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Credit and Trading Agreements with Institutional Customers

To the Chief Executive Officers of All Member Banks, Branches and Agencies  
of Foreign Banks and Bank Holding Companies in the Second Federal  
Reserve District:

The rapid growth of trading activities of institutional investors, including leveraged funds, has been an important source of new business for banks active in foreign exchange, securities and over-the-counter derivatives businesses. This newly important and expanding group of institutional customers is one with which banks do not have long experience. Moreover, the capacity of some institutional customers to alter swiftly their financial positions and, in some cases, the limited availability of public financial information about these customers may make their integration into existing bank credit processes difficult.

Accordingly, banks have been actively developing risk management procedures for the establishment and control of credit exposures to institutional customers. A key element in the control of these credit exposures is the increased use of credit and trading agreements that incorporate margin or collateral. These agreements include both arrangements in which margin is posted at the inception of a trading contract and those in which margin is posted upon a certain agreed-upon reduction in the value of positions, often called a "loss threshold".

As is customary with new developments in banking, we have been reviewing the policies, practices, and risks that pertain to trading agreements with institutional customers, and the appropriate use of margin to limit risk. While we recognize that margin arrangements can play an important role in managing credit exposure in trading operations, we believe that they should complement, rather than substitute for, more traditional approaches to managing credit exposure.



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Moreover, margin and collateral arrangements must be sufficiently robust to provide confidence that they will produce the intended level of credit protection in times of stress. To this end, exposure and collateral monitoring systems must meet high standards of timeliness, accuracy and comprehensive coverage.

The remainder of this letter sets out our preliminary thoughts about sound practices in five areas of potential supervisory concern: the credit process, credit limits and concentrations, margin setting, exposure and collateral monitoring, and internal controls.

### The Credit Process

Most banks have well-developed credit processes covering both commercial lending and trading activities for their traditional banking customers, such as commercial businesses, other banks, and governments. Importantly, these processes include a series of internal checks and balances designed to promote prudent credit analysis and timely credit monitoring. The entire credit process is documented in written policies and procedures, which provide a foundation for the overall credit culture of a bank.

Some types of new institutional customers exhibit characteristics which may make their integration into existing bank credit processes difficult. For example, many customers that are institutional investors are not subject to statutory or regulatory disclosure requirements, and some do not routinely prepare audited financial statements. Moreover, the static nature of financial statements limit their value in understanding the current financial position of institutional investors who trade very actively. In the view of many banks, the mutability of financial positions renders the traditional tools of financial statement analysis, such as ratio and trend analyses, considerably less effective.

As a result, banks often supplement traditional financial analysis with on-site visits and evaluations of a customer's risk-management practices, the customer's trading strategies, and the past performance of the customer's primary trading advisor. And, as noted, banks frequently incorporate margin arrangements into their trading agreements with these customers to facilitate day-to-day control of credit exposure.

Our discussions with banks suggest that the risk-management principles and practices normally associated with the credit process for traditional bank customers can, and as a matter of sound practice should, be applied to trading agreements with institutional customers which incorporate margin or collateral arrangements. This process begins with the bank's written policies and procedures. Banks using margin agreements to control trading-based credit exposures to institutional and other customers should maintain specific written



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policies and procedures that address the risk management objectives of margin, the criteria for their use for particular customers, and the necessary credit analysis for establishing margins, credit limits, and conditions for closing out or liquidating customer positions. These policies should be periodically reviewed by senior management and the board of directors in the same manner as the bank's other credit policies.

Credit analysis of these customers by the bank should explicitly recognize that margin arrangements can mitigate, but do not eliminate, counterparty credit risk from trading transactions. In stressful market conditions, market price moves can quickly exceed margins, and the customer's ability to meet margin calls and maintain market access to manage its risks will depend on its underlying financial strength. While on-site visitation and off-site monitoring of trading counterparties are clearly valuable tools in assessing and monitoring the creditworthiness of some institutional customers, we believe that traditional credit analysis, including financial analysis of the customer that takes account of the dynamics of the customer's financial position, is essential to determining the financial capacity of the customer. Some banks find that they need to modify traditional financial analysis techniques in order to get meaningful assessments of credit quality, much as banks have adapted their financial techniques to reflect the specific credit risk characteristics of other customer groups.

Besides policies and analysis, the credit process for institutional customers should include all the customary checks and balances in the bank's traditional credit process. Among other things, sufficient expertise in this form of credit is crucial to strong credit controls. Depth of staffing should be sufficient to preclude concentration of expertise in too few individuals, always a matter of concern from an internal control perspective, as well as to provide adequate customer monitoring. Another essential internal control element is a separate, independent review of credit decisions by expert staff.

#### **Credit Limits and Credit Concentrations**

Credit limits for customers are an essential tool for credit risk management. While credit limits, margin, and closeout terms taken together should constitute an integrated system of credit-risk control, credit limits also should recognize that margin can only mitigate, but not eliminate, credit risk. Therefore, credit limits must reflect the bank's assessment of the customer's underlying creditworthiness, especially the customer's capacity to bear and manage credit, price and liquidity risks in stressful market conditions. Consistent with traditional credit practices, banks should establish for each customer a maximum overall credit limit, as well as any sublimits normally required by the bank's credit policies.



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Moreover, we believe that trading-related margin arrangements, taken together, can create potential credit concentrations. Although trading strategies and financial performance may vary substantially among individual institutional investors subject to margin agreements, these customers may be subject to some common vulnerabilities. They may, for example, exhibit similar sensitivities to market stresses, such as market and funding liquidity pressures. These sensitivities, as well as the risks inherent in the general uncertainty among market participants about the overall activity of some individual institutional customers and their financial condition, represent sufficiently common risks to warrant attention as a potential credit concentration. We would expect banks to use traditional tools, including a limit on total credit exposure to such customers, to manage the potential concentration.

In evaluating this potential credit concentration, banks need to consider carefully the assumptions that are used in defining aggregate exposure. In particular, differentiation of funds managed by major financial institutions from other types of funds should not rest on an implied financial support from the sponsoring institution when such support is not explicitly set out in the fund's documentation.

### Margins

The role of margin and loss-threshold amounts in an individual trading agreement is to provide a level of credit protection in order to control risk. Margin levels may reflect customer creditworthiness, available customer financial information, market conditions, and market practices. The primary question in setting margins, however, is achieving the intended degree of credit protection in light of the price and liquidity risks in specific instruments. Our review suggests that, as a matter of sound practice, banks should perform sufficient analysis to ensure that margins meet the bank's credit-risk management objectives and, in particular, that banks establish minimum margin levels or maximum loss thresholds based on strong analytical foundations.

The analysis of the risk-reducing role of margin must take into account the bank's closeout rights in the event margin is not timely posted, and should also take into account the bank's risk of loss if the bank closes out a position. That risk of loss depends in part on the liquidity and credit quality of the collateral. More fundamentally, a bank must have in place legally enforceable margin and collateral agreements and perfected security interests in the collateral.

An important discipline for ensuring that analysis of margin requirements is conducted and periodically updated is full documentation of margin and closeout practices in the bank's credit policy for trading-related credit. The methodologies for establishing minimum margins by product and for assigning appropriate margins



and closeout conditions to individual customers should receive an independent review. A review of compliance with the bank's credit policy in these areas should be incorporated into the bank's internal audit program.

### **Exposure and Collateral Monitoring**

The bank's capacity to monitor exposures and collateral values is central to its ability to control credit exposures through margin arrangements. A bank's level of risk exposure and the expected volatility of that exposure should be consistent with the frequency with which the bank can monitor credit exposures and collateral values. For actively trading customers, for example, the credit-risk information systems required for monitoring credit exposures, margin requirements, and loss threshold amounts should be global in nature and may require a nearly real-time monitoring capability. We note with encouragement that many banks are currently enhancing systems and refining techniques for detecting, monitoring and measuring risk within their institutions.

Not only should margin and collateral activity be conducted in accordance with a bank's capacity to monitor exposures and collateral values, but banks should have policies and procedures that fully document their collateral management systems, including policies for overriding credit limits, making margin calls and waiving margin requirements. Compliance with these policies should be verified through independent review.

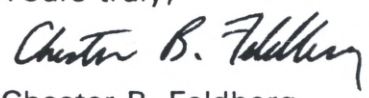
### **Internal Controls**

In addition to these traditional credit risk controls, banks should apply the same strong internal controls to trading relationships with institutional customers that are in place for trading activities with traditional customers. One area that could pose particular difficulty to banks is the assignment of trades to specific funds when the bank is dealing with an advisor to several funds. As a matter of sound and proper practice, a bank must know with which individual fund it is trading at the time of each transaction. Appropriate attention should also be given to obtaining from the customer the necessary authorizations to trade with specific traders, in specific products, and in specific types of trades.

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In conclusion, banks must ensure that sound risk-management policies and procedures are in place if they are making margin-based extensions of credit to institutional investors and other nonpublic trading counterparties. Furthermore, in reviewing their existing policies and procedures, banks should seek to establish solid analytical foundations for making credit judgments, assessing concentration risk, and establishing margins, limits and closeout conditions. Banks should also have in place effective credit monitoring systems and strong internal controls covering trading and credit activities. We plan to take a close look at the adequacy of bank risk management policies and practices in this area in the course of our ongoing supervisory process. If you have any questions or concerns in this area, please contact me or Christine Cumming, Senior Vice President, Specialized Examinations, 212-720-1830.

Yours truly,



Chester B. Feldberg  
Executive Vice President