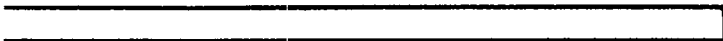


**THE
FOREIGN EXCHANGE COMMITTEE**

ANNUAL REPORT

1986



CONTENTS

| | Page |
|--|--------------|
| Chairman's Report | 3 |
| Committee Deliberations on Matters of Market Practice | 4 |
| Committee's Advisory Role to the Federal Reserve Bank of New York and Other Official Institutions | 7 |
| Bilateral Netting of Foreign Exchange Contracts | 11 |
| Calculation of Forward Foreign Exchange Gains and Losses | 12 |
| The Committee's Relationships with Other Organizations | 16 |
| Procedural Matters of the Foreign Exchange Committee | 17 |
| Meetings of the Foreign Exchange Committee in 1986-1987 | 18 |
| Selected Documents: | 19-50 |
| (a) Selected Guidelines for Management of Foreign Exchange Trading Activities | 20 |
| (b) Letter on Risks in Interest-Rate Swaps | 28 |
| (c) Letter on Supplemental Adjusted Capital Measure | 29 |
| (d) Report of the Options Task Force on Over-the-Counter Foreign Currency Options | 32 |
| Other Relevant Documents: | 51-70 |
| (a) Letters Concerning Netting | 52 |
| (b) Foreign Exchange Netting and Close-Out Agreement | 54 |
| (c) Summary Results of Federal Reserve Bank of New York U.S. Foreign Exchange Market Turnover Survey | 59 |
| (d) Document of Organization | 70 |
| Cumulative Index to Previous Reports | 71 |
| Foreign Exchange Committee Members and Alternates | 75 |

CHAIRMAN'S REPORT

Bank management focused during 1986 on ways to identify and monitor the different categories of risk emanating from sophisticated hedge instruments, and to strengthen their procedures for operating in the financial markets.

The market for hedge products continued to expand. Customers increasingly wanted to take advantage of these products to protect themselves against undesirable movements in exchange and interest rates as well as to seek higher yields or lower borrowing costs by switching between different currencies and/or between fixed and floating interest rates. Accordingly, the trading in these new products spread to more and more financial institutions.

As individual institutions' involvement grew and as particular transactions were adjusted to respond to specific customer requirements, management became increasingly intent that all aspects of these new businesses be thoroughly understood. The Committee's work during 1986 reflected this concern. It pointed to the potential ramification of documentation-related delays in interest-rate swap transactions. It followed closely the progress being made to implement bilateral netting of foreign exchange contracts, believing that in time this type of contract netting will provide for a significant reduction in counterparty risk. It also discussed the implications of a considerable lengthening of many banks' forward books in foreign exchange on the accounting for profits and losses on those transactions. For 1987 the Committee intends to work on improving ways to recognize and measure more precisely the risks in foreign exchange and related products as well as to ensure effective limits and controls.

Last year, the Committee also discussed with the Federal Reserve the possible market implications of new Federal Reserve policies or initiatives. The most important such initiative in 1986 was the proposal put forward by the Federal Reserve System, the Comptroller of the Currency and the Federal Deposit Insurance Corporation that would incorporate off-balance sheet items in a measurement of bank's capital adequacy. The Committee submitted a response to the Federal Reserve Board's initial proposal as it would have related to foreign exchange and understands its response was taken into account when the Federal Reserve revised that initial approach.

The rapidly changing structure of foreign exchange and related markets, together with an intensely competitive environment provided other challenges in managing a trading operation. The Committee responded to these challenges by updating and expanding its previous discussion of management issues, producing a new paper entitled "Selected Guidelines for Management of a Foreign Exchange Trading Activity." This paper focuses on the need for clear management guidance for traders, ethical issues, the trader-broker relationship and operational aspects of trading. The importance of each of these subjects cannot be over-emphasized. The Committee urges managers of trading rooms to assure that all dealers read and understand this important document.



Heinz Riehl

COMMITTEE DELIBERATIONS ON MATTERS OF MARKET PRACTICE

The Foreign Exchange Committee's discussions of market practices centered especially on efforts to update its statement of issues warranting special management attention.

In 1980, the Committee prepared a paper identifying issues that pertain specifically to a foreign exchange trading operation, many of which were not explicitly addressed in other codes of good trading practice or guidelines for foreign exchange operations. This paper, "Selected Issues Relating to the Management of Foreign Exchange Activity," was recirculated in 1982 and 1983 because the Committee felt that it remained timely and useful in its original form.

In more recent years, the Committee recognized that change in the market place had created a need for systematic reappraisal of these issues. The Committee believed it still had a continuing and useful role to play. By drawing on the experience of its members, it was in a position to evaluate various aspects of difficult and sometimes sensitive management issues, as well as to define good market practice. The Committee therefore undertook to revise its 1980 paper. In so doing, it addressed some areas that were previously unexplored and reexamined many longstanding issues.

Management Guidelines

The result was a paper circulated in February 1987, "Selected Guidelines for Management of a Foreign Exchange Trading Activity". This paper is different from the earlier one in both tone and substance. The tone of the new paper reflects the challenges to management presented by rising transaction volume, increased market volatility, intensifying competitive pressures and rapid turnover of personnel. In substance, it addresses a number of new issues, many of which have become important as a result of the changing character of markets or the changing technology used to support trading.

The Committee's Guidelines are significant in that they represent the views of commercial bankers and brokers participating in the U.S. exchange market. Although they are directed to managers of foreign exchange trading operations, others may also find it a useful document. Individual dealers may benefit from a discussion of these issues. In addition, much of the material is general enough to apply to trading operations other than foreign exchange.

Need for Clear Management Guidance for Traders

In discussing the variety of issues that surfaced while developing this paper, Committee members were impressed by the growing responsibility now delegated to an individual trader. Not only can a trader commit substantial resources of his institution, but he is frequently more independent in doing so. More dispersed operations, the greater number and size of transactions, and growing specialization of function have all contributed to an environment in which there is sometimes less immediate support for a trader in the form of oversight or timely suggestions from other experienced personnel.

At the same time, Committee members questioned whether their own institutions were doing enough to prepare their traders for these growing responsibilities. The process of training new traders has been shortened. Turnover of personnel has greatly increased. Thus, it is more possible to have dealers operating with less 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.

Consequently, the Committee suggested a number of areas where management should have explicit internal policies. It also expressed the importance of communicating those policies effectively to all trading personnel, including those recently joining the institution.

Ethical Issues

Committee members also felt that ethical issues and those relating to possible conflicts of interest or the appearance of such conflicts had become increasingly complex. There was considerable sentiment for strengthening many sections of the earlier paper. Indeed, the Guidelines are more explicit about the potential problems arising from traders accepting gifts and entertainment. They also include for the first time a discussion of substance abuse.

The Committee also expressed considerable concern about the potential for conflict between the individual dealer and his institution—arising both from the dealer's handling of his personal finances and his use of confidential information. However, in these areas, as well as in some others, the

Committee found it difficult to make recommendations that would be specific enough to be useful yet general enough to apply to many situations. As a result, it decided to suggest principles of mutual responsibility for both management and individual dealers that might serve as a guide to sound practice and appropriate behavior.

Trader-Broker Relationship Reconsidered

Of the technical, trading issues reviewed in the Guidelines, the ones pertaining to the trader-broker relationship were among the most challenging to resolve. The revised discussion largely reflects the need to focus on areas of tension in the trader-broker relationship at a time when growing transaction volume and a high level of exchange-rate volatility add to the stress on both sides of that relationship.

One of the practices that presented controversy was the practice of brokers "owing points." This practice comes into play, typically, when a broker cannot complete a transaction as originally intended and the dealer insists that another transaction be found at the same exchange rate. The broker might then suggest another transaction and, if the exchange rate has moved to the detriment of the dealer, the broker might make up the difference in exchange rates on a subsequent transaction. A difficulty with this procedure is that an individual dealer's or broker's position in points is not subject to management scrutiny and review. An alternative procedure would be for the broker to issue the dealer's institution a check representing the dollar amount of the difference in exchange rates.

The Committee expressed reservations about any practice that involves dealing at off-market rates, since such a practice can readily be abused to conceal trading losses or inflate profits. The Committee felt that procedures for dealing in points are inherently unsound. Moreover, the Committee is on record as expressing grave concern about any practice that might impair brokers' neutrality or place brokers in a position of bearing market risk in foreign exchange transactions. In its 1982 paper on name substitution, it pointed out that brokering firms may not have the capital to support foreign exchange positions and the commitments they undertake may not have a clear legal basis.

Operational Aspects of Trading

As before, the Committee stressed the importance of having an efficient support staff whose size is consistent with the scope of the institution's trading activity. But the

new Guidelines also point to the desirability of having other types of support for new product development and for the management of more complicated risk exposures. For example, provision of computer support for the pricing of new products and effective procedures for monitoring risk exposures are recommended.

The need to keep errors in check and problems under control is all the more pressing, given sharply increased trading volumes. Deal confirmations and conversation taping practices in use at active trading institutions are described and suggested as means of facilitating problem resolution and minimizing costly errors. There is also a discussion of the control procedures that the Committee views as appropriate for addressing the risks associated with payments made to parties other than principals to transactions. A number of measures useful in authenticating and verifying such "third party" payments are enumerated.

In discussing twenty-four hour trading, the Guidelines incorporate the discussion of management control procedures applicable to off-premise trading contained in the 1980 paper. In addition, the use of stop-loss orders, which has increased with the growth of trading after normal business hours on the East Coast in recent years, is also discussed. The Guidelines point to the need for management to establish clear policies about the acceptance and execution of such orders.

Interest-Rate Swap Documentation Practices

In some of its other work, the Committee discussed practices in the interest-rate swap market. Its interest in this market goes back to a request from a market participant, asking the Committee whether it could endorse any set of terms and conditions for the trading of these instruments in the United States.

In considering this issue, the Committee had several discussions during the course of the year with the International Swap Dealers Association (ISDA) concerning that organization's efforts to achieve greater standardization in swap markets. The Committee learned that ISDA had at first focused its efforts on developing a common vocabulary for this market. In so doing, it drafted the ISDA code, which provides a menu of terms and provisions that may or may not be used in individual contracts. The ISDA code originally dealt only with single currency swaps, unlike those suggested by the British Bankers' Association (BBA) which may apply to several currencies as well as to several different types of

swaps. But the ISDA code is more inclusive than the BBA terms in providing for both short- and longer-term swaps.

The ISDA told the Committee that, by early 1986, a real consensus on standardizing the documentation governing swaps had been reached. The process of achieving consensus had been difficult given the diverse nature of ISDA's membership and the international character of the group. But the ISDA hoped soon to have a pure interest-rate swap agreement document prepared for use in New York. The intent was to go beyond the menu approach of alternative choices. The group expected to develop a comprehensive enough agreement to make amendment unnecessary in most cases, although any two parties would still be able to delete or add particular provisions as they desired. The Committee welcomed this effort and indicated it was prepared to lend support in any way possible.

As mentioned in last year's Annual Report, the Committee had been concerned about substantial delays in the completion of final documentation for interest-rate swaps. An informal survey of institutions represented on the Committee showed that all respondents required full-length documentation for swaps, but eighty percent experienced significant delays in receiving it. When asked whether they considered the transaction binding at the time confirmations were exchanged or documentation was completed, sixty percent answered at the time of documentation while the remaining forty percent replied upon the exchange of telexes.

The Committee was reassured by ISDA representatives that, notwithstanding these delays, few problems had arisen and many institutions have taken steps to rectify the situation. A number of the most active swap market participants, for example, had mailed copies of their documentation to perhaps twenty or thirty potential counterparties in an effort to resolve any issues ahead of time and thereby avoid the possibility of delay at a later date.

Nevertheless, the Committee felt it would be useful to bring some of the issues surrounding documentation-related delays to the attention of management, particularly those that might not be so familiar with practices in this market. It therefore circulated a letter recommending the formulation

of internal policies to foster expeditious completion of swap documentation. The letter also elucidated some of the risks associated with documentation delays, most especially the risk of counterparty non-performance and the risk of resale of the swap.

Standard Terms and Conditions for Foreign Currency Options

At the start of the year, the Committee's Options Task Force was studying the BBA terms and conditions for interbank options trading in London to determine whether these terms could appropriately apply to interbank trading in the United States. The Committee circulated a proposal for public comment that suggested only a few specific modifications to BBA terms.

The comments received suggested that some further modifications to the BBA terms might be desirable. In one or two cases, there was a fair amount of consensus about the changes to be made. For example, it was generally proposed that the specification of the premium payment date be changed. The BBA terms state premiums are due two business days after maturity, even if the market for the underlying instrument is closed. The preferred alternative in these cases would be that premiums be due on the next spot value date in the underlying market.

Some comments reflected disappointments with the proposal to delete some of the BBA terms. Specifically, some felt that the terms on assignability, standard maturity dates, and clauses dealing with surrender should not be omitted. There remained a question, however, whether these provisions would be either relevant, given the Task Force's proposal to provide only for cash settlement, or consistent with many states' gaming laws.

Inasmuch as a number of legal questions were involved, the Task Force referred to its legal subcommittee proposals for amendment to the original Committee paper. As of year end, this subcommittee was still receiving examples of options contracts from market participants. These contracts were being used to assess current market practice and the scope for effective standardization.

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

On a number of issues the Committee served as a channel for two-way communication between market participants and the Federal Reserve or other official institutions. Many of these issues related directly to policies or proposals of the Federal Reserve.

Proposed Risk-Adjusted Capital Standard

The Board of Governors of the Federal Reserve System, along with the Comptroller of the Currency and the Federal Deposit Insurance Corporation, issued a proposal early in 1986 to increase the sensitivity of their capital policies to bank risk exposures by computing a "supplemental risk-adjusted capital measure". The proposal was not intended to substitute for examiner judgment in the assessment of an organization's capital adequacy or, at least for the time being, to replace currently used capital measures. It was intended to be an additional tool, in effect providing a "second opinion" to encourage banks to make adjustments in either the risk composition of their portfolios or their overall level of primary capital. It also represented the first effort by U.S. bank regulatory agencies to incorporate off-balance sheet items in a capital requirement.

According to the proposal, the aggregate dollar value of assets and off-balance sheet items would be placed in one of five risk categories. A comparison of the sum of weighted values with primary capital would be part of the determination of bank capital adequacy.

In the 1986 proposal, the Board requested comments on methods of evaluating the risk associated with foreign exchange trading activities, so that foreign exchange could be covered by the regulation at a later date. It also solicited commentary on the appropriateness of applying to foreign exchange some of the techniques developed for measuring risk at U.S. government securities dealers.

In discussing this proposal, members of the Committee felt that the risks entailed in foreign exchange were relatively small. Market risk, the risk that exchange rates would move in a way to generate losses on a bank's net foreign exchange position, was reflected by the practice of marking that position to market routinely. Gap risk, the risk that interest-rates would move in a way that increased the cost of funding mismatches in a bank's forward foreign exchange position,

was no different than the interest-rate risk banks assume in their other operations. Credit risk (including country risk), the risk that a counterparty would fail to perform on a contract, was real and, arguably, could be capitalized. But, they argued, the bulk of the counterparties on banks' outstanding foreign exchange contracts are high quality credit risks. In any case, the amount at risk is far smaller than the total of all outstanding contracts since contracts that become non-performing prior to the value date can be replaced.

Committee members also expressed distrust of any mechanical application of ratios. They preferred the present, discretionary examination process. They also felt that any ratios or formulas that might be developed should be applied uniformly among commercial, foreign and investment banks to avoid market dislocation caused by uneven imposition of requirements.

A representative of the Federal Reserve noted, however, that examiners must make subjective judgments under current examination procedures and the regulatory authorities would feel more comfortable having some guidelines which examiners could use as a base on which to build their ultimate judgments. In addition, regulators would feel it appropriate for management to decide explicitly how its institution's capital should be allocated to support the risks involved in its various business activities. Moreover, the international trend was to adopt a risk-based capital system. If the United States did not move along a similar path, potentially undesirable competitive disparities might develop.

Committee Response to Proposal

In light of these comments and the Committee's advisory role to the Federal Reserve, the Committee decided to draft a response to the request for comment. It was clear from the start that, on a topic of this complexity and with the Committee's membership so diverse, there would be a wide variety of opinions. It was also clear that banks were submitting responses directly that incorporated the specific opinions or views of their institutions. What emerged from the Committee was different. The letter the Committee sent to the Board of Governors represented a consensus view, broadly shared by the commercial bankers of the Committee, acting either on behalf of their banks or as individual market participants.

As it turned out, the Committee's letter was one of the few the Board received that focused on the issues relating to foreign exchange. It served to reinforce the proposition—a proposition for which the regulators already had some sympathy—that it is inappropriate to use a single figure for outstanding foreign exchange contracts, such as the one reported on Schedule L of the Call Report, as a basis for measuring risk in foreign exchange.

In the end, the Federal Reserve's proposal was later revised and put out for comment again early in 1987. The revisions partly are in response to the comments the Board received and partly the result of a decision to adopt a common framework with the Bank of England for establishing a risk-based capital adequacy requirement.

Proposed guidelines for incorporating foreign exchange risk were put out for comment in a supplemental proposal in March 1987, providing the Committee an opportunity for further discussion of the issue this year. A variety of other issues relating to risk management in foreign exchange were also put on the Committee's agenda for 1987.

Caps on Daylight Overdraft

At one of its meetings early in the year, the Committee also discussed with representatives of the Federal Reserve some of the possible implications of the Fed's implementation, on March 27, 1986, of its program to reduce payment system risk by capping daylight overdrafts.

The Federal Reserve indicated it was concerned that a bank may pose a threat to the entire payments system whenever it has an excessive net debit position with respect to all other banks. There also is a view that the payment system is being exposed to this risk routinely because of the large volumes of transactions resulting from trading in financial markets, volumes that are excessive relative to the financing requirements of a sound economy.

In an effort to contain these risks, the Federal Reserve had decided to tighten the requirements for Fedwire and other large-dollar payment networks wishing to be eligible to use Federal Reserve net settlement services. Specifically, for networks that settle through Reserve Banks, limits were to be placed on the maximum amount any one bank would be willing to receive from each other participant in the network ("a bilateral net credit limit") as well as on the amount of intra-day credit senders may incur (a "sender net debit cap"). The Federal Reserve had also strongly encouraged depository institutions to establish a limit on "sender net

debit caps" that would apply across all wire transfer systems.

The Federal Reserve indicated its desire that the transition to the new system go smoothly and recognized the need to exercise some flexibility in dealing with the problems that would inevitably arise at the beginning. It had been examining the payment flows of a sample of banks since October 1985 in an effort to anticipate and monitor the types of changes in payment flows that might be expected to occur in response to this program. It also indicated it would watch for signs of large shifts in transactions among payments systems.

During the discussion, Committee members expressed concern that the imposing of limits on the clearing of payments might lead to a prioritization of payments to be cleared. In the event that bank funding received top priority, delays in settlement of foreign exchange transactions could result, perhaps reducing exchange market liquidity. An additional concern was that, to the extent the Fed program affected reserve management practices, a two-tier, intra-day Fed funds market might develop in which funds delivered earlier in the day could command a higher price. During the course of the year, however, neither of these developments appear to have occurred.

Bilateral Payments Netting and Contract Netting Compared

The Federal Reserve representative cautioned that any bank attempting to net payments *vis-a-vis* another counterparty might be regarded as acting to avoid the central bank's risk reduction program. He made a distinction between bilateral payment netting and bilateral contract netting.

Bilateral payment netting involves an intra-day exchange of gross payment messages without accompanying funds transfer, except for an end-of-day net settlement. The institutions involved continue to be legally obligated to each other for each and every individual payment.

Contract netting, by contrast, involves an explicit, formal, and legally binding agreement to substitute net payment obligations for gross obligations. In this case there clearly is a reduction of risk for both counterparties. The Federal Reserve Bank of New York has generally supported the Committee's effort to establish contract netting as it applies for example, to foreign exchange (see p 52-58).

Regulation of OTC Options and Futures Markets

The Committee addressed in a variety of ways some of the issues surrounding regulation of the over-the-counter (OTC) options and futures markets, including the question of jurisdiction of the Commodity Futures Trading Commission (CFTC). Under current practice regulation of these markets is ambiguous.

Late in 1985, the CFTC asserted that limits placed on the CFTC's regulatory authority by the 1974 Treasury Amendment to the Commodities Exchange Act did not extend to trading in OTC futures involving certain non-institutional counterparties. In its interpretative letter, the Commission asserted that it had jurisdiction over the marketing of off-exchange futures products to the general public. The CFTC requested comment on this interpretation of its regulatory responsibilities from market participants and others. In response, the CFTC received such a wide range of opinion as to make it difficult for the agency to discern areas of consensus that would satisfy both the regulators and the industry.

When CFTC Commissioner Susan M. Phillips visited the Foreign Exchange Committee, she expressed appreciation for industry participants' desire to expand their off-exchange activities. At the same time, the CFTC was concerned that there are significant regulatory gaps. The present environment appeared to be permitting an increase of fraudulent activities, leading the agency to doubt that there was adequate protection for the public. Fraudulent "boiler-room" transactions are often associated with, but not necessarily limited to: (1) a sales force which solicits customers through commercial mailing lists and uses "canned" telephone sales pitches, (2) misleading promotional materials, and (3) extensive advertising in newspapers of general circulation.

Commissioner Phillips appeared to believe that a resolution of the regulatory ambiguity required legislation. In the interim, she was interested in exploring possible alternatives for monitoring market developments. She invited industry proposals for solving regulatory problems and gave examples of some specific areas where industry initiatives might be particularly helpful: clearance standards, accounting disclosures, and internal controls. She explained how the CFTC had supported efforts by some other industry sectors to establish a self-regulatory organization (SRO).

Task Force Study

In the meantime, the Committee's Options Task Force finished its study of the regulatory issues surrounding options

as well as futures. In a paper submitted to the Committee, the Task Force recommended, among other things, that the final solution to the regulatory ambiguity permit the CFTC to continue its regulation of the retail portion of the OTC market for currency options, but to exclude the wholesale portion of the market from its jurisdiction (see pp. 32-50).

The Task Force paper argues that the legal basis for its recommendation can be found in the Treasury Amendment that excludes the interbank foreign exchange market from CFTC jurisdiction. The wholesale OTC market for foreign currency options is presumed to be primarily an interbank market. That is, most of the dealers in the market are commercial banks and currently regulated by the banking authorities, and their customers are sophisticated, institutional investors. The CFTC's task is primarily that of consumer protection. According to the Task Force proposal, its jurisdiction would be limited to the retail market for currency futures and options, especially where dealers report to no other regulators and where customers may be less sophisticated.

This paper was endorsed by the Committee, which then presented it to the Federal Reserve Bank of New York. It urged the Fed to consider the proposals seriously, help resolve the outstanding questions concerning the regulatory and legal basis for these markets, and in so doing work closely with the other relevant regulators.

Market Developments

During a year in which substantial exchange rate adjustments were taking place, the Foreign Exchange Committee served as a useful forum for discussion of current and prospective market developments. In light of the increased policy coordination that was occurring among the major industrial countries, the Committee often discussed market responses to official commentary and actions. Near the beginning of the year, market participants were looking to official statements to diminish the confusion created by conflicting signals coming from economic indicators. By mid-year, however, a number of Committee members expressed the view that official comments about the dollar were a source of market uncertainty.

Though the Committee's market commentary was largely focused on exchange market developments, it touched also on changes taking place in the structure of the exchange market. Several members noted increases in the number of investors who prefer to use the foreign exchange market rather than organized exchanges to establish highly leveraged positions taken in anticipation of changes in market

volatility. A number of explanations for their preference for the interbank market were offered. Not only are personal relationships established in that market, but it offers twenty-four hour trading opportunities and the possibility for executing larger transactions. Some also expressed the opinion that transactions in the interbank market may be less expensive to these customers.

Foreign Exchange Turnover Survey

The Committee welcomed the results of the turnover survey of foreign exchange conducted by the Federal Reserve Bank of New York in March 1986. It had recommended that the survey include investment banks and be coordinated with similar efforts by central banks abroad covering other markets.

The Committee was able to advise the Federal Reserve about possible reporting difficulties the respondents to the survey may have encountered. In general, Committee members did not feel there was any reason to suspect systematic

bias in the survey results.

Committee members found useful the inclusion of investment banks and the results of surveys in foreign markets. Many members were impressed by the growth of the Tokyo market between 1983 and 1986. (See pp 59-69 for report of the U.S. survey results.)

Federal Reserve Lines With Brokers

As in the past, the Federal Reserve Bank of New York took advantage of the forum provided by the Committee to discuss certain technical aspects of its operating methods. The Federal Reserve, for example, indicated that it had installed telephone lines with several exchange brokers in New York in order to obtain timely information on market prices. The bank expressed the hope that this change would in no way alter its good working relationships with banks. Although it can use brokers lines to obtain current prices, it still relies heavily on the banks with whom it has relationships for commentary on market developments.

BILATERAL NETTING OF FOREIGN EXCHANGE CONTRACTS

During the course of the year, several New York banks worked on finalizing master agreements to implement bilateral foreign exchange netting for intra-New York trading. An example of such an agreement was presented for discussion at one of the Committee's meetings (see pp. 54-58).

The fundamental element of the bilateral netting provisions is that, by mutual agreement, all foreign exchange obligations payable on the same settlement date between New York offices of the participating banks will be netted to produce a single payment obligation on each settlement date for each currency traded. This procedure begins when a foreign exchange trade is confirmed. As soon as possible each of the two parties to the transaction transmits details of the trade to the other. If the details received from the other party are comparable in every respect, the transaction is regarded as "matched" and notice of the successful matching is transmitted to the other party. Then the transaction is, under most circumstances, netted automatically. That is, each party's obligations in respect to that transaction shall be automatically satisfied and replaced by an obligation to make a net payment on the relevant value date.

The agreements for intra-New York netting also contain provisions for automatic close-out in the event of bankruptcy of either party or a comparable event. These provisions specify that a close-out amount be calculated by converting the net payments due for each settlement date into U.S. dollars and discounting these amounts to present value.

These agreements are generally similar to the model netting agreement first proposed by the Committee in 1984. That agreement was not intended to be complete. It was put forward only as a model and therefore dealt only with the most general issues. It was clear from the start that any two institutions actually attempting to establish a bilateral netting arrangement would feel the need for more detail and possibly new provisions to suit the parties' needs.

During 1986, netting procedures came closer to being implemented in both New York and London. In New York, the effort to implement netting has been carried out largely by individual pairs of banks. In London, the effort has been organized by a group of interested banks, now organized as a limited partnership, to establish the legal basis and the procedures for netting as well as to develop and market a specially fitted microcomputer and appropriate software to

accomplish netting.

As these efforts proceeded, the Federal Reserve and the Bank of England were asked for their opinion about specific aspects of the netting proposals. The central bank responses in each case focused on the specific questions asked and frequently dealt with individual provisions of a draft netting agreement as it existed at the time of the request (see pp. 52-53). As a result, some aspects of the central bank letters may not be of continuing interest. Nevertheless, the major points of those letters are still applicable.

Federal Reserve Views on Netting

The Federal Reserve Bank of New York was asked by Chemical Bank how netted foreign exchange transactions should be reported in the Call Report. The Bank responded that the supervisory authorities had agreed that the reporting of net amounts outstanding under a contract provided for in a master netting agreement—one that effectively has replaced the original, individual foreign exchange contracts—would satisfy the Call Report instructions for reporting commitments to purchase foreign currencies and U.S. dollar exchange. This conclusion rests on the assumption that the agreement under which the contracts have been netted is binding and enforceable. A bank should be prepared to demonstrate to an on-site examiner that it has reasoned opinion of counsel to substantiate this assumption.

More generally, the Federal Reserve Bank of New York sees bilateral netting arrangements as an opportunity to lower banks' counterparty limits. It urges banks to take "direct and proportional" account of their netting arrangements in considering their counterparty limits and suggests that examiners will review these limits in the light of banks' netting arrangements with others.

Bank of England Views on Netting

Meanwhile, the Bank of England indicated no objection to netting under "novation" of forward foreign currency transactions. The Bank also indicated it would accept netted forward positions on any of the relevant reports banks submit. The Bank of England expects each netting bank to satisfy itself as to the legal validity of its netting arrangements and to make commensurate reductions in its counterparty limits with other participating institutions.

CALCULATION OF FORWARD FOREIGN EXCHANGE GAINS AND LOSSES

The Committee noted that several major banks have adopted a net present value ("NPV") method of calculating profits and losses resulting from forward foreign exchange transactions. This method may not necessarily be applicable for all banks. Those that adopted the NPV method generally were institutions having significant levels of activity in long-dated forward transactions (loosely defined as contracts with maturities in excess of 12 months). They made the accounting change in an attempt to provide a more economic view of the cash flows from these transactions and to avoid overstating the amount of future profits.

Up until recently, banks almost exclusively used a "rebate" method of accounting. According to the rebate method, forward foreign exchange contracts entered into as part of a trading or positioning operation are marked to market at the current market rate for the appropriate maturity on the occasion of periodic balance sheet dates. A gain or loss is computed to be the difference between (1) the dollar value of the foreign currency forward commitment at the contracted forward rate (or the forward rate last used to revalue that contract for the preceding accounting period), and (2) the dollar value of the contract at the forward rate prevailing at the time of revaluation for the remaining maturity of the contract. The sum of all gains or losses thus calculated for each contract is taken into foreign exchange income for the current accounting period.

The NPV method is a variation of the rebate method under which the gains and losses above are discounted to take into consideration the time value of money (see Exhibit I). Discounting the value of outstanding contracts may facilitate management of a foreign exchange portfolio composed of contracts of varying tenors. By discounting the expected cash flows from the existing foreign exchange contracts a trader can evaluate his portfolio position by taking account of the cost of funding the position between mismatched maturities (see Exhibit II).

Profit recognition under the two methods will differ (see Exhibit III). The rebate method will show higher gains or losses at earlier contract revaluations and lower gains or losses in subsequent revaluations. However, the total gain or loss recognized over the life of the contract will be the same under both methods.

The key determinants of the impact of discounting are the level of the discount rate used as well as the length and the remaining tenor of the contract. The higher the discount rate and the longer the remaining tenor, the greater the difference

in profit or loss between the rebate method and NPV method valuations early in the life of a contract. The discount rate chosen should reflect the cost of funds for the remaining tenor of the contract. Mechanically, the easiest approach would be to choose a discount rate at the initiation of the contract and use this rate throughout its life (as illustrated in Exhibit III). It would be more realistic, however, to adjust the discount rate each time the contract is revalued and a new, unrealized gain or loss amount is developed. This refinement affects only the timing of the recognition of gains or losses over the life of the contract—the total gain or loss recorded on the contract would be the same whether a fixed or floating discount rate is used.

The impact on gross income of ignoring discounting may be considerable when the effects on income taxes and dividend payments are also taken into account. Assuming a net gain, the income taxes and dividends paid under the rebate method may cause a cash outflow thought to be excessive in economic terms. The full amount of the outflow must be funded, since the future cash inflow related to the profits has not yet occurred.

The application of discounting to foreign exchange contracts is not explicitly provided for by the Financial Accounting Standards Board in its statement concerning foreign exchange (FASB 52)¹. Some accountants have expressed the view that the FASB 52 guidelines seem to suggest that contracts should be accounted for using either the straight line or the rebate method, and note that no mention is made of NPV. However, trading of long-dated foreign exchange forwards, where discounting would have a material impact, was not as large an activity at the time the statement was written as it is today. Given the growth of this activity, FASB's Emerging Issues Task Force recently reviewed this issue and reached a consensus that the NPV method is allowed but not required.

Members of the Committee concluded from their discussions that the NPV method might be considered as an alternative method of accounting for foreign exchange forwards where the impact of discounting might have a material effect. However, any bank considering a change in its accounting procedures should thoroughly review any proposal for change with their accountants.

¹Financial Accounting Standards Board Statement No 52, *Foreign Currency Translation*, (Stamford, Connecticut: FASB, 1981)

EXHIBIT I

COMPARISON OF REBATE AND NPV ACCOUNTING RESULTS FOR MATCHED CONTRACTS

Assume the holder of a contract to purchase 1,000 foreign currency units ("FC") in three years for \$2,900 (FC1 = \$2.90) decides to close out the position by entering into an offsetting contract to sell 1,000 foreign currency units when the current forward rate is FC1 = \$3.10. He would lock in a \$200 gain to be received in three years.

If exchange rates subsequently move, the dollar value of these contracts will change at the time of revaluation. But the changes in value of the two contracts will be offsetting.

Assume that the exchange rate for the FC changes (to FC1 = \$3.00) by the end of the reporting period. The value of the

purchase and sale contract are now of equal dollar value. But relative to the exchange rates at which the transactions were executed, the purchase and sale contracts have each increased by \$100. Under the rebate method, therefore, the \$200 gain would be recorded currently as a profit.

Under the NPV method, there would still be a gain. But instead of \$200, only the present value of the future \$200 cash flow would be recorded as a profit. If the relevant interest-rate were 10 percent, the discounted present value would be \$150 and the "overstatement" of profit under the rebate method would be \$50 (see below).

Revaluation of FC Exposure Position in U.S. Dollars

(+ = long position; - = short position)

| Period | FC Amount | Book Value in Dollar Equivalent | Current Market Rate | Value at New Market Rate | Rebate Profit/Loss | Discount Factor for Period* | Discounted Profit/Loss |
|--------------|---------------|---------------------------------------|------------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | col. (1) | col. (2) | col. (3) | col. (4) | col. (5) = col. (2) - col. (4) | col. (6) | col. (7) = col. (5) x col. (6) |
| Year 3 | +1,000 | -2,900 | 3.00 | -3,000 | +100 | .751 | + 75 |
| Year 3 | <u>-1,000</u> | <u>+3,100</u> | 3.00 | <u>+3,000</u> | <u>+100</u> | .751 | <u>+ 75</u> |
| Net Position | -0- | + 200 | | -0- | +200 | | 150 |

*Discount factor for an interest-rate (i) of 10 percent obtained from present value tables where the present value (P_0) of future income flows (P_t) are calculated according to the formula

$$P_0 = \sum_{t=1}^n \frac{P_t}{(1+i)^t}$$

EXHIBIT II

COMPARISON OF REBATE AND NPV ACCOUNTING RESULTS FOR UNMATCHED CONTRACTS

Assume the holder of a contract to purchase 1,000 foreign currency units ("FC") in two years for \$2,800 (FC1 = \$2.80) also holds a contract to sell 1,000 FC units at \$3,100 (FC1 = \$3.10) three years hence. His net position shows a profit of \$300. But, as in the first example, he is subject to the risk that the value of the contracts may change over time so that he may record a profit or loss.

Assume that the exchange rate for the FC changes to FC1 = \$2.70 for a 2 year contract and to FC1 = \$3.00 for a 3 year contract at the time of revaluation. In this case, the value of the purchase contract has declined by \$100 while the value of the sales contract has increased by \$100.

Under the rebate method, the forward sale for settlement

three years hence with an unrealized gain of \$100 may be viewed as a perfect offset to the forward purchase for settlement two years hence with an unrealized loss of \$100, and the net loss on these contracts would be zero

There is, however, a real economic loss embodied in this position. If these two contracts had to be closed out at today's exchange rate with perfectly offsetting contracts, the \$100 loss received in the second year would have to be funded until the \$100 gain is realized in the third year.

The NPV method reflects this economic loss by discounting the two-year loss and the three-year gain to reflect the funding costs. The result is, at a 10 percent interest-rate, a net loss of \$8.

Revaluation of FC Exposure Position in U.S. Dollars

(+ = long position; - = short position)

| <u>Period</u> | <u>FC Amount</u> | <u>Book Value in Dollar Equivalent</u> | <u>Current Market Rate</u> | <u>Value at New Market Rate</u> | <u>Rebate Profit/Loss</u> | <u>Discount Factor for Period*</u> | <u>Discounted Profit/Loss</u> |
|---------------|------------------|--|--------------------------------|-------------------------------------|-----------------------------------|--|-----------------------------------|
| | col. (1) | col. (2) | col. (3) | col. (4) | col. (5) = col. (2) - col. (4) | col. (6) | col. (7) = col. (5) x col. (6) |
| Year 2 | +1,000 | -2,800 | 2.70 | -2,700 | -100 | .826 | - 83 |
| Year 3 | <u>-1,000</u> | <u>+3,100</u> | 3.00 | <u>+3,000</u> | <u>+100</u> | .751 | <u>+ 75</u> |
| Net Position | -0- | + 300 | | + 300 | -0- | | - 8 |

*Discount factor for an interest-rate (i) of 10 percent from present value tables. See note in Exhibit I

EXHIBIT III

Calculation of Forward Foreign Exchange Gains and Losses Over Life of Contract Under Rebate and NPV Methods Using a Constant Discount Rate

Assume that an institution has a forward book in FC units involving a purchase of FC 1,000 for value in 2 years, bought at \$2,800 (or FC1 = \$2.80) and a sale of FC 1,000 for value in 3 years, sold at \$3,000 (or FC1 = \$3.00).

Assume that a fixed discount rate of 10 percent is used to calculate the cost of funds. Assume also that the spot and forward foreign exchange rates relevant to these transactions and the revaluation of these contracts is as displayed below:

Assumed Spot and Forward Exchange Rates:

| | Contract Rate | End of Year 1 | End of Year 2 | End of Year 3 |
|---------|---------------|---------------|---------------|---------------|
| Spot | | | \$2.72 | \$2.88 |
| 1 Year | | \$2.74 | \$2.89 | |
| 2 Years | \$2.80 | \$2.92 | | |
| 3 Years | \$3.00 | | | |

At the end of the first year, the position would be revalued in the same way as in the previous examples.

At the end of the second year, the value of outstanding contracts is again revalued to take account of the changes in

exchange rates that occurred between the end of the first and second years. In addition, account is taken of the interest earned on the \$66 gain posted for the first year's purchase contract as well as the cost of funding the \$55 loss on the sale contract for the current year. A similar procedure is followed for the third year. But this time account is taken of the interest earned in the second year from the investment of the \$66 first-year gain as well as of the interest earned on the second-year gain of \$27. Since the sale contract was no longer on the books, having expired at the end of the second year, there was no longer any account taken of that contract (see table).

The cumulative results of the two accounting procedures are the same, as long as the profit and loss includes the interest component from amortization of the discount. The cumulative profit of the position over the three years is \$40 in both cases. The purchase contract resulted in a cumulative loss of \$80, and the sale contract resulted in a cumulative profit of \$120.

| Accounting Method | Profit/Loss Realized | | | Cumulative Total |
|-------------------|----------------------|--------|--------|------------------|
| | Year 1 | Year 2 | Year 3 | |
| Rebate | +20 | +10 | +10 | +40 |
| NPV | +11 | +9 | +20 | +40 |

The timing of the results differs, however, according to the procedure used.

Revaluation of FC Exposure Position in U.S. Dollars

(+ = long position, - = short position)

| Period | FC Amount | Book Value In Dollar Equivalent | Current Market Rate | Value at New Market Rate | Rebate Profit/Loss | Factor for Period* | Discounted Profit/Loss | Earnings on Investment of Discounted Profit/Loss Over Remaining Life of Contract | NPV Total Return on Contract |
|-------------------|-----------|---------------------------------|---------------------|------------------------------|--------------------------------|--------------------|---------------------------------|--|---------------------------------|
| | col (1) | col. (2) | col. (3) | col (4) col (1) x col (3) | col (5) = col (2) - col (4) | col (6) | col (7) = col. (5) x col (6) | col (8)* | col (9) = col. (7) + col (8) |
| | | | | | end of year 1** | | | | |
| Year 2 | +1,000 | -2,800 | 2.74 | -2,740 | - 60 | .91 | - 55 | | - 55 |
| Year 3 | -1,000 | +3,000 | 2.92 | +2,920 | + 80 | .83 | + 66 | | + 66 |
| | | | | | end of year 2** | | | | |
| Year 2 | +1,000 | -2,740 | 2.72 | -2,720 | - 20 | 1.00 | - 20 | - 5 | - 25 |
| Year 3 | -1,000 | +2,920 | 2.89 | +2,890 | + 30 | .91 | + 27 | + 7 | + 34 |
| | | | | | end of year 3** | | | | |
| Year 3 | -1,000 | +2,890 | 2.88 | +2,880 | + 10 | 1.00 | + 10 | + 10 | + 20 |
| Cumulative Profit | | | | | + 40 | | + 28 | + 12 | + 40 |

*Represents costs of funding \$55 loss for last year of contract at an interest-rate of 10 percent, as well as the income from investing the \$66 gain for two years and the \$27 gain for one year at the same interest-rate

**Contract portfolios should be revalued on a monthly basis. Yearly revaluation were used only to simplify the illustration

THE COMMITTEE'S RELATIONSHIPS WITH OTHER ORGANIZATIONS

The Committee's deliberations on matters which were of concern to other groups fostered the development of contacts with other organizations. For example, the Committee's study of the issues surrounding the use of standardized terms and conditions in interest-rate swaps led to the establishment of contact with the International Swap Dealers' Association (ISDA) whose Code of Standard Wording, Assumptions and Provisions for swaps has provided a basis for standardization.

As questions about market practice with respect to documentation and confirmation procedures became of particular interest, the Committee invited ISDA representatives to a meeting to exchange views and learn more about the Association's work before continuing its own deliberations. ISDA was represented by John Toffolon of First Boston and Daniel Cunningham of Cravath, Swaine and Moore, the ISDA drafting counsel. They gave presentations on both ISDA work and the swap documentation process. Later in the year, when the Committee decided to circulate a letter concerning documentation practices to its membership, the ISDA was

asked to review and comment on Committee drafts.

The Committee's ongoing interest in the regulatory structure of OTC markets provided the impetus for a luncheon meeting with Commissioner Susan Phillips, Chairman of the Commodity Futures Trading Commission (CFTC). A number of institutions represented on the Committee had commented on the CFTC's 1985 interpretative letter which asserted CFTC jurisdiction over the marketing of off-exchange futures products to the general public. In addition to providing a forum for the sharing of views, the meeting gave the Commissioner the opportunity to outline some CFTC concerns and give some background to the current regulatory debate.

During the year, the Committee continued its relationship with the FOREX USA. The FOREX President, who has always been an observer at Committee meetings, volunteered to distribute the Committee's revised management guidelines to the FOREX membership.

PROCEDURAL MATTERS OF THE FOREIGN EXCHANGE COMMITTEE

As in the past, the Committee's formal meetings were generally held on the first Friday of alternate months during 1986. The June meeting was rescheduled to avoid a conflict with the FOREX ACI Congress.

On March 6, the Committee hosted an informal meeting to which representatives from the International Swap Dealers Association (ISDA) were invited. At its October 3 meeting, the Committee was honored to have as a guest Commissioner Susan M. Phillips, Chairman of the Commodity Futures Trading Commission.

The Committee completed two major documents during the year. It forwarded to the Federal Reserve Bank of New York in December a report commissioned by the Committee's Option Task Force on regulatory issues concerning the futures and options markets. In addition to proposing specific changes in the structure of regulation, the paper provides a survey of past legislative developments in order to clarify the nature of the issues involved in the current debate about regulatory structure (see p. 32). Included in this report is a descriptive overview of options markets that discusses both OTC and exchange traded instruments, as well as the nature of interbank and customer transactions. This paper was prepared for the Committee's Option Task Force by Maurine Bartlett (Cadwalader, Wickersham and Taft) and Kathleen Ludman (Federal Reserve Bank of New York). The Committee also circulated "Selected Guidelines for the Management of Foreign Exchange Activity," as an update to its 1980 paper, "Selected Issues Relating to the Management of a Foreign Exchange Trading Operation." A subcommittee consisting of James P. Borden (Chase Manhattan), Anthony Calvello (Noonan, Astley and Pearce), John Arnold (Morgan Guaranty), William Rappolt (Toronto-Dominion) and Michael Snow (Union Bank of Switzerland) had responsibilities for

drafting the updated paper, assisted by Margaret Greene (Federal Reserve Bank of New York).

The Committee sent out two letters during the year. The first, on interest-rate swaps, was prepared with the assistance of Alan Chase (National Westminster Bank) and Heinz Riehl (Citibank), along with Mindy Silverman and Randi De Witty (Federal Reserve Bank of New York). The second, written in response to the Board's request for comments on the applicability of risk-adjusted capital standards to foreign exchange trading activities, was prepared by John Arnold (Morgan Guaranty), Jean-Phillipe Frignet (Banque Indo-Suez), Douglas Grainger (Royal Bank of Canada), Kenneth Hartwell (Bank of Boston) and Waite Rawls (Chemical Bank), assisted by Robert Falconer (Federal Reserve Bank of New York).

During the Committee's eight years, its discussions have ranged over a wide variety of topics involving not only foreign exchange but also other closely related instruments. The proliferation of new products has, more recently, given rise to issues so technical in nature that the Committee has sought the opinions of some relevant experts from represented institutions. In addition, the Committee has at times debated whether a topic brought to its attention should fall into its purview.

Reflecting on these experiences the Committee decided it would be appropriate to review the Committee's objectives. At the same time, in light of changes in the types of institutions participating in the U.S. exchanges, the Committee decided to review the structure of its membership as well. A subcommittee to re-examine the Committee's charter was established comprising Christine Patton (Manufacturers Hanover Trust), Ron Levy (Marine Midland) and James Borden (Chase Manhattan).

FORMAL MEETINGS OF THE COMMITTEE

Meetings in 1986

April 4
May 30
August 1
October 3
December 5

Schedule for 1987

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

SELECTED DOCUMENTS

OF

THE COMMITTEE

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

LETTER ON RISKS IN INTEREST-RATE SWAPS

**LETTER ON SUPPLEMENTAL ADJUSTED
CAPITAL MEASURE**

**REPORT OF THE OPTIONS TASK FORCE ON
OVER-THE-COUNTER FOREIGN CURRENCY OPTIONS**



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 take 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, since 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 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 attaching 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 list 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

FOREIGN EXCHANGE COMMITTEE LETTER ON RISKS IN INTEREST-RATE SWAPS

The Committee urges management to consider formulating an internal policy that stresses the need for quick completion of interest-rate swap documentation.

The Committee recommends that management be kept informed about the amount of interest-rate swaps outstanding due to incomplete documentation. Management should also consider entering into bilateral master agreements with swap counterparties. Many banks have already done so and have found that such agreements, once in place, substantially reduce documentation-related delays.

To be sure, institutions participating in the interest rate swap market have made progress in reducing these delays during the past year or so. Nevertheless, a number of institutions represented on the Foreign Exchange Committee continue to experience significant documentation-related delays. The purpose of this letter is to call attention to the problems caused by these delays so that individual managers, considering ways to manage the variety of risk exposures resulting from interest rate swap activities, could take the Committee's experience and concern into account.

Two risks of documentation delays might be highlighted. First, there is the risk of non-performance during the period of delay. Without full documentation in place, the parties do not have a clear method of dealing with a failure by one party to perform or for measuring and collecting damages from that failure. Second, there is the risk of resale of the swap by one party without the prior approval of the other party. Without formal documentation in place, there would appear to be no legal constraint on such a sale.

A related area of concern involves the legal status of a swap for which there is an exchange of telexes confirming the transaction but no documentation or master agreement in place. One of the two parties may contend that the telex does not represent a binding contract, despite the fact that the other party accepts the telex as a final contract. In addition, it is unclear what governs in the case of a failure to perform if no provision has been made in the telexes for non-performance. Thus, there remains a substantial element of

uncertainty as to the status of the swap, and the ramifications of non-performance, when confirmation telexes serve as the only documentation.

Some institutions attempt to deal with this uncertainty by stating in their confirmation telexes that the commitments undertaken under the swap are subject to formal documentation, while others do not indicate whether any further documentation is needed. Unfortunately, these preconditions may actually increase the degree of uncertainty surrounding the transaction. If the telex states that more documentation is required, the confirmation telex alone is unlikely to be considered sufficient to create a binding contract.

Based upon experience, it appears that some institutions are drawing distinctions regarding the need for documentation based solely upon the maturity of a particular swap. The Committee recommends that banks strive to finalize and legalize any agreed transaction. If distinctions need to be drawn to reduce burdensome documentation requirements, all risk-related elements including the tenor of the swap should be factored into the selection of swaps not requiring full documentation. In this connection, we note that cross-currency swaps raise the same issues as interest-rate swaps but on a more complicated level, due to the added complexity of the instruments themselves.

It is clear that for many reasons thorough credit analysis and credit monitoring are extremely important for participants in the interest-rate swap market. It may well be prudent that special attention be given to those swaps that are not yet fully documented and to those where the counterparty is in a loss position.

Many Committee members expressed their hope that a model interest-rate swap agreement could serve as an example and thereby facilitate timely completion of swap documentation between any two parties. The Committee would support the convergence of market practice to such a model agreement. The Committee also welcomes the efforts currently under way to suggest language that could be used in the substantive provisions of individual bilateral master agreements.

LETTER ON SUPPLEMENTAL ADJUSTED CAPITAL MEASURE

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

Re: Supplemental Adjusted Capital Measure

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. While composed of relatively few members, its membership represents a broad range of participants in the interbank market. Because the individuals serving on the Committee have a broad and deep knowledge of the foreign exchange markets, the Committee is sending this letter on risk-adjusted capital standards to the Board of Governors (Board) and the Federal Reserve Bank of New York. It hopes that its comments are of use to the bank regulators. In addition, the Committee wishes to reaffirm its commitment to work with the bank regulators on matters of mutual interest. It wants to be involved in the process of recognizing and measuring the risks in foreign exchange and would like to assist in any manner that the regulators desire.

This letter responds to the Board's request for comments on the applicability of risk-adjusted capital standards to foreign exchange trading activities. It represents a consensus view that is broadly shared by the bankers of the Foreign Exchange Committee. In light of the complexity of the topic, as well as the diversity of the membership of the Committee, there are obviously differences in the positions of individual members of the Committee, and comments have already been submitted by respective institutions.

The Foreign Exchange Committee acknowledges the desirability of including off-balance items in any risk-based capital standard for banks. However, the Committee finds itself unable to reach a consensus as to what is the most appropriate means to address the particular risks associated with banks' foreign exchange operations. On the one hand, some members feel that the best approach is through the

subjective assessment that is gained through the examination process. On the other hand, some members recognize the need to support either the market or credit risk (including country risk) in foreign exchange. Despite these differences, the Committee wishes to share its comments on those aspects of the proposed capital standard that relate to foreign exchange. It hopes that these comments are useful to the Board and hopes to assist the Board in the future on matters related to foreign exchange.

Banks' Foreign Exchange Activities and Competitive Equality

The great bulk of banks' foreign exchange activities are in longstanding, traditional products whose risks are well known and understood. While the earnings from these activities are subject to wide fluctuations, they have been, on balance, a consistent source of earnings to many major commercial banks and have helped insulate overall bank earnings from the credit strains that have occurred in recent years. This experience suggests that the risks of foreign exchange activities are small as reflected in the relatively few losses that have occurred. This performance warrants special recognition in implementing any proposal so as not to endanger one of the important sources of commercial banks' future capital growth.

The Foreign Exchange Committee is concerned about the competitive positions of U.S. commercial banks, foreign banks and nonbanking institutions. While uniform treatment by the three Federal banking regulators in the United States is desirable, that alone will not establish a level playing field. Imposing capital standards on U.S. banks, in the absence of similar restraints on others, would place them at a major competitive disadvantage and undercut an important source of relative financial strength. Foreign banks should also be subject to the same standards, a point that has already been recognized by the governors of the central banks of the G-10 countries. But even uniform treatment across all banks may be inadequate due to the growing competition of investment banking institutions. Commercial banks face intense competition from these firms as traditional industry boundaries continue to erode and disappear. In addition, an important public policy consideration is that the commercial demand for these transactions will tend to push them, if unevenly regulated, into the hands of those institutions that may be less capable of handling them.

**Treatment of Off-Balance Sheet Foreign
Exchange Risk in a Risk-Adjusted
Capital Standard.**

In considering how a risk-adjusted capital standard could be applied to off-balance sheet risk of foreign exchange activities, the Committee is particularly concerned that some aggregate, such as the commitments to purchase foreign exchange reported on Schedule L of the current Call Report, might be used as a basis of a capital standard. The Committee views this aggregate measure of the foreign exchange book as a misleading and meaningless guide to measuring risk, since it grossly exaggerates the amount that is at risk. If a counterparty in a forward transaction defaults prior to settlement, the only risk the bank faces is the replacement cost due to the change in price since the transaction date. More importantly, banks may use long-term foreign exchange forward or option contracts to hedge foreign currency investments in overseas operations that are denominated in local currencies. Thus, many of the off-balance sheet items exist in order to manage or reduce market risks associated with balance sheet accounts and structure. If a risk-adjustment capital ratio were to have the effect of raising the cost of hedging, it could, at the extreme, have the perverse effect of encouraging institutions not to reduce their market risk and earnings exposure. In view of the foregoing, the Committee strongly believes that any attempt to include these off-balance sheet items should be based on actual amounts at risk.

Should interest rate risk be included?

On the question of including interest rate risk in foreign exchange activities, the committee recognizes that interest rate risk arises whenever there are mismatches or gaps in the maturity structure of a bank's foreign exchange activities. It is the Committee's view, however, that interest rate risk is inherent in virtually all phases of banking and that any attempt to incorporate this risk must consider the entire balance sheet of a bank as well as off-balance sheet items. It would seem unduly restrictive to introduce it to foreign exchange and fail to take it into account across all the other activities of a bank. Thus, at this juncture, the Foreign Exchange Committee strongly recommends not including interest rate risk.

**Applicability of Government Securities Dealers'
Capital Standards to Foreign Exchange**

The capital standard for government securities dealers

uses a "haircut" approach, or proportional allocations of capital to specific sources of risk, in assessing the capital adequacy of government securities dealers. Its primary focus is on the risks associated with various trading operations. The Foreign Exchange Committee recognizes that such an approach could be applied to the foreign exchange trading activities of banks. The risks of position taking are evaluated each day by every bank by marking these positions to market. Applying a capital standard to the net open position is one way to reflect the future price fluctuation on a currency position. This open position could be constructed so as to include futures and options positions

If this approach were followed, one question that needs to be resolved is whether distinctions need to be made among currencies. For example, the risks in trading currencies of the United States' two neighbors, Mexico and Canada, are dramatically different. Having made that point, however, the Committee recognizes the need for balancing simplicity in approach against the gains of greater precision. As a result, the Committee feels that, while distinctions need to be made among currencies, they probably could be made as broad categories, such as between major currencies and others that lack market depth.

The haircut approach is less well suited to addressing the credit risks in foreign exchange, i.e., the risk of non-performance of the contractual obligations by the counterparty. In part this is due to the fact that the full amount of a foreign exchange contract is at risk only on the maturity date of the contract. It also reflects the methodology of the haircut approach for the government securities market where next day settlement makes credit risk much less important than market risk.

Applying a broad haircut measure would also fail to reflect the existence and growth of netting agreements. Such agreements are already in widespread use with nonbank counterparties and, as detailed in the recent Annual Report of the Committee, interbank netting arrangements are being pursued by a host of banks. The Committee views this development as desirable and hopes that any extension of a capital standard to foreign exchange would not impede the spread of this practice.

In the view of the Committee, the haircut approach of government securities dealers has one major positive feature. That is that its similarities to the Security and Exchange Commission's net capital requirements may permit more rapid acceptance by the SEC.

Managing the Transition

Whatever the ultimate form of the risk-adjusted capital standard adopted, the Committee would like to emphasize a number of potential dangers that suggest great care in implementing the standard. Any measure that is applied only at various points of time, for example at the end of the month or quarter, could introduce anomalies in the foreign exchange market. Some institutions will seek to avoid these periodic capital standards. Since banks can rapidly change their exposure to market risk, it is possible that trading activity and exchange rates themselves could be influenced, not unlike the window dressing phenomenon that currently surrounds quarterly statement dates. Similarly, limiting the capital standards to a selected number of banks, based on their size or some other criteria, may create dislocations among banks. Also, if currencies are treated differentially, this too could impact foreign exchange rates and the willingness of some banks to be active participants in selected currencies.

Conclusion

In summary, the Foreign Exchange Committee recognizes the challenge of creating new capital standards that

address the risks of banking activities in a changing environment, while at the same time assuring the safety and soundness of commercial banks. Assessing the adequacy of capital is a pressing concern not only for regulators but also for bank management. The Foreign Exchange Committee recognizes that managing the transition to a new system will not be easy. 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. As this undertaking goes forward, the Committee eagerly hopes to work directly with the regulators.

Sincerely,

Heinz Riehl

OVER THE COUNTER FOREIGN CURRENCY OPTIONS

Prepared for the Foreign Currency Options Task Force
of the Foreign Exchange Committee

By Maurine R. Bartlett and Kathleen W. Ludman

SUMMARY

This paper surveys the state of United States law regarding over-the-counter ("OTC") transactions in foreign currency options. It points out certain ambiguities in the law, while emphasizing the effect on the OTC market of the commodities laws as currently interpreted by the Commodity Futures Trading Commission ("CFTC").

In order to place this survey of the law in perspective, the paper begins by broadly describing foreign currency options and the markets in which they are traded. It concludes by proposing a clarification of the regulatory standards and limits applicable to the OTC market.

In particular, the paper recommends that the so-called Treasury Amendment to the Commodity Exchange Act be interpreted to exclude from CFTC jurisdiction the wholesale portion of the OTC currency options market. This interpretation would allow the various regulators that are already responsible for regulating the participants in the OTC currency options market to oversee the development of this market. At the same time, the CFTC would have jurisdiction over any dealers presently not within the jurisdiction of any other regulator. The paper concludes that this approach would require the close coordination of the relevant regulators.

CONTENTS

| | PAGE |
|---|-----------|
| I. Introduction | 33 |
| II. The Foreign Currency Options Markets | 33 |
| III. The Regulatory Framework | 37 |
| IV. Regulatory Proposals | 43 |

I. INTRODUCTION

Prior to 1982, no exchange-traded foreign currency options market existed, and the OTC market in foreign currency options was virtually non-existent. Since that time, the growth of both markets has been explosive. One fairly recent estimate placed the number of foreign currency exchange-traded and OTC options issued in the U.S. at \$25-30 billion per month, over three times more than only two years earlier.^{1/} Indeed, the development of those markets and the extent to which options are now used to manage foreign exchange risk may be ranked among the most significant foreign exchange market developments of the decade.

In large part, perhaps, because of the innovative nature of the foreign currency options markets, the development of those markets has not been devoid of regulatory questions. The appropriate regulatory overseer for exchange-traded foreign currency options was the subject of debate until the commodities and securities laws were amended in 1982 to clarify this matter. And questions still linger regarding the statutory and regulatory provisions that apply to foreign currency options traded in the OTC market in the U.S.

This paper focuses primarily upon the latter subject, highlighting the uncertainties that currently exist with respect to the regulation of OTC currency options and making recommendations with respect to alternative regulatory schemes. In an effort to place this discussion in context, this paper also describes the operation of the markets themselves and their utility for reducing foreign exchange rate exposure.

II THE FOREIGN CURRENCY OPTIONS MARKETS

A Characteristics of Foreign Currency Options

A foreign currency option is a contract giving the purchaser of the option (the "Holder") the right, but not the obligation, to buy (or sell) a specified quantity of a specified currency at a certain price (the "strike price") on or prior to a specified future date (the "expiration date") from (or to) the writer of the option (the "Writer"). To obtain this right, the Holder pays a sum of money, called a "premium," to the Writer.

A foreign currency option that gives the Holder the right to buy the underlying currency from the Writer is referred to as a "call," whereas a foreign currency option that gives the Holder the right to sell the underlying currency to the Writer is called a "put." An "American-style" foreign currency option may be exercised and settled at the strike price at any point on or before the option's expiration date, while a "European-style" foreign currency option may only be exercised on its expiration date. When the market price of the underlying foreign currency is below the strike price, a call is said to be "out-of-the-money," and a put is said to be "in-the-money." Conversely, when the market price is above the strike price, a call is "in-the-money," and a put is "out-of-the-money."

Foreign currency options are traded both on organized exchanges and in the OTC market. Virtually all foreign currency options involve the purchase (or sale) of a foreign currency against the U.S. dollar.^{2/}

Foreign currency options can serve the economic function of transferring the risk of an unfavorable shift in the exchange rate from the Holder to the Writer of the option because the Writer assumes the obligation to sell a certain currency to (or buy that currency from) the Holder at a certain rate. The Holder is thus able to insure a specific exchange rate for a currency it may have to buy (or sell) in the future and to transfer to the Writer the risk that the underlying currency will rise (or fall) in price in the interim.

The Writer attempts to mitigate this assumed risk by appropriately pricing the premium, as well as by employing various hedging strategies. Generally, the Writer of a foreign currency option arrives at a premium using a computer pricing model. Most of the models base their calculations on five factors: (1) the value of the underlying currency; (2) the strike price of the option; (3) the time remaining until the option's expiration; (4) the differential interest rate expected to apply over the life of the option; and (5) the anticipated future volatility of the underlying currency. The first four factors are readily identified; however, the fifth — anticipated volatility — can be difficult to derive.

Volatility, which measures price variability, is defined as "the annualized standard deviation of daily percent changes in rates."^{3/} The foreign exchange markets have been volatile in recent years. It is not unusual for daily currency exchange rates to fluctuate by as much as 5 percent.^{4/} Indeed, one foreign exchange risk management expert has observed that the average weekly D-mark/U.S. dollar volatility over consecutive six-month periods between 1978 and 1983 was often 12 to 15 percent.^{5/}

We gratefully acknowledge the assistance of Nana G.H. Smith and Maria R. Bloch. We are also grateful for the contributions of the following individuals who reviewed this paper: Franklin Feldman, Margaret L. Greene, William D. Harrington, Ernest T. Patrikis, and Thomas A. Russo

In addition to their risk shifting function, options are also a vehicle for speculation — that is, for assuming risk that would not otherwise exist. Speculative activity can make markets more liquid. To the extent speculation increases the number of bids and offers in the market, hedgers can more easily offset their cash market price risks, and large option orders can be more readily absorbed without causing large movements in option prices. Speculative participation in the foreign currency options markets can thereby facilitate market participation by parties who are seeking to protect themselves against business-related foreign currency exposure.

B. Differences Among Currency Instruments: Options, Forwards and Futures

Foreign currency options differ in certain respects from the more traditional instruments used for hedging foreign exchange risks: *i.e.*, currency forwards or futures. All three instruments protect their holders against the risk of unfavorable cash market price moves. However, forwards and futures also eliminate any upside potential that might otherwise accrue to their holders if exchange rates move in their favor. Options, on the other hand, do not eliminate this potential, because the Holder of an option, unlike a buyer of a forward or a future, is not committed to complete the transaction at a predetermined exchange rate. To obtain this benefit, the Holder pays a premium which is the limit of its loss in the event of an adverse movement in the rate. Moreover, the Holder of an OTC currency option, in contrast with the holder of an exchange-traded futures contract, does not have to deposit variation margin if its option declines in value. In addition, while the holder of a forward or futures contract is restricted to a single settlement date, the Holder of an American-style option has the right to settle at any time prior to the expiration of the option.

For these reasons, foreign currency options are viewed as more flexible instruments than currency forwards or futures. The use of foreign currency options is particularly appropriate when a company's foreign currency exposure is merely contingent, for example, a tender on an export order, a bid to acquire a foreign company or a bid on a foreign construction project. Such outstanding offers or bids subject a corporation to the risk that adverse changes in the exchange rate of the foreign currency will occur before the bid is accepted, making it unprofitable to complete the project as bid. Previously, such risks were hedged through the use of forward currency transactions. Options, however, permit the bidder, in the event the bid is not accepted, to allow the option to lapse unexercised and limit its out-of-pocket cost to the price of its premiums. (If the option has moved "in-the-money," the corporation can exercise the option anyway, and then sell

the foreign currency on the spot market at a profit.)^{6/} Options also have proven useful in instances in which an unrealized gain based on exchange rate movement has occurred in connection with a firm's off-shore investment and that gain is thought to be in danger of reversal.^{7/}

From the Holder's perspective, the principal disadvantage of foreign currency options is the nonrefundable premium paid up-front. These premiums generally range from 1.5 to 4 percent of the contract's value, although they may be higher.^{8/} Corporate treasurers are accustomed to hedging their currency exposure through forwards, which typically involve no cash outlay until delivery and carry no premium other than an interest differential. Because of these differences, some corporations have hesitated to purchase foreign currency options.

Foreign currency options also have disadvantages for Writers because options are asymmetrical instruments. A Writer, unlike a Holder, can never gain more than the premium charged, but there is no theoretical limit to how much it can lose. However, this right can be reduced or even eliminated by assuming an offsetting position in the foreign currency forward, futures or options markets.^{9/}

C. The Exchange - Traded Foreign Currency Options Market

Options on foreign currencies are offered on the Philadelphia Stock Exchange ("PHLX"), the Chicago Board Options Exchange ("CBOE") and various non-U.S. exchanges.^{10/} Options on various foreign currency futures contracts trade on the Chicago Mercantile Exchange (the "CME").^{11/} During 1986, 8,004,707 foreign currency options were traded on the PHLX and 4,411,118 options on foreign currency futures contracts were traded on the CME.^{12/}

Exchange-traded foreign currency options differ in some respects from OTC foreign currency options offered by banks and dealers. Corporations holding OTC foreign currency options may have difficulty selling those options back to the bank that wrote them. On an exchange, in contrast, foreign currency option positions may be readily liquidated because exchange-traded contracts are standardized, and the major exchange markets are relatively liquid. On the other hand, because exchange-traded foreign currency options are standardized, they rarely will provide a perfect hedge against a corporation's or a bank's exposure.

Banks are important participants in the exchange-traded foreign currency options markets in Philadelphia, Chicago,

and Amsterdam.^{13/} Exchange-traded foreign currency options provide a means for the banks writing OTC options for their customers to hedge their positions. To the extent that the variety of contracts offered on exchanges helps banks to lay off their OTC risk, premiums on their OTC foreign currency options may be lower than otherwise would be the case. Thus, the OTC market and the exchange market in foreign currency options are complementary in some respects.^{14/}

Some multinational corporations with money management divisions also trade actively in foreign currency options on exchanges.^{15/} In addition, the exchange-traded markets are attractive to a number of small companies, such as travel agencies, because the small contract sizes substantially meet their foreign exchange needs and banks normally prefer to write foreign currency options on underlying amounts of at least \$1 million. Banks often view the premiums generated on smaller foreign currency options as too small to warrant the risk and transactional expense of writing them.^{16/}

D The Over-The-Counter Foreign Currency Options Market

The OTC foreign currency options market began developing in London in the late 1970's with "draw-down" options for three to four months out offered by banks to meet customer risk management needs.^{17/} By 1981, a few U.S. banks had begun to experiment in the market on a small scale. However, no significant OTC foreign currency option activity occurred until 1983. One estimate put 1985 trading in the New York OTC market at \$110 million a day, and in the London market at approximately \$150 to \$200 million daily.^{18/} A 1986 BIS Study indicates that U.S. and United Kingdom OTC markets are probably roughly equivalent in turnover and outstanding amounts, with the outstanding foreign exchange options in each market amounting to not more than \$10 billion.^{19/} A Bank of England estimate that commercial banks around the world are responsible for approximately \$20 billion of outstanding currency options, averaging \$2 to \$3 million a transaction, is consistent with the BIS Study findings.^{20/} The OTC foreign currency options market thus is a young, but rapidly developing, market.

In the U.S., the Writers of OTC foreign currency options are primarily commercial banks. However, this market has expanded over the past few years to include investment banks, brokerage houses, commodity pools, pension and insurance funds, and other sophisticated participants. The Holders of those options are primarily mid to large-sized corporations active in international trade and financial insti-

tutions with multicurrency asset portfolios. One indication of the OTC market's continuing development is that it can accommodate increasingly large transactions. In this regard, \$10 to \$20 million transactions by Fortune 100 Companies have become commonplace.^{21/} Thus, the OTC market for foreign currency options has been developing alongside the exchange-traded markets, with both markets showing considerable growth both in volume and in types of contracts traded.

Corporations and financial institutions often turn to their commercial or investment bankers for foreign currency options because OTC options can be "tailored" to meet the exact dimensions of the transaction they want to hedge. Although there has been some movement towards standardization of trading terms and conditions in the OTC market,^{22/} the fact that an OTC option can be individually tailored remains a primary reason for the high level of activity in that market. In addition, OTC options purchasers appreciate the convenience of OTC options and are often reluctant to devote the resources necessary to manage their currency exposure more actively, for example, by using exchange-traded options.^{23/}

Finally, the OTC market is the only avenue through which options are available to corporations with exposures in exotic currencies, unless a corporation is confident it can hedge adequately through an exchange-traded currency that closely correlates in value with the exposed currency. Because the volatility of the less common currencies may be higher or because the market for options in these currencies is less liquid, premiums will be higher for options on exotic currencies than on other currencies.^{24/}

U.S. banks generally write options because they are attracted to the fee income options generate and because their customers request this hedging mechanism.^{25/} Many commercial banks will reportedly deal only in "plain vanilla" foreign currency options; that is, in major currencies, for large amounts and for only their best customers.^{26/}

As noted, certain investment banks also write foreign currency options, often in a more aggressive and less risk-adverse manner than the commercial banks. For example, in October of 1983, a U.S. investment bank offered abroad 100,000 call warrants and an equal number of put warrants granting holders the right to buy (or sell) British pounds in a year's time. The \$300 million offering was warmly received, and a similar offering of D-mark warrants was effected soon afterward. Also in 1983, another investment bank began marketing "foreign exchange guarantees," essentially another type of foreign exchange option, to its corporate clients

in amounts up to \$25 million, with maturities out to one year. Investment banks reportedly will write OTC foreign currency options for a broader range of clients than will commercial banks.^{27/}

Corporations, on the other hand, are far more likely to buy foreign currency options than to write them; very few corporations currently write options. As a consequence, market observers estimate that the pool of option Holders exceeds the pool of available option Writers by at least three to one, and, perhaps by as much as nine to one.^{28/}

Because of the imbalance between Writers and Holders of OTC foreign currency options, banks normally cannot hedge the OTC options they write by assuming an offsetting OTC options position with another customer and must find other ways to lay off the risks they assume.^{29/} In practice, banks frequently lay off their risks through an informal interbank foreign currency options market. Using the interbank market is difficult, however, because most OTC foreign currency options differ as to their terms. Thus, interbank swapping of foreign currency options still produces only rough hedging of risks.

In recognition of the difficulties banks have laying off their risks as Writers of foreign currency options in the interbank market, money brokers have begun to move into the field of currency option services. At least three money brokers began interbank option brokerage in 1984, providing banks with market information, encouraging some standardization of terms and prices and helping banks to hedge their positions with offsetting positions in the interbank or exchange markets. These brokers are willing to act as principal with a bank or to act as a "go-between" for two or more banks.^{30/}

As was noted earlier, there has been some movement toward standardization in the market, especially in the European market. The London Interbank Currency Options Market ("LICOM"), a group of market participants, was organized in July, 1984, to work toward standardization in the London OTC market. For the purpose of facilitating interbank trading, a committee of the British Bankers' Association has standardized OTC foreign currency option terms and procedures and has advised that in London, interbank contracts and quotes should be in LICOM terms.^{31/} Similarly, the large Swiss banks have reportedly begun to trade standardized OTC options. The Foreign Exchange Committee has an effort underway to adopt terms similar to LICOM terms in the U.S. for the same reasons they have been adopted in London

The Bank of England has recognized the development of trading in foreign currency options in its prudential guidelines. Since 1984, the Bank has issued guidelines under which each bank or licensed deposit-taking institution has a foreign exchange limit for any uncovered foreign currency position. In addition, before it can begin to trade foreign currency options, an institution must satisfy the Bank that its option pricing and hedging systems are sufficiently developed.^{32/}

Thus, in London, where banks are thought to be writing more OTC foreign currency options than in New York, but for smaller quantities of currency, significant efforts have been made to develop a liquid interbank market. Indeed, many London banks essentially confine their interbank options market activities to purchases and sales for their own accounts, writing very few customer foreign currency options.

Despite the current project of the Foreign Exchange Committee noted above, less effort has been made to date to standardize practice in the U.S. interbank options market — perhaps because the market is still in its early stages of development and also possibly because option transactions in the U.S. tend to be fewer but larger in size. Aggregate currency exposures from forward and option positions are higher in the U.S. interbank market, and, as a consequence, U.S. banks reach their credit limits sooner than London banks do. They do not like to tie up their credit lines just to trade with another bank.^{33/}

Banks also lay off some of the risks assumed through writing currency options by setting up subsidiaries to trade listed foreign currency options on the exchanges.^{34/} For instance, BankAmerica Options has estimated that about 80 percent of the D-mark options written by Bank of America's San Francisco office are hedged on PHLX.^{35/} However, because contracts on the exchanges are relatively small and are standardized, hedging large and complex foreign currency exposures on an exchange can be a difficult task.

In addition to the purchase of offsetting options, Writers of foreign currency options also hedge their exposure through use of other techniques, the most common of which is "delta-neutral hedging." This technique involves buying and selling the underlying currency in amounts meant to neutralize the effects of small changes in the exchange rate on the value of the option.^{36/} Other Writers hedge their outstanding options by balancing exercise prices and maturities and puts and calls, using the so-called "pooled insurance" method,^{37/} while still others use various other specialized trading strategies.^{38/}

III THE REGULATORY FRAMEWORK

A. The Commodity Laws

Certain types of foreign currency option transactions are clearly subject to the jurisdiction of the CFTC—a Federal regulatory agency established in 1974 to regulate trading in futures and commodity options. In fact, the CFTC has insisted that *all* foreign currency option transactions—other than those occurring on a national securities exchange—are subject to its regulatory control. As will be discussed below, however, this matter is by no means free of doubt

1. Pertinent Statutory Provisions

On the most basic level, the CFTC's regulatory handle over foreign currency options stems from the fact that the CFTC's enabling legislation, the Commodity Exchange Act (the "CEA"), was amended in 1974 to define the term "commodity" to include "all other goods and articles, . . . and all services, rights and interests in which contracts for future delivery are presently or in the future dealt in. . . ."39/ Since the amendment was enacted, the foreign currencies on which futures contracts are traded have been "commodities" for purposes of the CEA.

Using this broad definition of commodity as a foundation, Congress went on to give the CFTC plenary authority to regulate "commodity" option transactions. Section 6c(b) of the CEA provides, in this regard, that "[n]o person shall offer to enter into, enter into, or confirm the execution of, . . . any commodity regulated under this chapter . . . which is of the character of . . . an 'option' . . . contrary to any rule, regulation, or order of the [CFTC] prohibiting any such transaction or allowing any such transaction under such terms and conditions as the [CFTC] shall prescribe. . ."40/

At the same time, Congress made the CFTC's jurisdiction over commodities "exclusive" in the case of "accounts, agreements (including any transaction which is of the character of . . . an 'option' . . .), and transactions involving contracts of sale of a commodity for future delivery traded or executed on a [designated] contract market or any other board of trade, exchange or market. . ."41/

Concurrently, at the urging of the Treasury Department, the Congress added language to the CEA to prevent the CFTC from interfering with the smooth operation of the foreign currency markets and certain other markets that generally do not involve public participation. This language, which is referred to as the "Treasury Amendment," provides that:

Nothing in this chapter shall be deemed to govern or in any way be applicable to transactions in foreign currency, . . . government securities, or mortgages and mortgage purchase commitments, unless such transactions involve the sale thereof for future delivery conducted on a board of trade.^{42/}

2. The Commodity Option Bans

Initially, the CFTC attempted to develop a regulatory scheme to govern the offer and sale of commodity options. However, in 1978, in response to widespread fraud and abuse in connection with the sale in the U.S. of options traded on London exchanges, the CFTC promulgated a regulation 32.11 banning most commodity option transactions.^{43/} Congress recognized and confirmed that ban several months later, but gave the CFTC the authority to adopt regulations exempting options involving a purchaser that is a "producer, processor, commercial user of, or merchant handling. . ." the commodity involved in the transaction.^{44/} That exemptive authority has been implemented by a CFTC regulation referred to as the "Trade Option Exemption."^{45/} In addition, the CFTC was given general authority to lift the statutory option ban, by documenting for Congress its "ability to regulate successfully" option transactions.^{46/} To date, however, it has lifted the ban only to allow options, including options on certain foreign currency futures contracts, to trade on commodity exchanges.

3. Interrelationship Between the Option Bans and the Treasury Amendment

Since the imposition of the commodity option bans, the scope of the Treasury Amendment's "safe harbor" for "transactions in foreign currency" that do not "involve the sale thereof for future delivery conducted on a board of trade" has been the subject of debate.

In early 1981, the PHLX took the position that the Treasury Amendment prevented the CFTC from regulating options on foreign currencies that were traded on a securities exchange. In accordance with this view, PHLX filed an application with the Securities and Exchange Commission ("SEC") to trade options on five foreign currencies. The jurisdictional uncertainty created by PHLX's application was resolved by a 1982 amendment to the CEA that makes clear that the CFTC has no jurisdiction over foreign currency options traded on a national securities exchange (such as the PHLX).^{47/} PHLX's interpretation of the Treasury Amend-

ment was consequently never put to a court test; however, several courts have considered the scope of this Amendment.

The first of these legal proceedings involved a CFTC suit against the American Board of Trade ("ABT"), a membership organization that provided an exchange marketplace for certain commodity option transactions. The ABT, which was not registered with or regulated by any government body, contended that its foreign currency option transactions involved "transactions in" foreign currency for purposes of the Treasury Amendment. However, Judge Broderick of the U.S. District Court for the Southern District of New York concluded that:

A transaction in foreign currency and a transaction in options involving foreign currency are different animals. . . .

An option to purchase or sell a commodity is not a transaction in that commodity. It is a transaction that involves the commodity. If one makes a contract to buy a specified amount of Swiss francs, one engages in a transaction in that currency within the meaning of the statutory proviso: when one pays the purchase price all that remains is for the foreign currency to be delivered.

. . . The option transaction is a long step removed from a transaction in the commodity involved, since the option purchaser, if he or she does nothing more when the specified date arrives, will simply see the option die. If, when the exercise date arrives, the option holder decides to exercise the option, he or she at that point, and not before, will engage in a transaction in the commodity involved.

The Commodity Futures Trading Commission, despite its name, is authorized by the Act to regulate more than transactions in commodity futures. The Commission is also authorized by the Act to regulate transactions in actual commodities and, most relevant here, transactions in commodity options. "[T]ransactions in foreign currency" are indeed exempted from Commission regulation. The exemption does not cover transactions involving the sale of foreign currency "for future delivery conducted on a board of trade, since such transactions are specifically excepted from the exemption. *Nor does the exemption cover options involving foreign currency, which are not "transactions in foreign currency" within the meaning of the Act. Instead such*

options are "transaction[s] . . . involving any commodity regulated under this chapter . . . which [transactions are] of the character of . . . an 'option' . . ." 7 U.S.C. 6c(b). . . . And accordingly, such options are within the prescriptions of the Act and Regulation 32.11.^{48/}

Although the accuracy of this line of reasoning is not self-evident, it was sustained recently by the Second Circuit in its affirmation of the decision.^{49/} However, unlike the District Court, the appeals court examined the legislative history of the Treasury Amendment, which it found to support its reading with regard to the legality of the ABT's foreign currency options business. The court found that the Treasury Amendment was enacted "at the behest of the Treasury Department on the ground that the protections of the [CEA] were not needed for the sophisticated financial institutions, already subject to regulation, that participated in such transactions."^{50/} The court found that an understanding of the intended reach of the Treasury Amendment "belie[s] the notion that the exception was designed to exclude from regulation foreign currency options transactions such as those defendants engaged in with private individuals."^{51/} Thus, with regard to the Treasury Amendment, the decision holds unambiguously only that it does not reach currency options transactions between unregulated entities and individuals. Although the court adopted the very broad language of the opinion below, its own analysis of the legislative history puts into question the extension of that opinion to transactions between regulated dealers and sophisticated institutions.

The language of the first ABT case was also quoted with approval by another Federal District Court in a CFTC suit against Sterling Capital Company, a firm that was marketing foreign currency options to the general public and allegedly engaging in various fraudulent sales practices.^{52/} Moreover, this line of reasoning was adopted with regard to government securities by the Seventh Circuit Court of Appeals in a suit spurred by an SEC order approving Government National Mortgage Association ("GNMA") options trading on the CBOE, a national securities exchange. The Court concluded that GNMA options are not "transactions in" government securities for purposes of that amendment, because:

[u]nder the CBOE proposal . . . , an option holder never has to exercise the option in order to profit from the position. Thus the options market may exist without any transactions in the commodity itself. Accordingly, the Treasury amendment does not affect CFTC power over GNMA options.^{53/}

The Seventh Circuit went on to conclude that, even if the "transactions in" lityny included GNMA options, the CFTC would still have jurisdiction over those options because they "involve" GNMA futures contracts and would therefore be caught by the "unless" clause of the Treasury Amendment. (That is, they would be caught by the language specifying that the CFTC has jurisdiction over transactions that involve the sale of the enumerated instruments "for future delivery conducted on a board of trade.")

It should be noted that each of those court decisions involved option sales to members of the general public, rather than interbank or dealer transactions between sophisticated and informed counterparts. A different conclusion might well have been reached with respect to interbank and dealer transactions, because, as the appeals court noted in its recent affirmation in the ABT case, the legislative history to the Treasury Amendment makes clear that amendment was designed to prevent the CFTC from interfering with transactions of this sort.^{54/} The Senate Report on the 1974 Amendments to the CEA observed, for example, that:

The Committee included an amendment to clarify that the provisions of the bill are not applicable to trading in foreign currencies and certain enumerated financial instruments unless such trading is conducted on a formally organized futures exchange. A great deal of the trading in foreign currency in the U.S. is carried out through an informal network of banks and tellers. The Committee believes that this market is more properly supervised by the bank regulatory agencies and that, therefore, regulation under this legislation is unnecessary.

Likewise, the Committee believes that regulation by the Commission of transactions in the specified financial instruments (*i.e.*, . . . government securities, mortgages and mortgage purchase commitments), which generally are between banks and other sophisticated institutional participants, is unnecessary, unless executed on a formally organized futures exchange.^{55/}

Similarly, in recommending the adoption of this Amendment, the Treasury Department noted that:

Virtually all futures trading in foreign currencies in the United States is carried out through an informal network of banks and dealers. This dealer market, which consists primarily of the large banks, has proved highly efficient in serving the needs of international business in hedging the risks that stem from foreign exchange rate movements. *The participants in this market are*

sophisticated and informed institutions, unlike the participants on organized exchanges, which, in some cases, include individuals and small traders who may need to be protected by some form of governmental regulation.

Where the need for regulation of transactions on other than organized exchanges does exist, this should be done through strengthening existing regulatory responsibilities now lodged in the Comptroller of the Currency and the Federal Reserve. These agencies are currently taking action to achieve closer supervision of the trading risks involved in these activities. *The Commodity Futures Trading Commission would clearly not have the expertise to regulate a complex banking function and would confuse an already highly regulated business sector. Moreover, in this context, new regulatory limitations and restrictions could have an adverse impact on the usefulness and efficiency of foreign exchange markets for traders and investors.*^{56/}

When it pressed for the adoption of this Amendment, the Treasury Department referred only to foreign currency "futures trading" between banks and dealers, rather than to foreign currency option transactions — an omission that is surely attributable to the fact that the foreign currency options markets did not begin to develop in the United States until 1982. However, transactions in foreign currency options serve essentially the same economic functions as the other foreign currency transactions the Treasury Amendment was expressly designed to encompass, are entered into by the same types of participants and are subject to the same type of oversight by banking authorities.^{57/} The Treasury Department's reasons for urging the adoption of the Treasury Amendment are therefore equally applicable to most of the foreign currency option transactions occurring in the interbank and dealer markets. It consequently is reasonable to argue that those transactions are not subject to the commodity option bans (or to any other type of CFTC regulation).

This argument draws support from the fact that the purposes underlying the commodity option bans do not apply in the context of interbank and dealer foreign currency option transactions. Those transactions have not been characterized by fraud and abuse, nor are the parties thereto unable to protect their own interests. As a result, those transactions are very similar to the interbank "futures" transactions the Treasury Amendment was primarily designed to exempt from CFTC regulation. Moreover, it is not likely that Congress, by enactment of the option ban, would divest

banks, without notice, of preexisting authority to deal in currency instruments. Nor is it likely that Congress would divest banking regulators of preexisting authority to supervise such activities without notice or discussion of the matter.

Nevertheless, the *American Board of Trade* and *Sterling Capital* decisions do categorically conclude that foreign currency options are not "transactions in" foreign currency for purposes of the Treasury Amendment. With the exception of the discussion of legislative history in the Second Circuit's *American Board of Trade* decision, the language of those decisions neither states nor implies any exceptions for interbank or dealer transactions. Moreover, although the Seventh Circuit specifically noted in its GNMA options decision that it was drawing "no conclusion" as to whether the Treasury Amendment affected any CFTC jurisdiction over options on foreign currency, the language of that decision is equally expansive.^{58/} For example, the Court expressed the view that "[b]y Section 4c(c), 'no person 'may enter into' any commodity option transaction involving any' of the new commodities — including GNMA's — until the CFTC lifts the ban on trading. . . ."^{59/} Moreover, that court seemed to suggest that the GNMA standby market — a market that is similar in some respects to the interbank and dealer foreign currency options markets — would be legal only if it fit within the confines of the Trade Option Exemption.^{60/}

Significantly, the CFTC also has taken an expansive view of its authority over foreign currency options. In a September 27, 1985 letter to the SEC, for example, the CFTC cited a 1982 Senate Report for the proposition that it has authority to regulate options on foreign currencies "when they are traded other than on a national securities exchange." The CFTC then went on to assert that the CEA's regulatory scheme for options applies to *all options* on foreign currencies except to transactions "in an option on foreign currency traded on a national securities exchange."^{61/}

In addition, in a 1984 interpretive letter, the CFTC staff appeared to be of the view that foreign currency options traded on a non-U.S. exchange could only be purchased by U.S. banks pursuant to the Trade Option Exemption. The staff did not suggest that the Treasury Amendment might have any pertinence to a bank's foreign currency option activities.^{62/}

In sum, although compelling arguments can be made for the proposition that interbank and dealer transactions in foreign currency options fall squarely within the Treasury Amendment and are thus free of CFTC control, there has, to date, been no clear judicial or CFTC support for this view.

Rather, the CFTC view appears to be to the contrary, and much of the relevant judicial analysis has not been helpful.^{63/}

4. The Trade Option Exemption

In light of the holdings in the court decisions interpreting the Treasury Amendment and the CFTC's expansive view of its authority over foreign currency options, the Trade Option Exemption presently affords the only incontrovertible escape from the CFTC's commodity option ban. Many option Writers and Holders have thus been advised to structure their option transactions in a manner that conforms to this exemption. If the conditions of the Trade Option Exemption are satisfied, option transactions are not subject to the commodity option ban or any CFTC regulation other than the CFTC's antifraud rule.

This exemption, by its terms, provides that the option ban does not apply to a commodity option offered by a person who has a "reasonable basis to believe" (1) that the option is offered to a "producer, processor, or commercial user of, or a merchant handling, the commodity which is the subject of the commodity option transaction" and (2) that such producer, processor, commercial user or merchant "is offered or enters into the commodity option transaction solely for purposes related to its business as such."^{64/} However, the CFTC's Division of Trading and Markets has taken a more restrictive view of this provision. In a 1984 letter regarding the proposed offer and sale in the U.S. of foreign currency options traded on a Canadian exchange, the CFTC staff observed that banking institutions may qualify as permissible offerees of foreign currency options under the Trade Option Exemption only if they are: (1) ordinarily engaged in a direct, commercial use of the underlying currency, and (2) "enter the transaction *solely for non-speculative purposes* related to their business as such."^{65/}

The letter states, as an example, that a bank may purchase Swiss franc options under the Trade Option Exemption only if it engages in Swiss franc exchange transactions on its own behalf as part of its commercial banking activities and the purchase of those options bears some direct, "non-speculative" relationship to the bank's Swiss franc transactions in the cash forward market. The staff took the view that "option purchases that exceeded any bona fide hedging requirements would be speculative" and as such inconsistent with the Trade Option Exemption.^{66/} In addition, the staff expressed the view that persons selling options pursuant to the exemption "must take affirmative steps to insure" that an option purchaser qualifies under the Trade

Option Exemption. According to the staff, "[m]ere reliance upon the undocumented representations of the purchaser would not be sufficient "

The CFTC staff also has taken the view that the option ban applies to the act of *entering* into a commodity option transaction, as well as to the solicitation of such a transaction.^{67/} Consequently, an option purchaser also has exposure if it purchases an option in violation of the ban.

It should be stressed that the views expressed in the staff's 1984 interpretive letter appear to be narrower than the language of the Trade Option Exemption itself, which requires only that an option be purchased "solely for purposes related to" the purchaser's business as a commercial user of the underlying currency. That exemption does not specify that the option must be purchased for a "non-speculative" or "hedging" purpose — an omission which is particularly significant because other CFTC rules do expressly incorporate those terms. Moreover, this restrictive interpretation goes well beyond the statutory language which authorizes the CFTC to promulgate the Trade Option Exemption^{68/} and appears to be something of an "after-thought" so far as the CFTC staff is concerned.^{69/} Nor does this strict interpretation comport with the fact that the CEA's identification of a "commercial user" class was ostensibly "intended to reflect a sophisticated class of commercial purchaser, engaged in a commercial use of the underlying physical commodity, which does not require extensive protection by the CFTC."^{70/}

Like the scope of the Treasury Amendment, the precise scope of the Trade Option Exemption is thus unclear. However, as is the case with the Treasury Amendment, the CFTC has interpreted the Trade Option Exemption in a manner that gives the commodity option bans the broadest sweep. If the CFTC's current view were fully enforced, it would be difficult to escape from those bans via either the Treasury Amendment or the Trade Option Exemption. It is therefore probable that the ambiguities and tensions created by these interpretations impede the development of the market to some extent.

B. The Securities Laws

Pursuant to 1982 legislation amending the Federal securities laws and the CEA,^{71/} the SEC has unequivocal jurisdiction over the trading of foreign currency options on a U.S. securities exchange, while the CFTC has exclusive jurisdiction over the trading of all foreign currency options on U.S. commodities exchanges. There has been some question whether the SEC retained any jurisdiction over the trading of foreign

currency options in the OTC markets; however, it is now generally accepted that the securities laws are not applicable to such transactions

During the mid-1970's, the securities laws were occasionally found to be applicable to "naked" commodity option transactions.^{72/} The cases reaching this result did so on the basis that such options constituted "investment contracts" and, hence, securities for Federal securities law purposes. Although the "investment contract" concept is not defined by statute, the Supreme Court in *S.E.C. v. W.J. Howey Co.*^{73/} defined an "investment contract" as "an investment of money in a common enterprise with profits to come solely from the efforts of others."^{74/}

"Naked" options differ from "covered" options, in that the Writer of a "naked option" does not own the underlying commodity or futures contract and does not otherwise hedge its financial exposure. Typically, the Writer of such an option accepts the premiums of its option purchaser investors but, rather than purchasing the underlying commodity or entering into a hedge, uses those premiums to speculate in the commodity markets. The "naked" option Writer gambles that it will earn more money by speculating than it will owe its investors upon settlement if their options move "into the money."

The courts reasoned that the "reliance upon the efforts of others" requirement of *Howey* was satisfied because the profits of an investor holding a naked option were inextricably interwoven with the Writer's success in speculating in the commodity markets. The "common enterprise" element of *Howey* was deemed satisfied by a showing that the investors' funds were "pooled" by the option Writer, such that "the success or failure of one investor's contracts and of the defendant's contracts could have a direct impact on the profitability of another investor's contract."^{75/}

However, the courts which held that a particular "naked" option was a security may well have been motivated by the desire to close a regulatory "gap." Since the creation of the CFTC in 1974, most cases involving a claim that a commodity option transaction violates the Federal securities laws have not reached the issue of whether the option might fall within the *Howey* definition of an "investment contract." Rather, those cases have held that Congress intended to strip the SEC of any jurisdiction it may have had over commodity options and vest jurisdiction with the CFTC.^{76/}

Moreover, most OTC foreign currency options are not vulnerable to judicial interpretation as "investment contracts" because they are individually negotiated contracts

between two parties, generally supported by some sort of "receivable" in the underlying currency, and profits are made solely through favorable market movements. These contracts thus lack the commonality and reliance elements of *Howey*.^{77/} In this regard, cases have concluded that insolvency risk alone does not create a common enterprise.^{78/} Furthermore, the purchasers of these options are often commercial users of the underlying foreign currency. The more clearly a purchaser is motivated by a desire to possess, consume or use some commodity, the less likely it is that a contract will be considered a security.^{79/} In addition, since the older "naked" option cases were decided, the SEC has shown no inclination to regulate the OTC foreign currency options market. As a result, as both a legal and a practical matter, OTC foreign currency options are unlikely to be considered securities

C. New York State Gambling Laws

It has been suggested that OTC currency options might run afoul of New York gambling laws.^{80/} This is the case under current law when such contracts are in fact simply a means for wagering on currency rate movements *and* the parties have no intention in any case of delivering the specified currencies.

The New York State Constitution prohibits gambling except as the Legislature expressly allows.^{81/} This prohibition has been implemented by enactment of both penal laws making gambling activities illegal and contract laws making gambling contracts unenforceable.^{82/}

New York State law defines gambling as the activity of a person who "stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under his control or influence, upon an agreement or understanding that he will receive something of value in the event of a certain outcome."^{83/} However, illegal gambling has been distinguished from legitimate business activity in State court decisions. Thus, in a 1945 decision involving a contract dispute, one court explained that business speculation is not illegal *per se*:

Business, including buying and selling, is carrying on an occupation connected with the operations of barter, trade, industry, or matters commercial for profit and usually catering to the economic necessities and welfare of the people or classes thereof. Business may involve speculation but unless the latter is illegal it does not get down to what in modern times is the lower classification known as gambling. Gambling is playing

a game of chance for stakes risked on an event, chance or contingency.^{84/}

In a 1968 New York County Court decision, *Liss v. Manuel*, the applicability of the gambling laws was considered in a case involving the enforceability of an agreement to pool the investing expertise of a masseur and some funds of his client, with the masseur making good any losses. When the selected investment failed, the masseur attempted to avoid his contractual obligation to indemnify his partner by claiming the agreement was an illegal gambling contract.^{85/} The court rejected the claim, characterizing the agreement as an investment agreement. The court explained:

Risk... is not the element which makes the transaction a gamble. When a party has a genuine personal stake in the outcome of future events, as when he has an insurable interest, . . . an investment, . . . a contract involving goods, commodities, work, labor or services, . . . it is an approved and judicially enforceable mode or form of business and regardless of risk, not a bet, wager or illegal gamble [citations deleted].^{86/}

That court equated investment with capital investment in an enterprise. Thus, "if . . . the money is used in the speculative enterprise, the reward of success is deemed a return on investment," and not as gambling winnings.^{87/} A comparable sort of investment is the use of funds to protect a profit to be derived from a commercial investment or contract. This sort of transaction, designated a "hedging" transaction, would also be considered a legitimate business activity under the reasoning of *Liss v. Manuel*, because its purpose would be to protect an investment or other commercial profit. The legitimacy of contracts entered into for hedging purposes has been recognized by New York courts.^{88/}

The distinction between illegal gambling and legitimate commercial transactions is key to long-established New York State case law on the legality of options contracts, which are normally considered to be valid commercial transactions so long as delivery is not foreclosed at inception. In other words, option contracts are presumed to be legal commercial agreements unless patently intended to serve solely as vehicles for speculation.

In the 1877 New York Court of Appeals decision, *Bigelow v. Benedict*,^{89/} the court considered an option under which Benedict, for a \$250 premium, agreed to receive from Bigelow at any time within six months \$2,500 in gold coin at an agreed rate. In other words, Bigelow sold a six-month put option. Benedict breached the contract, and when Bigelow sued, defended on the ground that the contract was a mere wager and thus illegal and voidable.^{90/}

The court affirmed the judgment below that the contract was legal. The court found that, although there was an element of risk involved in the transaction, as in all option contracts, such contracts are legitimate unless "there is no intention on the one side to sell or deliver the property, or on the other to buy or take it, but merely that the difference should be paid according to the fluctuation in market values . . ." ^{91/} According to the court, if the contract has no business purpose but rather merely serves as a "cover for betting on the future price of the commodity . . . , and no actual sale or purchase is intended, the contract is illegal . . ." ^{92/} Moreover, the court made clear that such a contract is to be presumed proper unless evidence shows the contrary. ^{93/} In fact, with reference to a futures contract, the legality of which was judged by the same standard, the Court of Appeals stated in a later decision that the illegal intent not to deliver must show on the face of the contract. ^{94/} The burden of proving illegality rests on the party challenging the transaction. ^{95/}

Thus, unless an OTC currency option contract can only be settled in U.S. dollars representing the gain on the contract, that option probably would not be vulnerable to challenge under New York State gambling laws. Moreover, a *bona fide* hedging purpose should save even an instrument providing solely for dollar settlement. ^{96/} Nevertheless, the conclusion to be drawn from this discussion is that New York State law concerning the legality of OTC currency options remains too ambiguous to offer comfort to many legitimate Writers of these instruments. We would therefore recommend the clarification of the legality of OTC currency actions under the gambling laws of the states in which they are written. This paper examined the gambling laws of one state; there likely are similar ambiguities elsewhere. Clarification of the status of these instruments would remove an unnecessary impediment to development of the OTC foreign currency options market.

IV. REGULATORY PROPOSALS

As indicated in the previous sections, legitimate corporate and institutional demand has fueled substantial growth in the currency options marketplace. Currency options are now used by industry, commerce, financial institutions, and certain individuals to manage currency exchange rate risk. Currently open interest in OTC foreign currency options in the U.S. measures at least \$10 billion, and writing currency options is a worldwide enterprise. Investment banks as well as commercial banks have entered the market in a significant way, and commodity and stock exchanges have added currency products at a rapid pace.

The OTC currency options market developed nearly a

decade after the enactment of the CEA in 1974 and was not contemplated by the legislators who set up that framework for the regulation of derivative commodity products. Nor has that market yet received appreciable Congressional attention. ^{97/} Many market participants are subject to the oversight of several different regulators, and uncertainty exists concerning which regulations, if any, apply to their OTC foreign currency option activities.

In view of the economic importance of the market, this uncertainty makes it essential to consider the best method of regulating the OTC market in currency options. A key issue is whether it would be more effective to have unitary regulation of the entire OTC currency options market or oversight by the regulators with jurisdiction over the separate players.

A. Regulatory Goals and the Over-The-Counter Currency Options Market

As an initial matter, it is important to identify the goals which the public interest would suggest regulation of this market should attempt to achieve. These goals arguably include financial stability, consumer protection and the creation of an environment in which efficient and useful markets can develop. ^{98/}

Financial stability may be important in the case of some currency options transactions, because sharp movements in the underlying currency can result in large and perhaps unexpected liabilities for option Writers and disappointments for option Holders. Adequate financial controls should facilitate the development of the markets and help to protect market participants from losses due to defaults.

Similarly, consumer protection may be a significant concern in some options markets because options are complex financial instruments that may be written in the OTC market with little, if any, margin and could be mass marketed to persons who would not enter the futures or forward markets. Thus, an unsophisticated customer might be tempted to speculate using an instrument he really does not understand. Historically, there have been numerous instances of abusive and fraudulent options marketing practices. As a result, Congress has clearly stated its sense that some options markets need close monitoring.

Finally, the creation of an environment in which efficient and useful markets can develop is important to assure that the markets are able to meet the economic needs of participants. This would argue for permitting the OTC market to develop in an environment which makes it possible for option Writers to compete to offer what their customers

want, as to both price and product specifications. A tailor-made product normally costs the customer more than a mass-produced one, but it may also meet customer needs more satisfactorily. Thus, where possible, regulation should avoid artificial market constraints and allow the development of the liquidity necessary for an efficient and responsive market.

The threshold question is the extent to which these regulatory goals are apposite in the OTC currency options market and what regulatory structure will best achieve these goals. Assuming that the OTC currency options market is and will remain a wholesale market,^{99/} or that access beyond wholesale transactions will be closely circumscribed, we suggest that consumer protection need not be a vital concern in this market. Entities using the OTC market should be capable of monitoring their own interests. The principal purpose of the option bans was consumer protection; nevertheless, it was thought proper to permit commercial users to purchase options pursuant to the Trade Option Exemption. Moreover, the contention that the Treasury Amendment exempts the interbank and dealer OTC market from the bans is premised, in substantial part, on the conclusion that participants in that market do not require extensive protection. In either case, whether the Treasury Amendment excludes the interbank market from CFTC scrutiny or the Trade Option Exemption is broadly interpreted to allow legitimate business transactions, permissible OTC currency option dealings do not appear to require extensive attention to consumer protection.

Under this analysis, the primary regulatory goals appropriate to the OTC currency options market would be financial stability and relatively unrestrained market development. Consumer protection would, of course, remain a concern in the case of any segments of the currency options market open to public participation.

With respect to the goals of financial stability and responsive market development, one could ask whether it is preferable to have a single regulator or multiple regulators. A more relevant question, however, is how restrictive the regulatory requirements themselves are. A single regulator could be either restrictive or permissive, as could multiple regulators. It is important, too, that the regulatory requirements be sufficiently clear so that market participants can know what is permitted. Ambiguity regarding permissible activities, of the sort that currently exists with respect to the scope of the Treasury Amendment, is detrimental to market development.

Nor does regulatory efficiency necessarily depend upon the number of regulators. If all regulators were equally efficient, perhaps economies of scale could be realized by

leaving the job to a single regulator. Aside from this hypothetical possibility, however, the number of regulators would not seem material. And, it could be countered that there are economies to be realized from having the regulator familiar with a particular market segment monitor option activities within that segment. Because the OTC currency options market contains such varied participants as commercial banks, commodities dealers, and securities dealers, regulation by market segment offers the advantage of regulator familiarity with the regulated entity. In addition, overall efficiency is increased by not burdening a particular participant with the need to satisfy multiple requirements set by various regulators.

Whether there is a single regulator or multiple regulators consequently does not determine the safety or efficiency of the marketplace. Nor is that factor decisive to protection of the consumer. In sum, the goals of regulation do not seem greatly affected by the number of regulators, so long as the applicable regulations are reasonable, coherent and consistent.

B. Regulatory Alternatives

At least three approaches to regulation of the OTC market which could address the needs discussed above may be suggested. Under one approach, the CFTC's jurisdiction over *any* type of OTC currency option could be recognized, and that agency could interpret the Trade Option Exemption broadly enough to allow legitimate interbank and dealer foreign currency option activities to proceed without undue regulatory constraint. Such an approach would eliminate the possibility of regulatory gaps and would enable one entity to develop consistent standards for all market participants. However, such an approach would subject some Writers of options, for example, commercial banks, to much more substantial regulation by the CFTC than is presently the case^{100/} and would greatly increase the burden on the CFTC. In addition, it is still unclear whether the CFTC will broaden its view of the transactions permitted by the Trade Option Exemption.

A second approach would be to interpret the Treasury Amendment to exclude the non-public portions of the OTC foreign currency options market from CFTC jurisdiction, but to leave the rest of the market subject to CFTC oversight and the Trade Option Exemption. This approach would uncontroversially remove the wholesale market from CFTC oversight and permit the regulated entities in that market to answer to their primary regulators. It would also avoid overburdening the CFTC. At the same time, the CFTC could use the option bans and the Trade Option Exemption to regulate access to other portions of the OTC market.

Of course, this approach assumes acceptance of the view of the Treasury Amendment's scope which is advanced above in Section III. That view is that the Treasury Amendment excludes from CFTC regulation the portion of the OTC market which is not available to the general public and which is regulated by other agencies. In addition, this approach would necessitate careful consideration of appropriate participation in the wholesale market. In this regard, we believe that only those entities and individuals not in need of protection should be allowed to participate. Possible disadvantages of this approach would include the opening of regulatory gaps and variations in standards applicable to similarly situated entities. These problems could be remedied by close coordination among the affected regulators and a recognition that residual jurisdiction over transactions in currency options lies with the CFTC.

We should also note with respect to this approach that the Treasury Department has recently expressed the view that interpreting the Treasury Amendment as excluding transactions involving the general public would be adverse to Treasury's interest in the government securities market. At the same time, Treasury conceded that "it may be appropriate to bring some foreign currency futures transactions marketed to the general public off-exchange within the scope of the [CEA]" but stated that to do so would require legislative amendment.^{101/} In other words, the CFTC and the Treasury Department differ on whether the Treasury Amendment exclusion extends to transactions with the general public, and thus the regulatory constraints on the off-exchange currency markets have recently become still more ill-defined than before. As discussed above, we believe clarification can only be salutary. To the extent that such clarification requires legislative amendment, we believe this course of action should be pursued. In the meantime, an appropriate regulatory approach could be implemented to a great extent through concerted action by the regulators involved.

A third approach would be to re-examine the regulatory structure of the OTC currency options market, focusing on which consumers need protection and, perhaps, expressly exempting certain types of transactions from regulation. This could be done either by enacting legislation or by relying on the various agencies' regulatory authority. This approach would allow the problems in this market to be considered from a policy perspective, free from the constraints and complexities derived from past history. How-

ever, even if theoretically desirable, such an approach would likely be difficult to effect. Moreover, in light of the fact that more realistic alternatives are available, such an approach does not appear to be necessary.

This last approach might be advisable, however, in the case of various hybrid financial instruments that have certain option-like elements. Financial markets in the recent period of explosive growth have become increasingly creative, and new instruments have been fashioned to meet the needs of various entities. Many instruments which have traditionally been thought of as "securities" now include rights which are similar to those afforded by options. At the same time, many products traditionally treated as "commodities" may contain elements which are similar to those of investment contracts and other securities. Oil index securities which grant the holder a one-way right to profit if the market moves in a certain direction are a good example of a hybrid instrument.

One result of this definitional ambiguity is that certain worthwhile products that do not neatly fall within the realm of "securities" regulation and outside that of "commodities" regulation may find themselves running afoul of the statutory and regulatory bans on certain commodity option transactions. It does not seem reasonable that the viability of these hybrid instruments should be threatened by a CFTC interpretation of the CEA which concludes that these instruments involve a commodity option and therefore are illegal unless they are sold pursuant to the Trade Option Exemption.

In short, because some financial instruments now being developed do not fit neatly into the traditional "commodity" mold, we believe there is a fundamental question as to whether the CFTC is the only appropriate agency to determine whether those instruments have been lawfully issued. This may, therefore, be an appropriate time for the pertinent regulatory authorities to re-examine the statutory provisions relating to hybrid instruments to determine whether any statutory or regulatory changes are necessary or desirable to clarify the legal status of those products.

In the case of conventional OTC foreign currency options, however, we would recommend the second approach: that is, viewing the Treasury Amendment as exempting from CFTC jurisdiction the regulated interbank and dealer OTC foreign currency options market and allowing the regulators

of dealers in that market to use their best judgment regarding the proper regulation of the foreign currency option activities of the entities subject to their oversight. Permitting each regulator to oversee the foreign currency options activities of its own market segment would permit regulatory variations suitable for the various sectors. Market safety, for example, might be promoted in various ways, such as, by clearing house structures, margin requirements, position limits or capital requirements. It is neither necessary nor appropriate to attempt to fit all segments of the market into one regulatory mold. Nor is it obvious that any essential

benefits are derived by installing a single regulator as the sole overseer of the market.

Although it is absolutely necessary to prevent the development of regulatory gaps and it is desirable to maintain a "level playing field" for entities selling OTC options, the conclusion to be drawn is not that a single regulatory scheme is necessary. Rather, it is that the pertinent regulators should coordinate their efforts to insure that abusive option practices do not occur and that the applicable regulatory schemes are coherent and consistent.

FOOTNOTES

- 1/ Falloon, *The Tilted Playing Field*, *Intermarket* 35 (June 1986).
- 2/ See generally *Recent Innovations in International Banking*, Bank for International Settlements 61-120 (Apr. 1986) ("BIS Study"); *Foreign Exchange Options*, Federal Reserve Bank of St. Louis 12-13 (Mar. 1984); Giddy, *Foreign Exchange Options*, 3 *The Journal of Futures Markets*, No. 2, 143-166 (1983); Goodman, *How to Trade Currency Options*, *Euromoney* 73-74 (Jan. 1983).
- 3/ See Kalberer and Wurman, *Volatility Varies Widely for New Currency Options*, *Futures* 84 (Mar. 1985).
- 4/ See Szala, *Trading Currency Changes in Options 'round the World*, *Futures* 63 (July 1985).
- 5/ See O'Dea, *The Fight Over Currency Options* *Intermarket* 14, 17 (Feb. 1985).
- 6/ See *Tradeable Insurance*, *Intermarket* 25, 35 (Nov. 1985).
- 7/ BIS Study, *supra* note 2, at 65.
- 8/ See *Financial Times*, Oct. 2, 1984, at 13; Anand, *Currency Options Help Manage Foreign Currency Swings*, 103 *Global Trade Executive*, No. 4, 21 (Oct. 1985). As of the end of May 1986, the premium on a six-month option to sell dollars at the prevailing rate on the OTC market was 3 percent. *Financial Times*, May 27, 1986.
- 9/ See pp. 15-18, *infra*.
- 10/ The options traded on PHLX are American style, while those traded on the CBOE are European style.
- 11/ See Szala, *supra* note 4, at 63.
- 12 See, BIS Study, *supra* note 2, at 97.
- 13/ BIS Study, *supra* note 2, at 72.

In February, 1984, a subsidiary of Bank of America, in joint venture with a securities company, became Dmark specialist on the PHLX, and in April, 1984, Fidelcor, the parent of Fidelity Bank, became the first bank holding company to have a wholly-owned foreign currency options brokerage subsidiary. *Fidelcor, Inc.*, 70 *Fed. Res. Bull.* 368 (1984). However, the Federal Reserve Board of Governors denied an application by Banque Indosuez to acquire indirectly a subsidiary that would have become the PHLX specialist in the French franc. *Banque Indosuez*, 72 *Fed. Res. Bull.* 368 (1985).
- 14/ See *Tradeable Insurance*, *supra* note 6, at 36.
- 15/ See *Bacardi Capital Ltd Acquires Majority of FOG Group*, *PR Newswire*, Sept. 9, 1985; *Tradeable Insurance*, *supra* note 6, at 30.
- 16/ See Sender, *New Era in Foreign Currency Trading*, *Dun's Business Month* 71 (Sept. 1984).
- 17/ See O'Dea, *Fencing With the Grim Reaper*, *Intermarket* 4 (June 1985).
- 18/ *Tradeable Insurance*, *supra*, note 6, at 28. O'Dea, *Competing for Currency Options*, *Euromoney* 34 (Apr. 1985).
- 19/ BIS Study *supra* note 2, at 72.
- 20/ See *Currency Options. Choices, Choices*, *The Economist* 86 (May 4, 1985).
- 21/ Falloon, *The Tilted Playing Field*, *supra* note 1, at 35.
- 22/ See Heywood, *When Options Are Better Than Forwards*, *Euromoney* 214 (May 1984).
- 23/ See pp. 16-17, *infra*.
- 24/ See Heberton, *Why Buying Over-the-Counter is a Better Option*, *Euromoney* 85-87 (Nov. 1983).
- 25/ See O'Dea, *Fencing With The Grim Reaper*, *supra* note 19, at 11.
- 26/ See Falloon, *The Tilted Playing Field*, *supra* note 1, at 35. *Financial Times*, Feb. 14, 1984, at 12; Reier, *Wall Street Muscles in on Foreign Exchange*, *Institutional Investor* 273-74 (Jan. 1984).
- 27/ See *Financial Times*, Feb. 14, 1984, at 12; Reier, *supra* note 29, at 273-74.
- 28/ See O'Dea, *Fencing With the Grim Reaper*, *supra* note 19, at 10; *Tradeable Insurance*, *supra* note 6, at 32.
- 29/ See O'Dea, *Fencing With the Grim Reaper*, *supra* note 19, at 10.
- 30/ See O'Dea, *Competing for Currency Options*, *supra* note 20, at 39.
- 31/ BIS Study *supra* note 2, at 75-76; see O'Dea, *Fencing With the Grim Reaper*, *supra* note 19 at 10; *Redundancy of the Crystal Ball*, *The Banker* 60 (Aug. 1984).
- 32/ See *Tradeable Insurance*, *supra* note 6, at 39; Damerjian, *How to Swap Your Options*, *Euromoney* 78 (Dec. 1984).
- 33/ See O'Dea, *Fencing With the Grim Reaper*, *supra* note 19, at 10-11.
- 34/ See *Tradeable Insurance*, *supra* note 6, at 36.

35/ See Gordon *The Options, Increase For Philadelphia*, *Euromoney* 349 (Oct. 1984); *Hobson's Choice*, *The Economist* 65 (Aug. 18, 1984).

36/ BIS Study, *supra* note 2, at 77-80.

37/ *Id* at 81-82.

38/ *Id* at 82, 85-92.

39/ 7 U.S.C. § 2 (1986).

40/ 7 U.S.C. § 6c(b).

41/ 7 U.S.C. § 2.

42/ 7 U.S.C. § 2.

43/ See 17 C.F.R. § 32.11 (1986). The CFTC took its action banning most options under the express authority of Section 4c(b) of the CEA.

The CFTC amended its option ban soon after it was promulgated to allow certain existing option dealers to continue to offer options on a physical commodity. These transactions are also exempted from the option ban by Section 4c(d)(1) of the CEA.

44/ 7 U.S.C. § 6c(c).

45/ See pp. 33-37, *infra*.

46/ 7 U.S.C. § 6c(c).

47/ 7 U.S.C. § 6c(f).

48/ *CFTC v American Board of Trade, Inc.*, 473 F. Supp. 1177, 1182-83 (S.D.N.Y. 1979), *aff'd*, 803 F.2d at 1242 (2d Cir. 1986) (emphasis added).

49/ *CFTC v American Board of Trade, Inc.*, 803 F.2d at 1242.

50/ *Id* at 1249.

51/ *CFTC v American Board of Trade, Inc.*, 803 F.2d at 1249.

52/ See *CFTC v Sterling Capital Co.*, [1980-82 Transfer Binder] Comm. Fut. L. Rep. (CCH) 21,169 at 24,783-84 (N.D. Ga. 1981).

53/ *Board of Trade v. S.E.C.*, 677 F.2d 1137, 1154 (7th Cir. 1982). The Court expressly noted that it was not applying its Treasury Amendment analysis to foreign currency. *Id* at 1155 n.34.

54/ *CFTC v American Board of Trade, Inc.*, 803 F.2d at 1249.

55/ S. Rep. No. 1131, 93rd Cong., 2d Sess. 23 (1974).

56/ S. Rep. No. 1131 at 50 (emphasis added). Guidelines on internal control of the foreign exchange activities of banks subject to Federal supervision have been in effect since 1980. 45J *Fed Reg* 42,370 (1980).

57/ The CFTC has expressed its view that the Treasury Amendment was not intended to exclude from CFTC jurisdiction futures transactions involving the general public. Therefore, under this view, it is likely that option transactions, even if undertaken by banks and other regulated entities, would not be exempt from CFTC oversight. See CFTC Statutory Interpretation, 50 *Fed Reg* 42,983 (1985).

The U.S. Treasury Department has recently stated its view that, because of its interest in the government securities market, even though it may be appropriate to bring some off-exchange currency futures transactions involving the general public within CFTC jurisdiction, the plain language of the Treasury Amendment places outside the CEA's coverage all off-exchange futures transactions in the instruments listed in the Treasury Amendment. The letter did not discuss options. Letter to Chairman Susan M. Phillips from Charles O. Sethness (May 5, 1986).

58/ See *Board of Trade v SEC*, 677 F.2d at 1155 n.34.

59/ *Id* at 1143 (emphasis added).

60/ *Id* at 1143 n.12.

61/ Letter to John Wheeler, Esq., SEC, from Jean A. Webb, Secretary to the Commission, CFTC (Sept. 27, 1985) In actuality, the legislative history to the 1982 amendments sheds no light on the scope of the CFTC's jurisdiction over off-exchange foreign currency options. The Senate Report cited by the CFTC did state that:

The trading of options on foreign currencies will be regulated by both agencies; the SEC will regulate these options when they are traded on a national securities exchange, the CFTC will regulate them when they are traded other than on a national securities exchange.

S. Rep. No. 384, 97th Cong., 2d Sess. 22 (1982). However, the House Report was more ambiguous, saying only that the CFTC would "have jurisdiction to regulate the trading of options on foreign currency in the commodities markets." See H. Rep. No. 565, 97th Cong., 2d Sess. 38 (1982). And, the Senate Committee on Banking, Housing and Urban Affairs made clear that, "[n]either bill would affect any existing authority of the CFTC to regulate other options trading on foreign currency." S. Rep. No. 97-390, 97th Cong., 2d Sess. 3316 (1982) (emphasis added). There is thus no indication that the Congress intended to expand the CFTC's pre-1982 jurisdiction over foreign currency options. As a result, any option transactions that would have been outside the CFTC's jurisdictional reach prior to the 1982 Amendments (*e.g.*, because of the Treasury Amendment) would continue to be free from CFTC control thereafter.

62/ CFTC Interpretative Letter No. 84-7 (Feb. 22, 1984), reprinted in 2 Comm. Fut. L. Rep. paragraph 22,025 at 28,593 (hereinafter "Interpretative Letter No. 84-7"). In that same letter, the staff took the view that a bank could not grant a foreign currency option traded on a non-United States exchange because the bank would have no way of knowing whether the purchaser qualified under the Trade Option Exemption.

This restriction was recently eased somewhat by the CFTC. See note 68 *infra*.

63/ However, staff of the Federal Reserve Board has recently expressed its view that the Treasury Amendment exempts from CFTC regulation certain foreign currency options, including those traded in the interbank market between regulated financial entities and their "sophisticated" customers. Letter to Kenneth M. Raisler, General Counsel of the CFTC, from Michael Bradfield, General Counsel of the Board of Governors (Mar. 6, 1986).

64/ See 17 C.F.R. § 32.4. It should be noted that only the option purchaser must qualify as a commercial user. No restrictions are placed upon the identity of the option grantor, and there is therefore no assurance that the grantor is a sophisticated entity that has the financial ability to meet its contractual commitments. In this regard, the CFTC has requested comments on the desirability of imposing restrictions on option grantors. See 50 Fed. Reg. 10,786, 10,791 (1985).

65/ Interpretative Letter No. 84-7 supra note 65, at paragraph 28,595 (emphasis added).

Under this analysis, a U.S. party could not act as a grantor on a foreign exchange because it would have no basis to identify a particular purchaser as a member of the class exempted from the ban under the Trade Option Exemption.

Recently, the CFTC has expressly exempted banks subject to regulation by the U.S. or any state from these limits to a certain extent. Such a bank may grant currency options on the Montreal Exchange if it enters the transaction (1) on its own behalf for business-related purposes, (2) not as part of a scheme to offer or sell such options to third parties, and (3) without the use of public customer funds. CFTC Order, 51 Fed. Reg. 12,698 (1986).

66/ The Division of Trading and Markets noted in this regard that transactions that meet the criteria of the CFTC's "bona fide hedging" definition would constitute "non-speculative" transactions for purposes of the Trade Option Exemption. Although that definition is rather complex, it essentially provides that bona fide hedging transactions are those that "normally represent a substitute for transactions to be made ... at a later time in a physical marketing channel" and "are economically appropriate to the reduction of risks in the conduct and management of a commercial enterprise." See 17 C.F.R. § 1.3(2).

67/ See Letter of Andrea M. Corcoran, Director, CFTC Division of Trading and Markets (July 12, 1985) (unpublished).

68/ This language provides that the option bans shall not apply to "any transaction expressly permitted under rules or regulations prescribed by the [CFTC] ... in which the purchaser is a producer, pro-

cessor, commercial user of, or a merchant handling, the commodity involved in the transaction. . . " 7 U.S.C. § 6c(c).

69/ The CFTC made no reference to non-speculative activities in 1976 when it first promulgated the Trade Option Exemption, but did mention this notion when it reissued its option regulations in 1978. See 41 Fed. Reg. 51,810 (Nov. 24, 1976); 43 Fed. Reg. 54,220 (1978).

70/ See 50 Fed. Reg. *supra* note 20, at 10,790 (Mar. 18, 1985).

71/ See Pub. L. No. 97-303, 96 Stat. 1409 (1982), codified at 15 U.S.C. §§ 77(b)(1), 78c(a)(10), 80a-2(a)(36), 80b-2(a)(18), 78111(14) and 78(i)(g) (1982), and The Futures Trading Act of 1982, Pub. L. No. 97-444, 102, 96 Stat. 2296 (1983), codified at 7 U.S.C. § 6c(f) (1982), respectively.

72/ *S.E.C. v. Commodity Options International, Inc.*, 553 F.2d 628 (9th Cir. 1977) (involving "naked double options" to buy and sell commodity futures contracts); *SEC v Norton, Comm Fut L Rep* paragraph 20,204 (CCH) (N.D. Ill. 1976) ("naked" commodity options traded on a discretionary basis); *In re Traders International*, Fed. Sec. L. Rep. (CCH) 94, 529 (N.D. Nev. 1974) (London options); *Searsy v. Commercial Trading Corp., et al.*, 560 S.W.2d 637 (S. Ct. Tex. 1977) ("naked" commodity options). See also *Jenson v Continental Financial Corp.*, 404 F. Supp. 792 (D. Minn. 1975) (agreements to buy and sell silver coins and bars on margin with repurchase option at set price).

73/ 328 U.S. 293 (1946).

74/ *Id.* at 301.

75/ *SEC v. Norton*, [1976 Transfer Binder] Comm. Fut. L. Rep. (CCH) paragraph 20,204 at 21,126.

76/ *Board of Trade of City of Chicago v SEC*, 667 F.2d 1137 (7th Cir. 1982) (off-set options on GNMA pass-through certificates); *S.E.C. v. Univest, Inc.*, 410 F. Supp. 1029 (N.D. Ill. 1976) (options on silver futures contracts); *Clayton Brokerage Co of St. Louis, Inc v. Mover*, 531 S.W.2d 805 (S. Ct. Tex. 1975) (London options); *International Trading Ltd v Bell*, 556 S.W.2d 420 (S. Ct. Ark. 1977) (London options). See also *SEC v. American Commodity Exchange*, 546 F.2d 1361 (10th Cir. 1976) (investment scheme offering basically "fictitious" commodity futures options was "investment contract" within the SEC's jurisdiction because the acts occurred prior to the effective date of CEA amendment).

77/ See *Marine Bank v Weaver*, 455 U.S. 551, 559 (1982).

78/ *Glazer v National Commodity Research and Statistical Service, Inc.*, 547 F.2d 392 (7th Cir. 1977). See also *NOA v. Key Futures, Inc.*, 638 F.2d 77 (9th Cir. 1980) (agreements to deliver silver bars within 30 days of receipt of payment with outstanding buy-back option at market price were not securities, because profits depended solely upon the fluctuations of silver market); *LTV Federal Credit Union v. UMIC Government Securities Inc.*, 523 F. Supp. 819 (N.D. Tex. 1981) (standby commitment to take delivery of government securities at holder's option at set price); *Elson v. Geiger*, 506 F. Supp. 236 (E.D. Mich. 1980) (loan participation and sale-leaseback agreements).

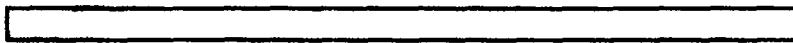
- 79/ See *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837, 858 (1975).
- 80/ Transactions lawfully performed on CFTC- or SEC-regulated exchanges are largely shielded from challenge under State law because the CEA and Securities Exchange Act have effectively preempted State law at least to the extent that it is inconsistent with the Federal regulatory scheme. See, e.g., *Paine, Webber, Jackson & Curtis Inc. v. Conaway*, 515 F. Supp. 202 (N.D. Ala. 1981) (State gambling statute prohibiting futures trading when delivery not contemplated preempted by CEA).
- 81/ N.Y. Const. Art I, § 9; *People v. Wilkerson*, 73 Misc. 2d 895, 342 N.Y.S.2d 936 (Monroe County Ct. 1973) (constitutional prohibition not self-executing).
- 82/ N.Y. Penal Law §§ 225.00-225.40 (McKinney's 1987); N.Y. Gen. Oblig. Law §§ 5-401-5-423.
- 83/ N.Y. Penal Law J225.00(2)
- 84/ *Holberg v. Westchester Racing Ass'n*, 184 Misc. 581, 53 N.Y.S.2d 490 (N.Y. App. Term. 1985).
- 85/ *Liss v. Manuel*, 58 Misc. 2d 614, 296 N.Y.S.2d 627, 629 (N.Y. County Ct. 1968).
- 86/ *Liss v. Manuel*, 296 N.Y.S.2d at 631.
- 87/ *Id.* (emphasis excluded).
- 88/ *In re Dana's Estate*, 206 Misc. 1038, 135 N.Y.S.2d 522 (Surr. N.Y. County Ct. 1954); see also *Liss v. Manuel*, 296 N.Y.S.2d at 631. Hedging activities have received extensive and approving attention by Federal courts. See, e.g., *Allenberg Cotton Co v. Pittman*, 419 U.S. 20, 27 (1974); *Board of Trade v. Christie G. & S. Co.*, 198 U.S. 236 (1905).
- 89/ 70 N.Y. 202 (1877), accord, *Story v. Salomon*, 71 N.Y. 420 (1877); *Frankfurter v. Silverman*, 208 N.Y.S. 405 (City Ct. of N.Y., Special Term 1925). Futures contracts have also received approval under similar conditions. See, e.g., *Brooks v. People's Bank*, 233 N.Y. 87, 134 N.E. 856 (1922).
- 90/ *Bigelow v. Benedict*, 70 N.Y. at 204.
- 91/ *Id.* at 206.
- 92/ *Bigelow v. Benedict*, 70 N.Y. at 206.
- 93/ *Id.* at 204-05, 207.
- 94/ *Brooks v. People's Bank*, 233 N.Y. 87, 134 N.E. 846 (1922).
- 95/ *Bigelow v. Benedict*, 70 N.Y. at 207.
- 96/ See *Liss v. Manuel*, 296 N.Y.S.2d 627.
- 97/ The CFTC has recently noted that "the current scheme of regulating options essentially reflects a Congressional and administrative response to fraud in the offer and sale of options to the public that occurred in the 1970's and currently may not fully address the needs of different classes of commercial and institutional entities." CFTC Order, 51 Fed. Reg. 12,698 (1986).
- 98/ It should be noted that antitrust considerations limit the ability of market participants to achieve these goals through self-regulation.
- 99/ "Wholesale market" in this context remains to be defined. This can be done, for example, by reference to the status and experience of the customer, the intended use of the currency which is the subject of the transaction, or the magnitude of the transaction. See Letter to Kenneth M. Raisler from Michael Bradfield 3-4 (Mar. 6, 1986).
- 100/ See, e.g., CFTC Interpretative Letter No. 86-12 (May 6, 1986), reprinted in 2 *Comm. Fut. L. Rep.* (CCH) paragraph 23,054 at 32,115.
- 101/ Letter to Susan M. Phillips, CFTC Chairman, from Charles O. Sethness, Assistant Secretary of the Treasury at 1 (May 6, 1986).

OTHER RELEVANT DOCUMENTS

LETTERS CONCERNING NETTING

FOREIGN EXCHANGE NETTING AND CLOSE-OUT AGREEMENT

**SUMMARY RESULTS OF FOREIGN EXCHANGE MARKET
TURNOVER SURVEY**



LETTERS CONCERNING NETTING

Richard S. Simmons, Esq.
Vice Chairman
Chemical Bank
277 Park Avenue
New York, NY 10172

Dear Mr. Simmons:

Peter Bartko has provided us with the latest version (February 13) of the Foreign Exchange Netting and Close-Out Agreement ("Agreement") prepared by Linklaters & Paines. You have asked how foreign exchange transactions netted under that Agreement would properly be reported in the Call Report.

I have discussed this matter with the Task Force on Reports of the Federal Financial Institutions Examinations Council. The Task Force, which includes staff members from the Board of Governors, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation, agreed that reporting the amounts outstanding (in various currencies, as of the close of business on the report date) under a new contract that has replaced the original individual foreign exchange contracts would satisfy the Call Report instructions. The Task Force noted that the Call Report instructions for Item 5 ("Commitments to purchase foreign currencies and U.S. dollar exchange") of Schedule RC-L of the Report of Condition require the reporting of "... the gross amount . . . of all commitments and contracts that are outstanding on the report date to purchase foreign currencies and U.S. dollar exchange . . ." (except those "within the consolidated bank"). The report date is normally "the last business day of the calendar quarter." Therefore, "outstanding on the report date" means outstanding on the close of business on the report date. The assumption is that, as of the close of business on the report date, a new contract has replaced the original contracts that were netted by novation (such that these original contracts no longer exist and are, therefore, not outstanding at the close of business on the report date). On this assumption, the reporting of the

amounts outstanding under the new contract (rather than amounts that would otherwise be outstanding under the original contracts) would satisfy the instructions.

Our conclusion rests, therefore, on the assumption that the novation is binding and enforceable. I believe that a bank should be prepared to demonstrate this by providing an on-site examiner with reasoned opinions of counsel that the agreement under which the contracts have been netted does what the agreement is intended to do and would be enforceable. That is, the opinions of counsel should state that the netting provisions of the agreement, at least, would be enforceable under the law governing the contract and the law governing the bankruptcy of the counterparty to its agreement. Specifically, the opinion should state that the netting provisions would be enforceable under applicable bankruptcy or insolvency law, even if the provisions closing out the agreement in the event of the bankruptcy, insolvency, or default of one party were held to be invalid.

If the enforceability of the Agreement is thus demonstrated, the obligations resulting from the netting would, in fact and law, represent the gross amount of outstanding commitments and contracts at the close of business on the report date. On the other hand, even though the Agreement provides that in the event of close-out, obligations in various currencies would be accelerated, converted to a single currency, and netted-out to a single amount, reporting the close-out amount (as opposed to the amounts outstanding in each currency) would not comply with the Call Report instructions, because the parties do not intend that the Agreement will be closed out in the normal course of events.

Yours sincerely,

Ernest T. Patrikis
Deputy General Counsel

Mr. Peter Bartko
Vice President
Chemical Bank
380 Madison Avenue
New York, NY 10017

Dear Peter:

As I am sure you now know, Ernie Patrikis has written to Dick Simmons regarding the Call Report aspects of foreign exchange contract netting. In reviewing the February 13 draft of the Foreign Exchange Netting and Close-Out Agreement, I note that the optional close-out provisions concerning cross default have been dropped. This allays significantly some safety-and-soundness concerns regarding the optional close-out provisions. However, the provision permitting optional close-out by one party if the other fails to make a payment due under the agreement within seven days after notice of nonpayment is still cause for concern on these grounds

A seven-day failure to pay, as you are aware, might not be all that unusual. It could arise from a variety of operational or other developments independent of a counterparty's financial conditions. Such a provision could provide a party in a favorable position with the opportunity to exercise the close-out option, imposing severe liquidity constraints on the counterparty and its clearing banks without good reason. We look forward to receiving the new material you offered to provide us on this issue. I would note, also, that we have addressed only netting of foreign exchange contracts, not other contracts.

As a final matter, I would urge, as Jerry Corrigan and others have in the past, that banks use this type of arrangement as an opportunity to lower their counterparty limits to take direct and proportional account of these netting arrangements. It should be understood that our examiners will review counterparty limits in the light of these netting arrangements. Some of the prudential benefits of the arrangement would be lost if it served only to facilitate increased trading.

Sincerely yours,

Margaret L. Greene
Senior Vice President

Mr. Peter Bartko
Chemical Bank House
180 Strand
London
WC2R 1ET

Dear Peter:

FX NETTING PROJECT

I am writing to you in response to your request for the Bank of England's views on this project, and on the method of reporting to the Bank to be adopted by any participants.

The Bank has now concluded that there would be no objection if any institution authorised under the Banking Act wished to participate in the scheme to net by novation its forward foreign currency transactions. The Bank will therefore accept reporting by participating institutions of their novated forward positions on the relevant returns.

The Bank will, of course, expect each participant in the scheme to have satisfied itself as to the legal validity of netting by novation in London (or elsewhere, for a UK bank, should the scheme be so extended), and in the country of origin of each of its participating counterparties. We will also expect to see a commensurate reduction in each participant's limits on such counterparties. These aspects of participation will no doubt be subjects for discussion during routine prudential interviews with each participant. We will therefore find it helpful to be informed of each institution joining this netting scheme

I should perhaps emphasize that the bank has not yet considered any possible extension of this scheme beyond the original proposition of netting forward foreign currency transactions between banks. I have already pointed out in the Steering Committee that important issues of principle and of law are raised by the suggestions, in the Business Plan, that the scheme might at some future date be extended to include the netting of deposits, the netting of traded instruments, and the participation of non-banks. The Bank will not therefore be prepared, without further careful consideration, to accept the implementation of any such extension of this scheme beyond the original proposition.

I am also writing to Alan Moore and Barry Linsley, as Co-Chairmen of the Steering Committee.

Yours sincerely

P W. Allsopp
Assistant to the Chief
of Banking Department

FOREIGN EXCHANGE NETTING AND CLOSE-OUT AGREEMENT

[An example of a foreign exchange netting agreement for intra-New York trading.

This example is for all banks except U.K. banks.]

AGREEMENT dated as of _____, 19____, between [U.S. Bank X], a _____ ("X"), and [U.S. Bank Y], a _____ ("Y").

A. The parties are engaged in the business of buying and selling foreign currencies and from time to time in the ordinary course of business enter into contracts with one another for the purchase and sale of such currencies.

B. The parties conclude a number of such contracts in the same currencies which are to be settled on the same dates, and each party desires to limit its obligations and exposure to the other party by terminating the parties' obligations arising out of such individual transactions and creating, by novation, new obligations in respect thereof. The parties additionally desire to provide for the close-out and payment of their obligations in respect of foreign exchange transactions under the circumstances and subject to the conditions hereinafter set forth.

C. The parties have agreed that foreign exchange transactions entered into between their Designated Offices (as defined below) should be governed by, and subject to, the terms and conditions set out in this Agreement.

D. Each party will, in determining whether to enter into any particular foreign exchange transaction with the other party subject to this Agreement, be relying on this Agreement and the other party's obligations hereunder.

Accordingly, the parties hereby agree as follows:

Section 1. Definitions

For all purposes of this Agreement:

"Automatic Close-Out Event" shall mean any event specified in Section 3(a)(y).

"Bankruptcy Event" shall mean (i) a Triggering Party's filing, or consent by answer or otherwise to the filing against it of, any petition or case seeking relief under any Bankruptcy Law, or (ii) the entry or issuance of an order or decree with respect to a Triggering Party, or the taking of similar action with respect to a Triggering Party, by a court or a governmental authority, agency, instrumentality or official of competent jurisdiction, (x) appointing a custodian, receiver, trustee, conservator, liquidator or other officer with similar power for such Triggering party or any substantial part of its assets or properties, (y) constituting an order for relief under, or approving a petition or case for relief or reorganization under, or any other petition or case to take advantage of, any Bankruptcy Law or (z)

ordering the dissolution, winding-up or liquidation of such Triggering Party.

"Bankruptcy Law" shall mean Title 11 of the United States Code or any other Federal, state or foreign bankruptcy, receivership, insolvency, administration, winding-up, liquidation, dissolution or similar law.

"Business Day" shall mean any day other than a Saturday or Sunday on which commercial banks in New York City are neither authorized nor required by law to close.

"Close-Out Date" shall mean the day in which the Close-Out Time falls.

"Close-Out Event" shall have the meaning given such term in Section 3.

"Close-Out Notice" shall have the meaning given such term in Section 3.

"Closing-Out Party" shall have the meaning given such term in Section 3.

"Close-Out Time" shall mean, in respect of any Close-Out Event or calculation with respect thereto, (i) in the case of any Close-Out Event as to which no Close-Out Notice is required to be given by a Closing-Out Party under Section 3(b), the time such Close-Out Event occurs and (ii) in the case of any Close-Out Event as to which a Close-Out Notice is required under Section 3(b), the time such Close-Out Notice is sent by a Closing-Out Party.

"currency" shall mean the lawful currency of any country or any "composite currency" such as the European Currency Unit.

"Designated Office" shall mean, as to either party, the office in the United States which such party shall from time to time designate by notice given to the other party as provided in this Agreement. The initial Designated Offices of the parties are as follows:

Any change in a party's Designated Office shall take effect on the date specified in the applicable notice given by such party, which date shall be not fewer than 10 days after the receipt of such notice by the other party. No change in a party's Designated Office shall affect either party's rights or obligations in respect of Foreign Exchange Transactions entered into prior to the effective date of such change.

"Foreign Exchange Transaction" shall mean a contract between the parties made through their Designated Of-

ofices under which one party agrees to buy from or sell to the other an agreed amount of one currency at an agreed rate of exchange for delivery on an agreed Value Date in exchange for an agreed amount of another currency also to be delivered on the same Value Date. This Agreement shall apply to each Foreign Exchange Transaction entered into on or after the date of this Agreement and to all outstanding Foreign Exchange Transactions.

"Matched" shall mean, when applied to any Foreign Exchange Transaction, that all steps necessary in accordance with Section 2(b) to confirm that Foreign Exchange Transaction have been completed (whether before or after the Netting Cut-off Time for both currencies involved in that Foreign Exchange Transaction).

"Netting Cut-off Time" shall mean, in relation to a particular currency and a particular Value Date, the time and date (being either the Value Date or, as the case may be, the number of Business Days preceding the Value Date) specified in the attached Schedule opposite that currency or such other time and/or date as may from time to time be agreed between the parties in writing for the purpose of this Agreement.

"Optional Close-Out Event" shall mean any event specified in Section 3(a)(x).

"Triggering Party" shall have the meaning given such term in Section 3.

"Value Date" shall mean, with respect to any Foreign Exchange Transaction and the replacement obligations, if any, under Section 2(d), the date agreed when that Foreign Exchange Transaction is entered into as the date for delivery of the currencies bought and sold under that Foreign Exchange Transaction.

Section 2. Netting and Novation

(a) *Records.* In relation to each Value Date, each party shall maintain in its records (in addition to any other records it may have regarding Foreign Exchange Transactions) a running account in the name of the other party in each currency bought or sold under a Foreign Exchange Transaction with that Value Date. As and when required by clause (c)(ii) of this Section 2, each party shall:

- (i) credit to the account maintained by it in the relevant currency an amount equal to the amount of that currency sold by it under that Foreign Exchange Transaction; and
- (ii) debit to the account maintained by it in the other relevant currency an amount equal to the amount of that currency purchased by it under that Foreign Exchange Transaction.

(b) *Confirmation of Transactions.* Following entry into a Foreign Exchange Transaction, each party shall confirm detailed thereof to the other in such manner as shall from time to time be agreed between them in writing for the purpose of this Agreement. Unless and until otherwise so agreed, the manner of confirmation shall be as follows:

- (i) as soon as reasonably practicable after that Foreign Exchange Transaction has been entered into, each party shall (either in addition to or instead of paper confirmations) transmit details of that Foreign Exchange Transaction to the other party's computer;
- (ii) if the details of a Foreign exchange Transaction so received from the other party match the details of that Foreign Exchange Transaction so transmitted by the recipient to the other party, the recipient shall as soon as reasonably practicable confirm that fact to the other party by message from the recipient's computer to the other party's computer; and
- (iii) when one party's computer has received the message referred to in (ii) above from the other party's computer, that Foreign Exchange Transaction shall be regarded as a Matched Foreign Exchange Transaction.

The details to be transmitted under (i) above are the respective names and Designated Offices of the parties, the respective amounts and currencies bought and sold, the rate of exchange and the Value Date. As soon as reasonably practicable after the execution of this Agreement, each party shall confirm to the other details of all outstanding Foreign Exchange Transactions in the manner described in this clause (b).

(c) *Netting by Novation.* If a Foreign Exchange Transaction is Matched before the Netting Cut-off Time for both currencies involved in that Foreign Exchange Transaction then, immediately upon that Foreign Exchange Transaction being Matched:

- (i) that Foreign Exchange Transaction shall be regarded as netted for the purpose of this Agreement;
- (ii) in accordance with clause (a) of this Section 2, details of that Foreign Exchange Transaction shall be entered by both parties in the accounts maintained in accordance with such clause (a) in the currencies in question; and
- (iii) each party's obligations in respect of that Foreign Exchange Transaction shall be automatically satisfied and discharged and replaced by an obligation to make on the relevant Value Date the payments (if any) to be made by it in accordance with clause (d) of this Section 2.

(d) *Payments.* On each Value Date:

- (i) the balance of a currency standing to the credit of a party in the accounts maintained by the other party in respect of that Value Date in accordance with clauses (a) and (c) of this Section 2 at the Netting Cut-off Time for that currency shall be paid in that currency to that party by the other party, and
- (ii) in relation to each Foreign Exchange Transaction with that Value Date which has not been Matched before the Netting Cut-off time for both currencies involved in that Foreign Exchange Transaction, each party shall pay to the other the amount sold by it under that Foreign Exchange Transaction in the currency so sold.

Section 3. Close-Out

(a) *Close-Out Events.* Each of the following events shall constitute a "Close-Out Event" hereunder (the party to this Agreement in respect of which such an event shall occur, as indicated below, being referred to as the "Triggering Party"):

(x) *Optional Close-Out Events:*

- (i) the Triggering Party fails to make a payment due from it under this Agreement when and as due and such failure continues until midnight, New York City time, of the seventh day following the date on which the other party (the "Closing-Out Party") has delivered a notice in accordance with Section 6(a) demanding payment, provided, however, that if the sole reason for not making the relevant payment before the end of such seventh day is that the making of such payment is prohibited by any applicable law or regulation having the force of law (other than any Bankruptcy Law or any regulation thereunder) in effect at the end of such seventh day and/or that it was impossible to make that payment before the end of such seventh day, such failure to pay shall not constitute a Close-Out Event under this clause (i) unless the Triggering Party fails to make such payment prior to midnight, New York City time, of the seventh day after the date, if any, on which the making of such payment ceases to be so prohibited and/or impossible;
- (ii) any event, circumstance or condition occurs or exists which, under any other agreement with the Triggering Party which provides for the netting of foreign exchange transactions conducted through any specified offices of the parties hereto (which may include one of the Designated Offices), and which provides for the close-out of obligations only upon the happening of events substantially similar to Close-Out Events hereunder, either (x) permits the Closing-Out Party to give notice exercising an option to close-out the parties' obligations under such other agreement or (y) automatically results in a close-out of the parties' obligations under such other agreement;
- (iii) at a time when no Bankruptcy Events has occurred in respect of the Triggering Party, the Triggering Party becomes insolvent, is unable to pay its debts as they fall due, or enters into a general assignment or arrangement or a composition with or for the benefit of its creditors;
- (iv) any step other than a Bankruptcy Event (including the convening of a meeting) is taken in any jurisdiction for or with a view to the appointment of an administrator, liquidator, receiver, trustee, custodian or similar official for the Triggering Party or the whole or any part of the business, undertaking, property, assets, revenues, or uncalled capital of the Triggering Party;
- (v) any event (other than a Bankruptcy Event) occurs which, under the laws of any relevant jurisdiction, can reasonably be considered as having an analogous or equivalent effect to any of the events specified in (iii) or (iv).
- (y) *Automatic Close-Out Event:*
- (vi) a Bankruptcy Event occurs in respect of the Triggering Party.

The fact that a payment otherwise required to be made hereunder is at any time prohibited by law or regulations or is impossible to make as contemplated by (i) above shall not preclude the occurrence at such time of a Close-Out Event under any other clause of this Section 3(a).

(b) *Close-Out of Obligations.* In the event that a Close-Out Event occurs, then (A) in the case of an Optional Close-Out Event, at the time the Closing-Out Party sends a notice (a "Close-Out Notice") to the Triggering Party to the effect that the Closing-Out Party is exercising its close-out option hereunder and (B) in the case of an Automatic Close-Out Event, immediately prior to the time of its occurrence, all obligations of both parties then outstanding

under Section 2(d) shall (regardless of whether the Netting Cut-off Time referred to therein has occurred) become automatically due and payable, and such obligations shall be closed out in the manner set forth in paragraph (c) below. The sending of a Close-Out Notice and the occurrence of an Automatic Close-Out Event shall have the effect specified above regardless of when or whether the Close-Out Notice is received or whether either party is aware of the occurrence of such Automatic Close-Out Event, as the case may be. Upon the closing out of the parties' obligations pursuant to this Section, the Triggering Party or the Closing-Out Party, as the case may be, shall be obligated to pay to the other party with respect to such closed-out obligations an amount determined in accordance with paragraph (c) below. The amount so determined shall, in the event a Close-Out Notice is sent, be due on demand and payable in full in U.S. Dollars on the Business Day next following the date of a demand for payment, and in the case of a close-out in connection with the happening of an Automatic Close-Out Event, the amount so determined shall be due and payable in full in U.S. Dollars on the date of occurrence of the Automatic Close-Out Event.

(c) *Determination of Close-Out Obligation.* The obligation referred to in paragraph (b) above shall be determined by the Closing-Out Party as set forth below, and such determination shall be conclusive absent manifest error:

- (i) with respect to each Foreign Exchange Transaction with a Value Date after the Close-Out Date which has been Matched but not netted before the Close-Out time and in respect of which either party has an obligation which is outstanding at that Close-Out Time, there shall be calculated the difference between:
 - (x) the amount of the currency which the Closing-Out Party originally contracted to sell under such Foreign Exchange Transaction (the "Sold Currency"); and
 - (y) the amount of the Sold Currency which is required to purchase the amount of the currency which the Closing-Out Party originally contracted to buy under such Foreign Exchange Transaction (the "Bought Currency") at the rate of exchange (determined in good faith by the Closing-Out Party) at which, at or about _____ New York City time on the Close-Out Date, the Designated Office of the Closing-Out Party could enter into a contract in the foreign exchange market to buy that amount of the Bought Currency in exchange for the Sold Currency for delivery on the relevant Value Date or the second Business Day after the Close-Out Date, whichever is later.
- If the amount referred to in (x) is less than the amount referred to in (y), the difference shall be treated as an amount arising in favor of the Closing-Out Party, and if such amount is greater than the amount referred to in (y), the difference shall be treated as an amount arising in favor of the Triggering Party;
- (ii) each difference calculated in accordance with clause (i) above in a currency other than U.S. Dollars and each balance of a currency other than U.S. Dollars owed at the Close-Out Time by either party to the other under Section 2(d)(i) with respect to a Value Date after the Close-Out Date shall be notionally

converted into U.S. Dollars at the rate of exchange (determined in good faith by the Closing-Out Party) at which, at or about _____ New York City time on the Close-Out Date, the Designated Office of the Closing-Out Party could enter into a contract in the foreign exchange market to buy such other currency in exchange for U.S. Dollars for delivery on such Value Date or the second Business Day after the Close-Out Date, whichever is later;

- (iii) with respect to each Value Date after the Close-Out Date, the balance of the U.S. Dollar account maintained in the records of the Closing-Out Party in respect of obligations of the parties under Section 2(d)(i) at the Close-Out Time and the U.S. Dollar amounts, determined pursuant to (i) and (ii) above, of the respective balances of the other accounts maintained in such records shall be consolidated to determine the net U.S. Dollar amount, if any, to the credit or debit of each party in respect of such Value Date;
- (iv) each net U.S. Dollar amount determined pursuant to (iii) above shall be notionally discounted so as to arrive at the amount which, when aggregated with the amount of income which could be earned on such sum if it were placed on deposit from the period from the Close-Out Date to the relevant Value Date at the interest rate specified in the next following sentence, would equal such net U.S. Dollar amount. The interest rate to be utilized for purposes of the foregoing shall be the rate per annum (on the basis of the actual number of days in question and a year of 360 days), determined as of approximately 11:00 a.m., London time, on the day two Business Days prior to the Close-Out Date, at which, in the good faith judgment of the Closing-Out Party, U.S. \$[1,000,000] could be placed on deposit in the London Interbank Market for the period from the Close-Out Date to the applicable Value Date and computations shall be based on the assumption that interest is compounded semi-annually;
- (v) each balance of a currency other than U.S. Dollars which shall have become due from either party to the other under Section 2(d)(ii) on or prior to the Close-Out Date but which shall not have been paid at the Close-Out Time, shall be notionally converted into U.S. Dollars at the rate of exchange (determined in good faith by the Closing-Out Party) at which, at or about _____ New York City time on the Close-Out Date, the Designated Office of the Closing-Out Party could enter into a contract in the foreign exchange market to buy such other currency in exchange for U.S. Dollars for delivery on the second Business Day after the Close-Out Date; and
- (vi) the amounts computed pursuant to (iv) and (v) above, and all U.S. Dollar balances which shall have become due from either party to the other under Section 2(d) prior to the Close-Out Time but which shall not have been paid, shall be consolidated, and the net amount owed by the Triggering Party to the Closing-Out Party, or by the Closing-Out Party to the Triggering Party, determined.

(d) *Amount of Close-Out Obligation.* The parties agree that the amounts payable pursuant to this Section with respect to the close-out of their obligations hereunder are a reasonable pre-estimate of loss and are not a penalty. Such amounts are payable as liquidated damages for the loss of a bargain and the loss of protection against future risks with respect to the forward payment obligations created hereunder, and the party receiving such amounts will not be entitled to recover additional damages as a consequence of such losses from the party obligated to pay such amounts.

Section 4. Representations and Warranties

Each party, as an inducement to the other party to enter into this Agreement and any Foreign Exchange Transaction, represents and warrants to the other party that: (a) it has the corporate power to execute, deliver and perform this Agreement; (b) this agreement has been duly authorized, executed and delivered by it, does not contravene any contractual restriction binding on it and constitutes its valid and binding obligation; and (c) all authorizations of, exemptions by and filings with any governmental or other authority that are required to be obtained or made by it in connection with this Agreement have been obtained or made and are valid and subsisting.

Section 5. Dollar Obligations

The receipt or recovery by either party of any amount in respect of an obligation of the other under Section 3 in a currency other than U.S. Dollars, whether upon the winding up or liquidation of such other party, pursuant to a judgment of any court or otherwise, shall discharge such obligation only to the extent that on the Business Day immediately following receipt of such amount the recipient shall be able, in accordance with normal banking procedures, to purchase U.S. Dollars with the currency received; if the amount of U.S. Dollars so purchasable shall be less than the original U.S. Dollar amount of such obligation, the obligor shall, as a separate obligation and notwithstanding any judgment of any court, indemnify the recipient against any loss sustained by it. The obligor shall in any event indemnify the recipient against any costs incurred by it in making any such purchase of U.S. Dollars.

Section 6. Miscellaneous

(a) *Notices.* Except as specified in Section 2(b) with respect to computer-transmitted messages, notices and other communications provided for herein shall be in writing and shall be delivered or sent by telex to the applicable address or telex number set forth below:

| | |
|--------------------|--------------------|
| _____ | _____ |
| [Name and address] | [Name and address] |
| _____ | _____ |
| Attention: | Attention: |
| _____ | _____ |
| Telex No.: | Telex No. |

or to such other address or telex number as may be designated by either party in a notice delivered to the other as provided in this paragraph (a). All notices and other communications shall be effective upon delivery, except for Close-Out Notices, which shall be effective when sent.

(b) *Payments; Interest on Overdue Close-Out Amounts.* All payments due under this Agreement shall be made in such manner as is agreed by the parties from time to time. Any amount payable under Section 3 which is not paid when due shall bear interest (computed on the basis of the actual number of days elapsed in a year of 360 days) for each day from the due date thereof through the date on which paid at a rate per annum equal to the rate, determined in good faith by the party to which such amount is owed, at which overnight deposits in dollars approximately equal to the amount owed are offered on such day to the London offices of such party by leading banks in the London Interbank Market.

(c) *Foreign Exchange Transactions.* Neither party shall have any obligation under this agreement to enter into any Foreign Exchange Transaction with the other. In the event of any inconsistency between this Agreement and the provisions of any foreign Exchange Transaction or either party's accounting or other records, this Agreement shall prevail to the extent of such inconsistency.

(d) *Successors and Assigns.* Whenever in this Agreement either of the parties hereto is referred to, such reference shall be deemed to include the successors and permitted assigns of such party, and all agreements by or on behalf of the parties shall bind and inure to the benefit of their respective successors and permitted assigns. Neither party may assign all or any part of its rights or obligations under this Agreement or any Foreign Exchange Transaction, or create or grant any security interest with respect hereto or thereto.

(e) *Applicable Law.* This Agreement shall be construed in accordance with and governed by the laws of the State of New York.

(f) *Waivers; Amendments.* Neither this Agreement nor any provision hereof may be waived, amended or

modified except by an agreement in writing executed by each of the parties.

(g) *Termination.* Either party may terminate this Agreement upon not less than 30 days' written notice to the other of the date on which such termination is to take effect. All rights and obligations in respect of Foreign Exchange Transactions entered into before the date shall be unaffected by such termination and shall continue to be governed by this Agreement.

(h) *Severability.* In the event any one or more of the provisions contained in this Agreement should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. The parties shall endeavor in good faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

(i) *Counterparts.* This Agreement may be executed in two counterparts, each of which shall constitute an original but both of which when taken together shall constitute but one contract.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed by their respective authorized offices as of the day and year first above written.

[X]
by _____
Title:

[Y]
by _____
Title:

SUMMARY OF RESULTS OF U.S. FOREIGN EXCHANGE MARKET TURNOVER SURVEY CONDUCTED IN MARCH 1986 BY THE FEDERAL RESERVE BANK OF NEW YORK

Gross foreign currency transactions reported by 123 banking institutions located in the United States averaged \$63.1 billion per day in March, according to a survey by the Federal Reserve Bank of New York. After adjusting to eliminate double counting of the same transactions reported by two banks, average daily volume was an estimated \$50 billion. This total represents an increase of over 92 percent from the April 1983 adjusted figure of \$26 billion.

Transactions arranged by nine foreign exchange brokers located in the United States averaged \$25.9 billion per day, an increase of 84 percent over the April 1983 daily brokered amount of \$14.1 billion.

Gross foreign currency transactions by 13 nonbank financial institutions in the United States averaged \$13.9 billion per day. After adjusting to eliminate double counting of the same transactions reported by a surveyed bank and a surveyed nonbank financial institution, average daily volume was estimated at \$8.5 billion. Nonbank financial institutions were surveyed for the first time in March 1986.

Calculation of average daily turnover for both the current and the previous surveys may have been affected by Easter holidays. While in the United States March 1986 and April 1983 each had 21 business days, most large financial centers abroad were closed for Good Friday and Easter Monday. As a result, overseas trading opportunities for U.S. institutions were limited on these days. In addition, a majority of U.S. banks operated with minimal staffs on Friday and most nonbank financial institutions were closed that day. Fragmentary data suggest that the volume of turnover in the U.S. market on Good Friday was less than ten percent of normal and on Easter Monday it was only about half of normal.

Any comparison between the results of the two most recent surveys also should take account of the possibility that turnover in April 1983 may have been temporarily reduced by the European shift to daylight savings time in late March, about one month ahead of the United States. This shift decreased by one hour each business day the length of time when both the U.S. and European foreign exchange markets were open simultaneously.

Surveyed Institutions

The 1986 survey included 123 *banking institutions* re-

porting gross turnover of \$1,325.3 billion, or \$63.1 billion per day. These transaction figures were 89 percent higher than the \$702.5 billion, or \$33.5 billion a day, reported by 119 banks in 1983.

A total of 106 banking institutions participated in both the 1983 and 1986 surveys. These institutions reported turnover of \$1,218 billion in 1986, an increase of 82 percent from the \$668 billion they reported in 1983.

The average size of all foreign currency transactions reported by banks was \$3.4 million.

The banking institutions surveyed in 1986 and 1983 included large money center and regional domestic commercial banks, Edge corporations and U.S. branches and agencies of foreign banks. While not all of the banks that deal in foreign exchange were included in the survey, the surveyed banking institutions are believed to account for the bulk of foreign exchange transactions in the United States by commercial banks.

Foreign exchange brokers were surveyed separately. Unlike banks, brokers do not trade currencies for their own accounts but instead act as intermediaries between market participants wanting to buy or sell currencies. Because brokers do not deal with each other there was no double counting within the survey of brokers.

The 9 foreign exchange brokers surveyed had turnover of \$543.6 billion in March, up 84 percent from the \$295.9 billion reported by 10 brokers in April 1983. Brokers reported a slightly larger average size of transaction, \$3.6 million, than did banks. The difference in size was almost entirely explained by a large average size in brokering Canadian dollars.

Nearly all brokers in the United States operating in the foreign exchange market were included in the two surveys. Because the brokers act on behalf of their counterparties, a large part of the turnover reported by brokers was also reported in the survey of banking institutions noted above and in the survey of nonbank financial institutions described below.

For the first time in 1986, the New York Fed survey included foreign currency transactions of *nonbank financial*

institutions. Nonbanks were included in the survey because of their growing role as participants in the foreign exchange markets. A total of 13 nonbank financial institutions were surveyed, reporting gross turnover of \$291.5 billion, or \$13.9 billion per day. The surveyed institutions include some of the largest nonbank financial institutions in the United States. However, the New York Fed's ability to select nonbanks may not be as good as selecting banks. As a result, some nonbanks that trade actively foreign currencies may have been excluded from the survey. Nonbank financial institutions reported the largest average size of transactions — \$4.6 million.

Currency Composition

The latest survey showed the ranking of foreign currencies by transaction volume at banking institutions was unchanged from 1983. However, trading became more concentrated, with the market share of each of the three major currencies — German marks, Japanese yen and British pounds — growing between 1983 and 1986, while the market share of the four other currencies surveyed declined. The broker survey showed a similar trend between the two surveys, except for a slight decline in the market share of British pounds.

Trading in German marks continued to be the most active. It accounted for 34.2 percent of transactions by banking institutions, up from 32.5 percent in 1983, as well as 37.7 percent of transactions for brokers, up sharply from 30.9 percent in 1983. The mark was also the most actively traded currency by nonbank financial firms, accounting for 31.5 percent of total volume in the latest survey.

Trading in Japanese yen was the second most active currency, accounting for 23.0 percent of transactions by banks and 22.0 percent of transactions by brokers, up about one percentage point from 1983 in the case of both types of participants. Trading in Japanese yen by nonbank financial institutions came to 26.8 percent of total volume.

Trading in British pounds, the third most active currency, rose from 16.6 percent of transactions by banks in 1983 to 18.6 percent in the latest survey. Brokers reported that trading in sterling declined from 17.0 percent of total volume to 16.3 percent during the two survey dates. With a market share of 20.6 percent, the British pound also was the third most actively traded currency by nonbank financial institutions surveyed in 1986.

The Swiss franc had a decline in percentage share, falling

from 12.2 percent in 1983 to 9.7 percent of transactions reported by banks in 1986, and from 9.6 percent to 7.1 percent of the brokered market. Despite this decline in market share, it maintained its rank as the fourth most actively traded currency by banks and the fifth most actively traded of the brokered market. Swiss francs accounted for 12.3 percent of foreign exchange turnover by nonbank financial firms and ranked as their fourth most actively traded currency.

The Canadian dollar — the fourth most active currency in the broker market and the fifth most actively traded by bank and nonbank financial institutions — saw its share decline from 11.8 percent to 8.0 percent in the broker market and from 7.5 percent to 5.2 percent in the interbank market. Similarly, the market shares of the French franc and the Dutch guilder fell from 4.4 percent to 3.6 percent and from 1.6 percent to 1.4 percent, respectively, of bank reported transactions. They declined from 5.7 percent to 4.1 percent and from 1.5 percent to 1.3 percent, respectively, of broker reported activity. The French franc and Dutch guilder shares amounted to 1.4 percent and 0.5 percent, respectively, of the activity of nonbank financial institutions.

For the first time, the 1986 survey respondents were asked to indicate the transaction volume in currencies other than the seven requested on the survey form. Specifically, the respondent was asked to specify each currency and to report transaction volume for each currency for which the respondent had a volume exceeding \$50 million. About 73 percent of the turnover reported in the "other" currency column was identified by the surveyed banks. Nonbanks identified 82 percent of the "other" currencies, while brokers identified 57 percent.

The Australian dollar, the Italian lira, and the ECU were specified as being the most actively traded currencies among the "other" currencies. The Australian dollar accounted for 41 percent of turnover in the "other" currency column reported by nonbank financial institutions, 20 percent reported by brokers, and 19 percent by banks. The Italian lira accounted for 27 percent of "other" currencies reported by brokers, 19 percent by banks, and 8 percent by nonbank financial firms. ECU's accounted for 24 percent of "other" currency transactions reported by nonbanks, 10 percent by banks, and 4 percent by brokers.

Additional currencies that were specified by banks included Spanish pesetas, Belgian francs and Swedish kroner, each of which represented 4 percent of "other" currency turnover.

Types of Transactions

In 1986, 63.2 percent of all foreign exchange trading reported by banks was in spot contracts, generally for delivery in two business days. That percentage share was little changed from the 62.9 percent spot trading in 1983. Another 29.8 percent of 1986 turnover was in swap contracts, in which an institution buys (or sells) a currency for one maturity and sells (or buys) the equivalent amount for a later date. That was down 3.2 percentage points from swap activity in 1983. Trading in outright forward contracts by banks, in which currencies are purchased or sold for future delivery, rose from 3.9 percent of total volume in 1983 to 4.7 percent in the latest survey. Trading in foreign currency futures and in foreign currency options, both exchange traded and over the counter, rose from 0.3 percent in 1983 to 2.3 percent in 1986. In a futures contract a bank buys or sells a standardized amount of foreign currency on an organized futures exchange for delivery on one of several standardized future dates. In a foreign exchange options contract a bank buys or sells the right — but not the obligation — to receive or deliver a specified amount of foreign currency at a specified price on or before a specified future date. Banks trade standardized foreign currency options on organized exchanges and also write and trade custom-tailored options outside organized exchanges.

Brokers reported that their brokering of spot contracts rose from 51.4 percent of their turnover in 1983 to 59.4 percent in the latest survey. Their swap activity fell from 48.2 percent to 39.8 percent between the two surveys.

For nonbank financial firms, trading in spot, swap and forward contracts represented 49.7 percent, 25.1 percent and 6.1 percent, respectively, of their total volume. Foreign currency options and futures accounted for 6.5 percent and

12.6 percent, respectively, of total turnover — considerably more than for the commercial banks.

Counterparties

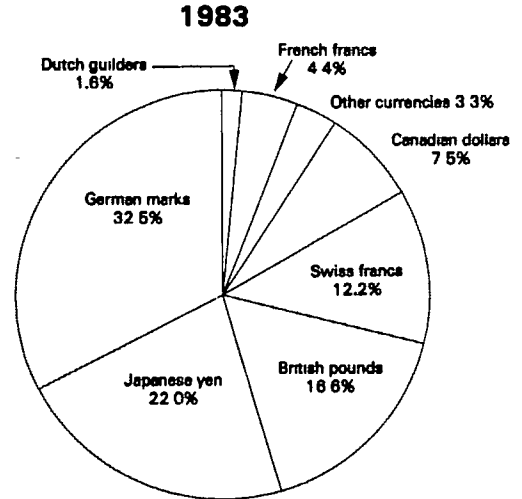
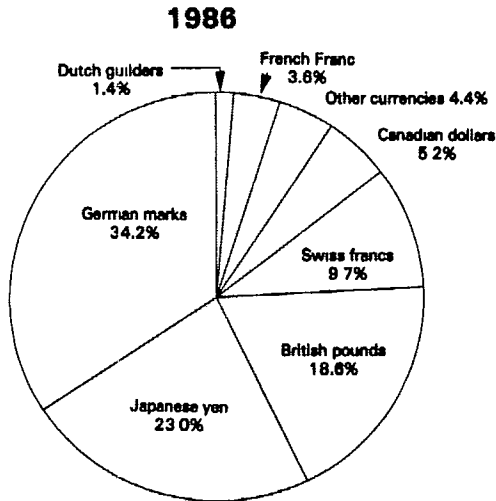
Bank reported trading with nonbank customers declined from 11.9 percent of total volume in 1983 to 11.5 percent in the latest survey. Similarly, trading between two banks fell slightly, from 87.4 percent to 86.6 percent between the two surveys. Trading on organized options and futures exchanges, by contrast, expanded from 0.7 percent of total bank reported volume in 1983 to 1.9 percent in 1986. The use of brokers by banks declined as the brokers' share of interbank turnover fell from 58 percent in 1983 to 51 percent in 1986. Trading with banking institutions abroad rose from 22 percent to 26 percent of interbank turnover between 1983 and 1986.

The brokers' survey shows that brokering between two U.S. banks declined slightly, from 53.7 percent of brokers' total turnover in 1983 to 52.1 percent in 1986. Brokering between a U.S. bank and a bank abroad declined from 41.5 percent of total volume in 1983 to 30.0 percent in 1986. The share of brokering between two banks abroad was little changed between the two surveys. The share of brokering that involved a nonbank party jumped from 1.6 percent in 1983 to 14.3 percent in 1986. This sharp rise points to the growing role of nonbank financial institutions in the foreign exchange market.

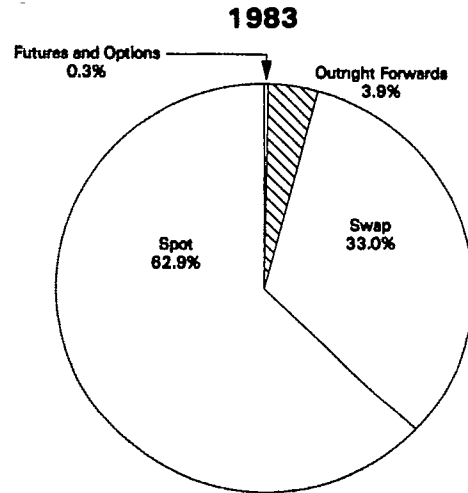
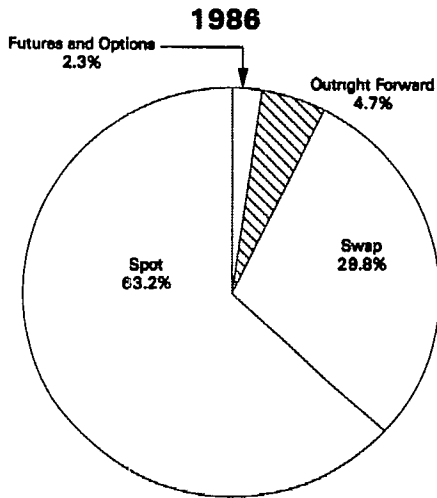
For the surveyed nonbank financial institutions nearly 63 percent of their 1986 total volume was with banks. Another 19 percent was with nonbank institutions, of which 7.7 percent was with nonfinancial institutions. Trading on organized futures and options exchanges was 18 percent of the total volume reported by the nonbank financial firms.

DISTRIBUTION OF FOREIGN EXCHANGE TURNOVER REPORTED BY BANKS

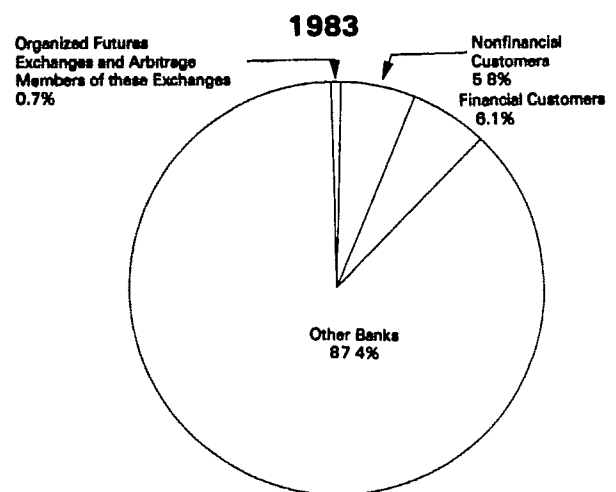
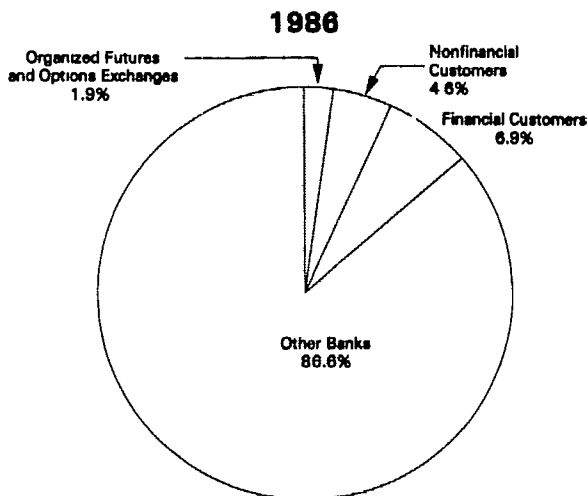
BY CURRENCY



BY TRANSACTION TYPE

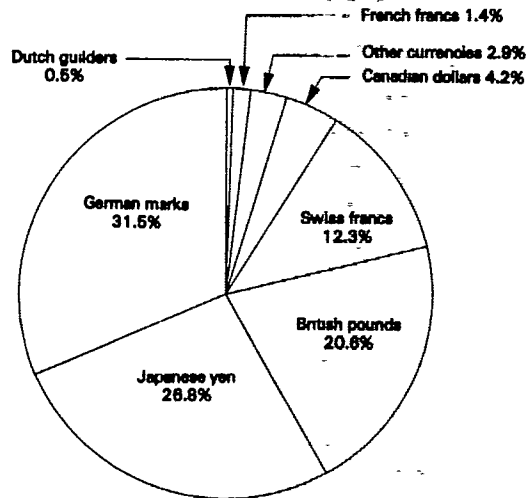


BY COUNTERPARTY

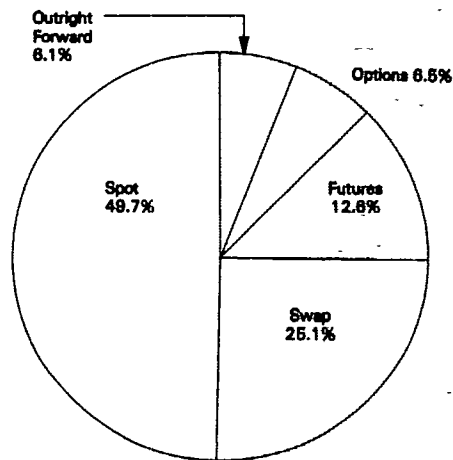


DISTRIBUTION OF FOREIGN EXCHANGE TURNOVER REPORTED BY NONBANK FINANCIAL FIRMS 1986

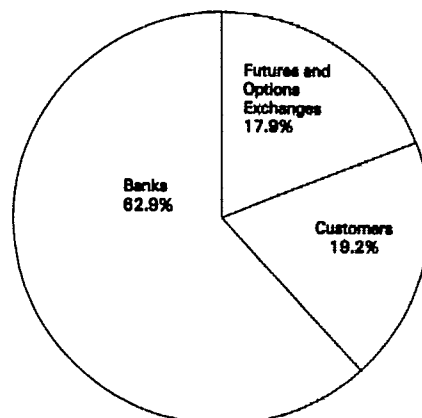
BY CURRENCY



BY TRANSACTION TYPE



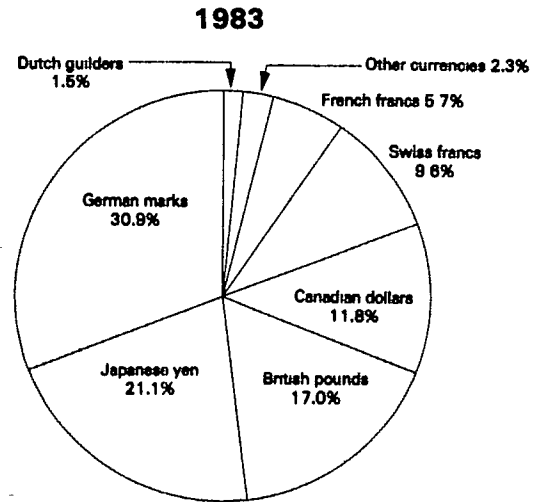
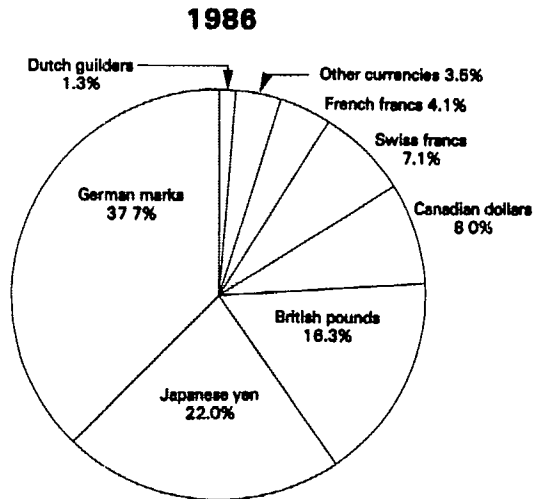
BY COUNTERPARTY



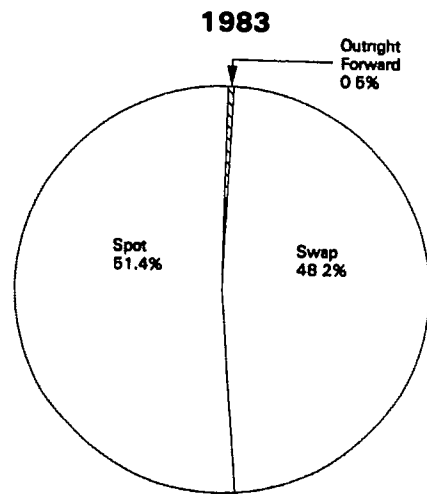
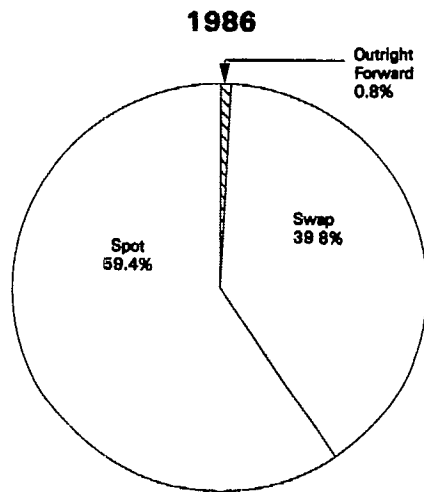
Note: Due to rounding some totals may not add to 100 percent

DISTRIBUTION OF FOREIGN EXCHANGE TURNOVER REPORTED BY BROKERS

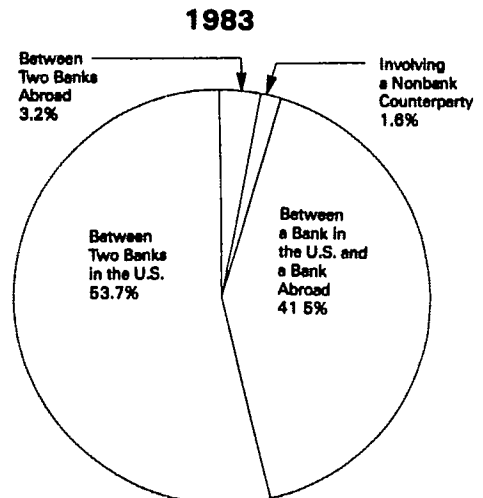
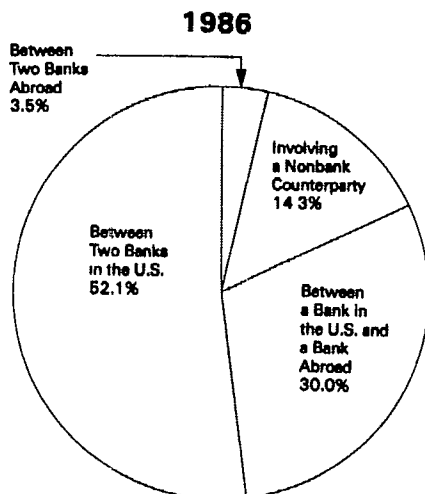
BY CURRENCY



BY TRANSACTION TYPE



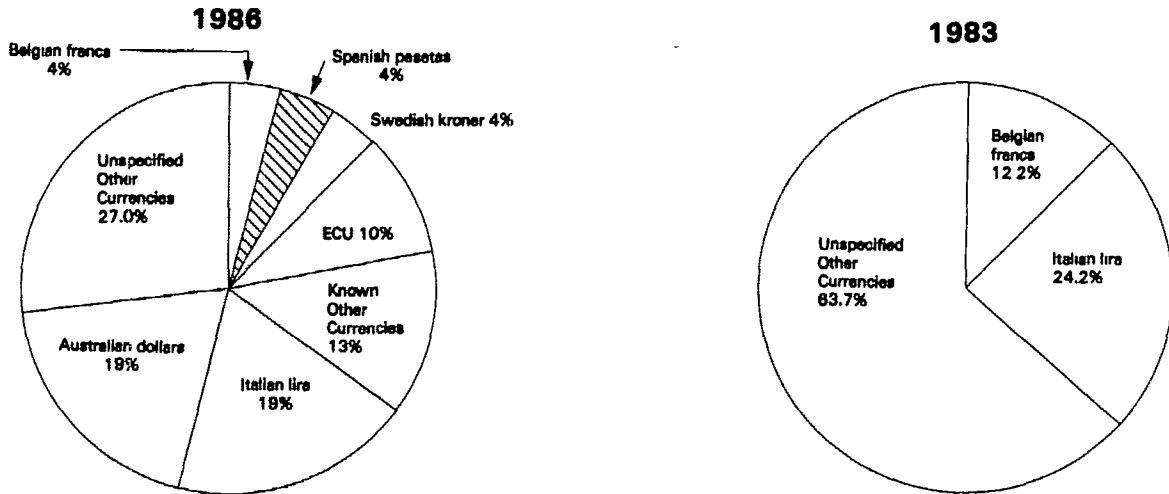
BY COUNTERPARTY



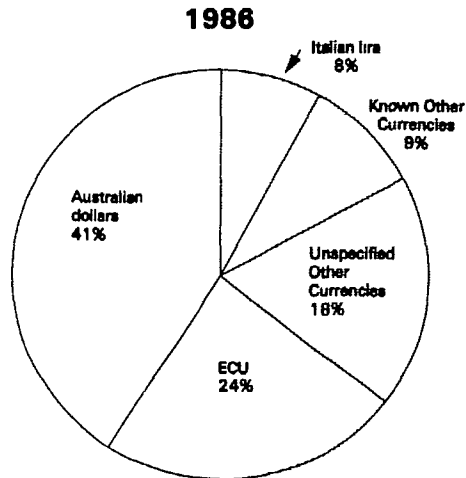
Note: Due to rounding some totals may not add to 100 percent

CURRENCIES IN THE OTHER CURRENCY COLUMN

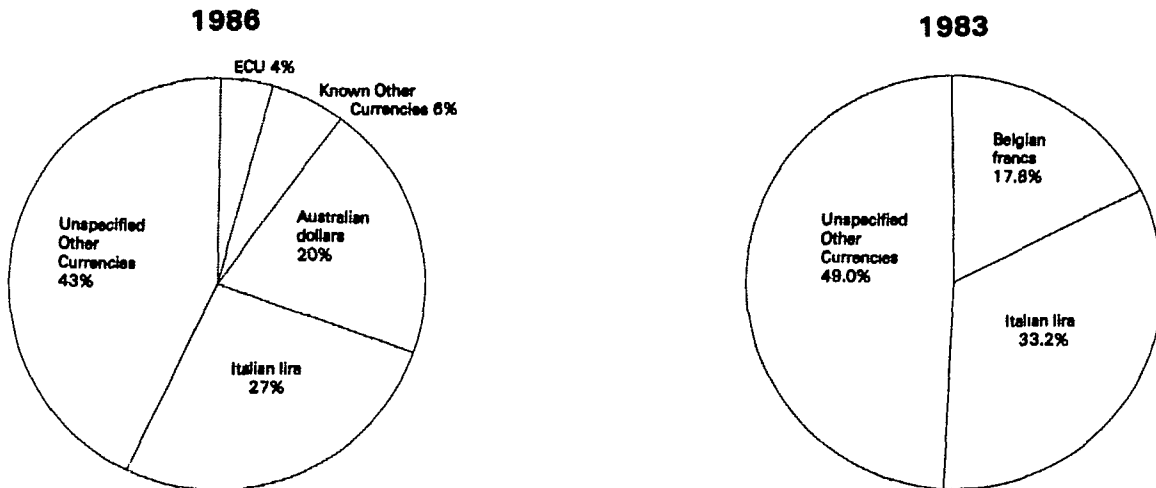
BANKING INSTITUTIONS



NONBANK FINANCIAL INSTITUTIONS



BROKERS



GROWTH IN FOREIGN EXCHANGE TURNOVER AMONG BANKING INSTITUTIONS IN THE U.S.

(April 1983 to March 1986)

| CURRENCY | BANKS REPRESENTED ON BOTH SURVEYS | | | ALL BANKS REPRESENTED ON EITHER SURVEY | | |
|------------------|-----------------------------------|------------------------------|-------------|--|------------------------------|-------------|
| | APRIL, 1983 (MILLIONS \$) | MARCH, 1986 (MILLIONS \$) | CHANGE % | APRIL, 1983 (MILLIONS \$) | MARCH, 1986 (MILLIONS \$) | CHANGE % |
| GERMAN MARKS | 216,662 | 427,136 | 97.1 | 228,643 | 452,843 | 98.1 |
| JAPANESE YEN | 145,540 | 281,301 | 79.5 | 154,894 | 304,677 | 97.0 |
| BRITISH POUNDS | 109,992 | 222,548 | 102.3 | 116,995 | 246,012 | 110.3 |
| SWISS FRANCS | 83,902 | 122,817 | 46.4 | 85,894 | 127,981 | 48.8 |
| CANADIAN DOLLARS | 49,717 | 65,862 | 32.5 | 52,655 | 68,352 | 29.8 |
| FRENCH FRANCS | 30,805 | 42,732 | 39.6 | 30,830 | 48,103 | 56.0 |
| DUTCH GUILDERS | 10,271 | 18,416 | 79.3 | 11,194 | 18,517 | 65.4 |
| OTHER CURRENCIES | 20,961 | 57,184 | 172.8 | 22,980 | 58,852 | 156.1 |
| TOTAL | 667,650 | 1,217,996 | 82.4 | 702,499 | 1,325,337 | 88.3 |
| SAMPLE SIZE | 108 | 108 | | 119 | 123 | |

*Individual currencies do not add to total. The total excludes \$1.5 billion of cross-currency transactions, in which a foreign currency is purchased or sold directly against another foreign currency rather than against dollars.

LIST OF BANKING AND NONBANKING INSTITUTIONS AND BROKERS

(Participants in the March, 1986 Survey Of Turnover in the U.S. Foreign Exchange Market)

(* Banks Included in 1983 Survey)

BANKS

- Algemene Bank Nederland NV
- American Express International
- American National Bank and Trust
- Amsterdam-Rotterdam Bank
- Australia and New Zealand Bank
- Banca Commerciale Italiana Chi
- Banca Commerciale Italiana LA
- Banca Commerciale Italiana NY
- Banco di Roma
- Banco di Sicilia
- Banco do Brasil
- Bank of America
- Bank of Boston
- Bank of Ireland
- Bank of Montreal
- Bank of New England
- Bank of New York
- Bank of Nova Scotia
- Bank of Tokyo Ltd. LA
- Bank of Tokyo Ltd. NY
- BankAmerica International Miami
- BankAmerica International NY
- Bankers Trust Co.
- Bankers Trust International
- Banque Francaise du Comm. Exterieur
- Banque Indosuez
- Banque Nationale de Paris
- Banque Paribas
- Barclays Bank International
- Bayerische Landesbank Girozentrale
- Bayerische Vereinsbank Girozentrale
- Berliner Handels-und Frankfurt
- Brown Brothers Harriman
- CIC-Unxon Europeene, Intl. et cie
- Caisse National Credit Agricole Chi
- Caisse National Credit Agricole NY
- California First Bank
- Canadian Imperial Bank of Commerce
- Chase Manhattan Bank
- Chemical Bank
- Citibank NA
- Comerca Bank-Detroit
- Commerzbank AG
- Commerzbank Aktiengesellschafts
- Connecticut National Bank
- Continental Illinois Bank
- Credit Lyonnais
- Credit Suisse
- Creditanstalt Bankverein
- Credito Italiano
- Crocker National Bank

BANKS

- Dai-ichi Kangyo Bank Ltd.
- Daiwa Bank Ltd.
- Deutsche Bank AG
- Deutsche Genossenschafts
- Dresdner Bank AG
- European American Banking Co.
- First American Bank of New York
- First Bank Minneapolis
- First Chicago International
- First Interstate Bank of California
- First National Bank of Atlanta
- First National Bank of Chicago
- First Pennsylvania Bank
- Fleet National Bank
- French American Banking Corp.
- Fuji Bank Ltd.
- Harza Trust and Savings Bank
- Hessische Landesbank Girozentrale
- Hong Kong and Shanghai Banking Corp.
- Industrial Bank of Japan Ltd.
- Interfrat Bank
- Irving Trust Co.
- J. Henry Schroder Bank and Trust Co.
- Lloyds Bank International
- Long Term Credit Bank of Japan
- Manufacturers Hanover Trust Co.
- Manufacturers and Traders Trust Company
- Marine Midland Bank
- Mellon Bank
- Mellon Bank International
- Merrill Lynch International Bank
- Midland Bank PLC
- Mitsubishi Bank Ltd.
- Mitsubishi Trust and Banking Co.
- Mitsuui Bank Ltd.
- Mitsuui Trust and Banking Corp.
- Morgan Guaranty Trust Co.
- National Bank of Detroit
- National City Bank
- National Westminster Bank PLC NY
- National Westminster Bank PLC SF
- Nippon Credit Bank
- Nordio American Banking Corp.
- North Carolina National Bank
- Northern Trust Co.
- Norwest Bank - Minneapolis
- Rainer National Bank
- Republic National Bank
- Republic National Bank of Dallas
- Royal Bank of Canada NY

BANKS

- Royal Bank of Canada SF
- Sanwa Bank Ltd.
- Seafirst National Bank
- Security Pacific International Bank
- Security Pacific National Bank
- Shawmut Bank of Boston
- Societe Generale
- Standard Chartered Bank Ltd.
- State Street Bank and Trust Co.
- Sumitomo Bank Ltd.
- Sumitomo Trust and Banking Co.
- Swiss Bank Corp. NY
- Swiss Bank Corp. SF
- Tokai Bank Ltd.
- Toronto Dominion Bank
- Toyo Trust and Banking Co. Ltd.
- Union Bank
- Union Bank of Switzerland Chi
- Union Bank of Switzerland NY
- Wells Fargo Bank
- Westdeutsche Landesbank Girozentrale
- Westpac Banking Corp.

NONBANK FINANCIAL

- Commodities Corp.
- Dean Witter Reynolds Inc.
- Discount Corp. of New York
- Drexel Burnham Lambert Inc.
- E. F. Hutton and Company Inc.
- First Boston Corporation
- Goldman, Sachs and Company
- Johnson, Matthey Commodities
- Morgan Stanley and Co. Inc.
- Nomura Securities International
- Phibro - Salomon Inc.
- Prudential Bache
- Shearson Lehman Brothers

BROKERS

- Bierbaum - Martin Inc.
- Debaussae and Company
- Fulton Prebon Money Brokers
- Harlow Meyer Savage Inc.
- International Money Brokers
- Lesser Marshall Inc.
- Noonan, Astley, Pearce, Inc.
- Tullet and Tokyo Forex Inc.
- Wallch and Matthes Inc.

MARCH 1986 TURNOVER SURVEY OF 123 BANKING INSTITUTIONS

*Aggregate Results
(In Millions of Dollars Equivalent)*

| TRANSACTION CATEGORY | GERMAN MARKS | JAPANESE YEN | BRITISH POUNDS | SWISS FRANCS | CANADIAN DOLLARS | FRENCH FRANCS | DUTCH GUILDERS | ALL OTHER | ALL CURRENCIES |
|--|-----------------|-----------------|-------------------|-----------------|---------------------|------------------|-------------------|--------------|-------------------|
| I OUTRIGHT SPOT TRANSACTIONS | | | | | | | | | |
| A. INTERBANK | 66,898 | 30,870 | 49,711 | 13,820 | 3,988 | 4,222 | 2,341 | 6,817 | 168,667 |
| 1 Direct with Banks in U.S. | | | | | | | | | |
| 2 Direct with Banks Abroad | 76,780 | 32,512 | 44,242 | 21,562 | 8,422 | 9,602 | 3,426 | 9,726 | 207,182 |
| 3 Through Brokers | 155,201 | 77,110 | 69,400 | 30,910 | 17,765 | 11,7854,792 | 10,546 | 377,499 | |
| B. Customer | | | | | | | | | |
| 1 Non-Financial Institutions | 10,655 | 6,158 | 6,000 | 2,667 | 2,574 | 890 | 327 | 1,870 | 31,141 |
| 2 Financial Institutions | 18,293 | 18,874 | 8,423 | 4,735 | 3,611 | 738 | 268 | 1,343 | 53,285 |
| II SWAP TRANSACTIONS | | | | | | | | | |
| A. Maturity 1 Year or Less | | | | | | | | | |
| 1 Interbank | | | | | | | | | |
| Direct With Banks in U.S. | 11,407 | 14,489 | 7,509 | 4,359 | 3,085 | 2,226 | 1,078 | 3,655 | 47,818 |
| B. Direct With Banks Abroad | 21,602 | 27,823 | 9,054 | 8,508 | 6,254 | 5,625 | 2,320 | 9,510 | 90,696 |
| C. Through Brokers | 57,608 | 71,409 | 28,489 | 22,532 | 12,242 | 9,150 | 2,359 | 6,977 | 210,767 |
| 2 Customer | | | | | | | | | |
| A. Non-Financial Institutions | 4,582 | 2,143 | 2,276 | 1,655 | 719 | 641 | 192 | 432 | 12,550 |
| B. Financial Institutions | 6,969 | 8,612 | 4,445 | 2,160 | 3,058 | 784 | 250 | 1,646 | 27,802 |
| B. Maturity Greater Than 1 Year | | | | | | | | | |
| 1 Interbank | 1,627 | 1,066 | 617 | 550 | 73 | 132 | 49 | 247 | 4,361 |
| 2 Customer | | | | | | | | | |
| A. Non-Financial Institutions | 64 | 151 | 68 | 18 | 23 | 19 | 3 | 73 | 419 |
| B. Financial Institutions | 23 | 169 | 97 | 14 | 8 | 32 | 2 | 259 | 604 |
| III OUTRIGHT FORWARD TRANSACTIONS | | | | | | | | | |
| A. Interbank | 10,263 | 7,068 | 6,391 | 5,150 | 1,809 | 1,248 | 798 | 3,588 | 36,205 |
| B. Customer | | | | | | | | | |
| 1 Non-Financial Institutions | 5,655 | 3,047 | 2,898 | 1,025 | 2,382 | 622 | 178 | 1,255 | 16,842 |
| 2 Financial Institutions | 2,942 | 2,004 | 2,068 | 828 | 452 | 248 | 125 | 558 | 9,226 |
| IV CURRENCY FUTURES AND OPTIONS | | | | | | | | | |
| A. Futures Contracts | 7,395 | 2,287 | 2,806 | 5,247 | 512 | 0 | 0 | 156 | 16,403 |
| B. Options Contracts | | | | | | | | | |
| 1 Purchased | | | | | | | | | |
| A. Over-The-Counter | 835 | 424 | 416 | 580 | 119 | 137 | 0 | 67 | 2,578 |
| B. On an Exchange | 1,180 | 512 | 324 | 601 | 163 | 15 | 0 | 9 | 2,814 |
| 2 Sold | | | | | | | | | |
| A. Over-The-Counter | 838 | 448 | 320 | 450 | 35 | 193 | 9 | 118 | 2,411 |
| B. On an Exchange | 1,994 | 491 | 658 | 709 | 200 | 14 | 0 | 0 | 4,066 |
| TOTAL SPOT | 317,837 | 162,524 | 177,776 | 73,694 | 37,360 | 27,137 | 11,154 | 30,302 | 637,774 |
| TOTAL SWAP | 103,893 | 125,672 | 62,555 | 39,688 | 25,460 | 18,489 | 6,253 | 22,799 | 395,017 |
| TOTAL FORWARD | 18,860 | 12,119 | 11,157 | 7,004 | 4,513 | 2,118 | 1,101 | 5,401 | 62,273 |
| TOTAL OPTIONS | 4,658 | 1,875 | 1,718 | 2,340 | 517 | 359 | 9 | 184 | 11,870 |
| TOTAL INTERBANK | | | | | | | | | |
| DIRECT WITH BANKS IN U.S. | 66,306 | 45,369 | 57,220 | 18,178 | 7,073 | 6,448 | 3,419 | 10,472 | 216,485 |
| DIRECT WITH BANKS ABROAD | 98,392 | 60,335 | 53,296 | 30,070 | 15,676 | 15,027 | 5,746 | 19,236 | 297,778 |
| THROUGH BROKERS | 212,810 | 148,519 | 97,889 | 53,442 | 29,997 | 20,935 | 7,151 | 17,523 | 588,266 |
| UNSPECIFIED | 11,890 | 8,134 | 7,008 | 5,700 | 1,772 | 1,380 | 847 | 3,635 | 40,666 |
| TOTAL | 391,397 | 262,357 | 215,413 | 107,391 | 54,518 | 43,790 | 17,163 | 51,066 | 1,143,096 |
| TOTAL CUSTOMER | | | | | | | | | |
| NONFINANCIAL | 20,966 | 11,499 | 11,042 | 5,265 | 5,678 | 2,172 | 700 | 3,630 | 60,952 |
| FINANCIAL | 28,227 | 26,659 | 15,033 | 7,738 | 7,127 | 1,782 | 645 | 3,806 | 81,017 |
| TOTAL | 49,193 | 38,158 | 26,075 | 13,003 | 12,805 | 3,954 | 1,345 | 7,436 | 151,969 |
| TOTAL TURNOVER | | | | | | | | | |
| CURRENCY SHARE % | 34.2 | 23.0 | 18.6 | 8.7 | 5.2 | 3.6 | 1.4 | 4.4 | 100.0 |
| NUMBER OF DEALS | | | | | | | | | |
| AVERAGE DEAL SIZE | 110,319 | 69,531 | 67,495 | 30,288 | 27,984 | 20,503 | 9,243 | 34,615 | 378,976 |
| | 37 | 4.3 | 3.6 | 4.0 | 2.4 | 2.3 | 2.0 | 1.7 | 3.4 |

MARCH 1986 TURNOVER SURVEY OF 13 NONBANK FINANCIAL INSTITUTIONS

*Aggregate Results
(In Millions of Dollars Equivalent)*

| TRANSACTION CATEGORY | GERMAN MARKS | JAPANESE YEN | BRITISH POUNDS | SWISS FRANCS | CANADIAN DOLLARS | FRENCH FRANCS | DUTCH GUILDERS | ALL OTHER | ALL CURRENCIES |
|--|-----------------|-----------------|-------------------|-----------------|---------------------|------------------|-------------------|--------------|-------------------|
| I OUTRIGHT SPOT TRANSACTIONS | | | | | | | | | |
| A. WITH A BANK COUNTERPARTY | 14,182 | 7,743 | 9,898 | 2,605 | 1,270 | 795 | 233 | 1,777 | 38,473 |
| 1 Direct with Banks in U.S. | | | | | | | | | |
| 2 Direct with Banks Abroad | 8,493 | 5,939 | 5,947 | 4,330 | 665 | 219 | 111 | 911 | 26,615 |
| 3 Through Brokers | 18,673 | 8,752 | 8,755 | 6,970 | 1,320 | 316 | 171 | 486 | 45,446 |
| B. Customer | | | | | | | | | |
| 1 Non-Financial Institutions | 5,339 | 3,896 | 2,466 | 1,107 | 734 | 380 | 180 | 295 | 14,377 |
| 2 Financial Institutions | 7,435 | 4,206 | 4,120 | 2,881 | 357 | 398 | 56 | 411 | 19,834 |
| II SWAP TRANSACTIONS | | | | | | | | | |
| A. Maturity 1 Year or Less | | | | | | | | | |
| 1 Interbank | | | | | | | | | |
| Direct With Banks in U.S. | 5,541 | 10,547 | 7,783 | 2,107 | 1,882 | 666 | 372 | 1,028 | 29,927 |
| B. Direct With Banks Abroad | 4,390 | 8,139 | 5,977 | 2,272 | 533 | 108 | 48 | 1,156 | 22,623 |
| C. Through Brokers | 1,440 | 1,267 | 1,589 | 747 | 574 | 51 | 33 | 229 | 5,930 |
| 2 Customer | | | | | | | | | |
| A. Non-Financial Institutions | 684 | 1,144 | 778 | 358 | 350 | 106 | 4 | 109 | 3,533 |
| B. Financial Institutions | 3,486 | 2,400 | 1,809 | 1,374 | 564 | 411 | 86 | 287 | 10,427 |
| B. Maturity Greater Than 1 Year | | | | | | | | | |
| 1 Interbank | 7 | 112 | 0 | 24 | 10 | 0 | 0 | 0 | 153 |
| 2 Customer | | | | | | | | | |
| A. Non-Financial Institutions | 2 | 83 | 39 | 75 | 0 | 0 | 0 | 96 | 295 |
| B. Financial Institutions | 2 | 95 | 0 | 107 | 0 | 0 | 0 | 96 | 300 |
| III OUTRIGHT FORWARD TRANSACTIONS | | | | | | | | | |
| A. WITH A BANK COUNTERPARTY | 2,173 | 3,534 | 1,913 | 1,128 | 722 | 156 | 54 | 801 | 10,581 |
| B. Customer | | | | | | | | | |
| 1 Non-Financial Institutions | 1,778 | 984 | 1,077 | 154 | 123 | 68 | 24 | 178 | 4,386 |
| 2 Financial Institutions | 712 | 505 | 757 | 229 | 245 | 142 | 9 | 350 | 2,948 |
| IV CURRENCY FUTURES AND OPTIONS | | | | | | | | | |
| A. Futures Contracts | 12,645 | 10,361 | 5,252 | 6,885 | 1,889 | 3 | 0 | 27 | 36,862 |
| B. Options Contracts | | | | | | | | | |
| 1 Purchased | | | | | | | | | |
| A. Over-The-Counter | 98 | 143 | 75 | 1,704 | 607 | 12 | 0 | 1 | 2,640 |
| B. On an Exchange | 2,182 | 4,507 | 811 | 281 | 85 | 83 | 0 | 0 | 7,919 |
| 2 Sold | | | | | | | | | |
| A. Over-The-Counter | 130 | 106 | 83 | 9 | 301 | 12 | 0 | 0 | 641 |
| B. On an Exchange | 2,349 | 3,759 | 913 | 409 | 118 | 79 | 0 | 0 | 7,827 |
| TOTAL SPOT | 54,092 | 30,536 | 31,189 | 17,863 | 4,346 | 2,068 | 751 | 3,880 | 144,746 |
| TOTAL SWAP | 15,552 | 23,787 | 17,976 | 7,064 | 3,913 | 1,342 | 553 | 3,002 | 73,188 |
| TOTAL FORWARD | 4,663 | 5,003 | 3,747 | 1,511 | 1,090 | 366 | 67 | 1,429 | 17,896 |
| TOTAL OPTIONS | 4,759 | 8,515 | 1,882 | 2,403 | 1,081 | 186 | 0 | 1 | 18,827 |
| TOTAL BANK COUNTERPARTY | | | | | | | | | |
| DIRECT WITH BANKS IN U.S. | 19,893 | 18,290 | 17,681 | 4,712 | 3,152 | 1,481 | 605 | 2,806 | 68,400 |
| DIRECT WITH BANKS ABROAD | 12,883 | 14,078 | 11,924 | 6,602 | 1,198 | 327 | 159 | 2,067 | 49,238 |
| THROUGH BROKERS | 20,113 | 10,019 | 10,347 | 7,717 | 1,894 | 367 | 204 | 715 | 51,376 |
| UNSPECIFIED | 2,180 | 3,646 | 1,913 | 1,152 | 732 | 156 | 54 | 901 | 10,734 |
| TOTAL | 54,869 | 46,033 | 41,865 | 20,183 | 6,976 | 2,311 | 1,022 | 6,489 | 179,748 |
| TOTAL CUSTOMER | | | | | | | | | |
| NONFINANCIAL | 7,803 | 6,087 | 4,380 | 1,694 | 1,207 | 534 | 208 | 678 | 22,571 |
| FINANCIAL | 11,635 | 7,206 | 6,686 | 4,561 | 1,166 | 951 | 161 | 1,144 | 33,510 |
| TOTAL | 19,438 | 13,293 | 11,066 | 6,255 | 2,373 | 1,485 | 369 | 1,822 | 56,081 |
| TOTAL TURNOVER | 91,711 | 78,202 | 60,045 | 35,726 | 12,119 | 3,985 | 1,391 | 8,339 | 291,518 |
| CURRENCY SHARE % | 31.5 | 26.8 | 20.6 | 12.3 | 4.2 | 1.4 | .5 | 2.9 | 100.0 |
| NUMBER OF DEALS | 15,540 | 10,834 | 12,200 | 5,87 | 1,948 | 1,361 | 411 | 3,468 | 51,249 |
| AVERAGE DEAL SIZE | 8 | 5.5 | 4.3 | 4.8 | 4.8 | 2.8 | 3.4 | 2.4 | 4.5 |

MARCH 1986 TURNOVER SURVEY OF NINE FOREIGN EXCHANGE BROKERS

*Aggregate Results
(In Millions of Dollars Equivalent)*

| TRANSACTION CATEGORY | GERMAN MARKS | JAPANESE YEN | BRITISH POUNDS | SWISS FRANCS | CANADIAN DOLLARS | FRENCH FRANCS | DUTCH GUILDERS | ALL OTHER | ALL CURRENCIES |
|---|-----------------|-----------------|-------------------|-----------------|---------------------|------------------|-------------------|--------------|-------------------|
| I OUTRIGHT SPOT TRANSACTIONS | | | | | | | | | |
| A. Between Two Banks In The U.S. | 82,722 | 35,077 | 27,308 | 9,886 | 7,738 | 4,511 | 2,497 | 5,163 | 174,989 |
| B. Between Two Banks Abroad | 5,397 | 556 | 539 | 390 | 2,729 | 436 | 0 | 89 | 10,136 |
| C. Between A Bank In The U.S. And A Bank Abroad | 44,698 | 11,548 | 13,126 | 6,402 | 5,889 | 4,729 | 2,386 | 3,587 | 92,366 |
| D. Involving A Non-Bank Counterparty | 16,797 | 12,350 | 7,945 | 5,893 | 1,477 | 135 | 1 | 1,044 | 45,642 |
| II SWAP TRANSACTIONS | | | | | | | | | |
| A. Maturity 1 Year Or Less | | | | | | | | | |
| 1. Between Two Banks In U.S. | 29,813 | 36,671 | 17,447 | 5,681 | 6,025 | 5,681 | 975 | 3,548 | 105,841 |
| 2. Between Two Banks Abroad | 378 | 489 | 194 | 321 | 7,193 | 20 | 200 | 128 | 8,923 |
| 3. Between A Bank In The U.S. And A Bank Abroad | 17,832 | 11,839 | 14,090 | 8,665 | 9,633 | 2,342 | 845 | 3,577 | 68,823 |
| 4. Involving A Non-Bank Counterparty | 6,824 | 8,845 | 6,597 | 1,070 | 2,255 | 3,983 | 60 | 1,875 | 31,489 |
| B. Maturity Greater Than 1 Year | 412 | 163 | 278 | 10 | 101 | 60 | 0 | 22 | 1,046 |
| III OUTRIGHT FORWARD TRANSACTIONS | | | | | | | | | |
| A. Between Two Banks In U.S. | 124 | 1,306 | 538 | 45 | 0 | 43 | 0 | 12 | 2,068 |
| B. Between Two Banks Abroad | 58 | 17 | 18 | 19 | 126 | 0 | 0 | 0 | 238 |
| C. Between A Bank In The U.S. And A Bank Abroad | 172 | 346 | 579 | 223 | 0 | 1 | 0 | 20 | 1,341 |
| D. Involving A Non-Bank Counterparty | 102 | 347 | 182 | 0 | 0 | 106 | 0 | 0 | 707 |
| TOTAL SPOT | 149,805 | 59,531 | 48,915 | 22,641 | 17,833 | 9,811 | 4,894 | 9,883 | 323,113 |
| TOTAL SWAP | 55,059 | 68,007 | 38,606 | 15,747 | 25,407 | 12,088 | 2,080 | 9,150 | 216,122 |
| TOTAL FORWARDS | 456 | 2,016 | 1,287 | 287 | 126 | 150 | 0 | 32 | 4,354 |
| TOTAL BETWEEN TWO BANKS IN U.S. | 112,659 | 73,054 | 45,290 | 15,682 | 13,763 | 10,235 | 3,472 | 8,723 | 282,878 |
| TOTAL BETWEEN TWO BANKS ABROAD | 5,833 | 1,062 | 781 | 730 | 10,048 | 456 | 200 | 217 | 19,297 |
| TOTAL BETWEEN A BANK IN THE U.S. AND A BANK ABROAD | 62,483 | 23,733 | 27,795 | 15,290 | 15,722 | 7,072 | 3,241 | 7,184 | 162,530 |
| TOTAL INVOLVING A NON-BANK COUNTERPARTY | 23,723 | 21,542 | 14,694 | 6,963 | 3,732 | 4,204 | 61 | 2,919 | 77,838 |
| TOTAL TURNOVER | 208,120 | 119,554 | 88,808 | 38,675 | 43,366 | 22,027 | 6,974 | 19,065 | 543,589 |
| CURRENCY SHARE (%) | 37.7 | 22.0 | 16.3 | 7.1 | 8.0 | 4.1 | 1.3 | 3.5 | 100.0 |
| NUMBER OF DEALS | 64,373 | 26,814 | 28,270 | 10,040 | 6,130 | 6,108 | 2,338 | 8,113 | 150,186 |
| AVERAGE DEAL SIZE | 3.2 | 4.5 | 3.4 | 3.9 | 7.1 | 3.6 | 3.0 | 2.3 | 3.6 |

Document of Organization

CONCLUSION OF FEASIBILITY STUDY TO ESTABLISH FOREIGN EXCHANGE COMMITTEE (June 1978)

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 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 market, as well as the related international money markets

To serve as a channel of information between the market and the Federal Reserve and, possibly, other official institutions within the United States and abroad.

It is understood that the Committee would seek to work closely with the FOREX.

The Committee may consider the possibility of formulating recommendations for uniform terminology and technical standards for use in the foreign exchange market. It will not concern itself with the evaluation of individual market participants, nor will it attempt to set requirements, qualifications, or terms for participation in the market.

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 (possibly including one New York Edge Act corporation)
- 2-3 regional banks
- 2-3 foreign banks
- 1-2 brokers (preferably to represent both foreign exchange and Euro-depositors)

the president of the FOREX USA, Inc

the Federal Reserve Bank of New York

Committee Procedures

At the outset, there would be a meeting of the Committee—with a specified agenda of items—at least every alternate month (January, March, May, July, September, November). 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 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 at the Federal Reserve Bank of New York.

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

CUMULATIVE INDEX TO PREVIOUS REPORTS

| SUBJECT | ANNUAL REPORT | PAGE |
|--|---------------|-------|
| <i>Advantages from Netting Foreign Exchange Contracts.</i> by Ray Peters | 1983 | 17-18 |
| Bank-Broker Relationship | 1982 | 5 |
| Banks' Relations with Customers | 1985 | 4 |
| <i>Bank's Risk Management with Foreign Exchange Customers.</i> by Edward R. Dobbins | 1983 | 24-27 |
| Bank-To-Broker Communication (Recommendation) | 1979 | 7 |
| British Bankers' Association (BBA) terms and conditions for interest-rate swaps, forward rate agreements, and foreign currency options | 1985 | 8-9 |
| Brokers | 1984 | 5,6 |
| • Name Substitution Practices | 1982 | 3,4-5 |
| --- | 1983 | 4 |
| • Role in Confirmation | 1980 | 9 |
| • Trader-Broker Relationship | 1980 | 9 |
| --- | 1984 | 9 |
| Canadian Dollar-Quoting (Committee Deliberations) | 1979 | 4 |
| Chairman's Report | 1979 | 3 |
| --- | 1980 | 3 |
| --- | 1981 | 3 |
| --- | 1982 | 3 |
| --- | 1983 | 3 |
| --- | 1984 | 3 |
| --- | 1985 | 3 |
| CHIPS Conversion to Same-Day Settlement | 1980 | 5-6 |
| --- | 1981 | 6 |
| • Letter from David E. Bodner | 1980 | 17 |
| • Federal Reserve Bank of New York Circular | 1980 | 17 |
| • Excerpts from Remarks by John F. Lee | 1980 | 15-16 |
| Committee's Advisory Role | 1979 | 5 |
| --- | 1980 | 5-6 |
| --- | 1981 | 4-5 |
| --- | 1982 | 6-7 |
| --- | 1983 | 9 |
| --- | 1984 | 8-9 |
| --- | 1985 | 10-11 |
| Committee's Relationships with Other Organizations | 1979 | 6 |
| --- | 1985 | 7 |
| Commodity, Definition of | 1984 | 22 |
| Commodity Futures Trading Commission | 1984 | 22 |
| --- | 1985 | 9 |
| Commodity Exchange Act | 1984 | 22 |
| Confidentiality | 1979 | 4 |
| --- | 1980 | 10 |
| Conflict of Interest | 1980 | 8-9 |
| --- | 1985 | 5 |
| Confirmation of Foreign Exchange Transactions | 1979 | 4 |
| • Broker Role In | 1980 | 9 |
| • Recommendation | 1979 | 3,7 |
| • Responsibility for (Committee Deliberations) | 1979 | 4 |
| • Spot transactions | 1985 | 5 |
| Corporate Use of Options | 1984 | 24 |
| Council on International Banking | 1985 | 6,7 |
| <i>Counterparty Risk in FIRC's and IRCAs.</i> by Ron Levy, Hans Neukomm, Heinz Riehl | 1984 | 15-16 |
| Country Risk | 1984 | 16 |
| <i>Credit Risks in the Foreign Exchange Business.</i> by Heinz Riehl | 1983 | 15-16 |
| Cross Border Risks | 1984 | 15-16 |
| Dealing Relationships | 1985 | 10 |
| Document of Organization | 1980 | 18 |
| --- | 1981 | 8 |
| --- | 1982 | 16 |
| --- | 1983 | 40 |
| --- | 1984 | 30 |
| --- | 1985 | 15 |

CUMULATIVE INDEX TO PREVIOUS REPORTS

| SUBJECT | ANNUAL REPORT | PAGE |
|---|---------------|----------|
| Establishing a Clearing House for the Netting of Foreign Exchange Contracts | 1983 | 28 |
| Eurodollar market. U.S. bank participation in (see also IBFs) | 1985 | 10 |
| Evolution of Markets for New Products (Committee Deliberations) | 1985 | 8-9 |
| <i>Exchange Market Intervention-Excerpts from Remarks by Under Secretary of the Treasury Beryl W Sprinkel</i> | 1982 | 5,14 |
| <i>Feasibility Study to Establish Foreign Exchange Committee Band Document of Organization</i> | 1979 | 8-9 |
| Federal Financial Institutions Examination Council (See Minimum Standards) | 1979 | 5 |
| --- | 1980 | 4,11-13 |
| Financial Futures | | |
| • Comments on Markets | 1981 | 5 |
| • Regulatory Requirements for | 1981 | 5 |
| Fixed Rate Agreements | 1984 | 6,18-20 |
| --- | 1985 | 8-9 |
| Foreign Currency Options Task Force | | |
| --- Establishment | 1984 | 6,7 |
| --- Members | 1984 | 7 |
| Foreign Exchange Contract Standards-Comments On | 1979 | 5 |
| --- | 1980 | 4,6,8-13 |
| --- | 1981 | 5 |
| Foreign Exchange Contracts-Proposed Rules of International Chamber of Commerce | 1979 | 5 |
| --- | 1980 | 6 |
| --- | 1981 | 5 |
| Foreign Exchange Operations. Guidelines For | 1980 | 3,6,8-13 |
| • Audit Documentation (FFIEC) | 1980 | 13 |
| • Documentation of Policy (FFIEC) | 1980 | 11-12 |
| • Internal Accounting Controls (FFIEC) | 1980 | 12-13 |
| Foreign Exchange Options | 1983 | 6 |
| --- | 1985 | 8 |
| --- Papers related to | 1984 | 21-29 |
| Foreign Exchange Options Pricing | 1984 | 25-27 |
| • Volatility | 1984 | 26 |
| Foreign Exchange Options Trading | | |
| • Hedging of Exposures from | 1984 | 27 |
| • Credit Risk in | 1984 | 28 |
| Foreign Exchange Transactions Volume (see Turnover Survey) | 1980 | 5 |
| --- | 1981 | 4-5 |
| Foreign Exchange Turnover Survey | 1982 | 7 |
| --- | 1983 | 9,30-38 |
| --- | 1985 | 11 |
| Formation of Committee | 1979 | 3, 9 |
| --- | 1985 | 14 |
| Forward Interest Rate Contract | 1984 | 6,18-20 |
| --- | 1985 | 8-9 |
| Group of Thirty Survey of Foreign Exchange | 1985 | 11 |
| <i>History and Definitions of Foreign Exchange Options, by Arnold Staloff</i> | 1984 | 21 |
| IBFs. Comments On | 1981 | 4 |
| --- | 1982 | 5-6 |
| • Proposal for Negotiable Certificates of Deposit | 1983 | 6-8 |
| Insolvency | 1980 | 6 |
| Interest Rate-Exchange Rate Volatility | 1980 | 6 |
| --- | 1981 | 4-5 |
| --- | 1985 | 10 |
| Interest Rate Futures | 1983 | 6 |
| Interest Rate Swaps | 1983 | 6 |
| --- | 1984 | 6,18-20 |
| --- | 1985 | 8-9 |

CUMULATIVE INDEX TO PREVIOUS REPORTS

| SUBJECT | ANNUAL REPORT | PAGE |
|---|---------------|---------|
| International Chamber of Commerce-Proposal-Foreign Exchange Contracts | 1979 | 5 |
| — | 1980 | 6 |
| — | 1981 | 5 |
| International Swap Dealers Association (ISDA) code | 1985 | 8-9 |
| Intervention, The role of | 1985 | 10 |
| <i>The Last of the Mohicans</i> (speech to FOREX USA Midwest Chapter | | |
| — Margaret L. Greene, April 12, 1985, Denver | 1985 | 13-14 |
| Legal and Regulatory Issues of Foreign Exchange Options | 1984 | 22-23 |
| Long-Dated Forward Contracts | 1985 | 4 |
| Management of Foreign Exchange Activity, Statement of Selected Issues (Committee Deliberations and Recommendations) | 1980 | 4,8-10 |
| — | 1982 | 4,11-13 |
| — | 1983 | 4,12-14 |
| — | 1985 | 5 |
| Market Practice (Committee Deliberations on) | 1979 | 4 |
| — | 1980 | 4 |
| — | 1982 | 4-5 |
| — | 1983 | 4-5 |
| — | 1984 | 4-6 |
| — | 1985 | 4-5 |
| Meeting Dates (1978-1979) | 1979 | 6 |
| — (1980-1981) | 1980 | 7 |
| — (1981-1982) | 1981 | 7 |
| — (1982-1983) | 1982 | 5 |
| — (1983-1984) | 1983 | 6 |
| — (1984-1985) | 1984 | 10 |
| — (1985-1986) | 1985 | 12 |
| Membership (Participation changes) | 1981 | 7 |
| — (December 1979) | 1979 | 11 |
| — (December 1980) | 1980 | 19 |
| — (December 1981) | 1981 | 9 |
| — (December 1982) | 1982 | 17 |
| — (December 1983) | 1983 | 41 |
| — (December 1984) | 1984 | 34 |
| — (December 1985) | 1985 | 19 |
| Memorial Day Observance in New York-Committee's Advisory Role | 1980 | 5 |
| • Letter from Scott Pardee | 1980 | 14 |
| Model Interbank Foreign Exchange Netting Agreement | 1984 | 12-13 |
| • Commentary | 1984 | 14 |
| Name Substitution Practices | | |
| — | 1982 | 3,4-5 |
| — | 1983 | 4 |
| • Recommendation | 1982 | 8-10 |
| Name-Switching | 1980 | 4,9 |
| Negotiable Certificates of Deposit for IBFs: A Feasibility Study | 1983 | 6-8 |
| <i>Netting Foreign Exchange Transactions in the Same Currency for the Same Value Date</i> , by Kathleen Ludman | 1983 | 19-23 |
| Netting of Foreign Exchange Contracts | | |
| — | 1982 | 6 |
| — | 1983 | 4-5 |
| — | 1985 | 6-7 |
| • Papers Related to | 1983 | 15-25 |
| • Agreement | 1984 | 4-5 |
| Non-Bank Participants in Exchange Market, Comment On | 1981 | 5 |
| Off-Hours Trading | 1985 | 5 |
| Off-Market Rates | 1980 | 8 |
| Off-Premises Trading | 1980 | 4,10 |
| — | 1985 | 5 |
| Ohta, Takeshi | | |
| — Excerpts from Remarks | 1982 | 15 |

CUMULATIVE INDEX TO PREVIOUS REPORTS

| SUBJECT | ANNUAL REPORT | PAGE |
|--|---------------|---------|
| Participation in Exchange Markets | | |
| — Non-bank | 1981 | 5 |
| — Changes in | 1984 | 5 |
| Participation in Options Market | 1984 | 24 |
| Performance of the Exchange Markets, Comments On | 1980 | 6 |
| — | 1981 | 4 |
| — | 1982 | 6-7 |
| — | 1983 | 9 |
| — | 1985 | 4 |
| Procedural Matters of the Foreign Exchange Committee | 1979 | 6 |
| — | 1980 | 7 |
| — | 1981 | 7 |
| — | 1982 | 5 |
| — | 1983 | 6 |
| — | 1984 | 7 |
| — | 1985 | 12 |
| Recommendations for Dealers (Association Cambiste Internationale) | 1980 | 4 |
| Recommendations Prepared in 1983 | 1983 | 9-10 |
| Recommendations and Papers Prepared in 1984 | 1984 | 11-16 |
| Regulatory Issues | 1985 | 13-14 |
| • Federal Financial Institutions Examinations Council (See Minimum Standards) | 1979 | 5 |
| — | 1980 | 4,11-13 |
| • Financial Futures | 1984 | 6,18-21 |
| • Foreign Exchange Options | 1984 | 22-23 |
| — | 1985 | 9 |
| • OTC Markets | 1985 | 9 |
| Risks in Interbank Cross-Border Transactions | 1984 | 15-16 |
| Same-Day Settlement (See CHIPS Conversion) | 1980 | 5-6 |
| — | 1981 | 6 |
| <i>Selected Issues Relating to the Management of Foreign Exchange Activity</i> | 1980 | 4,8-10 |
| — | 1982 | 4,11-13 |
| — | 1983 | 4,12-14 |
| Settlement Risk | 1984 | 19 |
| Speakerphones | 1979 | 4,7 |
| Sprinkel, Beryl W. | | |
| — Excerpts from Remarks | 1982 | 14 |
| Standardization of Contracts (see Comments on Foreign Exchange Contract Standards) | 1985 | 8 |
| Support Staff, Importance of | 1980 | 10 |
| Tape Recording | 1982 | 6 |
| — | 1983 | 4-5 |
| Taping of Telephone Conversations in Trading Rooms and Confirmation Areas: | | |
| • A Recommendation | 1983 | 9 |
| • A Report | 1983 | 10 |
| <i>Technical Aspects of Foreign Exchange Options, by Scott Dillman and William Lipschutz</i> | 1984 | 25-28 |
| Trade Options Exemption | 1984 | 22 |
| Trader-Broker Relationship | 1980 | 9 |
| — | 1984 | 9 |
| Trading Practices | 1980 | 9 |
| Trader-Trader Relationship | 1980 | 9 |
| — | 1985 | 10 |
| Transaction Date | 1985 | 5 |
| Two-Way Speakerphones (Committee Deliberations and Recommendation) | 1979 | 4,7 |
| <i>Uniform Guideline on Internal Control For Foreign Exchange Activities in Commercial Banks (FFIEC)</i> | 1980 | 11-13 |
| <i>U.S. Foreign Exchange Market Turnover (A summary of a survey in April 1983 by the Federal Reserve Bank of New York)</i> | 1983 | 30-38 |
| <i>Who Buys Options and Why, by Gary Seevers</i> | 1984 | 24 |
| <i>Yen in International Markets</i> | | |
| — Excerpts from Remarks by Takeshi Ohta, Director of the Bank of Japan | 1982 | 15 |

FOREIGN EXCHANGE COMMITTEE MEMBERS AND ALTERNATES

(JANUARY 1987)

| MEMBERS | ALTERNATES | MEMBERS | ALTERNATES |
|--|---|--|---|
| I. East Coast Banks | | III. Foreign Banks | |
| <i>Heinz Riehl Senior Vice President Citibank, N.A. 399 Park Avenue New York, NY 10043 (212) 559-0864</i> | <i>James P. Borden Senior Vice President The Chase Manhattan Bank One Chase Manhattan Plaza New York, NY 10081 (212) 652-7543</i> | <i>Michael Snow Senior Vice President Union Bank of Switzerland 299 Park Avenue New York, NY 10171 (212) 715-3100</i> | <i>Gerhard Schrief Senior Vice President BHF-Bank 55 East 59th Street New York, NY 10022 (212) 546-5522</i> |
| <i>Christine W. Patton Senior Managing Director Manufacturers Hanovers Trust 270 Park Avenue New York, NY 10017 (212) 286-7707</i> | <i>Ron Levy Senior Vice President Marine Midland Bank 140 Broadway New York, NY 10015 (212) 440-5718</i> | <i>Haruo Kimura Deputy General Manager New York Agency The Bank of Tokyo, Ltd 100 Broadway New York, NY 10005 (212) 766-3421</i> | <i>Owen van der Wall Senior Vice President Westpac Banking Corporation 335 Madison Avenue New York, NY 10017 (212) 551-2715</i> |
| <i>Jay Pomrenze Senior Vice President Bankers Trust Company One Bankers Trust Plaza New York, NY 10015 (212) 775-3375</i> | <i>Barry T. Linsley Managing Director Chemical Bank 277 Park Avenue New York, NY 10072 (212) 310-4480</i> | <i>Douglas Grainger Manager, Int'l Money Markets The Royal Bank of Canada 76 William Street New York, NY 10005 (212) 806-3376</i> | <i>Jean-Jacques Rideau Senior Vice President Midland Bank, PLC 520 Madison Avenue New York, NY 10022 (212) 759-8300</i> |
| <i>William Rappolt Executive Vice President Manufacturers & Traders Bank One M and T Plaza Buffalo, NY 14240 (716) 842-5553</i> | <i>John Arnold Vice President Morgan Guaranty Trust Company 23 Wall Street New York, NY 10015 (212) 483-2858</i> | IV. Brokers | <i>Edward Baltes President Lasser, Marshall, Inc. 76 William Street New York, NY 10005 (212) 943-5378</i> |
| <i>Kenneth G. Hartwell First Vice President Bank of Boston 100 Federal Street Boston, MA 02101 (617) 434-7120</i> | <i>Raimund Sargent Senior Vice President Fleet National Bank 111 Westminster Street Providence, RI 02903 (212) 431-7900</i> | <i>Anthony Calvello President Noonan, Astley and Pearce, Inc. Wall Street Plaza New York, NY 10005 (212) 504-2580</i> | |
| II. Other U.S. Banks | | <i>Richard M. McGee Managing Director Tullatt and Tokyo Forex, Inc. 80 Pine Street New York, NY 10005 (212) 208-2006</i> | |
| <i>David Harvey Senior Vice President First National Bank of Chicago One First National Plaza Chicago, IL 60670 (312) 732-5369</i> | <i>John P. Caulfield Senior Vice President Continental Bank 312 South LaSalle Street Chicago, IL 60697 (312) 828-7605</i> | V. Forex USA, Inc. (observer) | |
| <i>Mr. Kemp Mitchell Managing Director Security Pacific National Bank 300 South Grand Avenue, 19th Floor Los Angeles, CA 90009 (213) 229-1381</i> | <i>Raymond R. Peters Senior Vice President Bank of America, N.T. & S.A. Flow of Funds Management No. 3170 555 California St., 11 Floor San Francisco, CA 94137 (415) 953-9574</i> | <i>David Palmer Senior Vice President and Treasurer First American Bank of New York 350 Park Avenue New York, NY 10022 (212) 759-9898 ext. 752</i> | |
| <i>Barry L. Kaufman Vice President and Manager, Foreign Exchange Northern Trust Company 50 South LaSalle Street Chicago, IL 60675 (312) 630-6204</i> | <i>William L. Maxwell Executive Vice President North Carolina National Bank The Mall Level One NCB Plaza Charlotte, NC 28255 (704) 374-7723</i> | VI. Federal Reserve Bank of New York (ex officio) | |
| | | <i>Sam Y. Cross Executive Vice President Federal Reserve Bank of New York 33 Liberty Street New York, NY 10045 (212) 720-6180</i> | |
| | | <i>Margaret L. Greene Senior Vice President Federal Reserve Bank of New York 33 Liberty Street New York, N.Y. 10045 (212) 720-5688</i> | |