring legislation.

The CFTC is discussing various concerns about perfecting interests in securities positions and harmonizing bankruptcy provisions with the SEC and expects to cooperate in any studies conducted by third parties such as the securities bar. At the same time, the CFTC is studying approaches to effectuating the orderly transfer of customer positions in the event of an FCM insolvency and has effected transactions in several cases to date. In particular, Commission staff and the NFA have considered funding mechanisms whereby such positions could be preserved and transferred without any resultant market dislocation. <sup>29/</sup>

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<sup>29/</sup> See, e.g., Corcoran and Ervin, Maintenance of Market Strategies in Futures Broker Insolvencies: Futures Position Transfers From Troubled Firms, 44 Wash. & Lee L. Rev. 849 (1987). See generally NFA, Customer Account Protection Study (Nov. 20, 1986).