

**THE
FOREIGN EXCHANGE COMMITTEE**

ANNUAL REPORT

1987



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CHAIRMAN'S REPORT

During 1987 the Foreign Exchange Committee identified and discussed many of the facets of managing the counterparty or credit risk involved in foreign exchange.

A major Committee effort was the drafting of a response to a proposal of the United States and United Kingdom bank regulators to include foreign exchange and interest rate contracts in their framework for a risk-based capital guideline. The Committee's response focused on the methodology for measuring credit risk for foreign exchange contracts and on the competitive implication if these regulations were to apply only to banks located in the U.S. and the U.K.

The Committee was pleased to see that the latest initiative in this area, the December 1987 "Basle proposal" put forth by twelve countries (G-10 and Luxembourg), is consistent with the Committee's recommendations and contains desirable adjustments to the methodology.

Another example of the Committee's interest in managing risk was its discussion of the adequacy of documentation for long term forward foreign exchange contracts. The Committee did not reach a consensus about the appropriate degree of documentation on these contracts. But a number of interesting ideas emerged from the Committee's discussion of this point, as reported more fully in the text of this report.

Committee members believe that netting foreign exchange transaction obligations by novation can ultimately reduce counterparty credit risk as well as contain operating cost.

The subject of contract netting was frequently discussed at Committee sessions and will be a continuing focus of our attention for the year ahead. Commercial banks represented on the Committee are reviewing their own exposures and are considering the pros and cons of entering into novation netting agreements with some of their counterparties.

The Committee intends to study in 1988 some of the approaches proposed to implement netting and to prepare a paper for general circulation describing these approaches

Finally, the Committee feels a continued need to bring to the attention of all market participants the Guidelines for Managing a Foreign Exchange Trading Operation. Although this Committee paper was prepared last year, Committee members believe it continues to be relevant and timely to today's market environment. Once again, the Committee encourages that this paper be distributed to all traders to assure awareness and to generate a discussion with management of the many issues covered in these Guidelines.



Heinz Riehl

COMMITTEE'S ADVISORY ROLE TO THE FEDERAL RESERVE BANK OF NEW YORK AND OTHER OFFICIAL INSTITUTIONS

During 1987, as in the past, the Foreign Exchange Committee discussed a wide range of issues so as to communicate the concerns and impressions of the market to the Federal Reserve. This year, these discussions concentrated on the implications for foreign exchange of the bank supervisory proposals implementing a risk-based capital requirement.

Committee Comment on Proposed Risk-Based Capital Framework

In February 1987, the Board of Governors of the Federal Reserve issued for comment a revised proposal for developing a risk-based capital framework for banks, one that replaced a proposal on the same subject published by the U.S. bank regulatory authorities early in 1986. In developing this new proposal the Federal Reserve, the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) worked with the Bank of England, so as to continue, if not accelerate, the process of coordinating bank capital standards across countries.

The February U.S./U.K. paper proposed a basic framework for establishing a risk-based capital guideline. In March 1987, the Bank of England and the Federal Reserve issued, also for comment, a supplemental proposal setting out an approach for measuring credit risk associated with interest rate and foreign exchange contracts that would bring risk considerations on these instruments into the overall risk-based capital framework. The supervisory authorities had previously indicated their intention to incorporate foreign exchange and interest rate contracts into a capital guideline and had solicited comments from banks on methods that might be used to evaluate the credit risk associated with these activities. This March 1987 paper was the first proposal the authorities issued for measuring credit risk on these instruments.

Foreign exchange and interest rate contracts require special treatment because credit exposure on these contracts is not directly related to the notional value of the contracts. In the event of a counterparty failure, a bank would not be exposed to credit risk for the full face value of the contract, but only for the cost of replacing the cash flow on those contracts showing positive value. Thus, the credit risk associated with this type of contract is not only influenced by the creditworthiness of the counterparty, but also by

movements in market rates associated with the particular contract involved.

The March U.S./U.K. supplemental proposal was based on the premise that capital should be required to support not only current exposure to losses but also future increases in exposure that may develop over the remaining lifetime of a contract because of future changes in market rates. It sought to provide a measure of both current exposure and potential future exposure, the sum of which would then be the "credit equivalent" amount of exposure contained in each foreign exchange or interest rate contract. This is the amount of exposure conceptually equivalent to the exposure contained in banks' on-balance sheet assets. It would be assigned a risk weight, along with other assets, and thereby recognized in a risk-based capital requirement. More specifically, under the U.S./U.K. framework, the resulting credit equivalent amount would be assigned to one of the five risk categories based on the type of counterparty, with the risk weights varying from 0 to 100 percent.

Calculation of the credit equivalent amount of exposure in a foreign exchange (or interest rate) contract consisted of a two-part process under the March U.S./U.K. proposal. First, a bank calculated the mark-to-market value of its foreign exchange (or interest rate) contracts on the basis of market exchange rates or interest rates prevailing at the end of the current reporting period. In this way, the bank estimated the cost it would incur if a counterparty were to default at once. Second, the bank estimated the future costs of replacing a contract, based on a probability distribution of rate movements presumed to pertain to the remaining contract. Thus, the amount of exposure, as measured, depended on the volatility of the rates underlying the instruments. The future replacement cost, or the potential future exposure, would be significantly larger (or smaller) depending upon the variability of the rates underlying the instrument and the remaining maturity of the contract. The underlying methodology and the measurement parameters contained in the March U.S./U.K. proposal were based on volatility analysis done by the Bank of England and the U.S. bank supervisors.

Focus of Committee Discussions and Comment

The Foreign Exchange Committee decided to draft a response to the U.S./U.K. proposal on measuring credit risk in foreign exchange contracts. It sought to develop a re-

sponse that would complement, not substitute for, the comments of individual banks, focusing on the market-related issues and not the effects of the proposal on individual institutions. The Committee was able to reach a consensus view on several important aspects of the risk-based guidelines, despite the diversity of its membership and the complexity of the issue. The Committee's comment letter is reprinted in this report (see p. 22).

The Committee was prompted to respond to the proposal in part by its advisory role to the Federal Reserve. It was also motivated by the considerable attention that Committee members had paid to analyzing the risks of the foreign exchange business and developing ways of protecting against these risks.

In its comment letter, the Committee focused, most importantly, on the considerable dislocation and changes in competitive structure that might occur if any such guidelines were imposed only on commercial banks in the United States and the United Kingdom. Non-banking institutions and commercial banks operating under other supervisory regimes might obtain a competitive advantage. Such a dislocation could have a detrimental effect on market liquidity.

In addition, the Committee letter drew attention to the proposal's effect on pricing. The price effects of the proposal were seen to reflect both the cost of capital supporting trading activities and potential changes in prices related to the loss of liquidity.

Committee members also expressed considerable concern that the proposal, as constructed, did not appropriately consider that the vast majority of the counterparties for banks' outstanding foreign exchange contracts are high-quality credit risks. As a result, the guidelines would lead to an allocation of capital considerably larger than was actually necessary to support the banks' foreign exchange activities. The Committee pointed to the high credit standards applied by banks to foreign exchange counterparties as well as to the nature of foreign exchange contracts. For these reasons, the Committee recommended that foreign exchange contracts be treated like trade-related contingencies (such as commercial letters of credit) and be given a maximum risk weight of 50 percent.

At the same time, some of the assumptions that lay behind the volatility analysis of the U.S./U.K. paper were thought to be of questionable applicability to actual foreign exchange markets. This analysis worked in the direction of increasing the capital requirement. The Committee therefore decided

to comment also on the methodology of the proposal that produced this result.

In developing a response to the U.S./U.K. proposal, the Committee had a relatively short period of time in which to address a complex and technical topic. It invited representatives of the Bank Supervision Group and International Capital Markets Staff of the Federal Reserve Bank of New York to attend its April meeting. These representatives helped to clarify the rationale for the proposal as well as shed light on the development of its methodology.

The Committee established an *ad hoc* subcommittee to draft the response. Subcommittee members soon realized that an effective response to the proposal required statistical analysis, where possible, to support statements concerning the impact of the proposal on the market as a whole or on individual classes of participants. It also would require an analysis of the statistical methodology underpinning the U.S./U.K. paper. Given the complexity of the proposal, many subcommittee members drew heavily on technical personnel in their own organizations.

The subcommittee also obtained information from institutions represented on the Committee. Members of the Committee provided data on total dollar amounts lost due to counterparty default. The data lent credence to the view that, historically, losses from foreign exchange had been small.

The subcommittee also noted that the proposal indicated that capital requirements be calculated for each contract rather than on some aggregate level. Institutions represented on the Committee were therefore asked to estimate the costs of developing software to perform the calculations on a contract-by-contract basis. The results of this request indicated that the data necessary for implementation on a contract-by-contract basis were not readily available and that implementation of operating systems to provide contract-by-contract basis data would be both costly and time consuming to install. On this basis, the Committee letter suggested the Board develop appropriate proxy measures that could be used instead to determine potential exposure in a bank's portfolio and offered its assistance in this task.

The Basle Committee Proposal On Capital Adequacy

At the same time that the U.S. and U.K. banking authorities were receiving comments on their risk-based capital guide-

lines, multilateral discussions on the topic were being held by the Basle Committee on Banking Regulations and Supervisory Practices which comprises representatives of the central banks and bank supervisory authorities of the Group of Ten (G-10) countries and Luxembourg. While the multilateral discussions were being held, action on the U.S./U.K. proposal was deferred.

The discussions among the Basle bank supervisors resulted in the development of a general framework on the measurement of capital and capital standards for international banking organizations of the twelve major industrial countries. This proposal aimed to strengthen the international banking system by providing a consistent system for comparing capital positions of banks from different countries and by assessing capital adequacy in a way that would take credit risk considerations into account. Moreover, by including most of the major industrial countries, the Basle proposal would remove an important source of competitive inequality for banks arising from differences in national supervisory requirements.

In December 1987, the Basle Committee published a consultative paper which outlines the basic structure of a common framework for assessing bank capital adequacy. Bank supervisors from each of the G-10 countries and Luxembourg were expected to develop country-specific proposals to be circulated within their own countries for discussion with their respective banking organizations.

The Basle proposal included a system for relating capital to banking risks, including the risks associated with exposures from off-balance-sheet activities. The Basle

Committee was not able to come to agreement, however, on a single, best method for measuring the credit risks associated with foreign exchange and interest rate contracts. Instead, national bank supervisors would be allowed to choose one or both of two methods proposed for gauging the credit exposures of these contracts

Although the methodologies of the two techniques differ, they are intended to yield approximately equivalent measures of credit exposure. The first proposed measure, the "current exposure" measure, retains the basic structure of the original U.S./U.K. approach, combining current market exposure with an add-on for potential exposure. The procedure for estimating potential exposure is much simpler than in the earlier proposal, in part reflecting comments received on the U.S./U.K. proposal.

Some of the Basle supervisors favored an even simpler, "original exposure" approach for measuring the credit exposure of interest rate and foreign exchange contracts. With this methodology, a bank would not measure the current market value, but would simply multiply the notional principal amount by a conversion factor based on the type of instrument and its maturity

After having obtained a measure of credit exposure from either approach, the bank would then assign a risk weight to the credit equivalent amount. The weights would be chosen from the categories of counterparties used in the basic framework. However, most Basle Committee members are of a view that the maximum risk weight should be 50 percent, reflecting the relatively high credit quality of counterparties in the market for these instruments.

COMMITTEE DELIBERATIONS ON MATTERS OF MARKET PRACTICE

Much of the Committee's discussion on matters of market practice focused on recognizing and managing the credit risk related to a foreign exchange trading operation. These discussions encompassed a variety of approaches for dealing with credit risk—assuring the adequacy of documentation, collateralizing transactions, and reducing credit risk by way of netting foreign exchange contracts.

Long-Term Foreign Exchange Transactions

During several of its meetings this year, the Committee discussed the prudential role of documentation and trading limits in transactions involving long-term foreign exchange contracts with corporate customers.

Corporate clients are increasingly seeking long-term protection from exchange rate fluctuations and are otherwise involved in related activities of the international capital markets. As a result they have increased their requests for foreign exchange forward and options transactions with a maturity beyond one year.

Foreign exchange contracts do, of course, present credit exposure to a bank. With the extension of maturities beyond one year, these credit exposures are now taking on a character similar to a term loan. One major difference between exposures arising from foreign exchange transactions and those from loans is that the credit exposure on this longer-term foreign exchange transaction is market related. That is, the extent of the future exposure on a market-to-market basis cannot be precisely determined at the outset,

even though by agreement it may be limited.

The increased magnitude of credit exposures arising from foreign exchange transactions deserves management review on a number of points:

Trading Limits

Many banks approve foreign exchange trading limits for customers that apply to transactions which mature in one year or less. Longer-term contracts with those customers are handled as an exception item. This procedure may be adequate for a low volume of business. But as a bank encounters a growing number of customer requests for longer-term transactions, a more systematic procedure for monitoring these exposures should be considered.

Documentation

A general survey of bank practices indicates that most banks do not enter into written agreements with corporate customers to document long-term foreign exchange transactions. Many banks continue to use their dealing contracts or confirmations that were designed for short-term trading activities as the only documentation supporting long-term foreign exchange transactions, even though the risks of these transactions is similar to those of term loans which typically are well documented.

Possible issues to be addressed in Long-Term FX Contracts:	
Default procedures to determine in event of default prior to maturity failure to make payment within a predetermined time period	formula for determining liquidated damages right to require margin based on mark-to-market
Change of Corporate Status including Bankruptcy, Insolvency, Reorganization, Acquisition, or Divestiture	Taxes and Fees Cross Border Implications governing laws and regulations exchange controls
Par Passu LTFX contract will rank equal to all other obligations	Transfer/Assignment of Obligations right of offset/netting
Notices Representations, Warranties authority to enter into such transactions confirmation requirements	Capital Requirements notice of right to require payment of costs associated with unforeseen capital required by regulators
Damages interest on late payments, etc. rights to cover exposure in market	Treaty Default failure to perform on other agreements

To date, historical credit loss experience in foreign exchange has not been significant. But management may wish to consider whether current procedures provide adequate safeguards in an area of growing exposure. A bank may decide to require a written agreement as a matter of routine. Alternatively, it could decide to require documentation where either the maturity of the transaction, the currencies involved, or the size or nature of the anticipated exposure to the customer during the life of the contract so warrants.

Other Documentation Issues

Apart from the discussions concerning the adequacy of documentation for long-term forward contracts, the Committee did touch briefly on other documentation issues. It received copies of standardized documentation for swap transactions developed by the International Swap Dealers Association (ISDA). In the past, Committee members had expressed concern about the length of time needed to complete the documentation for swap transactions. The Committee therefore welcomed ISDA's efforts to produce standard form agreements for use by swap market participants. The Committee also received a letter drawing attention to the use of performance qualifiers to make a foreign exchange agreement immediately callable at the discretion of the contract issuer should the financial solvency of the counterparty deteriorate significantly.

Trading Against Collateral

The Committee decided it would be useful to explore issues related to the use of collateral to offset the credit risk of foreign exchange trading. This practice is apparently used to bring some counterparties up to the relatively high credit standard of most participants in the foreign exchange market. A subcommittee assigned to analyze this topic is proceeding in three steps. Beginning in the second half of 1987, the subcommittee began to survey the market to determine the nature of this practice. The Committee will also attempt to evaluate the costs and benefits of dealing with a counterparty on a collateralized basis. In the final stage of its analysis, the Committee will explore the broader implications of this practice for the foreign exchange market.

Netting in 1987

With banks reassessing risks, especially the payment and counterparty^{1/} risks in foreign exchange and focusing more intently on the costs of processing payments, the idea of netting foreign exchange contracts was pushed ahead during 1987. As a result, some advances were made in implementing a netting system. The Foreign Exchange Committee has followed this area with interest, having held discussions about netting since 1982.^{2/} Committee members felt that netting offers clear potential for dealing effectively with many of the banks' current concerns.

Attractions of Netting

Foreign exchange netting can reduce payment risk directly by dropping the number and amount of outstanding foreign exchange commitments under a binding and enforceable set of netting arrangements. The number of payments is limited to a single payment or receipt per currency per settlement date for each netting partner under bilateral netting. (Under multilateral netting systems it is possible to reduce payments to a single payment receipt in each currency per settlement date against a clearinghouse.)

The process of confirming transactions and agreeing on the netted amounts for settlement forces participants to resolve discrepancies at an earlier point in time than is now commonplace. A netting system may go so far as to provide for automated confirmation and matching of trades, thereby electronically flagging and keeping records of unmatched trades, reducing the likelihood of clerical oversight or confirmation error. Such a system may also include standard paying and receiving instructions, further cutting chances for payment errors.

Various Approaches to Netting

There are two basic approaches banks are adopting toward netting. These methods, payment and contract netting, have operational similarities but differ significantly in their legal and risk reduction characteristics.

Payments netting refers to the netting of the amounts of payments made between institutions. The contracts giving rise to the obligations being netted remain in effect, and each party to any such set of arrangements remains liable for its gross (un-netted) obligations to the other party until the net balance owed by one party to the other has been paid. Payments netting does not reduce the legal obligation of parties to make payment for individually contracted amounts. Thus, in a bankruptcy proceeding, a liquidator retains the ability to choose among individual contracts and determine which will and which will not be honored. Payments netting can dramatically reduce the number and size of settlement payments between institutions, and thus may simplify operations and reduce the probability of error. However, it can also mask risk and give false comfort to counterparties.

^{1/} Payment risk, also referred to as delivery or pay-out or settlement risk, or clear risk at liquidation, is the risk that a trading party may fail on the maturity date of a contract, and thus fail to make payments in return for payments sent to it. Counterparty risk, also referred to as market or exchange risk, is the risk that a trading party will fail before the maturity date of a contract, so that the contract may have to be replaced at a less favorable market rate.

^{2/} See previous Annual Reports of the Foreign Exchange Committee for documents: 1982 - pg. 6; 1983 - pg. 4-5, 15-28; 1984 - pg. 4-5; 1985 - pg. 6-7, 1986 - pg. 11, 52-58.

Contract netting refers to a netting arrangement under which, by agreement, two or more contracts giving rise to obligations for the same settlement date are extinguished and replaced by a new contract (legally, a "novation") between or among the parties. Each party is thus liable only for any positive net balance owed to the other party or parties. The legal obligation of a party to make payments under the original, individual contracts disappears and is replaced by the obligation to pay the amount due as a result of the netting provided for under the novation contract. Novation, in replacing the original obligations with a new contract, removes the ability of a liquidator to pick among the original, individual contracts, thus reducing counterparty risk with respect to obligations maturing after failure of an insolvent party. Novation reduces payment and counterparty risk by legally cutting the amounts due from one party to another to the netted amount.

Two approaches to netting by novation came to the Committee's attention: FXNET and the Foreign Exchange Clearing House (FCH) proposed by the Options Clearing Corporation (OCC). FXNET, an English limited partnership, began implementing automated netting in May 1987 in London. As proposed by the OCC, FCH — which is still in the developmental stage — would be a central clearing entity through which multilateral netting by novation would be accomplished.

The FXNET system enables a participant to net bilaterally with any other party on the network, allowing counterparties to retain full control over credit worthiness, exposure and risk management with each other. FXNET licenses computer software which runs on a decentralized computer system and may interface with a bank's own operations system. The FXNET system reduces a set of obligations arising from a set of foreign exchange contracts to one payment or receipt per currency per settlement date per netting counterparty. A model bilateral netting agreement, developed and reviewed by counsel, serves as the basis for the netting relationship between any two parties in the system.

Under the multilateral contract netting arrangements proposed by the OCC, each netting counterparty would net against a clearinghouse. That is, a bilateral contract between participating trading parties would be extinguished, and replaced by a new contract between each of the parties and FCH, which would be substituted for each party as a principal with respect to the other. A participant in such a system would make or receive a single payment per currency per settlement date to or from the clearinghouse.

The OCC anticipates that the proposed arrangements

would involve the posting of margin against the exposure of the individual participants to the clearinghouse, thereby enhancing the credit-worthiness of the clearinghouse, and reducing the risks for participants emanating from failure of a member to perform. The proposal is still being formulated and questions concerning how the clearinghouse might work are not yet resolved.

Committee Involvement with Netting

The Committee has looked at issues concerning netting for a number of years. It developed a model netting agreement in 1984 and followed the development of prospective mechanisms to accomplish netting in the United States with considerable interest. The Committee has viewed netting by novation as substantially reducing payment and counterparty risk in foreign exchange.

Given its interests in this area, the Committee decided to establish a subcommittee late in 1987 to examine current proposals for netting foreign exchange. The subcommittee intends to describe several of the current efforts or proposals to achieve foreign exchange netting. It will be holding a series of meetings with representatives of various organizations proposing netting arrangements and other interested parties to build its knowledge about each system or proposal and preparing a document describing the various netting products.

Reissuance of Management Guidelines

At various times during the year, Committee discussions touched on issues related to managing a foreign exchange trading operation. In February, the Committee circulated a revised version of its management guidelines. This paper had benefited from considerable Committee discussion on issues facing management during the recent period of increased activity, growing competitive pressures, and rapid turnover in personnel. The discussions and the resulting paper focused on managing both the operational aspects of trading as well as a bank's relationships with other classes of market participants.

During the course of the year, events in the market prompted Committee discussions of management issues in each instance. Committee members found that the guidelines continued to prove useful for meeting the challenges being faced. As a result, the Committee thought it appropriate to reissue the paper, "Guidelines for Management of Foreign Exchange Trading Activities," as part of this annual report.

REASSESSMENT OF THE ORGANIZATION AND PROCEDURES OF THE FOREIGN EXCHANGE COMMITTEE

Since 1979, the Foreign Exchange Committee has operated along the lines set forth in its original charter. From time to time, it established specialized *ad hoc* subcommittees to work on individual projects. At one point it established a task force, drawing both on institutions represented and not represented on the Committee, to make a recommendation on a then innovative foreign exchange product. But the Committee's basic structure of organization and procedures changed little.

In recent years, however, it became increasingly apparent that managing a foreign exchange operation requires thorough familiarity with the instruments and structure of a variety of related international markets, not just foreign currency trading as narrowly defined. As a result, the Committee's discussions ranged over many issues relating to international financial markets.

During 1987, the Committee felt it appropriate to consider whether the increasing integration of markets warranted a review of both its objectives and membership structure. There was a feeling that the original document was more narrowly defined than was appropriate, given the Committee's actual practice.

Committee Objectives

In looking at the statement of objectives contained in the Document of Organization, the Committee deemed it appropriate to broaden the scope of the Committee's charter in several respects. The Committee clarified that its deliberations would relate not only to the traditional foreign exchange market, but also to all closely related international financial markets. It also felt that the Document of Organization should reflect that the Committee will continue to produce documents intended to enhance the general understanding of these markets as well as to further the knowledge of risk management both in theory and practice. The nature of Committee membership enables it to make useful contributions concerning a variety of technical or specialized topics of interest to other market participants.

Nature of Committee Membership

At the start of this review of objectives and membership structure, there was a presumption, frequently expressed, that a broadening of the membership structure was neces-

sary to effect a broadening of its objectives. But during the year, Committee members began to question that presumption. The restatement of objectives was seen increasingly as a recognition of a widening in the Committee's focus that had already occurred, not a new departure. Furthermore, Committee members began to see themselves serving more clearly as representatives of their institution, capable of drawing upon all of their institutions' resources. They no longer felt that, in addressing the many and diverse issues coming to the Committee's attention, they had to rely only on their own individual experience or expertise.

As a result of this change in perception, more of the Committee's attention this year was directed at defining the role of a Committee member than changing the structure of membership. This effort resulted in a brief statement of the responsibilities of Committee membership, a statement that was added to the Committee's Document of Organization.

Relationship between Members and Alternates

In the discussion about the nature of Committee membership, questions arose about the significance of the designations "member" and "alternate." The Committee, after much discussion, concluded that the existence of two groups of members represents a reasonable solution to achieving a desirable compromise. On the one hand, it provides for a broad representation of market participants so that a variety of views or opinions can be expressed. On the other hand, it creates a decision-making body that is small enough to deal effectively with issues that come before it.

The Committee's procedures were reaffirmed whereby the member, or the alternate in the event the member is absent, votes on issues presented for Committee deliberations. In every other respect, the alternate shares all responsibilities of Committee membership. The paired member and alternate are expected to work closely together, ensuring attendance of one of the pair at formal meetings and discussing matters of substance that arise. At the same time, any member or alternate is in a position to bring forward issues, to participate in subcommittees, and to support the Committee's work in other ways.

Membership Structure

The discussion of the structure of membership that took place in 1987 centered on existing classes of membership.

There was a consensus that the current composition of bank membership is broadly representative of the banks operating in the U.S. foreign exchange market.

The Committee decided to revert to having a single broker member. Broker membership had been increased to two in 1984 in order to make it easier for at least one broker to attend each meeting. This change had taken account of the fact that, since the Committee's establishment in 1978, foreign exchange brokerage firms had become international organizations whose management had to travel extensively, rendering attendance more difficult. But many felt that all classes of members travel extensively, and broker participation could be adequately assured by having one broker member and two broker "alternates."

For the time being, no new class of membership was decided upon, although the possibility was discussed. One idea that received considerable support was to increase the number of professional organizations that have observer status by inviting representatives of organizations that cover markets related to foreign exchange to serve in an observer capacity similar to the President of FOREX USA. It was thought that such an involvement of other organizations would provide technical expertise in markets related to foreign exchange. To explore the feasibility of such an idea,

the Committee plans to invite officers of some of these professional groups to attend its meetings during 1988.

Standing Subcommittee on Membership

For the first time the Committee established a standing subcommittee, a Subcommittee on Membership, to advise the Federal Reserve on the selection of new members and to assist in introducing them to Committee procedures. As new participants came into the market, particularly those from outside New York and in sectors of the market with which the Federal Reserve did not have any ongoing relationship, a more formal structure was found useful

Accordingly, the Committee established the Membership Subcommittee, under the chairmanship of the Federal Reserve. The members would be chosen so as to encompass at least one member representing regional banks, and perhaps the observer from FOREX. During 1987, the Membership Subcommittee consisted of Kenneth G. Hartwell (Bank of Boston), David Palmer (FOREX), James P. Borden (Chase Manhattan), and Ron Levy (Marine Midland), and was chaired by Margaret L. Greene (Federal Reserve Bank of New York). The Subcommittee participated in the discussions leading up to invitations to new members for 1988 and assisted in an orientation program for these new members.

FORMAL MEETINGS OF THE COMMITTEE

Meetings in 1987

February 6
April 3
May 29
August 7
October 2
December 4

Schedule for 1988

February 5
April 8
July 8
August 5
October 14
December 2

PROCEDURAL MATTERS OF THE FOREIGN EXCHANGE COMMITTEE

Formal meetings of the Committee were generally held on the first Friday of alternate months during 1987. The June meeting was rescheduled to avoid a conflict with the FOREX ACI Congress. J. Andrew Spindler and Betsy Buttrill White of the Bank Supervision Group and Charles Lucas of the International Capital Markets Staff of the Federal Reserve Bank of New York attended a meeting of the Committee to discuss a Federal Reserve Board proposal to introduce a risk-based capital framework.

A number of *ad hoc* subcommittees were established during the course of 1987. Two of these subcommittees completed their work. The outcome of the first subcommittee's work was a comment letter on the risk-based capital proposal. The comment letter was prepared by a subcommittee consisting of Christine W. Patton (Manufacturers Hanover), William Rappolt (Manufacturers & Traders), Kemp Mitchell (Security Pacific), John Arnold (Morgan Guaranty), Gerhard Schleif (BHF), and Jay Pomrenze (Bankers Trust), assisted by Willene A. Johnson and Margaret Browne (Federal Reserve Bank of New York). The letter is printed on p. 22 of this report.

The other subcommittee that completed its task during 1987 discussed issues to be considered concerning documentation of long-term forward contracts. A subcommittee consisting of David Harvey (First Chicago), Douglas Grainger (Royal Bank), Barry L. Kaufman (Northern Trust), and John P. Caulfield (Continental Bank) set forth these issues as reported on p. 7 of this report.

The subcommittee reviewing the objectives and structure of membership of the Committee also made considerable progress during the year. It drafted the revisions of the

charter to widen the Committee's objectives and define more clearly than before the responsibilities of membership. This subcommittee consisted of James P. Borden (Chase Manhattan), Ron Levy (Marine Midland), and Christine W. Patton (Manufacturers Hanover), assisted by Margaret L. Greene (Federal Reserve Bank of New York).

Three other subcommittees were formed whose work continues:

- A "risk points" subcommittee proposes to consider aggregate measures of risk that can be utilized across instruments. The subcommittee members include Ron Levy (Marine Midland), William L. Maxwell (NCNB), Heinz Riehl (Citibank), Michael Snow (UBS), Douglas Grainger (Royal Bank), and David Harvey (First Chicago), assisted by Thomas Heffernan (Federal Reserve Bank of New York).
- Another subcommittee is studying the netting of foreign exchange contracts. Its members include Christine W. Patton (Manufacturers Hanover), John P. Caulfield (Continental Bank), Raymond R. Peters and Lewis Teel (Bank of America), Richard M. MaGee (Tullett and Tokyo), and Douglas Grainger (Royal Bank), assisted by Peter S. Holmes and Janice A. Oser (Federal Reserve Bank of New York).
- A subcommittee exploring issues related to trading against collateral consists of Owen van der Wall (Westpac), James P. Borden (Chase Manhattan), Kemp Mitchell (Security Pacific), and John P. Caulfield (Continental Bank), assisted by David Roberts (Federal Reserve Bank of New York).

**SELECTED DOCUMENTS
OF
THE COMMITTEE**

**GUIDELINES FOR THE MANAGEMENT OF
FOREIGN EXCHANGE TRADING ACTIVITIES**

**COMMITTEE LETTER ON PROPOSED
RISK-BASED CAPITAL**

DOCUMENT OF ORGANIZATION

GUIDELINES FOR THE MANAGEMENT OF FOREIGN EXCHANGE TRADING ACTIVITIES

The U.S. foreign exchange market has changed significantly in recent years. More sophisticated communications systems have provided access to greater numbers of institutions throughout the world, prompted wider use of off-site and around-the-clock trading, and contributed to sharp growth in turnover. New financial instruments have introduced complexities to dealing that did not previously exist.

With changes in the market have come changes in the institutions operating there. A number of new participants have joined the market, bringing with them different practices and perspectives. Existing firms have been forced to adapt or modify traditional procedures. Foreign exchange units, once operated almost strictly as a service for customers, can today be major profit centers for banking institutions. Accordingly, management objectives have changed to place more attention and emphasis on profitability

Growth and change are also affecting the individuals acting within the market. An influx of new people, not necessarily familiar with the specific traditions of the foreign exchange market, has altered the tone of the marketplace. More aggressive trading for profit and the growing importance of incentive-based compensation programs have increased pressure on individuals, pressure compounded by the fast pace and increasing size of the trades themselves. Partly in response to these developments, the turnover of personnel has risen, and individual traders have become increasingly specialized.

In acknowledgement of these trends, the Foreign Exchange Committee updated and expanded its 1980 Management Guidelines for Foreign Exchange. The Committee is especially concerned that managements recognize how change has affected and will continue to affect their own operations.

Most important, management should realize the growing responsibility that is now delegated to the individual trader. He not only can commit substantial resources of the institution but is relatively independent in doing so. More dispersed operations, the greater number and size of transactions, and greater specialization among individuals have all contributed to an environment in which there is less support for the trader in the form of oversight or timely suggestions from other experienced personnel. Implicitly, institutions place tremendous faith on each individual's abil-

ity and willingness to operate in accordance with institutional policies and regulations.

The Committee advises management to weigh these considerations seriously when making hiring or assignment decisions. The Committee firmly believes that by attracting and retaining quality personnel, institutions will protect their own standards of performance. They will also contribute to the maintenance of a professionally sound and smoothly functioning foreign exchange market, a goal that all market participants share

Some specific issues relating to the management of foreign exchange activities the Committee finds to be particularly topical are discussed more fully below. In revising its guidelines, the Committee focused its attention especially on the requirements of a foreign exchange trading operation. Many of the points discussed are, however, general enough to apply to trading operations for other closely-related instruments.

Confidentiality

Confidentiality and anonymity are essential to the operation of a professional foreign exchange market. Participants in the market—commercial accounts and banks alike—can expect to have their interest and activity known only by the other party to the transaction and an intermediary if one is used.

Management is responsible for ensuring that its employees can readily identify information that is confidential or situations where anonymity is essential. Management should also instruct its employees to handle such information accordingly. In the normal course of his duties, a trader has access to a considerable amount of confidential information. In addition to the details of the trades he executes, he may know of confidential material prepared within his own organization or obtained from those with whom his institution does business. Such information might pertain directly to the foreign exchange market or to other markets. While not explicitly stated to be confidential, it may not be publicly available.

Whenever confidentiality is broken, it is the role of management to see to it that the institution moves swiftly to correct the conditions that permitted such an event to occur.

Managers should not tolerate a trader utilizing confidential material for personal benefit or in a manner that compromises the institution in any fashion. A trader should not be permitted to pass on information outside his institution. Nor should a trader distribute information within his institution, except on a need-to-know basis.

Management should also be alert to the possibility that the mechanics of foreign exchange trading might jeopardize the institution's attempt to preserve confidentiality. When the Foreign Exchange Committee issued its original guidelines in 1980, a procedure that generated considerable concern and subsequent discussion about confidentiality was the use of two-way speakerphones by both brokers and dealers. Since then two-way speakerphones have either been abandoned or, where still in use, have been controlled so as to maintain the level of confidentiality appropriate to executing transactions.

As technological innovations are introduced into the trading environment, management should be aware of the security implications of any changes. In today's market, the widespread use of computers represents a case in point. Much of the information stored there is highly sensitive. It should be protected. Access should be strictly controlled and monitored. All necessary steps should be taken to protect confidential materials from potential breaches, inadvertent or otherwise.

Visitors to the dealing or brokerage operation may present yet another complication in the attempt to ensure confidentiality. There is always the possibility that visitors will overhear information not intended for them; names of participants, amounts of trades, and currencies traded may be disclosed. Whether or not that information is ever put to use, and however unintentional the distribution of that information, the simple fact that the presumed confidentiality between counterparties has been violated is grounds for concern.

Accordingly, management might consider whether visits to individual operations are appropriate. If so, management should move to protect sensitive information. When allowed, visits should be prearranged. Similarly, visitors should be accompanied by an employee of the host institution. It is strongly recommended that a visitor not be permitted to trade for his own institution from the premises of the host.

Trading for Personal Account

In general, managers expect that any trader will give full attention to the employing institution's business activities,

not distracted by his own personal financial affairs. Management also expects that any trader will fulfill his institutional responsibilities objectively, unbiased by his own financial position.

Management should be aware that, if traders are permitted to deal for themselves in instruments closely related to the ones they deal for the institution, a conflict of interest or an appearance of a conflict of interest might arise that could be detrimental or embarrassing for the institution, the trader, or both. Therefore, it is management's responsibility to develop and to disseminate a clear institutional policy on these matters. In that regard, most institutions require the explicit permission of senior management whenever a trader engages in a transaction for his own account, either in the instrument he deals for the institution or one closely related to it.

Traders should recognize that they, too, have a responsibility for identifying and avoiding conflicts or appearances of conflict of interest. In particular, a trader should bring to management's attention any situation about which there is a question of propriety. In no instance should a trader use the resources of his professional affiliation to facilitate or to create trading opportunities for personal gain.

Entertainment/Gifts

Because of the nature of the money and exchange markets and the manner in which business is conducted in these markets, close personal ties may develop between professionals. Close contacts among market participants can be constructive to the extent they contribute to the smooth functioning of the market. There is a risk, however, that these ties may tempt a trader to assist a fellow practitioner at the expense of the employer.

Traders, unlike many others within an organization, are in a position directly to reciprocate gifts, entertainment and favors by the way they direct the business they execute for their institution. Management should therefore assure itself that general guidelines its institution may have concerning entertainment and the exchange of gifts are sufficient to address the particular circumstances traders may encounter. Where appropriate, the general guidelines should be supplemented for trading personnel to help dealers avoid the dangers of excessive entertainment. Special attention needs to be given to the style, frequency, and cost of entertainment afforded traders. A mechanism for monitoring entertainment should be in place. Although it is customary for a broker or trader to entertain market contacts at lunch or

dinner on occasion, entertainment even in that form becomes questionable when it is underwritten but not attended by the host.

In turn, traders should conduct themselves in such a way as to avoid potentially embarrassing situations and to reduce the chances of incurring a presumption of indebtedness. They should fully understand their institution's concept of what constitutes an appropriate gift or entertainment as well as the bounds of law and reasonable propriety. They should also be expected to notify management regarding unusual favors granted them by virtue of their professional position.

Personnel Issues for Management

In recent years the work environment for trading personnel has changed in some very important respects:

- The stress and pace of work for traders has become increasingly intense. They are operating under strong internal pressures to make profits in a market that is open 24 hours a day.
- The process of developing a trader has become far more compressed. Seldom do individuals learn trading over a period of years, by starting with purely clerical tasks and gradually—under the tutelage of a seasoned and experienced foreign exchange professional—taking on more responsible tasks. Today, traders are either hired from other institutions or, they are developed internally from individuals thought to have either on-the-job experience or academic training in areas that would prepare them quickly for market-making and/or position-taking activities.

These changes raise new issues for management to consider and require new responses, some of which are specifically mentioned here.

Stress Stress may lead to job-performance problems. Managers need to be able to identify symptoms of stress among their trading personnel. An institution should have the ability to respond to any incipient problem, even if doing so means that foreign exchange managers may have to be more flexible in their approach to personnel issues than is generally the case for the organization as a whole.

Drug Abuse. Drugs, as well as other mind-altering substances, can be debilitating and affect the user's judgment. They can also produce a need or dependency that may influence a user's professional conduct in other ways. The

apparent ease of distribution and the changing nature of the substances used make it difficult for management to recognize incidents where drugs may be involved.

Management should educate themselves and their traders to signs of use and to the potential damage incurred by drugs and other abused substances. Management would thereby be in a better position to detect possible use in the organization.

Policies and Procedures of the Organization. Increased mobility of dealing personnel within the financial industry has a material effect on the dealer's perception of his relationship to his employer. It is more possible today than before to have a dealer trading an instrument for an institution without having either an intimate knowledge of the traditions and practices of that market or the traditions and corporate culture of his current employer. This situation can give rise to misunderstandings about what management expects of its traders.

Management should ensure that each trader is fully acquainted with the policies, procedures and style that the institution chooses to employ in the conduct of its business. This task is made more difficult by the high level of turnover that now exists among trading personnel. Management should consider providing complete orientation procedures for new employees of all levels and formal procedures to ensure periodic review of the institutions's rules and policies by each trader.

Trading Practices

Traders' Responsibility for Prices, Credit Guidelines. In the conduct of dealing, traders quote prices directly to customers or, in the interbank market, to other dealing institutions either directly or through the intermediary of brokers. Traders are expected to distinguish which counterparties represent acceptable names for doing business and to operate with those counterparties in accordance with management's policies and procedures. In making a price, the trader is expected to deal with an acceptable name at the price he quoted within a reasonable period of time; his counterparty is expected to respond within a reasonable period.

Need to Avoid Questionable Practices At times when markets are unsettled and prices are volatile, opportunities may arise for traders to engage in practices which may realize an immediate gain or avoid a loss, but which may be questionable in terms of a trader's reputation—as well as that of the bank—over the long run. The kinds of questionable

practices are many. Some, like the perpetrating of rumors, may reflect adversely on the professionalism of the dealer. Others, like the renegeing on deals, may give rise to liability.

Management should be alert to any pattern of complaints about a trader's behavior from sources outside the institution such as from customers, other banks, or intermediaries. Information available within the organization should be reviewed to determine if individual traders become frequently involved in disputes over trades or tend to accept deals at rates which were obvious misquotes, accidental or otherwise, by counterparts. Complaints about trading practices may be self-serving, however, and should be handled judiciously.

Off-Market Rates. Counterparties from time to time may ask a dealer to use an "off-market" exchange rate. Such a request arises most frequently in connection with swap transactions when there can be a discussion about whether the "current" or "historical" rate is to be applied. To be sure, the essence of a swap transaction is neither the spot nor the forward rate *per se*, but the relationship between the two.

Even so, any use of "off-market" rates should raise questions of propriety and perhaps policy issues for the bank. Use of non-market rates may in effect move income from one institution to another (perhaps over an income reporting date) or alter the timing of reported taxable income. Since use of historical rather than market rates can in any case result in an extension of unsecured credit to the counterparty, all such requests should be referred to management for policy and credit judgments as well as for guidance on appropriate accounting procedures. While the nature of certain commercial transactions may justify the use of historical rates with selected customers, use of "off-market" rates with other banks should be considered highly exceptional.

Trader-Trader Relationship

For several years, banks have been dealing directly with each other, at least at certain agreed-upon times during the dealing day. The nature of the direct dealing relationship will vary according to the interests of the two parties. Management should be sure that the terms of each relationship are clearly understood and acceptable to both institutions, and are being respected in fact by the way their traders conduct themselves.

A possible element of a direct dealing relationship between two banking institutions is reciprocity. That is, each bank of the direct dealing pair may agree to reciprocate

upon request in providing timely, competitive rate quotations for marketable amounts when it has received such a service from the other. Differences in the relative size of the institutions, together with their expertise or specialization in certain currencies, will influence what is perceived by the two parties as an equitable reciprocity. If there are to be limitations to reciprocity, or times of the day when the two do not wish to be bound by the obligation of reciprocity, the limitation should be explicitly agreed upon in advance by the two parties.

Management should analyze trading activity periodically. Any unusually large concentration of direct trading with another bank or banks should be reviewed to assure that the level of activity is appropriate.

Trader-Broker Relationship

The use of brokers is a longstanding feature of the foreign exchange market in the United States. By providing participants anonymity until a transaction's size and exchange rate is agreed to, brokers contribute to the depth and breadth of the market. A brokers' market can function smoothly, however, only if most participants in that market can be reasonably confident that virtually all counterparties contacted through brokers will meet certain minimum standards of creditworthiness and professionalism.

A basic contribution that each institution using brokers can make in this regard is to assure itself that its name is acceptable to enough of the participants in the brokers' market that its actions do not contribute to "name" problems. From time to time, entities using the brokers' market are not broadly regarded as acceptable counterparties. If a broker proposes a transaction on behalf of such an entity, it is appropriate for that broker to make potential counterparties aware that the transaction may need to be referred to management for credit approval—that is, that the transaction may be "referable"—before the transaction can be agreed to. Brokers cannot be expected to make credit judgments for banks. But they are in a position to know what entities, if any, are consistently difficult to place and have a responsibility for indicating to potential counterparties if a price they are currently showing is on behalf of such an entity. Those institutions whose names are not sufficiently acceptable might consider whether it is appropriate or even in their long-run interest to continue to use brokers.

Brokers with links to affiliated firms overseas can also contribute by making greater efforts to ascertain whether a bid or offer price, that is communicated to it by an overseas affiliate for dissemination here, has been initiated by an

institution that might be an unacceptable or unrecognized counterparty to many of the broker's U.S. clients. In this instance, the broker should indicate that the institution may either be referable or unknown, even if the overseas brokers do not do so. Further, brokers should apprise any client regarding the name recognition and credit line problems that it might face in executing transactions through a broker.

For those institutions that use brokers' services, foreign exchange managers should themselves maintain contact with their counterparties at each individual brokerage firm to establish and monitor the brokering relationship. Brokers and their customers should be satisfied that all of the terms and conditions of the brokerage service being rendered are mutually agreeable, that the nature and extent of entertainment are appropriate, that the broker treats his clients' business with discretion, and that any aspect of the relationship can be reviewed by either party at any time. Management will find that brokers welcome frank and constructive conversations on such matters.

In addition, bank management needs to establish and clearly communicate internal policies and procedures covering the way its dealers should do business with brokers, as well as the way any disputes between the two are to be resolved. In so doing, management needs to be aware of areas of tension that arise between bank dealers and brokers.

One recurring source of difficulty occurs when a dealer discovers that a transaction he thought he had agreed to is not consummated by the broker at the agreed price. Such a situation may occur because the price was simultaneously canceled, because the amount being presented at that price was insufficient to cover the amount of the dealer's transaction, or because the broker received multiple and simultaneous responses to the original bid or offer.

Whenever a trade is aborted, it may be impossible for the broker to find another counterparty at the original price. Most dealers in this situation are prepared to cancel their price if a broker cannot conclude the transaction within a reasonable time or do at least a part of the original transaction at the agreed price. But, if the trader insists that the original transaction be fully honored, the broker is forced to assume market risk.

When forced to assume market risk, the broker may respond in two ways, each entailing undesirable consequences. He may deal at the next available price, passing on

to the trader any profit that would result from a favorable movement in exchange rates and protecting the trader from any potential loss by remitting a difference check if there were an adverse movement in market rates. (Sometimes when the loss accruing to the broker is substantial and he requests time to try to reduce his loss, the transaction may be left open and the difference check deferred for several hours.) Alternatively, the broker may request a trader from another institution to deal at an off-market rate. Should this second trader agree, the broker would "owe points" to the second trader, which he would have to repay one way or another.

The Committee has expressed grave concern about any practice that, in effect, forces the broker in a role as principal to a foreign exchange transaction, of managing a foreign exchange position, or otherwise compromising the neutrality of the broker. (See Foreign Exchange Committee's paper "Name Substitution Practices in the United States Foreign Exchange Market" in this Committee's Annual Report of 1982.) Foreign exchange brokering firms are often not capitalized to an extent appropriate to accept the risk of being put into those situations routinely. Moreover, the obligations which brokers are presumed to assume under some of these arrangements may not have a clear legal basis. Bank management should be aware of these practices, determine if and under what circumstances dealers of their institutions should engage in them, insist upon a speedy resolution of any dispute, and ensure there are adequate controls to detect a lack of compliance with bank policy.

To the extent that such practices do continue in the foreign exchange market in the United States, for reasons of operational convenience and market efficiency, their frequency should be reduced to those situations that do not readily allow for alternative methods of resolution. Although difficulties are bound to occur on occasion, there is likely to be a relationship between the frequency of these problems and questions regarding the reputations of the individuals or concerns involved.

The practice of "owing points" developed in order to permit brokers a way of resolving difficult situations. Some banks prefer to receive a difference check than to permit their dealers to trade in brokers' points. Whatever an institution's policy may otherwise be, under no circumstance should a trader request or a broker agree to "lend points" to a trader or otherwise facilitate a trader's effort to deal at an off-market price in order to hide a trading loss or inflate his profit. Management of brokerage firms should discourage this type of behavior.

A trade may also be aborted because of a "name" problem. That is, one party may indicate that it cannot accept the name of the other for credit line reasons, either because it has no line for the second institution or its line is full. The broker should explain to the second institution why the transaction has not been consummated and identify the other institution involved. Two considerations support this conclusion. First, most managers consider this information to be helpful since it clarifies the market standing of their institution. Second, market participants recognize that credit lines are a necessary prudential constraint on market participants; their invocation in appropriate circumstances does not necessarily reflect poorly on either institution.

When a "name" problem arises, each institution knows the details of the trade that, but for the problem, would have been consummated. Because such information is considered privileged in this market, many institutions believe that, once they have shown their hand in this way, they should complete a trade with the same specifications. Brokers may respond to this desire by trying to find a new counterparty (a clearing bank) to interpose between the two original ones. As long as the clearing bank is in full knowledge of the trade and is operating in accordance with its normal procedures and limits, it has no different risk serving as a clearing bank than it has with any other trade with that bank. But the clearing bank has tied up a portion of its credit lines with the other two parties. Moreover, the two transactions entail normal processing costs but do not generate revenues, since both sides of the trade are executed at the exchange rate agreed by the original two counterparties.

Given the risks involved and the disruptions that can occur when transactions cannot be completed expeditiously, foreign exchange managers should clearly define with their brokers the approach their institution will generally follow in handling specific name problems. Some provide their brokers with the names of institutions with which they are willing to deal or, alternatively, the names of institutions they will virtually always reject. With the help of this information brokers can reduce the frequency of name problems by not matching pre-specified pairs of institutions.

Managers of foreign exchange trading operations should also assess the extent to which and the ways in which their institutions are used as clearing banks. Some banks decline to accept the name of a clearing bank and others decline to act as a clearer in such transactions.

Regardless of whether a transaction is left incomplete because of credit line or other reasons, a banking institution is left with two options in the first instance: it can either cancel its bid or offer price with the broker or request that

the broker find a clearing or substitute bank. If it opts for the latter, it should allow the broker a reasonable period of time in which to find a new counterparty whose name is acceptable. In any case, a substitute should be found in no more than a few minutes and preferably within the same phone call. If an acceptable name cannot be provided in a reasonable time period, the institution should consider canceling its price.

Relationships between brokers and traders are based on a variety of factors, including quality of service (speed, reliability, closeness of prices, size of deals) and the effectiveness of personal interaction. In these circumstances traders are quite likely to favor a few brokers over others and a certain amount of concentration of business is not inappropriate. However, inasmuch as it is possible for a trader to influence a broker's share of the bank's business, there is always the possibility that some brokers may attempt to ingratiate themselves with a trader or that a trader may use his volume of business as leverage to make unreasonable demands upon a broker. Therefore, managers should be alert to subtle changes in patterns of brokers used and to possible undue concentration of business, especially if they perceive no significant difference in the quality of service from other brokers.

In the interest of preserving confidentiality of transactions, visits by traders to brokers' offices during the trading day should normally be prearranged. During such visits traders should never participate in the interbank market through utilizing the on-premises communications network.

Brokers should take full responsibility for confirming all international transactions to the institutions they service by telex, or by any other means of written confirmation acceptable to the banking community. In addition, brokers have responsibility for passing instructions on all spot international transactions the same day the trade is consummated. Banks, of course, have the responsibility to check the confirmation brokers provide on a timely basis.

Trader-Customer Relationship

Growing strain has emerged in the relationship between bank dealers and their customers. The strain reflects increased size and sophistication of customers' requirements, the pressures of a more competitive marketplace, and increased volatility of exchange rates. Customers are increasingly requesting narrow spreads to cover an ever growing size of transactions. At the same time customers do not typically extend reciprocity, that is, they do not make markets to bank dealers nor do they provide rate quotations with

narrow spreads to cover bank dealers' own needs. This situation can be frustrating for dealers who must cope with internal pressure to make profits. These circumstances require a high degree of integrity and respect in relationships between dealers and customers. These circumstances also require clear communication between management on the one hand and traders and sales personnel on the other hand about the business objectives of the trading operation.

It is normal practice for non-financial organizations to delegate trading authority formally to specific persons within the organization and to advise their bankers accordingly. Although one cannot identify with certainty the authorized individual via telephone, banks are obliged to make reasonable efforts to comply with corporate dealing authorization instructions. Bank personnel who deal with customers should be familiar with current corporate instructions and those instructions should be readily accessible. Additionally, sales and trading personnel should bring to management attention changes in counterparties' trading patterns or the accumulation of significant book profits or losses.

Operational Aspects of Trading

Trading of foreign exchange and other money market instruments exposes an institution to various forms of market risk and various forms of credit risk. Management of a trading institution should clearly identify the types and scale of risk it is willing to have the trading operation assume, as well as have in place effective procedures for monitoring its individual risk exposures and for detecting lack of compliance with management's policy directives. Both the ways of expressing risk exposures and the procedures for monitoring them differ considerably from one institution to another. The differences depend among other things on the structure of the organization, volume of activity, flexibility desired, costs associated with individual controls and differences in law and practice between trading markets. But it is essential that each institution's system of control be commensurate with the risks to which it is exposed.

Even with such systems in place, trading errors will occur. Errors in foreign exchange are becoming increasingly costly and burdensome to resolve. This trend reflects the growing size of individual deals and daily volume as well as exchange rate volatility and the high level of turnover of personnel. At the same time, the potential for errors has increased as different institutions adapt to changing technology and are at different stages of implementing these changes. Management should be attentive to the need to maintain clear lines of communication and authority internally, have adequate support for its dealing operations, and have in place procedures to facilitate timely recognition and resolution of problems that do arise.

Deal Confirmations Increasingly, institutions active in the exchange markets are choosing to exchange confirmations of all deals of significant amounts—spot and forward, inter-bank and corporate—by telephone, telex, swift, or other means of immediate communication on the transaction date. Same-day telephone confirmation is then followed up with written confirmation. Trading institutions have found that the sooner a problem is identified, the easier and maybe less expensive it is to resolve. Prompt and efficient confirmation procedures also are a deterrent to unauthorized dealing.

Taping of Telephone Conversations Another practice many active trading institutions have adopted is to tape record all telephone lines used for trading and confirmation. The taping of conversations in foreign exchange trading rooms and confirmation areas helps resolve disputes quickly and fairly. Whether or not dealers need access to untaped lines in order to carry out unrecorded conversations on sensitive topics is a matter of individual preference.

Access to tapes containing conversations should be strictly limited to those personnel with supervisory responsibility for trading, customer dealing, or confirmations. They should be kept in secure storage for as long as is sufficient for most disputes to surface. Wherever taping equipment is first installed, banks should give counterparties due notice that, henceforth, conversations will be taped.

Third Party Payments. Management should have a clear policy for dealers concerning the appropriateness of honoring requests for "third party payments." A "third party payment" involves a transfer of funds to an account, institution or corporation other than the counterparty to the deal. A subsidiary of the counterparty is a legally separate third party but a foreign branch of an institution is not.

The normal payment risk inherent in foreign exchange — the risk that funds are paid out to a counterparty but not received — is most acute in deals where the funds, either local or foreign currency, are transferred to a party other than the principal to the transaction. These "third party payments" are more susceptible than normal transactions to fraud perpetrated by a current or former employee of the counterparty who is diverting payment to a personal account, fraud perpetrated by an employee of the bank who is altering the payment instructions, or misinterpretation of the payment instructions whereby the funds are transferred to an erroneous beneficiary. In many cases the bank's ability to recover the funds paid out will depend upon the outcome of legal proceedings.

As a matter of policy, many institutions establish special controls for this type of transaction. The control procedures

appropriate to address the associated risks would include various measures to authenticate or verify "third party payments" such as:

- to require the counterparty to provide standing payment and settlement instructions;
- to require an authenticated confirmation on the transaction date;
- to require the counterparty to submit a listing of individuals authorized to transact business and to confirm deals; or
- to confirm by telephone all deals on the transaction date to the individual identified by the counterparty.

Importance of Support Staff. Management's attention to a foreign exchange trading operation is usually directed toward establishing trading policies, managing risk and developing trading personnel. Equally important is an efficient "back office" or operating staff. Details of each trading transaction must be accurately recorded, payment instructions correctly exchanged and executed, timely information provided to management and traders, the underlying results properly evaluated and accounts quickly reconciled. Time-consuming and costly reconciliation of disputed or improperly executed transactions mar the efficiency of the market, hurt profitability and can impair the willingness of others to trade with the offending institution.

Accordingly, management must be aware of its responsibility to establish a support staff consistent with the scope of its trading desk's activity in the market. Conversely, management should ensure that trading is commensurate with available back office support.

Computer and Technical Support. In recent years, the development of new, complex products and services has led banks to introduce products whose characteristics and risks are significantly different from those traditionally offered. As new activities are being considered, management should recognize the need not only for the special requirements new products or services may require but also for accounting, legal control and additional back office support. Management should also consider the desirability of enhancing dealer support by providing computer assistance to allow accurate and timely pricing of these new products together with the correct measurement of their associated risks, hedging requirements and profitability.

Management should also investigate thoroughly the methodology traders use to price these new products and to make other supporting calculations. It should assure itself that the procedures used are consistent with both management objectives and current market practices.

Twenty-Four Hour Trading With foreign exchange trading now taking place on a continuous 24-hour basis, management should be certain that there are adequate control procedures in place for trading that is conducted outside of normal business hours — either at the office or at traders' homes. Management should clearly identify those types of transactions that may be entered into after the normal close of business and should ensure adequate support and accounting control for such transactions. Management should also designate and inform their counterparties of those individuals, if any, who are authorized to deal outside the office. In any case, all confirmations for trades arranged off-premises should be sent promptly to the appropriate staff at the office site.

Increasingly, banks in the United States are receiving, during their workday, requests to trade from dealers operating outside of the counterparty's normal business hours. Management should consider how it wants its own dealers to respond. It is possible that, for selected counterparties, arrangements can be discussed in advance and a *modus operandi* can be established that will accommodate the counterparty's needs and still identify and protect all parties to the transaction.

Stop Loss/Profit Orders Dealing institutions may receive requests from branches, customers and correspondents to buy or sell a currency if the exchange rate for that currency should reach a specified level. These orders, which include stop/loss and limit orders from trading counterparties that desire around-the-clock protection for their own currency positions, may be intended for execution during the day, overnight, or until executed or canceled.

Management should be sure there is an explicit and mutually-acceptable understanding between the institution and its counterparty about the obligation the institution has assumed in accepting such an order. Moreover, management needs to establish clear policies and procedures for its traders who accept and execute stop/loss and limit orders. These orders create a potential for loss or liability which can be substantial if the order is mishandled within the organization or there is a misunderstanding about some of the terms and conditions concerning the execution and confirmation of the deal.

Management should also insist that any dealer accepting such an instruction have adequate lines of communication with the correspondent so that the dealer can reach authorized personnel in case of an unusual situation or extreme rate movement. This procedure can minimize the possibility that misunderstandings will arise about the circumstances under which these orders should be executed.

COMMITTEE LETTER ON PROPOSED RISK-BASED CAPITAL

William W. Wiles, Secretary
Board of Governors of the Federal
Reserve System
20th and Constitution Avenue N.W.
Washington, D.C. 20551

Re: U.S./U.K. Risk-Based Capital Proposal

Dear Mr. Wiles:

The Foreign Exchange Committee is a committee, sponsored by the Federal Reserve Bank of New York, that serves as a vehicle for discussing and communicating with the U.S. monetary authorities technical and policy issues relating to the foreign exchange market. Its membership represents a range of participants in the interbank market who have a broad and deep knowledge of the foreign exchange markets.

The Foreign Exchange Committee welcomes opportunities to work with bank regulators on matters pertaining to foreign exchange. The Committee is in general accord with the objective of the Federal Reserve and the Bank of England to develop risk-based capital requirements for off-balance sheet activities. In submitting this response, it hopes to draw attention to certain aspects of the proposal as it pertains to foreign currency dealing activities that are of particular importance to, or reflect the opinions of, foreign-exchange market practitioners.

The Committee's response represents views that are broadly shared by the members of the Foreign Exchange Committee, based on their personal experience in foreign exchange. To be sure, the complexity of the topic, as well as the diversity of the membership, results in some differences among members of the Committee on particular points—differences that presumably will be more apparent in a comparison of responses submitted by the individual institutions. The Committee has chosen to comment on those areas where its expertise is most relevant; an absence of comment on any particular point does not necessarily imply agreement, therefore.

The pricing and competitive effects expected to be generated by the present Proposal are of paramount concern for public policy and, therefore, are discussed first. It is the Committee's belief that adoption of the Proposal would critically affect prices and market liquidity. The selective application of the guidelines only to U.S. and U.K. banks would severely undermine their competitive positions. These disruptions would alter the competitive structure of the market if similar requirements are not introduced simultaneously by foreign regulators of other multinational banks and by domestic regulators of investment banks and other market participants.

The Committee then presents its reasons for thinking that the Proposal overstates credit risk. It believes that the qualitative characteristics of counterparties in foreign exchange markets are higher than those of the average borrower in every class of counterparty. The Committee is also of the opinion that the methodology used to derive credit exposure could be improved by taking into account the lessening of risk associated with currency diversification in an actual portfolio.

The problems of implementing the proposed guidelines are then addressed. It is suggested that certain aggregate measures might be used as an alternative to the Proposal and an appropriate phase-in period for the new standards be adopted. The Committee also believes that the regulators should recognize netting and collateral arrangements which serve to reduce credit risk. It proposes that the definition of spot transactions be amended to include those deals with a remaining maturity of less than 8 calendar days.

Finally, it is the Committee's view that the methodology presented in the paper is inappropriate for determining the credit risk associated with options contracts and the Committee suggests that a new approach be developed.

Pricing

The Committee believes that application of even the *minimum* potential exposure factors presented in the Proposal plus the capital provision for marking to market will have a substantial impact on banks' pricing of forward contracts, particularly as maturities lengthen, and will reduce liquidity in the inter-bank forward market. In reaching this conclusion, the Committee assumes that bank managements will attribute capital requirements to foreign exchange dealing operations. Dealers will, in turn, price their transactions to cover the additional costs and to minimize the size of their capital intensive forward books. The Committee believes that the impact would be significant even before consideration of the "level playing field" issue.

The degree of impact on liquidity and prices relates to the cost of maintaining the required capital over the life of the contract. A Committee member calculated the Proposal's cost of adding a \$1 million contract to his bank's forward book at the end of 1986. (The calculations are explained in Appendix A.) The following table shows the cost of capital associated with the addition of a \$1 million contract to the end of the various maturity periods. The cost is shown in actual dollars and as it would be reflected in the contract rate. For example, in the 91- to 365-day category, \$242.63 is the cost of financing the capital required by the addition of a 365-day, \$1 million contract with another bank and is equivalent to .000449 in the contract rate at the current rate of DM1.80.

**Cost of Capital Associated with the Addition of both a \$1 million Bank and
\$1 million Client Counterparty Contract to an Existing Book^{a/} (for respective maturities)**

	Maturity Days			Years		
	<u>3-30</u>	<u>31-90</u>	<u>91-365</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>
With Banks						
dollar cost/contract	\$7.65	\$37.91	\$242.63	\$2,097.63	\$3,537.63	\$6,161.63
change in quoted rate	.000014	.000066	.000449	.003768	.006345	.011023
new contract rate	1.799986	1.799934	1.79955	1.7962	1.7937	1.7890
With Non-Banks						
dollar cost/contract	\$39.97	\$168.77	\$963.22	\$2,595.22	\$5,715.22	\$7,939.22
change in quoted rate	.000072	.000304	.001732	.004659	.010229	.014178
new contract rate	1.799928	1.7997	1.7983	1.7953	1.7898	1.7858

a/ Incorporated in the calculations are the minimum proposed potential exposure factor, a capital ratio target of 8 percent and a capital cost rate of 20 percent. (Estimates of the cost of capital will differ from institution to institution, ranging from the day-to-day Federal Funds rate to a before-tax return sufficient to meet return on equity targets. Twenty percent was selected as a middle-of-the road esti-

mate for the purposes of this example.) Marked to market calculations were derived from the 12/31/86 ratio of the sum of unrealized gains and creditable unrealized losses (losses were creditable to the extent of potential exposure on a contract-by-contract basis) to the notional principal balance of open contracts for the respective maturity periods.

Given current conventions in the market, it is unlikely that banks would be willing to enter into an interbank forward foreign exchange deal with a maturity beyond 90 days without passing on to the counterparty the additional anticipated cost. Banks would probably pass such costs on to non-bank counterparties for any deal that matured in more than 30 days.

In view of the above, banks are likely to curtail or discontinue interbank forward "market making" activity, more so as maturities lengthen, in order to minimize the size of their forward books. A likely consequence of this diminished liquidity would be wider spreads between bids and offers. The Committee would also expect much of the forward dealing activity to be executed through the foreign currency brokers market rather than direct between banks since brokers would act in an anonymous way to find a counterparty of matching interest.

Concerning corporate transactions, the Proposal's higher costs associated with non-bank forward business creates an even stronger disincentive to execute forward transactions. Currently, bank dealers operate in an environment in which transaction costs are absorbed in the course of writing a forward contract with a corporate client. For example, and with reference to the above costs of additional contracts, a bank will offer to buy sterling from a corporate client at the interbank market rate for one year outright sterling knowing that the deal can be immediately hedged at insignificant cost. Under the Proposal, the immediately hedged position will cost \$1,206 on a matched pair of forward contracts with a combined nominal value of just \$2 million and normally there would be no compensating profit margin. If the bank cannot pass on the cost of this

transaction to its counterparty, it is unlikely to engage in the transaction.

As banks respond by widening spreads and reducing more costly business such as deals with non-banks, corporations are likely to widen their universe of potential bank counterparties to find one who is particularly interested in assuming the corporate position. Corporations are likely to turn to foreign currency brokers in longer dated forward business as an efficient means of reaching a wider universe of counterparties. Or they could turn to organized exchanges. However, the net costs associated with exchange traded contracts are likely to be higher and the inflexible contract specifications are generally considered unattractive. Alternatively, corporations may stay in the 30-day period and roll over their contracts. However, this is administratively cumbersome, exposes them to interest rate risk and may not meet their own accounting objectives. In summary, customer business, particularly the longer dated transactions, will be diverted to banks not required to abide by the proposed capital guidelines. Corporations that turn to brokers will incur brokers fees, increasing the cost of their business. In addition, liquidity may decline if corporations are unable to find counterparties because banks are no longer willing to do business with them.

Competition

If the guidelines were universally applied, the "level playing field" would be maintained and there would be no significant competitive advantage accruing to any single party. However, on a "tilted playing field" business would accrue to those firms which worked in the more favorable regulatory environment. Near term application of the Proposal to U.S.

and U K banks would benefit, in particular, U.S. investment banks, U.S. "de minimus" banks and foreign banks.

Investment banks have already established strong banking relationships with U.S. corporations by providing commercial paper and other credit services. This Proposal would provide them with a major competitive advantage in foreign exchange products, further distancing commercial banks from their traditional corporate base. Unaffected foreign banks would also be positioned to gain a larger market share. The Proposal would open the door to both groups to provide foreign currency business to corporate customers at favorable rates in order to develop overall client business at the expense of affected commercial banks. The above cost figures indicate the magnitude of their competitive advantage in the different maturity periods.

These points, the Committee believes, underscore the importance of a realistic capital requirement and the critical necessity of simultaneous introduction of such requirements on all significant market participants. Even a relatively brief delay in such implementation could lead to permanent loss of market share.

Credit Quality

The Committee believes the Proposal should be modified to differentiate between the credit quality of foreign exchange market participants and that of the average borrower at a bank. Banks' loan portfolios include consumer credit, advances extended under credit cards and revolving loans. Foreign exchange counterparties are generally larger and better capitalized institutions than the average bank borrower. According to the March 1986 Turnover Survey conducted by the Federal Reserve Bank of New York, 84 percent of the swap and outright forward counterparties were banks and, therefore, subject to regulation and supervision. The balance consisted primarily of major corporations and non-bank financial institutions. Low quality counterparties do not usually have access to foreign currency dealing facilities except in so far as they are closely monitored and may be subject to collateralized dealing arrangements. Moreover, the nature of the contracts and the way they are marketed help limit credit exposure. The contracts are short term relative to loans, enabling banks to reduce credit exposure promptly. Foreign exchange relationships are not committed credit facilities and dealing is routinely halted or curtailed at the earliest sign of slippage in a counterparty's creditworthiness.

As a direct result of these longstanding market practices, foreign exchange related losses attributed to counterparty

default for 10 of the major U S banks as a group has totaled a statistically insignificant \$44 million over the past 10 years.^{1/} These losses are the result of 12 individual counterparty defaults. This 10-year history is clearly superior to the chargeoff experience of the same banks with regard to their loan portfolios

For these reasons, it is the Committee's conviction that the universe of foreign exchange counterparties, and the credit exposure thereto, is not similar to that of loan counterparties. The Committee notes that the Board took account of similar considerations when deciding that trade-related instruments, such as commercial letters of credit (LC's) should be evaluated at only 50 percent of face value. As has been cited by the Federal Reserve in its discussion of trade-related contingencies in the Federal Register Volume 52, no 33, dated February 19, 1987.

The conversion at the 50 percent level of trade-related contingencies is based on the view that the counterparty involved in such contingencies has a strong incentive to meet its obligations if it wishes to conduct its day to day business

The Federal Reserve also considered it important that actual loss on LC business is small. The Committee believes that parallel reasoning applied to foreign exchange dealing loss experience. It suggests that the "credit conversion factor" applied to derive potential credit exposure be reduced so that foreign exchange contracts are treated in a fashion similar to commercial letters of credit or performance standbys.

In conclusion, the Committee finds that the Proposal does not take into account the excellent historical default record that exists because of the nature of foreign exchange contracts, the high credit standards applied by banks to counterparties and the creditworthiness of these counterparties. It proposes that the regulators incorporate a measure of the credit loss history (capable of being updated) into the conversion factor. It also suggests that the Board apply a reduced "credit conversion factor" to foreign exchange contracts for the same reasons it does so to commercial letters of credit. That is, in both cases the counterparty has a strong incentive to meet its obligations if it wishes to continue to conduct day to day business.

^{1/} Loss attributed to counterparty default was derived by calculating the replacement cost of the contract, as defined in the Proposal, net of recoveries. The 10 banks are Bank of America, Bankers Trust, Chase, Chemical, Continental Illinois, First Chicago, Manufacturers Hanover, Marine Midland, Morgan Guaranty and Security Pacific.

Methodology

The Committee is concerned that the methodology by which mark-to-market exposure is derived has not been clearly identified. It suggests that the Board state clearly and precisely the calculation of mark to market exposure. The Committee assumes that this calculation is to be made on a present value basis. If this is indeed the intention of the regulators, then it would be appropriate to calculate potential exposure on a present value basis as well.

There is also concern that potential exposure is overstated because the volatility measure used in the Proposal to calculate that exposure fails to reflect the diversified nature of banks' currency portfolios. Potential exposure, as defined in the Proposal, is determined by a measure of credit risk arising as a result of rate volatility. The study on exchange rate volatility on which the Proposal is based included only three major currencies—the Japanese yen, the German mark and the British pound. Banks hold contracts in a variety of currencies, many of which are much less volatile than those used in the study. These include currencies that generally move with the U.S. dollar, such as the Canadian dollar. In addition, a significant portion of a bank's portfolio may be composed of contracts that involve a direct exchange of European currencies. The rate volatility between two European currencies is significantly lower than that between the dollar and individual European currencies. The Committee believes an analysis of a portfolio of contracts should reveal that credit exposure is reduced when this diversification is taken into account.

There are a number of other highly technical points concerning the methodology which the Committee understands will be covered thoroughly by individual institutions. It has chosen not to pursue them here.

In summary, the Committee proposes that the regulators calculate mark-to-market and potential exposure on a present value basis and that the desired method of calculating mark-to-market exposure be clearly defined. In addition, it is concerned that the measures of volatility overstate risk because they do not consider portfolio diversification.

Implementation

Despite the assumption in the Proposal, data necessary for implementation is not readily available. Very few institutions currently mark each contract to market and the regulators ought to consider an alternative for such institutions. The Committee believes it would be costly and time consuming to adopt the contract-by-contract procedure. In addition, global accounting systems would have to be standardized into one format. The Committee would recommend that at least one year notice be provided to give the banks time to implement these guidelines.

The Committee agrees with the Board's objective of simplicity and ease of implementation. To that end, it suggests that, where banks have difficulty meeting the contract-by-contract procedure, the Board might consider accepting calculations using a proxy or a ratio approach. The Committee wishes to point out that this will not indicate actual credit exposure by counterparty but, it believes use of a proxy will produce approximately the same results. For example, if 20 percent of a bank's foreign exchange business is corporate, then that 20 percent could be slotted into the appropriate risk category in the risk asset ratio. In addition, a maturity proxy of the portfolio would substantially reduce the reporting burden created by determining potential exposure on a contract-by-contract basis. The Foreign Exchange Committee would be happy to work with the Board in developing appropriate proxy measures if this were deemed worthwhile.

In addition, with regard to the definition of a spot contract, most banks represented on the Foreign Exchange Committee currently treat deals with a remaining maturity of up to 7 calendar days as spot deals. The Committee believes that this is indicative of standard market practice. Consequently, the definition of a spot contract should be changed to include any transaction with less than 8 calendar days to maturity.

Options

The Committee believes that the proposed guidelines may not be appropriate for measuring the credit risk associated with options contracts. Options contracts are relatively new and complex instruments and their properties cannot easily be equated with those of forward contracts. As the Committee would like the framework of the final guidelines to be longlasting, it urges the Board to exclude options contracts from the Proposal until an appropriate measure can be devised. The Committee believes that since foreign exchange options contracts do not currently have a very large volume or credit risk, the temporary exclusion of the contract from the guidelines would not jeopardize the market. In defining the appropriate measure of credit risk associated with options contracts, the Committee suggests that particular attention be given to the exact process by which current mark-to-market exposure is established. In addition, in estimating potential exposure, consideration should be given to the treatment of differing strike prices. The Foreign Exchange Committee does not have a solution to these problems at this time but would be happy to work with the Board to solve this problem.

Credit Reduction

Consistent with the Board's objective would be the fostering of practices that aim directly at reducing banks' credit exposure. The Committee believes that foreign exchange

transactions netted under an agreement containing novation and close out provisions help reduce credit exposure and should be included under the Proposal only to the extent of any net difference between the offsetting contracts. Netting is a growing practice in the industry. If the Committee's suggestion concerning netting is adopted, these guidelines would serve as a strong inducement to banks to develop standardized netting practices.

The Committee also believes that collateralized deals should be treated in the same fashion as exchange traded contracts because the collateral acts, as margin does, to offset credit exposure. In addition, it suggests that any final Proposal clarify the status of interoffice deals (between branches, subsidiaries, etc.) in calculating credit exposure. It recommends that, at the least, credit exposure between the bank and its branches be exempt from the capital guidelines.

Conclusion

In summary, the Committee believes the Proposal will add significantly to the cost of doing business in foreign exchange. It recommends that the regulators not risk market dislocations or hamper the competitiveness of U.S. banks participating in the foreign exchange market by imposing these guidelines before other regulatory bodies are prepared

to implement similar regulations. The Foreign Exchange Committee also proposes that the regulators distinguish the credit risk associated with foreign exchange business from the credit risk associated with loans and that they treat foreign exchange contracts in a manner more similar to those applied to commercial letters of credit. It also suggests that the methodology used to calculate the mark-to-market value of a portfolio be clarified and that potential exposure be revised to take into account the currency diversification of an actual portfolio.

It has been the Committee's pleasure and privilege to submit this letter to the Board. Because of its keen interest in this substantive undertaking, the Foreign Exchange Committee hopes that the bank regulators will make use of the Committee as a mechanism to discuss concepts or prospective proposals. The Committee would welcome any other opportunity to assist the regulators or comment on any issues that might develop as this undertaking goes forward.

Sincerely,

Heinz Riehl

APPENDIX A Capital Costs of Adding Two \$1 Million Foreign Exchange Contracts to an Existing Book—Illustrated is a Purchase from a Client and a Sale to a US Bank Both to Mature in One Year (Actual Dollars)

Potential Risk	3-30 (Days)	31-90 (Days)	91-365 (Days)	
BANK	\$1,000,000	1,000,000	1,000,000	
Factor	01	02	04	
	\$ 10,000	20,000	40,000	
Bank Factor	25	25	25	
Credit Equiv To Maintain Ratio	\$ 2,500	5,000	10,000	
	08	08	08	
Capital Required	\$ 200	400	800	
Capital Cost %	20	20	20	
Annual Cost	\$ 40	80	160	
Cost per Period	\$ 3.11	13.33	122.22	= 138.66

Marked to Market

	\$1,000,000	1,000,000	1,000,000	
BANK				
Factor	.0146	.0254	.027	
	\$ 14,600	25,400	27,000	
Bank Factor	25	25	25	
Credit Equiv To Maintain Ratio	\$ 3,650	6,350	6,750	
	.08	.08	.08	
Capital Required	\$ 292	508	540	
Capital Cost %	.20	.20	.20	
Annual Cost	\$ 58.40	101.60	108	
Cost per Period	\$ 4.54	16.93	82.50	= 103.97

	3-30 (Days)	31-90 (Days)	91-365 (Days)	
CLIENT	\$1,000,000	1,000,000	1,000,000	
Factor	01	02	04	
	\$ 10,000	20,000	40,000	
Client Factor	100%	100%	100%	
Credit Equiv To Maintain Ratio	\$ 10,000	20,000	40,000	
	08	08	08	
Capital Required	\$ 800	1,600	3,200	
Capital Cost %	20	20	20	
Annual Cost	\$ 160	320	640	
Cost per Period	\$ 12.44	53.33	488.89	= 554.66

	\$1,000,000	1,000,000	1,000,000	
CLIENT				
Factor	.0221	.0283	.025	
	\$ 22,100	28,300	25,000	
Client Factor	100%	100%	100%	
Credit Equiv To Maintain Ratio	\$ 22,100	28,300	25,000	
	08	08	08	
Capital Required	\$ 1,768	2,264	2,000	
Capital Cost %	20	20	20	
Annual Cost	\$ 354	453	400	
Cost per Period	\$ 27.53	75.47	305.56	= 408.56

Total Costs to Book and Carry Contracts of which:			\$1,205.85
CLIENT			
Potential Risk		554.66	
Marked to Market		408.56	\$ 963.22
BANK			
Potential Risk		138.66	
Marked to Market		103.97	\$ 242.63

DOCUMENT OF ORGANIZATION

CONCLUSION OF FEASIBILITY STUDY TO ESTABLISH FOREIGN EXCHANGE COMMITTEE

(June 1978, as amended October and December 1987)

It was generally agreed that any new forum for discussing matters of mutual concern in the foreign exchange market (and where appropriate off-shore deposit markets) should be organized as an independent body under the sponsorship of the Federal Reserve Bank of New York. Such a Committee should.

1. be representative of institutions participating in the market rather than individuals;
2. be composed of individuals with a broad knowledge of the foreign exchange markets and in a position to speak for their respective institutions;
3. have sufficient stature in the market to engender respect for its views, even though the Committee would have no enforcement authority;
4. be constituted in such a manner as to insure at all times fair presentation and consideration of all points of view and interests in the market, and
5. notwithstanding the need for representation of all interests, be small enough to deal effectively with issues that come before this group

The objectives of the Committee would be:

To provide a forum for discussing technical issues in the foreign exchange and related international financial markets.

To serve as a channel of communication between these markets and the Federal Reserve and, where appropriate, to other official institutions within the United States and abroad.

To enhance knowledge and understanding of the foreign exchange and related international financial markets, in practice and theory.

To foster improvements in the quality of risk management in these markets.

To develop recommendations and prepare issue papers on specific market-related topics for circulation to market participants and their management.

It is understood that the Committee would seek to work closely with the FOREX and other formally established organizations representing the other relevant financial markets.

The Committee

In response to the results of the study, the Federal Reserve Bank of New York agreed to sponsor the establishment of a Foreign Exchange Committee. It was agreed that:

1. The Committee should consist of no more than 14 members and an equal number of alternates. In addition, the president of FOREX would be invited to participate.
2. Institutions participating in the Committee should be chosen in consideration of their participation in the exchange market here as well as of the size and general importance of the institution. Selection of participants should remain flexible to reflect changes as they occur in the foreign exchange market
3. Responsibility for choosing member institutions and alternates rests with the Federal Reserve Bank of New York. The Federal Reserve may solicit the advice of current Committee members.
4. Initially, the terms of half of the members will be for two years and half for three. Thereafter, to provide for maximum participation in the Committee by institutions eligible for membership, the term of membership would be two years. It is envisaged that, at the expiration of each member's term, the alternate would succeed to full membership.

The composition of the Committee should be as follows:

5-6 East Coast Banks

2-3 Other U.S. Banks

2-3 Foreign Banks

1-2 Brokers (preferably to represent both foreign exchange and Euro-deposit markets)

the president of the FOREX USA, Inc.

the Federal Reserve Bank of New York

Committee Procedures

There would be a meeting of the Committee with a specified agenda of items at least every alternate month. The format of the discussion, however, would be informal.

In the event that a member is unable to attend a meeting, his alternate may attend.

Any recommendation the Committee wishes to make on items coming to its attention can be discussed and decided upon only at its meetings. Any such recommendation would be distributed not only to member institutions and their alternates, but to every senior officer in charge of the international money desks of every participating institution in the United States.

The Committee will have a standing Membership Subcommittee to aid in the selection and orientation of new members. A representative of the Federal Reserve Bank of New York will serve as chairman of this Subcommittee.

The Committee may designate *ad hoc* working groups to focus on specific issues.

Depending on the agenda of items to be discussed, the Committee may choose to invite other institutions to participate in its discussions and deliberations.

Summaries of discussions at each meeting would be prepared and distributed to market participants generally by the Federal Reserve Bank of New York on behalf of the Committee.

Meetings of the Committee would be held either at the Federal Reserve Bank of New York or at other member institutions.

In addition to the meetings provided for above, a meeting of the Committee may be requested at any time by two or more members.

Responsibilities of Committee Members

The Foreign Exchange Committee membership is composed of institutions who participate actively in the foreign

exchange markets as well as other financial markets worldwide. As a senior officer of such an institution, the Committee member has acquired expertise that is invaluable to attaining the Committee's objectives. The member's continuous communication with the markets worldwide generates knowledge which is necessary to the Committee's deliberations of market issues or problems. Effective individual participation is critical if the collective effort is to be successful.

The responsibilities of membership apply equally to all associated with the Committee, whether they are serving currently as a formal member or an alternative member.

The specific responsibilities of each member are:

- To function as a communicator to the Committee and to the marketplace on matters of mutual interest, bringing issues and information to the Committee, contributing to discussion and research, and sounding out colleagues on issues of concern to the Committee
- To represent to the Committee the concerns of his own institution. In addition, to reflect the concerns of a market professional as well as the constituency from which his institution is drawn or the professional organization on which he serves.
- To participate in Committee work and to volunteer the resources of his institution to support the Committee's projects and general needs.
- To coordinate between the formal member and the alternate attendance at meetings and to communicate to the absent member on a timely basis the discussions and other items of import that occurred at each meeting. This responsibility is reciprocal within each designated pair of formal and alternate members.

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