This has been a particularly challenging year for the global financial community. Few of us were left untouched by the tremendous loss of life and destruction caused by the September 11 attacks on the World Trade Center and the Pentagon. These tragic events did not, however, diminish the power of the human spirit to overcome disaster. I am particularly proud of the contributions that the Foreign Exchange Committee made to enable the financial system to remain functional on September 11 and in the days and weeks that followed. Committee members and affiliates worked tirelessly to ensure that essential trading and settlement operations continued. The effectiveness of their efforts demonstrates the importance of committed individuals and industry groups to the smooth functioning of the marketplace, even in difficult times.

The crucial importance of communication gained even greater prominence as the events of September 11 illustrated the global nature and resilience of the foreign exchange market. Throughout the year, the Committee made a priority of improving communication and strengthening relationships with other industry groups such as the Singapore Foreign Exchange Market Committee. The Committee also endeavored to support the functioning of the market by publishing relevant papers and letters and by issuing press releases in response to critical market events. All of the Committee’s actions were focused on providing the foreign exchange community with information and contributing to its overall development.

Supporting the market after September 11
The attack on the World Trade Center destroyed both the front- and back-offices of many financial firms. Much of New York City’s financial district was evacuated and firms activated contingency sites elsewhere. Immediately following the attacks, the Operations Managers Working Group of the Foreign Exchange Committee began to conduct conference calls to address issues that arose from the disaster and affected foreign exchange transactions. The group met two to three times daily from September 11 to September 19. During conference calls, members were able to provide crucial marketwide status reports and to identify problems as they developed. In addition, because the relocation of firms and disruption of communications made it difficult for counter-
parties simply to find one another on September 11, within hours of the disaster the group helped market participants locate one another by creating a contact list and circulating it by e-mail.

In an early conversation, members of the group considered whether changes in the settlement conventions were needed to accommodate settlement disruptions, but the majority agreed that trades were settling sufficiently well and no change was warranted. The conference calls also provided a forum for immediate information sharing and an opportunity for the Federal Reserve Bank of New York to engage in dialogue with the marketplace about trading and settlement conditions in foreign exchange and money markets.

The group’s efforts proved critical in keeping foreign exchange markets functioning and reestablishing settlement operations. Consequently, the foreign exchange markets experienced fewer disruptions after the attacks than other markets. The Foreign Exchange Committee recognizes that having the Operations Managers Working Group already in place enabled the Committee to respond quickly and to mobilize efforts to identify essential issues and resources. After witnessing the effectiveness of the Operations Managers Working Group, many other industry participants have established similar standing groups to aid the marketplace in any future disruptions.

Nonetheless, the September 11 attacks highlighted a number of risks specific to the foreign exchange market that the Committee wishes to emphasize as market participants examine their preparedness for market events in the future. Toward that end, the Committee issued a paper in November 2001, *Contingency Planning: Issues and Recommendations*, summarizing specific events in the foreign exchange market and offering recommendations to help avert or minimize any such future event.

The Committee also reassessed its own preparedness for emergencies and instituted several changes. The Committee’s public web site was enhanced to provide more tools for information sharing in the event of an emergency. In addition, meetings with other industry groups, such as the Singapore Foreign Exchange Market Committee and the Canadian Foreign Exchange Committee, were initiated to discuss ways to coordinate contingency planning efforts and to foster increased communication between secretariats in the future. The Committee is continuing those initiatives.

**MARKET VOLATILITY**

Before September 11, the Committee was already at work addressing issues of market volatility and disruptions. Throughout the years, market participants have learned that prudent market practices and optimal communication become particularly necessary in times of uncertainty. The Committee has consistently aimed to alleviate concerns about market volatility and disruption by providing a forum for sharing information and, in certain instances, recommending best practices.
In 2000, a group of central banks sponsored a forum to discuss market disruptions specifically. This meeting of the Financial Stability Forum Working Group of Highly Leveraged Institutions resulted in a list of key measures titled Trading Principles. Although the Guidelines for Trading Activities in Foreign Exchange promote many of these principles, the Guidelines were amended in 2001 to include Addendum C, which highlights practices that take on particular importance during periods of significant market volatility.

Nonetheless, the Committee thinks that good planning and clear internal guidelines are equally important in more ordinary times and can help market participants position themselves to react more effectively to market events. With this in mind, the Committee issued Supplementary Guidance for Market Disruptions as an aid to participants in preparing for such circumstances.

**MONITORING E-COMMERCE ISSUES**

The Committee understands the important role played by e-commerce in the foreign exchange industry. Surveys such as the Bank for International Settlements’ Triennial Survey of Foreign Exchange indicate growing interest among market participants in using web portals for transacting trades. The Committee continues to monitor the effect of e-commerce on price discovery, transparency, and liquidity in the marketplace.

In 2001, several multidealer portals began operations that allowed customers to use a single web interface for trading with several counterparties. To better understand these developments, the Committee established a sub-group to study them. The group as a whole felt that it was too early in the evolution of e-commerce to warrant any substantial change in the structure or practice of foreign exchange, but will continue to evaluate trends going forward. However, with the cooperation of the Operations Managers Working Group, the Committee offered special guidance on the use of electronic validation, a feature offered by many electronic trading platforms. The document, Supplementary Guidance on Electronic Validations and Confirmation Messaging, outlines some of the key risks of replacing trade confirmation with electronic validation.

**REDUCING SETTLEMENT RISK**

The Committee continues to make reducing settlement risk a priority. In 2001, the Committee worked on two initiatives that aim to bolster the certainty that foreign exchange trades will be settled efficiently and correctly. Continuous Linked Settlements (CLS) Bank, which, as its name implies, will provide continuous linked settlements for its customers, is scheduled to begin operation in the fall of 2002. At the Committee’s May meeting, representatives from CLS Bank updated the attendees on the effort to establish a single multicurrency settlement service that will consolidate the foreign exchange settlement activities of large foreign exchange providers. CLS representatives also reported on continuing efforts to minimize liquidity risk by the introduction of “inside-outside swaps,” a function that will allow participants to settle one leg of a
foreign exchange swap inside CLS and the other leg outside CLS, minimizing
the variance in daily balances within the CLS system.

The Operations Managers Working Group and the Financial Markets
Lawyers Group (FMLG) continue to consult with CLS Bank on several issues of
market practice recommended by CLS. Both groups continue to participate in
periodic meetings with the CLS User Group—a U.S.-based advisory group cre-
ated to consider the establishment of CLS. In April, the Committee issued a
letter to the CLS User Group expressing support for a proposed recommenda-
tion that counterparties may choose, on a bilateral basis, to eliminate trade
confirmations in lieu of a trade match in the CLS system.

The Committee also continued to collaborate with SWIFT in an ongoing
effort to simplify trading procedures and limit settlement error and confusion.
Together with the Singapore Foreign Exchange Market Committee, the
Committee wrote a letter to SWIFT proposing stricter guidelines for trade docu-
mentation. A second letter to SWIFT communicated the Committee’s support
for proposed changes in the definitions for certain SWIFT confirmation fields.

ESTABLISHMENT OF THE CHIEF DEALERS WORKING GROUP
As trade issues in foreign exchange have become increasingly complex, the
Committee thought that it would be prudent to revive the Chief Dealers Working
Group. Committee members nominated chief dealers to participate in the Group.
Among its purposes will be to advise the Committee on emerging trade issues
and to address specific concerns and questions raised by the Committee.

In the Working Group’s first year of revival, it discussed a range of issues,
including the impact of electronic dealing in the customer market, trade prac-
tices for emerging market currencies, and current trends in trade disputes.
Concerning the latter, the Group recognized the need for improved communi-
cation between counterparties by clarifying standard terminology for stop-loss
orders. In consultation with the FMLG and the Committee, the Group com-
piled a new section on “Stop-Loss Order Definitions” to be added to the
Guidelines for Foreign Exchange Trading Activities.

REACTING TO TRADING DISRUPTIONS
The Committee monitored disruptions in the trading and settlement of the
Indonesian rupiah, Taiwan dollar, and Argentine peso. In February, Bank
Indonesia, the central bank of Indonesia, announced certain restrictions with
regard to foreign exchange transactions involving the rupiah. The Singapore
Foreign Exchange Market Committee coordinated with the Foreign Exchange
Committee to seek clarification from Bank Indonesia on the scope of these
restrictions to mitigate uncertainty in the marketplace. Subsequently, both
groups advised counterparties affected by the restrictions to contact one
another in order to discuss the treatment of rupiah trade positions.

In September, the Singapore Committee issued a statement regarding the
treatment of fixing rates and settlement dates for Taiwan dollar nondeliver-
able forwards (NDFs) after questions arose regarding fixing rates.
Subsequently, the Foreign Exchange Committee endorsed the Singapore Committee’s recommendation regarding Taiwan dollar NDFs.

In July, the Committee, along with its co-sponsors the Emerging Markets Traders Association (EMTA) and the International Swaps and Derivatives Association (ISDA), included new documentation for Argentine peso NDFs in Annex A of the 1998 Foreign Exchange and Currency Option Definitions. That document supplements the Committee’s master agreement templates for NDF trades. The new documentation introduces settlement procedures in the event of an unexpected market holiday.

On December 21, 2001, officials in Argentina announced that local financial markets would be closed. The announcement followed months of mounting pressure on Argentina’s bank and foreign exchange reserves. Argentine banks remained closed until January 11, 2002. After the banks reopened, the peso-dollar convertibility regime was replaced by a partial floating rate regime. Throughout this period, market participants looked to the Committee and other industry groups, including EMTA, for guidance on the trade and settlement of Argentine peso NDFs.

The Committee collaborated with EMTA on several other initiatives in 2001. Changes in currency spot rate definitions for the Korean won culminated in additional updates to Annex A of the 1998 Foreign Exchange and Currency Option Definitions. The Committee recognizes that there is more work to be done to enhance NDF documentation and market certainty for trading in emerging market instruments and will continue to support EMTA’s work to supplement existing standard trade documentation.

**LOOKING AHEAD: PLANS FOR 2002**

Although the Committee made great strides in 2001 toward helping market participants prepare and respond to market events, more remains to be done. In 2002, the Committee will concentrate on a number of projects, including:

- Updating operational guidance to incorporate market-related innovations over the past five years,
- Monitoring the activities of CLS Bank,
- Collaborating with the Securities Industry Association (SIA) to examine cross-border implications of proposed efforts to shorten securities settlement from three days to one day,
- Evaluating the developments of electronic dealing with the assistance of the Chief Dealers Working Group,
- Supporting the efforts of EMTA to improve the documentation of NDFs, and
- Examining changes in risk management structures for foreign exchange markets.
In my first year as Chairman of the Foreign Exchange Committee, I am gratified to report the progress made by the Committee in its support of the marketplace. Thanks to the dedication and expertise of Committee members and affiliates, the foreign exchange community stands better prepared to weather both systemic changes to the industry as well as future market events. Many of this year’s achievements are discussed in greater detail in later sections of this report, and I encourage readers with particular interests to find them there for their convenience.

I look forward to the continuation of the Committee’s efforts to encourage the foreign exchange marketplace to strive for the highest standards of integrity and sound business practices.

David Puth
Chairman of the Foreign Exchange Committee
Legal Initiatives

THE FINANCIAL MARKETS LAWYERS GROUP (FMLG) COORDINATES legal projects with the Foreign Exchange Committee, and provides guidance on legal matters. The FMLG is sponsored by the Federal Reserve Bank of New York and includes senior in-house legal representatives from commercial and investment banks active in the foreign exchange market. A senior member of the Federal Reserve Bank of New York’s legal staff chairs the group.

The FMLG supports the Committee by:

- Reviewing new documentation and publications prior to circulation,
- Briefing the membership on pressing legal issues,
- Advising the Committee on actions, including lobbying efforts,
- Emphasizing the need for consistent industry documentation related to foreign exchange transactions and collaborating with other industry groups on documentation issues, and
- Promoting a greater understanding of the legal environment surrounding foreign exchange trading.

FMLG ACTIVITIES IN 2001

After the terrorist attacks of September 11, much of the group’s focus was on assessing the strength of market contingency procedures and developing new procedures to improve market functioning during crises. Improved communications among market participants and various industry groups was seen as the single most important area to address to keep markets functioning. The FMLG worked with the Operations Managers Working Group to implement procedures that would help market participants maximize contact during times of extraordinary market stress. The FMLG also provided assistance in finalizing the Foreign Exchange Committee’s Supplementary Guidance for Market Disruptions.

In addition, throughout the year the FMLG worked on a wide variety of projects in collaboration with the Committee. Early in the year, the group met with representatives of the European Financial Markets Lawyers Group, a legal
industry association affiliated with the European Central Bank, to provide the basis for further collaboration and information sharing. By the end of the year, the group was monitoring the market situation in Argentina and assessing the impact of events there on nondeliverable forwards (NDF) documentation. Some of the most significant work of the FMLG is reviewed below:

**Post-9/11 Contingency Planning:**
The FMLG, along with the Committee and the Operations Managers Working Group contributed to an assessment of contingency arrangements and communication facilities in light of the 9/11 terrorist attacks. The FMLG helped draft the Committee’s Supplementary Guidance for Market Disruptions. This guidance addressed how firms should prepare themselves for significant market-disruptive events such as terrorist attacks and sudden changes in law, regulations, or trading conditions.

**Hague Convention on Private International Law:**
Representatives from the FMLG contributed to efforts to create a legal framework that would provide market participants with more certainty regarding the law governing collateral accounts. Representatives from a number of nations have participated in this effort, and it is expected that a final document will be produced in late 2002. The FMLG intends to participate in that effort.

**Continuous Linked Settlement (CLS) Bank:**
The FMLG subcommittee on CLS Bank continued to monitor the impact that settlement through CLS Bank would have on the foreign exchange market and to identify issues for further study. CLS Bank plans to become operational during calendar year 2002, and the FMLG will continue to monitor its development during the final stages before implementation.

**Bear Stearns v. Kwiatkowski:**
The FMLG participated in the preparation of the amicus brief filed by the Committee, along with the Bond Market Association, and the Futures Industry Association, in the Kwiatkowski case. The appeal in this case seeks to overturn a ruling that could impose duties on market intermediaries, including brokers and dealers, that exceed those defined by contract.

**Other initiatives:**
- The FMLG commented on the Financial Law Panel’s (FLP) initiative on legal risk. The FMLG provided the FLP with a number of criteria that could be used to properly define legal risk for financial institutions.
- The FMLG commented on the draft UNICITRAL Convention on Assignment of Receivables. The FMLG specifically addressed the treatment of certain kinds of financial contracts under the draft Convention.
- The FMLG continued to provide its membership with up-to-date netting opinions for its published documentation in key jurisdictions.
- The FMLG monitors important legislative and regulatory changes that could affect the foreign exchange market. During 2001, the group followed the implementation of the regulations of the Commodity Futures Trading Modernization Act of 2000 and the progress of the financial contract netting provisions of bankruptcy reform legislation in particular. During 2002, the group will continue to monitor regulatory developments concerning derivatives and the implementation of regulations under the U.S. Patriot Act.
THE COMMITTEE HAS ALWAYS RECOGNIZED THE IMPORTANCE OF working with other industry bodies to foster greater communication and promote smooth functioning of financial markets. In the aftermath of September 11, collective problem-solving skills became essential when the industry relied on lines of communication established through years of collaboration to inform market participants about global trading and settlement conditions. Subsequently, the Committee has emphasized the need to maintain good working relationships with other industry groups at all times, and particularly during times of market stress.

COOPERATION AFTER SEPTEMBER 11
In the days immediately following the attack on the World Trade Center, the Committee participated in daily conversations with industry groups such as the Canadian Foreign Exchange Committee and the Singapore Foreign Exchange Market Committee. The groups exchanged updates of trading and settlement conditions in New York City and other market centers. They also consulted one another on best practices. These conversations were critical in providing marketwide status reports and identifying emerging problems. When telephone lines in New York City were impaired, the Canadian Foreign Exchange Market Committee served as a communication hub, relaying information to market participants in other regions. In addition, the Committee and the Singapore Foreign Exchange Market Committee jointly conferred on market practices. The two committees agreed that market conditions generally remained orderly and prevailing trading and settlement practices were appropriate.

As the Committee reevaluated the ways to best support the market during uncertain times, it recognized the importance of working with other industry groups in creating its own contingency plans. The Committee has collaborated with other groups to establish multiple lines of communication between secretariats as safeguards and has emphasized the need to maintain regular contact with one another in ordinary times and even more frequent contact during times of market stress.
**JOINT EFFORTS DAILY**

The Committee collaborates with a variety of industry associations and advisory groups on a day-to-day basis, for example working closely with the Financial Markets Lawyers Group (FMLG) on legal issues. The FMLG, in turn, often coordinates work on its projects with other organizations, such as the Bond Market Association (BMA), the British Bankers’ Association (BBA), the International Swaps and Derivatives Association (ISDA), and the European Financial Markets Lawyers Group (EFMLG).

The Foreign Exchange Committee also interacts with the Financial Markets Association-USA, whose president serves as an observer on the Committee. In addition, the Committee has continued its involvement with CLS Bank as it evolves.

**SUPPORTING EMTA’S EFFORTS**

In 1998, the Committee embarked on a joint initiative with the International Swaps and Derivatives Association (ISDA) and the Emerging Markets Traders Association (EMTA) to standardize trading documentation for non-deliverable forwards (NDF) and related emerging market transactions. In recent years, EMTA has spearheaded efforts to improve NDF documentation. In 2001, EMTA explored alternatives for settling NDF contracts when local markets close unexpectedly. In July, EMTA proposed new NDF documentation for Argentine peso NDFs, introducing a means of settlement in the event of a market closure.

The Committee endorsed the proposed changes, and together with ISDA and EMTA, integrated changes to Annex A of the 1998 *Foreign Exchange and Currency Option Definitions*, a document that supplements the Committee’s master agreements. (This document is available on the Committee’s public web site at <http://www.newyorkfed.org/fxc>). The new documentation was particularly timely given that Argentine markets closed unexpectedly on December 21 for a twenty-day period.

The Committee also collaborated with EMTA on several other initiatives in 2001. Changes in currency spot rate definitions for the Korean won culminated in additional updates to Annex A of the 1998 *Foreign Exchange and Currency Option Definitions*. The Committee will continue to support EMTA’s work to further enhance NDF documentation and market certainty concerning trading in emerging market instruments.

**OFFERING FOREIGN EXCHANGE EXPERTISE TO THE SIA**

The Securities Industry Association (SIA) continues to spearhead efforts to shorten U.S. securities settlement from three days to one day. In 2001, the SIA established a Foreign Exchange Subcommittee to examine the cross-border implications of T+1 settlement. The SIA asked the Committee to offer a foreign exchange perspective on the SIA’s work. Committee members, as well as members of the Operations Managers Working Group, participated in the SIA’s Foreign Exchange Subcommittee.

The subcommittee will publish a white paper in 2002 that examines ways to enhance the automation and efficiency of cross-border securities trade.

Given that most foreign exchange spot transactions settle in two days, investors based abroad would be challenged to fund U.S. securities trades within a shortened settlement window. The subcommittee is researching possible funding alternatives and means of encouraging straight-through-processing (STP) to facilitate faster and more efficient trade and settlement of foreign exchange. In its work, the subcommittee has solicited feedback from other industry groups, including the Tokyo Foreign Exchange Market Committee and the Hong Kong Foreign Exchange and Money Market Practices Committee.

**COORDINATING WITH THE SINGAPORE FOREIGN EXCHANGE MARKET COMMITTEE**

The Foreign Exchange Committee values its close and ongoing relationship with the Singapore Foreign Exchange Market Committee. Both groups share common objectives of improving market efficiencies, reducing global settlement risk, providing guidance to the foreign exchange marketplace, and disseminating information about market practices and issues.

The Singapore Committee is uniquely able to provide key information on Asian financial developments given the proximity of Singapore to other financial market centers such as Indonesia and Malaysia. In 2001, the
Foreign Exchange Committee referenced guidance by the Singapore Committee for trading the Indonesian rupiah and Taiwan dollar.

In February, Bank Indonesia announced certain restrictions with regard to foreign exchange transactions involving the rupiah. The Singapore Committee coordinated with the Foreign Exchange Committee to seek clarification from Bank Indonesia on the scope of these restrictions to mitigate uncertainty in the marketplace. Subsequently, both groups advised counterparties affected by the restrictions to contact one another to determine jointly whether it was appropriate to terminate affected trades.

In September, the Singapore Committee issued a statement regarding the treatment of settlement dates for Taiwan dollar NDFs after questions arose regarding fixing rates. The Committee subsequently endorsed the Singapore Committee’s recommendation regarding Taiwan dollar NDFs.

In most years, the two committees conduct a joint meeting in November to discuss issues of mutual interest. However, given travel restrictions in the fall of 2001, the meeting was postponed until November 2002. In place of the joint meeting, a conference call was held between the chairs of the two committees. The discussion included enhanced preparedness for contingency events, regional model codes, the upcoming start of CLS Bank, and potential issues arising from the proposed T+1 settlement of U.S. securities.

The Committee also routinely exchanges minutes and agendas with the Canadian Foreign Exchange Committee, the Foreign Exchange Joint Standing Committee, the European Central Bank Foreign Exchange Market Contact Group, the Hong Kong Foreign Exchange and Money Market Practices Committee, and the Tokyo Foreign Exchange Market Practices Committee.
A core function of the Foreign Exchange Committee is to advise its sponsor, the Federal Reserve Bank of New York, on issues related to the foreign exchange market. Committee meetings provide a forum for members to identify changing conditions in the marketplace and highlight industry developments that warrant attention. In these discussions, representatives from various types of institutions have an opportunity to voice their assessment of recent market developments and trading conditions. These discussions cover a broad range of topics, including currency trends, trading practices, market structure, operations, and risk management.

Throughout 2001, much of the discussion on market developments concerned the outlook for major global currencies, including the U.S. dollar, the Japanese yen and the euro. Many of the discussions centered on volume and volatility trends before and after the events of September 11. Also, members discussed changing conditions in several emerging market currencies, including the Indonesian rupiah, the Turkish lira, and the Argentine peso.

In addition to commenting on market developments, many discussions highlighted industry developments and issues that may warrant the attention of the Committee.

- Electronic trading platforms and the potential impact of electronic dealing on current best practices,
- CLS Bank and best practices associated with processing trades through it,
- Proposed T+1 settlement for U.S. securities and its potential impact on foreign exchange markets,
- Possible measures to minimize confusion and miscommunication among market participants regarding stop-loss orders,
- Ways to improve communication between market participants during market disruptions, and
- Lessons learned from the events of September 11 for improving contingency planning.
IN 2001, THE COMMITTEE FOCUSED ITS ATTENTION ON ENHANCING the ability of the marketplace to operate safely and responsibly in difficult times. After examining historical market disruptions, the Committee recognized the need to offer additional recommendations for sound planning and practices during market disturbances and periods of high volatility. Many of these recommendations, which are reprinted in this annual report, were highly useful on September 11 and afterwards. In addition, the Committee will continue to work on several long-term issues.

UPDATING OPERATIONAL GUIDANCE
As the foreign exchange industry evolves, the Committee acknowledges the importance of keeping its guidance current and applicable. Consequently, the Operations Managers Working Group, in association with the Committee, will update the Committee’s guidance on operational practices, *Management of Operational Risks in Foreign Exchange*, first published in 1996. Many industry developments, such as the introduction of electronic dealing and prime brokerage, will be incorporated in the revision.

CLS BANK
As the start-up of CLS Bank approaches, the Committee will continue to focus on specialized issues involving the set-up of CLS and its integration into the marketplace. In 2002, the Committee will invite CLS to update the Committee on its structure and the progress of testing. In addition, the Committee’s Operations Managers Working Group will continue its interaction with CLS Bank’s operations-related policy group—the North American User Group—to maintain a high level of expertise in continuous linked settlements.

E-COMMERCE
The Committee understands the important role e-commerce plays in the growth of the foreign exchange industry. With this in mind, the Committee will work with the Chief Dealers Working Group to monitor the development of electronic dealing in the customer-to-dealer arena. In addition, the Committee intends to offer a public forum on electronic dealing aimed at educating market participants...
on the functions of electronic dealing and resulting changes in the industry.

**NONDELIVERABLE FORWARDS**

The Committee will continue to support the efforts of the EMTA to improve the documentation of nondeliverable forwards. In particular, the Committee will continue to coordinate with EMTA on its effort to generate alternatives for settling nondeliverable forwards contracts when local markets close unexpectedly.

“T+1”

The Committee, along with representatives from the Operations Managers Working Group, will continue to work with the Securities Industry Association (SIA) to offer a foreign exchange perspective on the SIA’s effort to shorten securities settlement from three days to one day. The group will examine the means by which market participants can enhance the automation and efficiency of cross-border securities trade. The Committee will work with other industry groups, including the Tokyo Foreign Exchange Market Committee, the Hong Kong Foreign Exchange, and the Money Market Practices Committee on these efforts.

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1Following a number of delays in technology development, CLS Bank will begin testing in the spring of 2002 and is projected to begin operation in the fall of 2002.
The Membership Subcommittee, composed of four senior members of the Foreign Exchange Committee and chaired by a representative from the Federal Reserve Bank of New York, oversees the administration of the Committee and assigns duties to its members.

Although the process of choosing members continues throughout the year, most membership deliberations and decisions occur at the year’s end. Each fall the Subcommittee reviews the composition of the Committee, taking into account those members leaving and those wishing to join, and strives to ensure that the membership reflects the diverse interests of the financial community.

Prospective members are generally representatives of an institution with a leading market presence, are respected individuals within the financial community, and are capable of speaking on behalf of their institutions. Members are expected to be active in the Committee’s activities, to attend all meetings, and to participate in projects or subcommittees when needed. See the Membership Lists section of this report for complete membership information for 2001 and 2002.

The Subcommittee also orients new members to the activities of the Committee, chooses administrative leaders for various working groups, and makes administrative changes to the operating structure of the Committee if necessary.

Early in 2001, the Subcommittee revived the Chief Dealers Working Group in response to the growing need to address trading issues in the industry. Committee members may nominate representatives to participate in the Working Group. The objective of the Group is twofold: to bring issues concerning the trade and operation of the foreign exchange market to the Committee’s attention, and to serve as an advisory body to the Committee on best practices, guidelines, market education, and projects to foster risk management in the marketplace.
Meetings of the Committee

The Committee typically convenes eight times each year. Meetings are routinely held each month except April, July, and August. Each year, the Committee conducts six afternoon meetings—followed by a dinner—hosted by various members. In addition, two working luncheons are held each year at the Federal Reserve Bank of New York. Typically, the November meeting is a joint session with the Singapore Foreign Exchange Market Committee, hosted alternately in New York and Singapore.

In 2001, the events of September 11 led to several schedule changes for the Committee. Owing to constraints on international and domestic travel, the meeting scheduled for September 13 was replaced by a number of phone conferences. Additionally, the November 8 joint session with the Singapore Foreign Exchange Market Committee was postponed until November 14, 2002.

For 2002, eight meetings are scheduled, including a November 14 joint session to take place in Singapore. Notably, the meeting usually scheduled for March will take place on April 11 to avoid scheduling conflicts.

**2001 Meetings**
- January 11
- February 8
- March 8
- May 3
- June 7
- September 13
- October 9
- November 8

**2002 Meetings**
- January 10
- February 7
- April 11
- May 2
- June 6
- September 12
- October 10
- November 14
Committee Assignments, 2001 and 2002

2001

COMMITTEE CHAIRMAN
David Puth

LIAISONS FOR THE WORKING GROUPS

Operations Managers
Peter Mesrobian
Robert White

Chief Dealers
James Kemp
Sue Storey

MEMBERSHIP SUBCOMMITTEE
Dino Kos (Chairman)
Peter Bartko
Mark Snyder
Michael Williams

2002

COMMITTEE CHAIRMAN
David Puth

LIAISONS FOR THE WORKING GROUPS

Operations Managers
Rick Rua
Robert White

Chief Dealers
James Kemp
Sue Storey

MEMBERSHIP SUBCOMMITTEE
Dino Kos (Chairman)
Mark Snyder
Michael Williams
Jamie Thorsen

1A working group handles special projects and functions in lieu of a subcommittee because this structure facilitates a more flexible agenda for addressing specific issues. The Committee may also appoint members as liaisons to working groups. These members attend working group meetings, articulate the Committee’s directives, and promote communication between the working group and the Committee.
Defining Stop-Loss Orders
The following definitions have been added to the Guidelines for Foreign Exchange Trading Activities in the trading section:

Stop-loss orders typically fall into four classes, although some dealers may offer products that vary in their structure and complexity. Some classes are more commonly used than others and dealers do not typically offer all classes of stop-loss orders.

To varying degrees, each type of stop-loss order balances protection against the risk of “slippage” (the difference between the order level and the actual trade price) and the expense of an early exit from the trade position. While slippage is a function of liquidity at different price levels, it may be magnified or mitigated depending on the type of stop-loss order used.

All of these definitions apply to normal market amounts under normal market conditions. As always, counterparties should ensure that they have an independent understanding of the parameters of normal market conditions for each currency market and can effectively recognize risks during abnormal market conditions.

**BID/OFFER STOP**

The order is executed when the market bid (offer) price reaches the level indicated by the bid (offer) stop order. This stop-loss order becomes an “at best” order (executed at the best price available), which may result in significant slippage in volatile market conditions.
Example:
Buy 10 mio Eur at .90xx s/l BID
When the euro bid price is at .90xx, the customer’s order will be filled at the next offer price. In this example, the order may be filled at a much higher price than the original order level, depending on the market liquidity at the time of the trade.

ALLTAKEN/GIVEN-NEXT STOP
The order is executed when the market is no longer offered (in the case of a buy stop) or bid (in the case of a sell stop) at the level indicated by the order. While this stop-loss order becomes an “at best” order, the slippage may be less than a bid/offer stop under normal liquidity conditions.

Example:
Buy 10 mio Eur at .90xx s/l Alltaken Next
When the euro trades through all remaining .90xx offers, the customer’s order will be filled at the next available offer. It is not necessary for the market to be bid at .90xx.

ONE-TOUCH STOP
The order is executed if the order level trades in the market. It is only necessary for the level to trade once for the stop loss to be executed. This type of stop-loss order may provide additional protection against slippage. However, it typically does not protect against the risk that the order may be executed even if the market price does not trade through the order level.

Example:
Buy 10 mio Eur at .90xx s/l One-Touch
If the euro trades at .90xx, the customer’s order will be filled at the next offer, including any remaining .90xx offers. In this example, the order fill may be closer to the order level than a bid/offer stop or an alltaken/given stop order.

AT-PRICE STOP
The order is typically a one-touch stop in which the dealer will guarantee, under normal market conditions, that the order fill will not exceed the level of the order. The customer typically faces the risk that the order may be executed even if the market price does not trade through the order level. It should be noted, however, that at-price stops are not typically offered by all dealers, given their implied guarantee.

Example:
Buy 10 mio Euro at .90xx s/l At-Price
If the euro trades at .90xx, the dealer will buy 10 million euro. The dealer will sell 10 million euros to the client at .90xx regardless of where the dealer covers the position in the market. In this case, the risk of slippage is borne by the executing dealer, given that the trade price may exceed the order level.
The Guidelines for Foreign Exchange Trading Activities have been amended to include the following addendum:

This addendum offers supplemental guidance to market participants in order to promote sound business and fair dealing practices during periods of significant market volatility. The Guidelines and other work of the Committee promote such practices in all trading conditions, although certain practices can be particularly relevant, and take on increased importance, during periods of significant market volatility. The following guidance highlights these provisions and also finds support in the Trading Principles drafted by a group of leading foreign exchange intermediaries in response to a recommendation made by the Financial Stability Forum Working Group of Highly Leveraged Institutions published in April 2000.

**ADDENDUM C**

**Effective Risk Management**

The Committee recognizes that, as part of effective risk management, all trading parties need to heighten their awareness of and sensitivity to market risk and credit management issues during periods of significant market volatility. When an individual currency is experiencing high volatility, intermediaries should use particular care when they extend credit to counterparties in such markets. (For further information on best practices...
for effective risk management, refer to the Risk Management section of the Guidelines.

Dealings with Market Participants
Given the increased potential for confusion and disputes in volatile markets, it is essential that market participants pay close attention to the general expectation (applicable at all times) that they act honestly and in good faith when marketing, entering into, executing, and administering trade orders. Market participants should always act in a manner that promotes public confidence in the wholesale financial markets.

Counterparties should satisfy themselves that they have the capability (internally or through independent professional advice) to understand the risks of trading at volatile times and to make independent trading decisions. A salesperson at an intermediary has the right, but not the obligation, to convey economic or market information, trading parameters, the institution’s views, and personal views, as well as to discuss with the counterparty market conditions and any potentially applicable restrictions relating to transactions. The counterparty should understand that such communications will not constitute investment advice and therefore should not be relied upon, unless that service is specifically contracted for or stipulated in writing. Intermediaries should remain aware that, unless otherwise agreed, an intermediary is not obligated to enter into a transaction with a counterparty under any circumstances.

Stop-Loss Orders and Barrier Options
Intermediaries should ensure that there is mutual agreement with counterparties on the basis of which orders—in particular stop-loss orders and barrier options—are undertaken so as to avoid disputes that may arise in connection with the execution of such orders as market liquidity fluctuates. In addition, it would be prudent for a counterparty to take steps to ensure that it independently understands market developments and individual trigger levels if an intermediary has not contractually agreed to be an investment advisor to the counterparty.

Execution of Counterparty Orders
Handling of counterparty orders requires standards that promote best execution for the counterparty in accordance with such orders, subject to market conditions. Intermediaries should exercise caution in ensuring that internal guidelines are followed at all times and particularly during periods of significant market volatility. (For further information, refer to the Ethics section of these Guidelines.)

Publication of Market Research
Intermediaries should be attentive to the independence and integrity of any market-related research that they publish. Any views expressed in market research constitute the intermediary’s understanding of prevailing markets.

Communication of Information
Market participants are encouraged to communicate information regarding market developments with each other during times of volatility, with the understanding that each participant providing and receiving information should view it with particular scrutiny—given the potential for information to be false or misleading during periods of significant market volatility. Market participants should also pay special attention to internal guidelines concerning handling false or misleading information, particularly during periods of significant market volatility.

Trading Practices
It is important for market participants to adhere to the general standard (applicable at all times) that they not engage in trading practices that constitute fraudulent, deceptive, or manipulative acts or practices under applicable laws and regulations, or in practices that violate their institution’s ethical rules or any rules of electronic trading systems.
INTRODUCTION
From time to time, events—including actions by government authorities—have created significant uncertainty concerning the ability of foreign exchange market participants to settle outstanding transactions involving currencies. Over the last few years, there have been several instances in which new government currency regulations, unanticipated civil unrest, natural disasters, or terrorist acts have made market participants unsure of both their counterparties’ and their own ability to meet current and future contractual obligations in conformance with applicable law. These events may also prevent settlement systems from performing their expected functions. Lack of effective communication—both among market participants and between market participants and governmental authorities—can exacerbate problems and increase systemic pressures on global capital markets.

PURPOSE
The suggestions below are meant to provide the foreign exchange community with guidance that might be useful before and after the occurrence of future disruptive events. The practices recommended would permit market participants to act proactively with sufficient information to manage the credit, market, legal, and operational risks arising from such events. Although the Committee notes that these events, in some
instances, may be precipitated by government action, the Committee takes no view on the advantages or disadvantages of particular government actions or sovereign policies regarding foreign currency trading.

As in any best practice recommendation, the Committee’s views are not meant to, and indeed cannot, replace the terms of parties’ negotiated transactions. When making a recommendation, the Committee attempts to note the applicable provisions of the common market standard agreements that participants may have in place. But specific terms between parties and any other legal requirements will always govern such relationships and should be the first place that market participants look to resolve differences or seek solutions to new situations.

**THE IMPORTANCE OF INFORMATION SHARING**

The Committee believes that it, along with other market-based industry groups, can contribute to alleviating concerns and to allowing the market to function in line with market expectations by providing a forum for information sharing, and, in certain instances, recommending specific best practices. The Committee’s role in response to an event or the issuance of an order, law, or regulation is to draw the attention of market participants to changes that may affect the way business is done. The Committee will also disseminate information that it receives about the details of an event or government action that has, or could have, a material impact on the foreign exchange market either in a country or by involving a country’s currency. As a central and well-known industry body, the Committee can encourage communication between trade counterparties and act as a liaison with other industry groups so that market participants can determine the best course in the context of their trading relationships. If appropriate, the Committee may encourage market participants to adopt measured reactions to events such as unexpected natural or governmental acts that increase market stress. Finally, to the extent that consultation with a broad array of market participants does not resolve uncertainties, the Committee may publicly request needed clarification from the relevant authorities.

**PAST EVENTS**

The Committee has gained substantial experience in coordinating communication and providing suggested best practices in response to certain market events. In coordination with other industry groups, the Committee has published guidance for the foreign exchange community during past disruptive events. Most notably, the Committee offered guidance in reference to certain exchange controls involving the Malaysian ringgit in 1998 (see the Committee’s 1998 announcement, Foreign Exchange Committee Recommends Closeout of Ringgit Positions), regulatory restrictions involving the Indonesian rupiah in 2001 (Foreign Exchange Committee Recommendations Regarding Rupiah Positions), and rate ambiguities involving the Taiwan dollar in 2001 (Foreign Exchange Committee Endorsement Regarding the Taiwan Dollar). During those events, the Foreign Exchange Committee had the opportunity to endorse or enhance recommendations made by the Singapore Foreign Exchange Market Committee that proved instrumental in the Committee’s ability to publish useful information for the financial community.

The Committee has no rigid criteria for determining whether to issue guidance, but rather seeks to respond to the information needs of the market when disruptive conditions threaten. Although committee statements are not appropriate in all circumstances, they can provide information as well as serve as a basis for the beginning of bilateral discussions between market participants.

The Committee has also, from time to time, acted as an information conduit for all members of the foreign exchange community, including those not affiliated with the Committee. Although these communication efforts may not result in the publication of formal Committee views, they serve an important purpose by promoting the continued smooth operation of the financial markets. Various
incidents have taught the Committee that communication and additional information create a climate where market participants can act consistently with the law and market expectations without exacerbating conditions or creating market distortions.

The Committee’s purpose in issuing specific recommendations or sponsoring informational discussions is always to preserve the fair and efficient functioning of the foreign exchange marketplace within the boundaries of applicable law. In this regard, under no circumstance does the Committee condone any actions by any of its members that would be in contravention of law, including antitrust law.

**BEST PRACTICES**

Although the Committee can function as a clearinghouse of information during times of market stress, institutions themselves can take a number of steps to prepare for disruptive events. Institutions should:

- Develop contingency settlement arrangements that can be put in place quickly and that are sufficient to accommodate the level of the institution’s business activity during a disruptive event,

- Ensure that relevant persons within the institution understand the settlement systems that they rely on, either directly or indirectly, to settle transactions so that the institution may assess the impact of physical dislocations and similar events that may impede timely settlement,*

- Ensure that counterparties provide contacts available at any time, including off-hours,

- Publicize contingency contacts and have available up-to-date and comprehensive contingency contact information for counterparties, (including front-office, operations, and legal professionals), and

- Designate a point person responsible for gathering, coordinating, and internally disseminating information on market events, sovereign actions, or natural events that could affect settlements; this person should also maintain lists of useful contacts at relevant government, regulatory, and settlement agencies.

In addition, after a market disruption and during times of continued uncertainty, institutions should:

- Be aware of announcements of the Committee and other industry groups, and possibly contact local market groups to obtain additional information,

- Be prepared for senior personnel to participate in industry efforts to gather and distribute clarifying information,

- Contact the appropriate government, regulatory, or settlement officials to request clarification of new rules or requirements, and

- Contact counterparties with which an institution has effected trades in order to share information on the event and to begin the process of confirming trade terms and discussing the possible effect of the event on transactions.

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*Many market participants were unaware of the details of the settlement process in Indonesia in 1998, and as a result were unable to react quickly when civil unrest effectively prevented settlement.
The growth of electronic trading in the foreign exchange market is one of the most significant trends of recent years. Screen-based systems have rapidly replaced the phone as a conduit for conducting trades, enhancing the efficiency of the trading process as well as reducing trade errors because trade information can be entered just once—rather than being re-keyed several times during the trade and settlement process.

Electronic front-end trading systems are also changing the way in which counterparties validate or confirm trades with one another. Industry best practices recommend, for example, that counterparties confirm each trade with one another via confirmation messages (that is, by SWIFT MT300, fax, paper, or phone). Some counterparties, however, have chosen on a bilateral basis to eliminate confirmation messages with one another and to use electronic affirmation facilities offered by electronic trading systems instead. Such facilities provide for an independent (that is, nondealer) validation of trade details. Some trade systems alternatively send trade summaries directly to each counterparty’s back office for verification. Market participants can affirm that the trade details reflected in the electronic trading system correspond to their own internal books and records and that proper controls are followed. However, it is important to recognize that such validation exercises do not necessarily confirm that trade details have been entered correctly into the books and records of each counterparty.
The Committee continues to recommend back-office confirmation messaging as a means of controlling operational and settlement risks. Market participants who choose to replace confirmation messaging with trade validation from electronic front-end trading systems, however, should carefully consider both the benefits and risks of doing so.

**BENEFITS**

- Automates the confirmation phase, minimizing the need for dual entry of trade data and enhancing straight-through processing,
- Eliminates the cost of sending confirmation messages as well as the operational expense of processing confirmations manually,
- Offers a consistent system for both small and large market participants to verify trade information in a timely and efficient manner, and
- If two counterparties use electronic validation in common, trade information can be confirmed against an independent and unbiased third-party record.

**RISKS**

- Affirmation facilities connected with electronic front-end systems may not allow counterparties to validate whether the trade has been accounted for properly in the books and records of each firm, even though they allow counterparties to confirm that trade details are accurate,
- Electronic front-end systems may not capture sufficient data to provide a robust audit trail in the event of a dispute, even though they provide sufficient data for matching the trading terms,
- Without confirmations, electronic databases may not accurately reflect trade amendments or adjustments, increasing the chance of settlement errors,
- Eliminating confirmations may also limit the independence of the trade validation process by the back office and may increase the risk of unauthorized (that is, rogue) trading,
- In the absence of standard settlement instructions (SSIs), eliminating confirmation may compromise the ability of each counterparty to ensure that settlement instructions are accurate, and
- Electronic trading systems that do incorporate SSIs may not be updated correctly without per-trade confirmation; new accounts open and settlement instructions change, but this may not be communicated to all counterparties.

**SUMMARY**

Market participants who eliminate confirmation messaging are urged to have sufficient measures in place to mitigate the risks noted above. The Committee recognizes that future developments in electronic trading systems may further safeguard trade validation. Careful analysis is necessary, however, to be certain that risks are sufficiently recognized and managed. The Committee will continue to monitor the evolving electronic marketplace and provide guidance as necessary.
Contingency Planning

Issues and Recommendations
On Tuesday, September 11, 2001, the destruction of the World Trade Center resulted in widespread damage throughout the financial community. Both front- and back-offices at many downtown financial firms were destroyed or evacuated. Affected firms quickly shifted to contingency facilities to restore operations, however, and the importance of robust contingency planning for all firms was highlighted.

Although the events of September 11 resulted in some disruption of business in the foreign exchange market, the market continued to function, thanks, in part, to comprehensive contingency planning by financial firms in preparation for Y2K. On the whole, market participants were well-equipped to initiate contingency operations and communication channels with one another. Consequently, the foreign exchange industry responded quickly and efficiently to events as they unfolded, and the scope of disruptions among foreign exchange participants was surprisingly narrow. Yet the disruptions of September 11 highlighted several risks specific to the foreign exchange market that foreign exchange providers should note as they reassess their preparedness for future market events.

As an advisor to the foreign exchange community, the Foreign Exchange Committee (the Committee) serves as a forum for offering guidance during market disruptions. Toward this end, the Committee has summarized below some of the issues reported in the foreign exchange marketplace on September 11 and subsequent
days. The majority of these issues affected a relatively limited subset of market participants, but they provide an opportunity for all market participants to consider their firm’s preparedness for such events. In addition to other Committee documents such as the Guidelines for Foreign Exchange Trading Activities, the Committee offers supplementary guidance for firms’ business continuity planning efforts and encourages foreign exchange providers to review their contingency preparedness in light of them.

**SETTLEMENT AND PAYMENT**

- Systems problems reportedly resulted in delayed settlement for some proprietary foreign exchange trades.
- Third-party payment delays constrained some payment flows, resulting in additional payment delays.
- Some firms reported elevated levels of trade fails on September 11 and 12. The number and size of failed trades diminished in subsequent days. No firms reported alarming levels of fails.

Recommendation: Market participants’ business continuity plans should incorporate the business recovery capabilities of their internal foreign exchange transaction-processing facilities, as well as those of their critical service providers—particularly clearing and third-party settlement banks.

**LIQUIDITY**

- Interdealer liquidity was reportedly constrained at times by disruptions in electronic trading systems.
- Connectivity to interdealer electronic trading systems was reportedly intermittent in New York. Many firms, however, accessed these systems in other locations, such as London.
- Some foreign exchange providers did not have electronic trading systems at their contingency locations.
- Dealers reported that liquidity for dollar-based currency pairs did not migrate to alternative electronic trading systems as rapidly as it had during past service disruptions.
- Many dealers reported difficulty reaching voice brokers in New York during the week of September 11.

Recommendation: Market participants’ business continuity plans should reflect their liquidity requirements and the business continuity capabilities of their critical liquidity providers, including disaster recovery site access to electronic trading services.

Market participants should be mindful of the contingency arrangements made available by their key liquidity providers.

**CONFIRMATIONS AND NETTING SERVICES**

- Participants reported some disruptions in confirmations, netting, and settlement services.
- Affected firms reportedly netted trades manually.
- Firms concentrated on reconciliations—ensuring that reconciliations were completed before authorizing additional trades.

Recommendation: Market participants’ business continuity plans should take into consideration the

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technical support requirements of their critical processing systems, including contingency site access to critical confirmation and netting systems and increased manual trade processing requirements.

Business continuity plans should incorporate the contingency arrangements made available by critical confirmation and netting systems.

**INDUSTRYWIDE AND FIRMWIDE COMMUNICATION**

- Industrywide conference calls served as a forum for exchanging information and highlighting trading and settlement issues.
- Conference calls between the Federal Reserve Bank and the foreign exchange community were an important means of communication.
- Participants composed a contact list of emergency contact information for trading, legal, and operations staff.
- Participants recommended that banks re-evaluate contingency plans to ensure that front- and back-office staffs are trained and prepared for evacuation. Operational redundancy should include staff cross-training in the event of an emergency.

**Recommendation:** Market participants should ensure that business continuity plans address the ability of personnel to relocate during the crisis.

Market participants should maintain emergency contact information for their primary counterparties. Information records should include contingency site phone numbers and key personnel contact information. Market participants should periodically monitor updated contact information made available on the Foreign Exchange Committee’s web site (www.newyorkfed.org/fxc).

**INDUSTRY GROUP COORDINATION**

- The Foreign Exchange Committee coordinated with the Singapore Foreign Exchange Market Committee (SFEMC) on best practices regarding the Taiwan dollar (see statement at http://www.newyorkfed.org/fxc/taiwan.pdf).

**Recommendation:** During market disturbances, market participants should pay special attention to guidance published by industry groups such as the Foreign Exchange Committee and the Singapore Foreign Exchange Market Committee.

Regional foreign exchange committees should exercise best efforts to communicate market recommendations to one another prior to their public release.
The April 2001
Foreign Exchange
and Interest Rate Derivatives Markets Survey

Turnover in the United States
This report presents the United States turnover portion of the 2001 Central Bank Survey of Foreign Exchange and Derivatives Markets. The survey is part of an ongoing series of surveys conducted by central banks every three years on the size, structure, and trends in the foreign exchange and derivatives markets. The survey collected data on over-the-counter transactions executed in the United States during April 2001 in the foreign exchange and derivatives market. The participants included both domestic- and foreign-owned dealers in the United States. Seventy-nine dealers (sixty-six banks and eleven nonbanks) participated in the foreign exchange survey and fifty-four dealers (forty-eight banks and six non-banks) participated in the derivatives survey.
This report encompasses two surveys. The Foreign Exchange Market Survey includes foreign exchange (FX) spot, forward, and swap instruments. The Foreign Exchange and Interest Rate Derivatives Markets Survey\(^1\) incorporates forward rate agreements (FRAs), currency and interest rate swaps, and foreign exchange and interest rate options.

**SUMMARY OF THE FOREIGN EXCHANGE AND DERIVATIVES STUDIES**

\(~\) Daily turnover in the U.S. foreign exchange market (spot, forwards, and FX swaps) during April averaged $254 billion, after adjusting for the double reporting of transactions between reporting dealers in the United States. This is a decline of 28 percent from the April 1998 survey. The decline in turnover was 12 percent after removing the effects of changes in exchange rates.

\(~\) Daily turnover for the other derivatives markets (FRAs, interest rate swaps, cross currency interest rate swaps, and foreign exchange and interest rate options) averaged $135 billion. This represents a 48 percent increase (a 14 percent annualized growth rate) from the prior survey.

**The Foreign Exchange Market Survey**

Daily trading volume in the U.S. foreign exchange market averaged $254 billion in April 2001, down 28 percent from the previous survey. This is the first decline since these surveys began.\(^2\)

Several developments contributed to this decline. First, the introduction of the euro eliminated trading in the European currencies it replaced. Second, there was significant consolidation among financial institutions. The number of participating dealers declined to seventy-nine in the 2001 survey from ninety-three in 1998 and one hundred and thirty in 1995. Third, increased trading through electronic brokers has enhanced the market’s price discovery process, reducing the ripple effect on turnover of new business. Fourth, some foreign-owned institutions have centralized trading, shifting trading from the United States to their home countries. Several large U.S. institutions also shifted part of their trading operations to London. Despite the overall decline in turnover, several dealers indicated that bid-offer spreads and liquidity were similar to levels at the time of the last survey.

**Instruments**

The volume of both foreign exchange spot and swap transactions declined about 30 percent from the previous survey. However, transactions in the forward market showed little change.

FX swaps continued to account for the largest share of turnover (45 percent). The data for FX swaps also show that:

\(~\) The U.S. dollar was one of the currencies in 98 percent of FX swaps.

\(~\) The maturities of foreign exchange swaps have changed little since the last survey. Approximately 68 percent of swaps had maturities of seven days or less, down about 1 percent from 1998. Swaps with maturities between seven days and one year increased about 1 percent to 31 percent.

Spot trades accounted for 41 percent of turnover, down from 42 percent in the previous survey.

Forward transactions rose to 14 percent of the total from 11 percent in the previous survey.

\(~\) On average, maturities in the forward market lengthened. Transactions with maturities of seven days or less declined to 40 percent of the total from 50 percent in 1998 while trades with maturities of over seven days to less than a year rose to 59 percent from 48 percent, with transactions over a year accounting for the remainder.

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\(^1\)The survey is often also referred to in the industry as the Triennial Survey of Foreign Exchange.

\(^2\)This total is adjusted for the double reporting of transactions between participating dealers in the United States.
The proportion of forward trades that were designed as non-deliverable forwards increased to 16 percent, up from 8 percent in the previous survey.

**Currencies**
The U.S. dollar was traded in 93 percent of all transactions, up slightly from 90 percent in the last survey. The euro was the second most actively traded currency, and was one of the currencies in 39 percent of trades. (In the 1998 survey, the German mark was the second most actively traded currency with 35 percent of the total.) The yen remained the third most active currency at 27 percent (up from 24 percent), followed by the Canadian dollar at 8 percent (up from 4 percent), and the Swiss franc at 7 percent (down from 9 percent). Other currencies were involved in 13 percent of transactions, compared with 9 percent in 1998.

The most actively traded currency pair was the U.S. dollar against the euro. Dollar/euro transactions accounted for 33 percent of total turnover. (In 1998, dollar/mark was the most heavily traded currency pair with 25 percent of the total.) Dollar/yen was the second most active currency pair with 24 percent of turnover (up from 22 percent in 1998).

**Market Structure**
In addition to the introduction of the euro, the foreign exchange market has experienced a number of significant changes since the 1998 survey.

Trading through all types of electronic trading systems together accounted for 79 percent of spot trading in the dollar/euro pair, 62 percent for dollar/yen, and 58 percent for euro/yen.

Dealers reported that 61 percent of their spot, forward, and FX swap transactions were conducted with counterparties outside the United States.

The consolidation of financial institutions led to an increase in the market shares of the largest foreign exchange dealers. The list of the largest dealers, however, varies by instrument, and the lists of the top five and top ten dealers have changed considerably since the last survey.

The market share of the top ten firms increased to 66 percent from 52 percent. The five largest dealers in spot trading increased their share of turnover to 41 percent from 33 percent in 1998.

In the forward market, the market shares of the top five and the top ten increased, respectively, to 49 percent from 39 percent and to 69 percent from 59 percent.

In the foreign exchange swaps market, the top five firms’ share of turnover increased to 46 percent from 35 percent. The share of the top ten increased to 68 percent from 58 percent.

The survey asked dealers to assess foreign exchange and derivatives turnover during April in terms of trading patterns and trends.

Trading during the month was considered normal by 65 percent of survey participants, below normal by 29 percent, and above normal by 6 percent.

Turnover during the previous six months was considered steady by 62 percent, was seen as increasing by 21 percent, and decreasing by 17 percent.
OVERALL VOLUME TRENDS FOR THE FOREIGN EXCHANGE AND INTEREST RATE DERIVATIVES MARKETS SURVEY

Daily turnover in the foreign exchange and derivatives markets (FRAs, interest rate swaps, cross currency interest rate swaps, and foreign exchange and interest rate options) rose 48 percent from the previous survey to $135 billion after adjusting for the double reporting of trades by participating dealers in the United States. This represented a 14 percent annualized growth rate, a significant decline from the 20 percent growth rate between the 1995 and 1998 surveys.

Average daily turnover for interest rate swaps was $82 billion, an increase of more than 160 percent since the last survey. Turnover for FRAs was the next largest at $23 billion, an increase of 44 percent since 1998.

As in 1998, U.S. dollar-denominated contracts and contracts with the dollar on one side accounted for more than 83 percent of turnover in these instruments. The share of dollar-denominated contracts ranged from 81 percent for interest rate swaps to 92 percent for currency swaps.

Trades with local counterparties accounted for 44 percent of the total, down from 55 percent in the 1998 survey. There was, however, considerable variation across the five instruments.

Counterparties for 77 percent of interest rate options were local.

Counterparties for FX options, currency swaps, interest rate swaps, and FRAs were more likely to be located outside the United States.

Trading in the derivatives market is more concentrated than it is in the foreign exchange market.

Seventy-one percent of turnover in these instruments was transacted between reporting dealers, up from 46 percent in 1998. Trades with other financial institutions accounted for 20 percent of turnover in these instruments. Trades with nonfinancial customers represented 8 percent of the total.

Since the last survey, the proportion of trading of the ten largest dealers has increased for currency swaps, forex options, and interest rate swaps, while declining somewhat for interest rate options and FRAs.
ANNEX I
Survey Terms and Method

1. TURNOVER

a) Turnover is the volume of transactions during April 2001 in U.S. dollar equivalents. The amount of each transaction is reported before the effects of any netting arrangements. In the case of swap transactions, only one leg is reported.

b) Three types of counterparties were covered by the survey:

1) reporting dealers participating in the survey
2) other financial firms, and
3) nonfinancial customers.

Each type of counterparty was broken down into local and cross-border—resulting in a total of six categories for counterparties.

c) Market totals. Transactions between two participating dealers were reported twice, once by each of them. Survey figures for market totals are therefore adjusted to avoid double counting of such trades. Adjusted figures are market totals after adjusting for double reporting by participating dealers. Unadjusted figures are gross totals without adjusting for double reporting. The data in this report are adjusted figures unless otherwise noted.

Since transactions between local reporting dealers were reported twice, the total of local dealer transactions is divided by two for the adjusted total.

d) Average daily turnover was obtained by dividing total volume by twenty trading days. Although there were officially twenty-one business days in the United States during April 2001, Good Friday, April 13, was not counted as a trading day since little trading was done.

e) Turnover for non-U.S. dollar transactions was reported in U.S. dollar equivalents using exchange rates at the time of the transactions.

f) Changes in exchange rates affect the comparisons of turnover volumes between surveys. Turnover of non-U.S. dollar transactions were reported in U.S. dollar equivalents using exchange rates at the time of the transaction. As a result, the rise of the dollar against most foreign currencies since the last survey lowered turnover in foreign currency transactions when converted to dollars. (Market turnover, calculated by revaluing 1998 turnover in foreign currencies at 2001 dollar exchange rates, was down about 12 percent, compared with the 28 percent decline in unadjusted dollar terms.)

2. LOCATION

Trade vs. book location. Transactions were reported on the basis of the location of the dealer agreeing to do the transaction. A dealer in New York, for example, might engage in a trade that is booked at a London affiliate. In that case, the trade location is New York and the book location is London. The transaction would be included in the turnover figures in the U.S. survey. If a trader in London entered into a trade, but the trader’s firm booked the trade in its New York affiliate, the transaction would be included in the institution’s survey report to the Bank of England.

3. PARTICIPATING FIRMS

A total of seventy-nine dealers—sixty-eight banks and eleven nonbanks—participated in the foreign exchange part of the survey. (A total of ninety-three firms participated in 1998 and one hundred and thirty participated in 1995.) A total of fifty-four dealers—forty-eight banks and six nonbanks—participated in the foreign exchange and interest rate derivatives part of the survey. (In 1998, sixty participated, and in 1995, fifty-one participated.) The dealers included both U.S. institutions as well as foreign institutions with dealing operations in the United States (Annex II). As in 1998, all of the largest dealers participated.

Dealers were asked to participate based on several criteria, including participation in the last survey, the firm’s outstanding contracts reported in bank call reports, or, in the case of nonbanks, outstanding contracts reported in published financial statements.

Data provided on the amount of trading through electronic systems were derived from the reports of dealers. As in past U.S. surveys, foreign exchange market brokers were also surveyed. These data cannot be published, however, in view of the very small number of participants. Only two voice brokers
participated in the survey this year, down from nine in 1998, as mergers and industry consolidation reduced the number of participants in this business. Electronic brokers participating numbered only two as well.

4. INSTRUMENT DEFINITIONS

Foreign exchange spot: Single purchase or sale of currency for settlement not more than two business days after the deal is contracted.

Foreign exchange forward (outright forward): Currency trade to be settled at an agreed time in the future—more than two business days.

Non-deliverable forwards: Forward transaction where settlement is made by a cash payment reflecting the market value of the contract instead of the exchange of currencies.

Foreign exchange swap: Simultaneous exchange of two currencies on a specific date at a rate agreed at the time of the contract, and a reverse exchange of the same two currencies at a date further in the future at a rate agreed at the time of the contract. Short-term swaps carried out as “tomorrow/next day” transactions are included in this category.

Currency swap: A contract that commits two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and to exchange principal amounts in the respective currencies at an agreed exchange rate at maturity.

Currency option: Option contract that gives the right to buy (call option) or sell (put) a currency with another currency at a specified exchange rate during a specified period. This category includes currency warrants and multi-currency swaptions.

Forward rate agreement: Interest rate forward contract in which the rate to be paid or received on a specific obligation for a set period of time, beginning at some time in the future, is determined.

Interest rate swap: Agreement to exchange periodic payments related to interest rates on a single currency. The swap can be fixed for floating, or floating for floating, based on different indices. This group includes those swaps whose notional principal is amortized according to a fixed schedule independent of interest rates.

Interest rate option: Option contract that conveys the right to pay or receive a specific interest rate on a predetermined principal for a set period of time.

Interest rate cap: Option contract that pays the difference between a floating interest rate and the cap rate.

Interest rate floor: Option contract that pays the difference between the floor rate and a floating interest rate.

Interest rate collar: Combination of cap and floor.

Interest rate swaption: Option to enter into an interest rate swap contract.

Interest rate warrant: Long-dated (more than one year) interest rate option.

Bond option: Option contract that conveys the right to purchase or sell a fixed income security. The survey does not, however, include options embedded in bonds or notes.
ANNEX II:  
Foreign Exchange Survey Participants

Foreign Exchange Dealers

NONCOMMERCIAL BANKS
AIG International  
American Express Bank Limited  
Bear Stearns  
General Re Financial Products  
Goldman Sachs  
ING Barings (US Capital Markets)

COMMERCIAL BANKS
ABN AMRO North America  
Allfirst Financial Incorporated  
Asahi Bank  
Banca Commerciale Italiana  
Banca di Roma  
Banca Monte dei Paschi  
Banca Nazionale del Lavoro  
Banco Bilbao Vizcaya Argentaria  
Banco Santander Central Hispano  
Bank Julius Baer and Company  
Bank Leumi le-Israel Corporation  
Bank of America Corporation  
Bank of Montreal  
Bank of New York  
Bank of Tokyo-Mitsubishi Limited  
Bank One Corporation  
Barclays Capital  
BNP Paribas  
Canadian Imperial Bank  
Chase Manhattan  
Christiania Bank OG  
Citigroup  
Comerica Bank  
Commercial Bank of New York  
Commerzbank AG  
Commonwealth Bank of Australia  
Credit Agricole Securities  
Crédit Lyonnais  
Credit Suisse Group  
Dai-Ichi Kangyo Bank  
Den Danske Bank AG  
Den Norske Bank ASA  
Deutsche Bank AG  
Dresdner Bank AG

Lehman Brothers  
Merrill Lynch  
Morgan Stanley Dean Witter  
Prudential  
Salomon Smith Barney Holdings

Erste Bank  
Firstar Corp  
Fuji Bank Limited  
Huntington Bancshares  
Imperial Bank  
Industrial Bank of Japan  
Keycorp  
Marshall & Ilsley Corporation  
MBNA Corporation  
Mellon Financial Corporation  
Merita Bank PLC  
Natexis Banques Populaires  
National City Bank  
Norddeutsche Landesbank Girozentrale  
Norinchukin Bank  
Northern Trust Corporation  
Pacific Century Financial Corporation  
People’s Mutual Holdings  
Rabobank Nederland  
Sanwa Bank Limited  
Skandinaviska Enskilda Banken  
Société Générale  
Standard Charter Bank  
State Street Bank and Trust Company  
Sumitomo Mitsui Banking Corporation  
Sun Trust Bank  
Svenska Handelsbanken AB  
Tokai Bank  
U.S. Bank  
UBS AG  
UniCredito Italiano  
Unionbancal Corp  
Wachovia Bank  
Wells Fargo
# Foreign Exchange Survey Participants

## Derivatives Dealers

### Non-Commercial Banks
- AIG International Incorporated
- Bear Stearns
- General Re Financial Products
- Goldman Sachs
- Merrill Lynch
- Morgan Stanley Dean Witter
- Salomon Smith Barney Holdings

### Commercial Banks
- ABN AMRO North America
- Allfirst Financial Incorporated
- Banca di Roma
- Banca Monte dei Paschi
- Banco Bilbao Vizcaya Argentaria
- Bank of America Corporation
- Bank of Montreal
- Bank of New York
- Bank of Tokyo-Mitsubishi Limited
- Bank One Corporation
- Barclays Capital
- BB and T Corporation
- BNP Paribas
- Chase Manhattan Corp
- Citi Group
- Comerica Bank
- Commerzbank AG
- Compass Bankshares
- Credit Agricole Securities
- Crédit Lyonnais
- Credit Suisse Group
- Dai-Ichi Kangyo Bank
- Den Danske Bank AG
- Deutsche Bank AG
- Dresdner Bank AG
- Erste Bank
- Firstar Corporation
- Fuji Bank Limited
- Huntington Bancshares
- Industrial Bank of Japan
- Keycorp
- Mellon Financial Corporation
- Merita Bank PLC
- National City Bank
- Norddeutsche Landesbank Girozentrale
- Rabobank Nederland
- Sanwa Bank Limited
- Société Générale
- State Street Bank and Trust Company
- Sumitomo Mitsui Banking Corporation
- Sun Trust Bank
- Svenska Handelsbanken AB
- UBS AG
- Unionbanca Corporation
- Wachovia Bank
- Wells Fargo
Dear Mr. Virgilio:

The Foreign Exchange Committee and the Singapore Foreign Exchange Market Committee commend SWIFT’s responsiveness to our recommendations related to the format of SWIFT confirmation messages. As part of our joint letter dated December 15, 2000, we suggested the following language for the published terms and conditions for SWIFT Field 77 D:

**Rules:** This field is to be used to refer to specific agreements between the parties to the trade. This field is not to be used to impose any additional conditions or references to local regulations that are not covered in master agreements. If the field is not present, the deal conforms to the usual banking practice.

Subsequently, SWIFT inquired if the Foreign Exchange Committee and the Singapore Foreign Exchange Market Committee would support a minor revision to the recommended language. The proposed definition was revised as follows:

**Rules:** This field is to be used to refer to specific agreements between the parties to the trade. This field is not to be used to impose any additional conditions or references to local regulations that are not covered in master agreements. *Any other information included in this field must have been previously agreed upon by the trading parties.* If the field is not present, the deal conforms to the usual banking practice.
The two groups, in consultation with the Foreign Exchange Committee’s Operations Managers Working Group, condone the recommended change. We concur that the proposed definition will help to simplify trading procedure and limit confusion and errors.

We welcome any additional questions regarding our letter and appreciate SWIFT’s attention to our requests.

Very truly yours,

David Puth
Chairman
The Foreign Exchange Committee

Jeanette Wong
Chairman
The Singapore Foreign Exchange Market Committee
Dear Mr. Koleba:

The Foreign Exchange Committee’s Operations Managers Working Group has long been an advocate of streamlining the back-office process while ensuring the adherence to our recommended *50 Best Practices* in monitoring and controlling operational risk. An important part of the foreign exchange process flow is the confirmation of the trade as well as the resulting settlement of the underlying obligation.

In this regard, it is with great interest that we have been following the progress of the CLS Bank initiative to eliminate settlement risk as well as your committee’s work in identifying the opportunities for leveraging the CLS instruction match process as a substitute for the trade confirmation match.

Having reviewed version 2.1 of your committee’s paper on the elimination of SWIFT MT300 matches in favor of the CLS instruction match, we add our support to your efforts and wish to highlight several key points in your document:

- Institutions participating in CLS should establish a control process to monitor the status of their instructions at CLS Bank. This monitoring process should identify unmatched trades on the trade date.
- Instructions should be submitted to CLS Bank within the two-hour limit recommended as a best practice.
Banks considering eliminating the MT300 confirmation match on a bilateral basis should ensure their processing and confirmation systems have been adjusted to accommodate the selective nature of match substitution with regard to counterparties and currency pairs while still supporting settlements outside of CLS, as needed.

Procedural changes must also be implemented to ensure that key controls are in place to adequately identify exceptions.

Those institutions that are able to participate comfortably in this match substitution process may indeed find an efficient processing method that maintains accuracy and control.

We thank you for submitting your document to us for evaluation and including us in the discussion process.

Very truly yours,

David Puth
Chairman
The Foreign Exchange Committee

Jeanette Wong
Chairman
Singapore Foreign Exchange Committee
Regarding Review of Outstanding Trades in the Indonesian Rupiah during Uncertain Conditions

Bank Indonesia (the central bank of Indonesia) recently announced certain restrictions with regard to foreign exchange transactions involving the Indonesian rupiah. While Bank Indonesia has attempted to clarify these restrictions, continued uncertainty, particularly concerning the scope of the restrictions, remains throughout the foreign exchange community. Further official clarification may be provided in the coming days, and, indeed, the Committee encourages Bank Indonesia to provide such clarification to foreign exchange market participants as completely, transparently, and quickly as possible.

The Committee understands that as a result of the uncertainty surrounding the new restrictions, market participants may be exposed to unanticipated risk. The Committee recommends that each market participant with outstanding trades that could be affected by the restrictions contact its counterparties in order to determine jointly whether termination of these trades would be appropriate.

The Committee believes that if the parties to these affected rupiah transactions mutually agree to close out, then they should agree on a mutually acceptable closeout price as soon as possible. Market practice on closeout of existing transactions normally involves valuing future payments with a view toward determining discounted future cash flows. One resource for finding a mutually agreeable closeout mechanism is a statement by the Singapore Foreign Exchange Market Committee published earlier today, “Notes of Meeting on Settlement of Indonesian Rupiah Transactions.”
The Foreign Exchange Committee Endorses the Singapore Foreign Exchange Market Committee’s Recommendation regarding the Treatment of the Taiwan Dollar Fixing Rate for September 12, 2001

On September 12, 2001, the daily 11:00 a.m. fixing rate for the Taiwan dollar was published during the afternoon of September 12, leading market participants to question whether the published rate reflected 11:00 a.m. trading. In an effort to provide guidance on the treatment of the fixing rate, the Singapore Foreign Exchange Market Committee issued the attached statement recommending that market participants use the fixing rate of September 13 in lieu of the September 12 fixing rate. The Foreign Exchange Committee fully endorses this recommendation in accordance with market best practices.

Singapore Foreign Exchange Market Committee Statement regarding the Treatment of the Taiwan Dollar Fixing Rate for September 12, 2001

On the morning of September 12 (Wednesday), the Taiwan Central Bank stated that the foreign exchange, futures, and the stock markets in Taiwan will be closed. Consequent on the announcement, the foreign exchange banks in Singapore, in the interest of certainty, agreed that it would be prudent and commercial to use the 11:00 a.m. fixing rate appearing on the following business day. Accordingly, there was no 11:00 a.m. fixing rate on that day. After 11:00 a.m. the same day, the Taiwan Central Bank stated that foreign exchange trading in Taiwan would resume at 12:00 noon. Notwithstanding the resumption of foreign exchange trading at 12:00 noon, the banks decided that it would be reasonable to maintain the agreement reached that morning to use the 11:00 a.m. fixing rate on the following business day.
New and Amended Argentine Peso Rate Source Definitions Announced by EMTA, ISDA, and the Foreign Exchange Committee

The Emerging Markets Traders Association (EMTA), the International Swaps and Derivatives Association (ISDA), and the Foreign Exchange Committee jointly announced today the following amendment to the Argentine Peso rate source definition—the ARS Official Rate—and the addition of a new rate source definition for the Chicago Mercantile Exchange (CME)/EMTA ARS Industry Survey Rate, in Annex A of the 1998 FX and Currency Option Definitions. Annex A is amended, effective as of July 10, 2001, to replace the current ARS Official Rate definition with that in (1) below, and to add the CME/EMTA ARS Industry Survey Rate definition in (2) below:

1. (B) “ARS Official Rate” and “ARS02” each mean that the spot rate for a rate calculation date will be the Argentine peso/U.S. dollar offered rate for U.S. dollars, expressed as the amount of Argentine pesos per one U.S. dollar, for settlement on the same day, as quoted by Banco de la Nacion (in accordance with the Convertibility Law of March 27, 1991, and Regulatory Decree No. 529/91 of April 1, 1991, as may be amended from time to time) for that rate calculation date.

2. (C) “CME/EMTA ARS Industry Survey Rate” and “ARS03” each mean that the spot rate for a rate calculation date will be the Argentine peso/U.S. dollar Specified Rate for U.S. dollars, expressed as the amount of Argentine pesos per one U.S. dollar, for settlement on the same day, calculated by the Chicago Mercantile Exchange pursuant to the CME/EMTA ARS Methodology Summary which appears on the Reuters Screen EMTA Page (the EMTA website (www.emta.org) and CME website (www.cme.com) at approximately 1:00 p.m. Buenos Aires time, or as soon thereafter as practicable, on the rate calculation date. “CME/EMTA ARS Methodology” as used herein means a methodology dated and effective as of July 10, 2001,
for a centralized industrywide survey of financial institutions in Buenos Aires that are active participants in the Argentine Peso/U.S. Dollar spot markets for the purpose of determining the CME/EMTA ARS Industry Survey Rate, which is published by EMTA and may be obtained from EMTA's website at www.emta.org.

**PRACTITIONER’S NOTES:**

~ The ARS Official Rate is published by Banco de la Nacion on Reuters Page ARSX=BNAR daily between 3:00 p.m. and 5:00 p.m. This information is not included in the ARS Official Rate definition because the Argentine peso/U.S. dollar exchange rate is established by the 1991 Convertibility Law. This Law determines the ARS Official Rate for a rate calculation date, regardless of when or where the ARS Official Rate is published on such rate calculation date.

~ Market participants may agree to the CME/EMTA ARS Industry Survey Rate in accordance with EMTA’s recommendations for use in the event of a price source disruption or of a price materiality disruption event. Details of these disruption events are available in the *1998 Foreign Exchange and Currency Option Definitions*.

~ Parties that specify in confirmations that a particular version of Annex A applies to their trades should reference Annex A effective as of July 10, 2001, if they desire to incorporate the revised ARS Official Rate and CME/EMTA ARS Industry Survey Rate definitions into their trades. If parties do not specify in their confirmations a particular version of Annex A, the above Argentine peso rate source definitions would apply to trades that incorporate the *1998 Foreign Exchange and Currency Option Definitions* and have a trade date on or after July 10, 2001.
The EMTA, ISDA, and Foreign Exchange Committee Announce the Addition of New Korean Won Rate Source Definitions to Annex A, Effective as of June 20, 2001.

The Emerging Markets Traders Association (EMTA), the International Swaps and Derivatives Association (ISDA), and the Foreign Exchange Committee jointly announced on June 20, 2001, the following amendment to the Korean won rate source definitions in Annex A of the 1998 Foreign Exchange and Currency Option Definitions. Annex A is amended, effective as of June 20, 2001, to replace the current KRW rate source definitions with the following:

(A) “KRW KFTC18” and “KRW02” each mean that the spot rate for a rate calculation date will be the Korean won/U.S. dollar market average tom rate, expressed as the amount of Korean won per one U.S. dollar, for settlement in one business day reported by the Korea Financial Telecommunications and Clearing Corporation, which appears on the Reuters Screen KFTC18 Page to the right of the caption “USD Today” that is available at approximately 5:30 p.m., Seoul time on that rate calculation date, or as soon thereafter as practicable, but in no event later than 9:00 a.m., on the business day following the rate calculation date.

(B) “KRW TELERATE 45644” or “KRW03” each mean that the spot rate for a rate calculation date will be the Korean won/U.S. dollar market average tom rate, expressed as the amount of Korean won per one U.S. dollar, for settlement in one business day reported by the Korea Financial Telecommunications and Clearing Corporation, which appears on the Telerate Page 45644 to the right of the caption “USD Today” that is available at approximately 5:30 p.m., Seoul time on that rate calculation date, or as soon thereafter as practicable, but in no event later than 9:00 a.m., on the business day following the rate calculation date.
PRACTITIONER’S NOTES:

~ The Korean won rates reported by the Korea Financial Telecommunications and Clearing Corporation are market average rates for value in one business day in the local market. The Korean Won rate source definitions have been amended to reflect this fact by adding the word “tom” to the description of the rate, and adding the words “for settlement in one business day.” This does not affect the settlement convention in the non-deliverable markets, which continues to be two business days from the valuation date.

~ The Korean won rate source definitions provide for a KRW rate availability time of “5:30 p.m., Seoul time, but no later than 9:00 a.m., on the business day following the rate calculation date.” Although the KFTC has reported the KRW rate at the end of each business day for some time now, previously there was no end-of-day publication of the KRW rate. The KRW rate for a particular business day was published only at 9:00 a.m. on the next business day (for example, “the business day following the rate calculation date”). Now, in light of the end-of-day availability of the KRW rate, market consensus is to reference the 5:30 p.m. time (on the rate calculation date), but to continue to maintain the reference to 9:00 a.m. (on the next business day after the rate calculation date) as the final publication time. The final publication time serves as a cut-off time for purposes of determining whether a settlement rate is available or whether a price source disruption has occurred. This approach also enables market participants to take into account adjustments to the KRW rate made after the 5:30 p.m. publication (with the addition of late-settling trades into the market average). It also addresses the practical reality that, because the KRW rate is published so late in the day in Seoul, most traders do not consult the rate until 9:00 a.m. on the following business day.

~ The Korea Financial Telecommunications and Clearing Corporation reports the KRW rate. However, the KRW rate is published on Reuters Page KFTC18, which is a page supplied by Seoul Money Brokerage Services, Ltd.

~ Parties that specify in confirmations that a particular version of Annex A applies to their trades should reference Annex A effective as of June 20, 2001, if they desire to incorporate the new Korean won rate source definitions into their trades. If parties do not specify in their confirmations a particular version of Annex A, the above Korean won rate source definitions would apply to trades that incorporate the 1998 Foreign Exchange and Currency Option Definitions and have a trade date on or after June 20, 2001.
A FEASIBILITY STUDY RECOMMENDING THE CREATION OF THE FOREIGN Exchange Committee was conducted in June 1978. This document includes the study’s conclusions and has been periodically updated (most recently in January 1997) to reflect the Committee’s evolution.

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

1. be representative of institutions, rather than individuals, participating in the market,

2. be composed of individuals with a broad knowledge of the foreign exchange market 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 ensure fair presentation and consideration of all points of view and interests in the market at all times, and

5. notwithstanding the need for representation of all interests, be small enough to deal effectively with issues that come before this group.

COMMITTEE OBJECTIVES:

- to provide a forum for discussing technical issues in the foreign exchange and related international financial markets,

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

- to enhance knowledge and understanding of the foreign exchange and related international financial markets, in practice and in theory,
● to foster improvements in the quality of risk management in these markets,

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

● to work closely with the Financial Markets Association–USA and other formally established organizations representing relevant financial markets.

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

1. The Committee should consist of no more than thirty members. In addition, the president of the Financial Markets Association–USA is invited to participate.

2. Institutions participating in the Committee should be chosen in consideration of a) their participation in the foreign exchange market here, and b) 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.


4. The membership term is four calendar years. A member may be re-nominated for additional terms; however, an effort will be made to maximize participation in the Committee by institutions eligible for membership.

5. Members are chosen with regard to the firm for which they work, their job responsibilities within that firm, their market stature, and their ongoing role in the market.

The composition of the Committee should include New York banks; other U.S. banks; foreign banks; investment banks and other dealers; foreign exchange brokerage firms (preferably to represent both foreign exchange and Eurodeposit markets); the president of the Financial Markets Association–USA (ex officio); and the Federal Reserve Bank of New York (ex officio).

COMMITTEE PROCEDURES
The Committee will meet at least eight times per year (that is, monthly, with the exception of April, July, August, and December). The meetings will follow a specified agenda; the format of the discussion, however, will be informal.

Members are expected to attend all meetings.

Any recommendation the Committee wishes to make on market-related topics will be discussed and decided upon only at its meetings. Any recommendation or issue paper agreed to by the Committee will be distributed not only to member institutions, but also to institutions that participate in the foreign exchange market.

The Membership Subcommittee will be the Committee’s one standing subcommittee. A representative of the Federal Reserve Bank of New York will serve as Chairman of the Membership Subcommittee. The Membership Subcommittee will aid in the selection and orientation of new members. Additional subcommittees composed of current Committee members may be organized on an ad hoc basis in response to a particular need.

Standing working groups may include an Operations Managers Working Group and a Risk Managers Working Group. The working groups will be composed of market participants with an interest and expertise in projects assigned by the Committee.

Committee members will be designated as working group liaisons. The liaison’s role is primarily to provide guidance to the working group members and foster effective communication between the working group and the Committee. In addition, a representative of the Federal Reserve Bank of New York will also be assigned as an advisor to each working group.

The Committee may designate additional 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 discussions and deliberations.

Summaries of discussions of topics on the formal agenda of Committee meetings will be made available to market participants by the Federal Reserve Bank of New York on behalf of the Committee. The Committee will also publish an annual report, which will be distributed widely to institutions that participate in the foreign exchange market.

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

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

RESPONSIBILITIES OF COMMITTEE MEMBERS
The Foreign Exchange Committee is composed of institutions that participate actively in the foreign exchange markets as well as other financial markets worldwide. As a senior officer of such an institution, the Committee member has acquired expertise that is invaluable to attaining the Committee’s objectives. The member’s continuous communication with the markets worldwide generates information that is necessary to the Committee’s deliberations on market issues or problems. Effective individual participation is critical if the collective effort is to be successful. The responsibilities of membership apply equally to all Committee members.

The specific responsibilities of each member are:

- to function as a communicator to the Committee and to the marketplace on matters of mutual interest, bringing issues and information to the Committee, to contribute to discussion and research, and to sound out colleagues on issues of concern to the Committee;
- to present the concerns of his or her own institution to the Committee; in addition, to reflect the concerns of a market professional as well as the constituency from which his or her institution is drawn or the professional organization on which he or she serves; and
- to participate in Committee work and to volunteer the resources of his or her institution to support the Committee’s projects and general needs.
Foreign Exchange Committee Member List, 2001

Daniel Almeida
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2 Resigned December 2001.
7 Resigned December 2001.
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COUNSEL  
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*Nominated for the position of Under Secretary for Domestic Finance, Department of the Treasury in March 2001.
## Foreign Exchange Committee Member List, 2002

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company/Department</th>
<th>Address/Location</th>
<th>Contact Information</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beau Cummins</td>
<td>Managing Director</td>
<td>Bank of America</td>
<td>9 West 57th Street, 20th Floor</td>
<td>New York, NY 10019</td>
<td>2002-2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>212-933-2570</td>
<td><a href="mailto:hugh.s.cummins@bankofamerica.com">hugh.s.cummins@bankofamerica.com</a></td>
<td></td>
</tr>
<tr>
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<td>FleetBoston Financial</td>
<td>MADE 10012E, 100 Federal Street</td>
<td>Boston, MA 02110</td>
<td>2002-2005</td>
</tr>
<tr>
<td></td>
<td></td>
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<td><a href="mailto:stephen_desalvo@fleet.com">stephen_desalvo@fleet.com</a></td>
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</tr>
<tr>
<td>Mark DeGennaro</td>
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<td>Lehman Brothers</td>
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<td>2001-2004</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>2002-2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>212-902-7810</td>
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<td>2000-2003</td>
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<td>212-723-6700</td>
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<tr>
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