The Foreign Exchange Committee

2009 Annual Report

Contents

Actions and Initiatives

Publications

Documents

Speech

Survey of North American Foreign Exchange Volume

Reference Material

Chair's Letter

At the start of 2009, financial market conditions were fragile but recovering. The Foreign Exchange Committee's primary concerns continued to be funding and liquidity. In the first quarter, the Committee focused on capital and credit preservation as members closely monitored the effects of both on the global currency market. The Federal Reserve Bank of New York was proactive in communicating both the intent and the substance of the various policy initiatives it had undertaken. Trade volumes and risk appetite appeared low. Against this backdrop, the Committee chose to direct its efforts to three areas:

- *Post-crisis market structure*: Evaluating tools that exist within the foreign exchange market to help reduce systemic risk and considering changes to the market structure to further bolster the market's resilience and efficiency;
- *Risk measurement and management*: Addressing the risk that arises from the limitations of conventional statistical frameworks as well as broader credit, settlement, liquidity, and reputational risks; and
- *Foreign Exchange Committee products and communication*: Reexamining the composition and role of the Committee itself within the broader foreign exchange industry.

The global equity markets stabilized at the end of the first quarter of 2009, and the remainder of the year was characterized by equity rebounds, episodic signs of slow recovery, and an increasing focus on new proposed regulation. Globally, countries were at different stages of recovery; domestically, policy responses varied and reflected national concerns. The responses to quantitative easing, economic stimulus, extraordinary liquidity provision, and various regulatory agendas were difficult to assess.

The Foreign Exchange Committee took a 360-degree view of events—looking back to the crisis of 2007-08 to analyze root causes and market performance, and looking ahead to understand the challenges of large complex financial institutions, financial market interconnectedness, and systemic risk. Coincident with these initiatives, the Committee stepped up its dialogue with similar committees around the world. It hosted the Secretariat of the Bank of England's Foreign Exchange Joint Standing Committee (FXJSC) at its May and October meetings. In addition, the Committee participated in a meeting of eight global foreign exchange committees in Singapore toward the end of the year. Dialogue among the foreign exchange committees of the euro zone, the United Kingdom, Canada, Japan, Hong Kong, Singapore, Australia, and the United States is active and ongoing.

As the year progressed, Committee discussions addressed the role of the U.S. dollar as a reserve currency, the timing and process of the eventual normalization of monetary policy, and the potential changes in the regulatory environment. During the summer, the first drafts of proposed U.S. financial market legislation appeared. The Committee studied the language of this legislation and debated the prospective impact on the global foreign exchange market. The work of our task forces intensified, as did our dialogue with the FXJSC in London, with whom we share some members.

In September, the FXJSC published a working paper on the foreign exchange market. This paper dealt with foreign exchange market size, scope, and structure; performance during the crisis; and current market initiatives. The Committee, with its Buy-Side Subcommittee, decided to publish in November a similar U.S.-focused paper to educate readers about the market and to clarify technical issues raised by proposed regulatory reform efforts. Specifically, our intent was to provide a basic overview of the foreign exchange market for those who might be unfamiliar with its scope and function, to comment on its performance during the crisis, to underscore the global nature of the foreign exchange market and thus the importance of global regulatory communication, and to suggest further risk mitigation efforts for the industry. The Foreign Exchange Committee's *Overview of the OTC Foreign Exchange Market: 2009* was published in the autumn.

The Committee's conclusions are consistent with those of its FXJSC colleagues in the United Kingdom. The foreign exchange market is resilient, and the significant risk mitigation mechanisms developed over the years (many of which have been documented in past Committee publications) have served participants, end users, and the general public well. Opportunities to enhance transparency and risk mitigation remain, and the Committee and its working groups will continue to focus on these priorities in 2010.

Throughout 2009, the Foreign Exchange Committee used its position to enhance knowledge and understanding of the foreign exchange and related international financial markets. It will continue its work to promote the efficiency and transparency of the foreign exchange market, pursue greater standardization of documentation, improve its communication with both participants and those who regulate them, and sharpen its focus on crisis management. Although the financial and regulatory reform environment created by the recent crisis is uncertain, the Committee will continue to recommend best practices and educate market practitioners and the public on the function and challenges of the global foreign exchange market.

For thirty years, the Committee has served as a forum to discuss foreign exchange issues, a source of best practices, and a channel of communication for both regulators and the general public. I leave this noble work to my colleagues, as 2009 marks the end of my sixteen-year involvement with this group. These men and women graciously serve a variety of constituencies—clients, shareholders, other professionals in the foreign exchange industry, and the public interest. As this annual report and the ones that have preceded it demonstrate, their commitment is considerable. It has been an honor to serve with all my past and present colleagues.

Rich Mahoney

Actions and Initiatives

Works in Progress for 2010

During 2009, members of the Foreign Exchange Committee and its Buy-Side Subcommittee participated in three work streams, addressing foreign exchange market structure, risk management in foreign exchange, and Foreign Exchange Committee communications.

The efforts of the work stream on foreign exchange market structure culminated in the November 2009 release of *Overview of the OTC Foreign Exchange Market: 2009* on the Committee's website. The document highlights elements of the market structure that helped support the foreign exchange market's operation during the recent financial turmoil. It also identifies opportunities for further improvement.

In 2010, efforts of the other work streams remain active. The work stream on risk management in foreign exchange has reviewed current best-practice guidance and noted opportunities to refine guidance in light of lessons learned during the recent period. The Committee expects to draft and publish updated language accordingly. In addition, the Foreign Exchange Committee communications work stream has provided a set of recommendations for improving the Committee's external and internal communications going forward.

Finally, as legislative proposals on regulatory reform continue to take shape in the United States and abroad, Committee members will stay abreast of these developments and work to provide effective guidance in support of a robust and efficient global foreign exchange market.

Efforts of the Working Groups

The Chief Dealers Working Group will continue to support publication of the Survey of North American Foreign Exchange Volume. The group will also assist the Committee by providing relevant and timely best-practice guidance on foreign exchange trading activities.

The Operations Managers Working Group will review the current set of best practices for managing operational risk in foreign exchange. Additionally, it will continue to promote efforts to further increase automation and straight-through processing of foreign exchange option confirmations, consistent with commitments being made to the supervisors of major dealers in over-the-counter derivatives.

Legal Initiatives

Introduction to the FMLG

The Financial Markets Lawyers Group (FMLG) is a committee of lawyers from leading worldwide financial institutions that supports over-the-counter (OTC) foreign exchange and other financial markets trading. The FMLG originated in the late 1980s, when a group of lawyers formed to develop a model master netting agreement for foreign exchange trading in the United States. The FMLG advises the Foreign Exchange Committee on many initiatives as well as pursues its own capital markets initiatives. The FMLG is sponsored by, but independent of, the Federal Reserve Bank of New York (FRBNY). A senior FRBNY legal officer chairs the group, and senior staff of the FRBNY's Legal Department are members.

The FMLG provided support to the Foreign Exchange Committee in the development and publication in 1997 of master netting agreements for foreign exchange transactions—the International Foreign Exchange and Options Master Agreement (FEOMA), the International Foreign Exchange Master Agreement (IFEMA), the International Currency Options Market Master Agreement (ICOM), and the International Foreign Exchange and Currency Option Master Agreement (IFXCO). Recent accomplishments of the FMLG include the introduction, with cosponsors, of the industry's first multilateral master confirmation agreement for non-deliverable forward (NDF) and non-deliverable option (NDO) foreign exchange transactions. The FMLG also introduced the industry's first foreign exchange master give-up agreement and cosponsored the *1998 FX and Currency Option Definitions (1998 Definitions)*. Group members have participated in a number of global initiatives, including the Global Documentation Steering Committee, the Hague Convention on collateral accounts, and industry preparation for Y2K and conversion to the euro. The FMLG continues to draft new trade documentation, best-practice recommendations, legal briefs, comment letters, and policy papers associated with OTC market developments.

The FMLG maintains relationships with OTC industry associations and official institutions worldwide in order to maintain channels of communication and cooperation on issues of importance to the foreign exchange and OTC markets. Among the groups with which the FMLG enjoys close ties are EMTA, Inc., the International Swaps and Derivatives Association, Inc., and the Securities Industry and Financial Markets Association, in the United States; the European Financial Markets Lawyers Group (EFMLG), sponsored by the European Central Bank; the Financial Markets Law Committee and the Foreign Exchange Joint Standing Committee, sponsored by the Bank of England; and CLS Bank. In 2009, the FMLG joined representatives of the EFMLG, the Financial Law Board, and the Financial Markets Law Committee at the annual quadrilateral meeting held by the groups. Meeting participants discussed a wide range of issues, including the market turmoil, bankruptcy law and developments, governance and controls, EU-U.S. global regulatory convergence, and netting and other documentation issues. FMLG members also joined a symposium on documentation harmonization hosted by the EFMLG in September.

FMLG Initiatives during 2009

Many of the FMLG's projects in 2009 underscore the group's strong bond with the Foreign Exchange Committee. Other efforts reflect the FMLG's policy interests and the cooperative relationship that has evolved among legal-oriented industry groups in the global community.

FMLG Cross-Currency NDF and NDO Template Working Group

The FMLG continued its efforts to develop cross-currency templates that would provide standardized rate sources to smooth the trading and confirmation process for cross-currency NDFs and NDOs. The working group plans to develop a set of rate source definitions for hard currency pairs.

Foreign Exchange Novations Protocol

The FMLG continued to work with the Operations Managers Working Group (OMWG) to develop a standard protocol for foreign exchange novations, given their increasing use in the market. The working group will collaborate with the International Swaps and Derivatives Association, Inc., to draft a protocol to reduce the incidence of settlement and collateral fails associated with foreign exchange novations.

Prime Brokerage

The FMLG, with the Foreign Exchange Committee, published its white paper on prime brokerage reverse give-up relationships, which defines for market participants the different types of relationships that have emerged and provides an overview of key legal and operational issues associated with reverse-give-up trading activities.

The FMLG also established a working group to investigate the viability of streamlining the prime brokerage designation notice process by way of an automated, single-platform electronic system to replace existing traditional media. The working group, together with the OMWG, discussed the possibility of developing an electronic platform that would be a repository of data containing information already found in designation notices.

Electronic Confirmations

The FMLG established a working group to examine issues arising from the growing trend of electronic confirmation use. The working group anticipates reviewing Foreign Exchange Committee best-practice and other guidance on confirmations as well as examining the enforceability of electronic confirmations in major jurisdictions.

Legislative, Regulatory, and Judicial Action

Throughout 2009, the FMLG closely followed pending legislation and regulation that could affect the foreign exchange and financial markets as well as events associated with the financial crisis.

The FMLG assisted the Foreign Exchange Committee in the publication of its paper *Overview of the OTC Foreign Exchange Market: 2009*, which provides an overview of the foreign exchange marketplace, describes certain tools available to mitigate foreign exchange risks, and recommends priorities designed to further strengthen the foreign exchange marketplace. The FMLG also drafted a comment letter for the Committee to respond to the Financial Industry Regulatory Authority's proposed Rule 2380, which would impose a leverage limitation on retail foreign exchange transactions.

Opinions

The FMLG continued its long-term efforts to coordinate the annual compilation and updating of legal opinions on IFEMA, ICOM, FEOMA, and IFXCO. In 2009, David Miller of the FMLG solicited updated opinions from more than thirty jurisdictions in which member firms are active.

Publications

Foreign Exchange Prime Brokerage Reverse Give-Up Relationships: Overview of Key Issues and Analysis of Legal Framework

I. Introduction

Foreign exchange prime brokerage allows clients to source liquidity from a variety of executing dealers while maintaining a credit relationship, placing collateral, and settling with a single entity—the prime broker. The product emerged in the early 1990s and gained momentum when several financial institutions entered the prime brokerage business with more formal operational controls, procedures, and processes. This approach laid the foundation for an expansion of the client base to include hedge funds, commodity trading advisors, asset managers, small banks, and other foreign exchange market participants. The fundamental concept in a "plain vanilla" prime brokerage arrangement is the "give-up"—whereby a prime broker accepts foreign exchange trades executed between its client and a dealer. In this arrangement, the prime broker is interposed between the dealer and its client as counterparty to offsetting foreign exchange trades.

Since the late 1990s, foreign exchange prime brokerage has evolved from the "plain vanilla" give-up model into a more complicated set of "reverse give-up" relationships among multiple prime brokers, give-up parties, and their clients. Clients in this area include hedge funds and asset management companies that execute trades with several dealers for their own accounts, for the accounts of financial institutions, or for hedge funds that maintain accounts at financial institutions. Additionally, reverse give-up relationships arise when clients manage money for hedge funds that transact with different prime brokers or when, for business or credit reasons, clients desire to use multiple prime brokers. In a reverse give-up, the prime broker, to whom the foreign exchange trades of its clients have been "given up," in turn enters into offsetting transactions with another financial institution that may or may not be a prime broker.

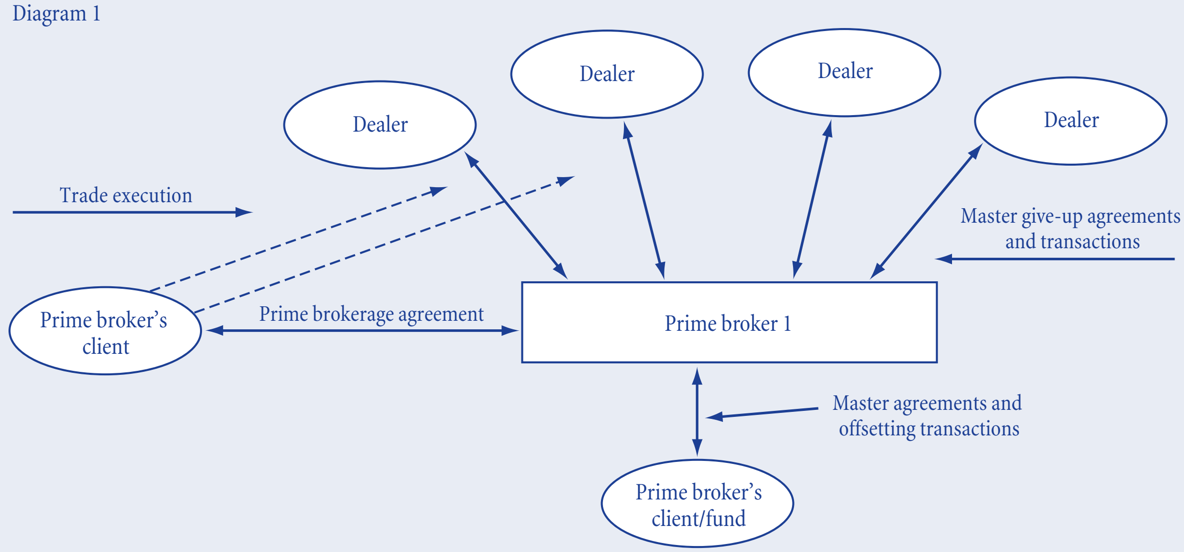
The Financial Markets Lawyers Group (FMLG) seeks to explain to market participants the different types of reverse give-up relationships that have emerged and provide an overview of key legal and operational issues that they should consider when engaging in reverse give-up trading activities. These issues are distinct from those that arise in the "plain vanilla" prime brokerage context; thus, they require an understanding of the complexity of the relationships and associated documentation. Recognizing that market practices for defining the legal relationships and processes of reverse give-up relationships are diverse, the FMLG aims to heighten awareness of the key issues to enable counterparties to negotiate and engage in reverse give-up relationships in a productive manner that appropriately addresses relevant risks and processes.

II. Reverse Give-Up Participants and Relationships

A. No Reverse Give-Ups

A "plain vanilla" prime brokerage relationship involves three parties—the client, the prime broker, and the executing dealer. The client conducts a trade with the executing dealer for give-up to its prime broker. When the prime broker is notified of the trade by the client and executing dealer and accepts the trade, the prime broker—rather than the client—becomes the party to the transaction. This relationship is documented under the prime brokerage agreement between the client and prime broker, and under the master give-up agreement between the prime broker and executing dealer.

Diagram 1



In Diagram 1, assume that the prime broker's client is a hedge fund or an asset management company that executes trades with several executing dealers. The client trades for its own account and manages hedge fund accounts serviced by the prime broker. The trades are given up to the prime broker under the terms of each master give-up agreement between the prime broker and each executing dealer and of the prime brokerage agreement between the prime broker and the client. The prime broker enters into offsetting trades with the client and with the hedge funds, as instructed by the client. The offsetting trades are typically governed by master agreements, such as the ISDA (International Swaps and Derivatives Association) Master Agreement or the Foreign Exchange Committee's IFEMA (International Foreign Exchange Master Agreement) or FEOMA (International Foreign Exchange and Options Master Agreement), between the prime broker and the client, or the prime broker and the hedge funds.

To address risks arising from the "plain vanilla" give-up relationship, the Foreign Exchange Committee published in 2005 the first industry Master FX Give-Up Agreement, followed by best practice recommendations.[1] The agreement and recommendations address several key relationship issues, such as the scope of the give-up relationship, trade notification, trade acceptance or rejection, and post-trade events. Specifically, the Master FX Give-Up Agreement addresses: (i) the types of trades that the prime broker will accept and the credit limits that apply to the give-up relationship; (ii) when the client and/or executing dealer must provide trade notifications to the prime broker; (iii) the rights and obligations of the prime broker concerning acceptance or rejection of trades, including notices (if any) to be provided by the prime broker; and (iv) the party responsible for determination and notification of post-trade events. These key issues are further developed in reverse give-up relationships, as described below.

B. Reverse Give-Up Party

A reverse give-up relationship introduces a fourth party to the prime brokerage relationship among the client, the prime broker, and the executing dealer. The fourth party is a reverse give-up party, often a financial institution that acts as custodian for hedge fund accounts for which the client trades as manager. The give-up party may also permit the client to trade for its proprietary book. This relationship is typically documented under a reverse give-up agreement among the prime broker, the give-up party, and the client.

[1] For more on the development of the prime brokerage product and the Foreign Exchange Committee's best practice recommendations for the industry, see "Foreign Exchange Prime Brokerage: Product Overview and Best Practice Recommendations," published December 19, 2005 (available at http://www.newyorkfed.org/fxc/2005/fxc051219a.pdf). The Master FX Give-Up Agreement and an accompanying Compensation Agreement are available at the websites noted in footnote 3.

In Diagram 2, assume that the prime broker's client is a hedge fund or an asset management company that carries out trades with several executing dealers. The client manages hedge fund accounts for which the give-up party acts as custodian and trades for the give-up party's own account. The trades are given up to the prime broker, under the terms of each master give-up agreement between the prime broker and each executing dealer, and the prime brokerage agreement between the prime broker and the client. The prime broker then enters into offsetting trades with the give-up party, under the terms of the reverse give-up agreement between the prime broker and the give-up party (and typically the client). The give-up party enters into offsetting trades with the hedge funds managed by the client. When the client trades for the give-up party's own account, trades are internally booked to that account.

This reverse give-up relationship raises the key issue of whether the give-up party is a passive recipient of trades, or if it actively imposes limits on trades allocated to it and on procedural requirements for notices. The give-up party may separately limit the client's trades outside of the reverse give-up relationship with the prime broker.

C. Two Prime Brokers

A reverse give-up relationship can also involve a fifth party—a second prime broker—in addition to the client, the first prime broker, the executing dealer, and the give-up party. A second prime broker can be involved when the client manages money for funds that have relationships with different prime brokers, prefers to diversify its business with other prime brokers, or already has used extensive lines with dealers through the first prime broker. The reverse give-up relationship between two prime brokers is typically documented under a reverse give-up agreement or a master give-up agreement between them, while the client has entered into a prime brokerage agreement with each of the prime brokers, as illustrated in Diagram 3.

Assume that the client is a hedge fund or an asset management company that executes trades with several executing dealers for its own account and for the give-up party's own account at the second prime broker; it also manages hedge fund accounts for which the second prime broker acts as prime broker. The trades are given up to the first prime broker, under the terms of each master give-up agreement between the first prime broker and each executing dealer, and the prime brokerage

Diagram 2

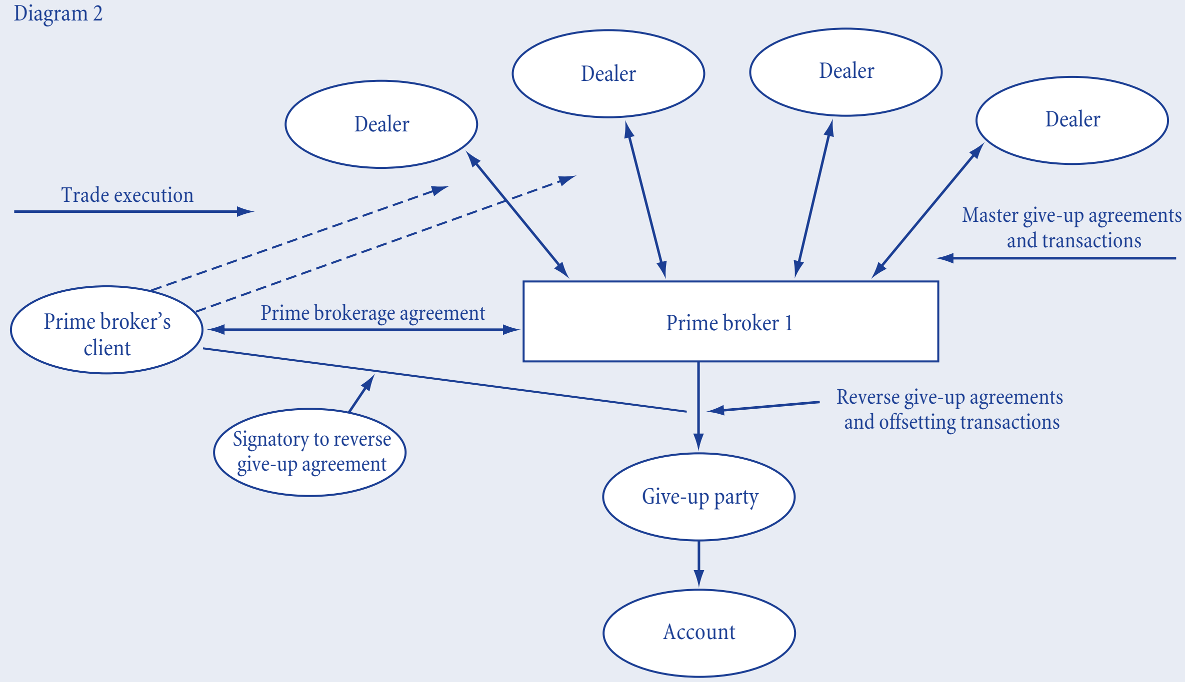
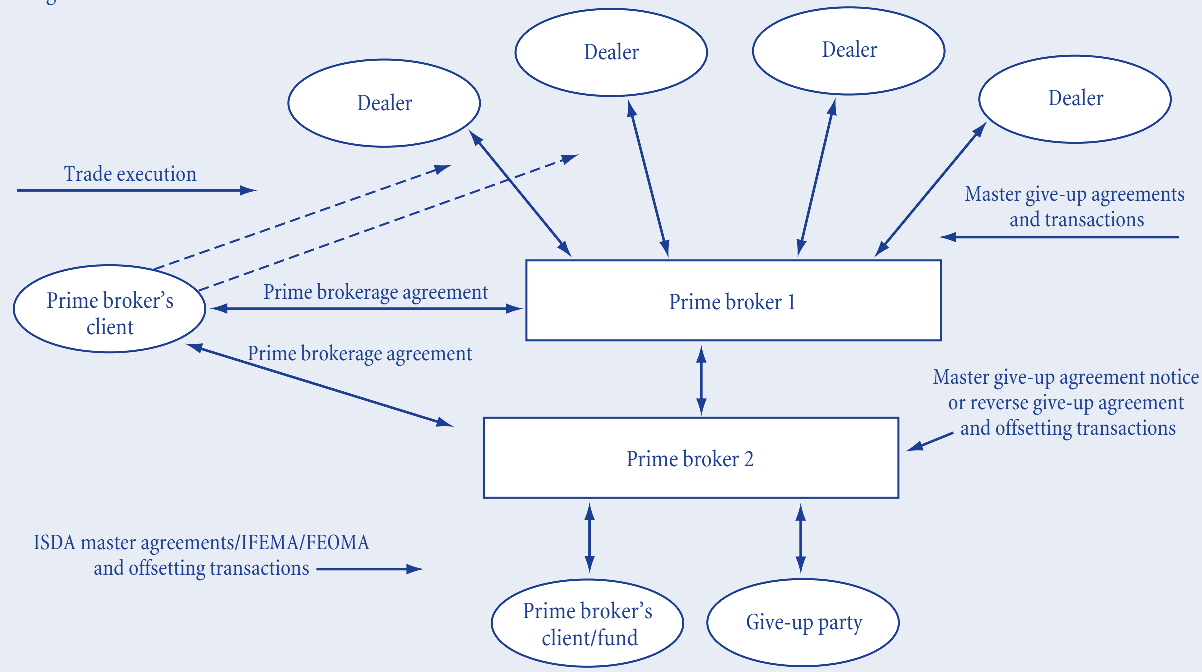


Diagram 3



agreement between the first prime broker and the client. The first prime broker then enters into offsetting trades with the second prime broker. The prime brokers can have in place a reverse give-up agreement between them (and possibly the client), as well as separate prime brokerage agreements with the client, that governs these trades. However, it is also possible to document a reverse give-up under the master give-up agreement between the first prime broker, acting as dealer, and the second prime broker, acting as prime broker. The second prime broker then enters into offsetting trades with hedge funds managed by the client and with the give-up party. These trades are governed by the terms of master agreements in place with these parties. In addition, the second prime broker enters into offsetting trades with the client, which are typically governed by the terms of the master agreement between the prime broker and the client.

This scenario raises the legal issue of whether the second prime broker, in the reverse give-up arrangement with the first prime broker, takes on the role of a passive give-up party or instead takes on the role of a prime broker that actively controls the trades given up to it and requires notices. It also raises a "Wall" issue for the first prime broker, in that trades executed on the sales side could, depending on the documentation, be conducted under the same give-up lines as trades that have been "reverse" given up in the prime brokerage business. As discussed in Part III.E.1, financial institutions typically maintain a Wall that restricts the flow of information between their prime brokerage business and their trading and sales desks.

D. Multiple Relationships

In reality, trades given up to a prime broker are split in several ways among other prime brokers, give-up parties, and client funds or accounts. The existence of multiple relationships among these parties raises issues such as transparency of trades beginning with the first prime broker, disclosure to clients of fees charged by both prime brokers, and operational risk.

In Diagram 4, assume that the first prime broker's client is a hedge fund or an asset management company that executes trades with several executing dealers. The client manages hedge fund accounts for which there are multiple prime brokers, trades for one or more give-up parties with accounts at multiple prime brokers, and trades for its own account. The trades are given up to the first prime broker under the terms of a master give-up agreement between the first prime broker and each executing dealer, and the prime brokerage agreement between the first prime broker and the client. In turn, the first prime broker enters into several offsetting trades with:

i) hedge funds managed by the client;

ii) the give-up party; and

iii) the client, with respect to trades for the client's own account.

These offsetting trades are governed by the terms of several different documents:

i) the master agreements between the first prime broker and the hedge funds;

ii) the reverse give-up agreement between the first prime broker and the give-up party; and

iii) the master agreement between the first prime broker and the client.

In addition, the first prime broker enters into offsetting trades with the second prime broker (and possibly other prime brokers). The offsetting trades are executed under the terms of a reverse give-up agreement entered into on a bilateral basis between the prime brokers or, alternatively, under the terms of a master give-up agreement between the first prime broker, acting as dealer, and the second prime broker, acting as prime broker. In turn, the *second* prime broker (and possibly other prime brokers) enters into several offsetting trades:

i) with hedge fund accounts managed by the client;

ii) with a second give-up party; and

iii) with the client, with respect to trades for the client's own account.

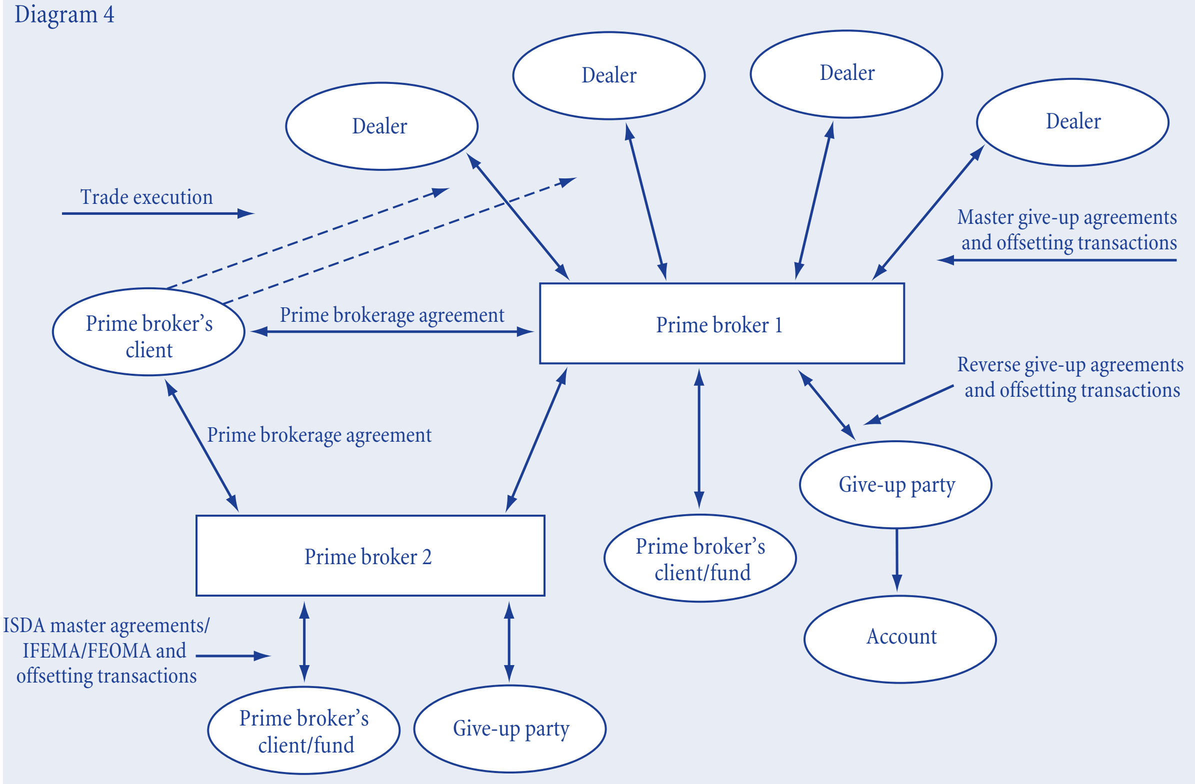
Each of these offsetting trades is governed by the terms of several different documents:

i) master agreements between the second prime broker and the hedge funds;

ii) the reverse give-up agreement between the second prime broker and the give-up party, and the master agreement between the second prime broker and the give-up party; and

iii) the master agreement between the second prime broker and the client.

Diagram 4



III. Key Relationship Issues

A. Credit Limits

Prime brokerage arrangements require active credit-limit monitoring against the limits set forth in governing legal agreements. In the prime brokerage agreement, the prime broker establishes limits for acceptance of the client's trades. In the master give-up agreement, the prime broker establishes limits for acceptance of the client's trades vis-à-vis the executing dealer. Reverse give-up arrangements require the analysis of additional relationships among the client, the prime brokers, the give-up parties, and the client accounts in determining the applicability of credit limits. The key issues concerning administration of limits in reverse give-up arrangements are:

1. Would a give-up party impose limits for the trades it accepts from a prime broker?
2. Would a prime broker impose limits for the offsetting trades it enters into with a give-up party?
3. When there are two prime brokers, do both prime brokers' limits apply to the client's trades given up to the second prime broker?

Would a give-up party impose limits for the trades it accepts from a prime broker?

When deciding whether to impose limits for trades it accepts from a prime broker, a give-up party will consider several factors. One key factor is the capacity in which the give-up party is acting for the client. If the give-up party assumes the role of an active prime broker, it would be inclined to impose limits in order to control the amount of its exposure as a result of entering into offsetting trades with hedge fund accounts managed by the client. A secondary concern of the give-up party would be to control the amount of the give-up party's line with the prime broker that the client may use. Alternatively, if the give-up party is acting in another capacity, such as a custodian for the client, it would be less likely to impose limits for the trades it accepts from the prime broker, unless line usage is an issue. In making this decision, the give-up party would consider the size of current limits with the prime broker and the sensitivity of the client's trades vis-à-vis the current limits. However, the give-up party may separately impose limits on the client's trading activity outside of the reverse give-up relationship with the prime broker. The give-up party may do so by specifying limits in its ISDA master agreement with the client, if it executes offsetting trades with the client. Alternatively, if the give-up party is an end-user, limits may be specified in the investment management agreement between the give-up party and the client.

Would a prime broker impose limits for the offsetting trades it enters into with a give-up party?

A prime broker that accepts a client's trades with an executing dealer and gives them up to another party by entering into offsetting trades incurs credit risk against the give-up party. The prime broker may or may not decide to impose limits on offsetting trades that will be entered into with the give-up party. The prime broker's main concern would be credit line usage, although there is a divergence of views and practice in this area. In the past, prime brokers did not impose their own limits on give-up parties because they could control the amount of trades they would accept through lines with clients and executing dealers in the prime brokerage and give-up agreements. Any limits on the give-up party's side would be a subset of lines extended to the client. However, recently, prime brokers have become concerned that clients could use the prime broker's credit line with the give-up party, which the prime broker would prefer to use for its own proprietary trading or its own customers. In such a case, the prime broker would impose separate limits on offsetting trades with the give-up party.

When there are two prime brokers, do both prime brokers' limits apply to the client's trades given up to the second prime broker?

The first prime broker has daily settlement or net open position limits and can reject the client's trades with a particular executing dealer that do not fall within these limits. When this happens, the trade is never submitted to the second prime broker and, in effect, the first prime broker's limits affect the reverse give-up relationship. Alternatively, a trade may be accepted by the first prime broker, which has entered into the trade with the executing dealer, but not fall within the limits established by the second prime broker. This situation occurs when a client attempts to allocate a trade over its limits established with the second prime broker. The agreement between the first prime broker and the client would require the client to reallocate the trade by the end of the day, such as to a third prime broker or a fund that the client manages. Alternatively, the client may obtain from the second prime broker its consent to exceed the limit in exchange for additional collateral. If all else fails, the trade could be unwound and the client may be responsible for compensating the executing dealer for any losses under a compensation agreement.

The first prime broker may want to consolidate its limits with the limits applicable when the second prime broker is acting as a prime broker. Conversely, the second prime broker may want to consolidate its limits against trades accepted from the first prime broker, regardless of the capacity in which the first prime broker is acting. That is, with a particular client, the first prime broker may be acting as a prime broker by accepting trades the client enters into with other executing dealers (and then entering into offsetting trades with the second prime broker), and also may be acting as an executing dealer by entering into trades with the client that are given up to the second prime broker (resulting in a trade between the two prime brokers and an offsetting trade between the second prime broker and the client/fund or give-up party). If the second prime broker seeks to consolidate limits on all trades accepted from the first prime broker, this would raise "Wall" issues for the first prime broker, as discussed in Part III.E.1.

B. Trade Notifications

In a typical give-up relationship, the executing dealer and the client are required to notify the prime broker once a trade has been executed, informing the prime broker of the material terms of the trade. In reverse give-up situations, procedures for notification of executed trades depend on how the parties view their relationships.

1. Would a give-up party require notices of trades to be provided by the client and/or the prime broker?
2. Would the give-up party accept trades only if the notices match?
3. When there are two prime brokers, what notices will be required and which party will need to give them?

A give-up party's position on whether and from whom it will require trade notices will vary based on the relationship of the parties and how the give-up party obtains legal certainty that the prime broker and the client are bound to a trade with certain terms. A give-up party that has taken on an active role such as that of a second prime broker may require matching trade notices from the prime broker and the client, as if the prime broker were an executing dealer. More typically, a conventional give-up party receives trade notices only from its client or only from the prime broker and later confirms trades with the prime broker. The give-up party would obtain the agreement of the prime broker or the client that the trade notice provided by the other party would be sufficient evidence of the terms of the trade to which it is bound. In the give-up context, this arrangement takes the form of a trading authority agreement, under which the client acts as agent and attorney in fact for the prime broker (or vice versa) for purposes of notices.

When there are two prime brokers, most commonly the first prime broker would receive trade notices from the executing dealer and the client while the second prime broker would require matching trade notices from the first prime broker and the client. The second prime broker views the client as the one who went to the first prime broker and executed a bulk trade given up to the second prime broker in part. The first prime broker acts as an executing dealer. The second prime broker enters into a mirror trade based on the terms of the trade between itself and the first prime broker, and therefore requires matching notices in order to protect itself from basis risk between the trades booked against the client and the first prime broker. However, the second prime broker may agree to receive notice from the investment advisor that handles trade allocations rather than from the first prime broker. There is a risk to the second prime broker in doing so that can be addressed by obtaining the agreement of the first prime broker that it may act on a notice from the client. A fund may also notify the second prime broker of the trade it has accepted an allocation of, if the client trades for the fund.

C. Trade Acceptance and Rejection

Once the prime broker receives notice of a trade, it has certain rights and obligations with respect to the acceptance or rejection of the trade, and it must determine if a trade meets the applicable conditions of the prime brokerage and master give-up agreements. The prime broker may reject a trade if it is not within the scope of permitted transactions specified in the give-up agreement with the executing dealer, if it is not within the specified tenor limits, if it is not within the specified credit limits, or if the trade details provided by the executing dealer and the client do not match. A reverse give-up relationship introduces the possibility of trade rejection by a give-up party and any other prime brokers that are part of the reverse give-up arrangements. The procedures for trade acceptance and rejection are particularly critical in reverse give-ups because, ultimately, the client will need to appropriately allocate trades to the give-up parties and accounts for which it acts as manager.

1. Would a give-up party reserve a right to reject trades?
2. When there are two prime brokers, what are the second prime broker's notification obligations to the first prime broker, if any?
3. When a trade is rejected, who bears the risk that a trade will not be allocated to the appropriate client account?

A give-up party will typically reject trades if they exceed credit limits, assuming that the give-up party has determined to apply limits to trades accepted from the first prime broker. Give-up parties rarely, if ever, reject trades as a result of process issues such as failure to receive trade notices on a timely basis.

If a second prime broker decides to reject a trade, it would typically do so on the same day that the trade has been given up to the first prime broker if notified on such date. As noted in Part III.A, the client agrees that all trades will be allocated, and any unallocated trades will go to the client's account directly, or the client will reallocate the trades to a give-up party or a fund managed by the client. The client will be responsible for allocating all trades given up to the first prime broker by the end of the day. Accordingly, the first prime broker does not bear the risk of the second prime broker's trade rejection. In some relationships, second prime brokers do not notify first prime brokers of trade acceptance or rejection, but typically confirm trades to first prime brokers in the ordinary course. By comparison, in other relationships, second prime brokers send first prime brokers notices of trade acceptance or rejection. In addition, the executing dealer is not concerned about whether the second prime broker will accept the trade. The executing dealer has a binding trade with the first prime broker. If this trade is ultimately unwound, the client may have agreed to compensate the executing dealer for any associated losses.

D. Post-Trade Events

Structured transactions involve post-trade events that could give rise to market or basis risk for the prime broker. Basis risk occurs when the parties interpret post-trade events differently—for example, whether a barrier has been broken and an option has been knocked out. In the case of non-deliverable forward foreign exchange transactions, the parties may not agree on the rates at which the fixing of such transactions should occur for purposes of valuation and settlement.

1. When a give-up party or a second prime broker is involved, who is responsible for the determination and notification of post-trade events?
2. When a give-up party or a second prime broker is involved, who assumes the basis risk associated with varying interpretations of post-trade events by the parties?

The issue of who is responsible for the determination and notification of post-trade events is a complicated one. In the "plain vanilla" prime brokerage relationship, the prime broker seeks to pass on to the client determinations made by the executing dealer. A give-up party or a second prime broker that is a major dealer may or may not agree to such an approach, but may be less concerned if it is matched on either side of the trade. If the give-up party or second prime broker agrees to this approach, the determination and notification of post-trade events would flow from the executing dealer to the first prime broker to the second prime broker.

However, the proprietary desk of the give-up party or second prime broker may not be comfortable with another dealer (the executing dealer) being the sole calculation agent and may seek to be joint calculation agent with the first prime broker. In this situation, the first prime broker will also seek to be joint calculation agent with the executing dealer on the other side of the trade. If it does not do so, the first prime broker will bear the basis risk should the executing dealer and the give-up party/second prime broker disagree on whether a barrier has been breached or on the interpretation of some other post-trade event.

E. Other Key Relationship Issues

1. *"Wall" between trading and prime brokerage business*

When a prime broker gives up trades to another prime broker, it needs to consider the effect of the Wall that typically exists between its prime brokerage business and its trading and sales desks. This Wall generally restricts the prime broker from giving information on its clients' trades to trading and sales personnel. As a result, if it effected reverse give-ups to the second prime broker under the same give-up lines that it uses when its sales desk executes a trade with the second prime broker's clients, its trading and sales personnel may need to see the line usage for the reverse give-up trades in order to monitor whether there is availability under the line for their future trades. The problem would arise because the Wall would often restrict the trading and sales personnel from having this access.

The prime broker can avoid this problem by conducting the reverse give-up trades under a different give-up line from that used for the give-ups executed by its sales desk. This separate line could be documented under the same master give-up agreement as used for the sales giveups but both prime brokers would have to track the trades very carefully to avoid confusion over which line they should be charged to. More commonly, prime brokers in this situation would document the reverse give-up trades under a separate reverse give-up agreement with the second prime broker.

2. *Transparency of client's trading activities to the prime broker*

As with any other relationship, a prime broker could face reputational risk with respect to its relationship with its clients. A prime broker could incur harm to its reputation if the client or one of the client's employees, for example, were to engage in fraud or other improper activities through its foreign exchange trading. At the same time, when a client splits trades among several prime brokers and give-up parties, the client's activities are less transparent to the prime broker. A prime broker should be prepared to investigate a complaint by an executing dealer, give-up party, or another prime broker that a client may have engaged in illegal or unethical trading practices. The prime broker should evaluate the reputational risk posed to it and assess whether it should modify its role or cease acting as prime broker for the client. While the prime broker is not legally responsible for ensuring that any of these parties or its client comply with applicable law and regulation, the prime broker should ascertain whether the client's trading activity affects any legal or regulatory obligation on the part of the prime broker.

3. *Fees charged to the client*

When two prime brokers are involved in the relationship, the client potentially faces two fees for the same trades. Prime brokers should be aware of and consider the issue of transparency of fees to underlying accounts. The investment manager should make disclosures to the underlying accounts regarding the fees that it will incur by using two prime brokers.

IV. Addressing Key Relationship Issues in Documentation

A. The Prime Brokerage Agreement

The Prime Brokerage Agreement, which is executed by the prime broker and its client, establishes the framework under which the client executes trades with executing dealers that are given up to the prime broker. In the context of "plain vanilla" prime brokerage (without reverse give-ups), the Prime Brokerage Agreement would address several significant issues in this relationship. These issues include the trading authority of the client; the types of trades and limits that apply to trades that are given up to the prime broker (for example, size of trades, net open position limits, and settlement limits); and the fees that the prime broker charges the client. The prime broker also typically undertakes to maintain the confidentiality of the client's trading activities on the prime brokerage side and not share confidential client information with trading and sales personnel. In the context of reverse give-ups, additional key issues should be addressed in the Prime Brokerage Agreement: (i) the client's undertaking to allocate and, if necessary, reallocate trades to funds and give-up parties, and the process for allocation and reallocation of trades;[2] (ii) identification of the give-up parties; and (iii) is the party responsible for notifying the reverse give-up party of trades.

B. The Master FX Give-Up Agreement/ Compensation Agreement

The Master FX Give-Up Agreement, which is entered into by the prime broker and each executing dealer, provides the terms and conditions under which trades between the executing dealer and the client are given up to the prime broker. In 2005, the Foreign Exchange Committee published a Master FX Give-Up Agreement that contains generally accepted standard provisions addressing most aspects of the give-up relationship between a prime broker and a dealer, as well as a model Compensation Agreement. The Compensation Agreement may be entered into by the client and the executing dealer in order to establish liability for losses vis-à-vis these two parties in the event that the prime broker does not accept trades that were intended to be given up to the prime broker. These agreements are available for industry use to address the key relationship issues raised in the "plain vanilla" give-up relationship.[3] The terms of these agreements address "plain vanilla" prime brokerage relationships and do not address reverse give-up issues. However, if there are two prime brokers who document a reverse give-up relationship under an existing Master FX Give-Up Agreement, they may do so through a designation notice or a side letter that addresses all relevant terms.

C. The Reverse Give-Up Agreement

The Reverse Give-Up Agreement, which is entered into by the prime broker and the give-up party or a second prime broker, should address the key relationship issues between these parties described in this document. The Reverse Give-Up Agreement may also be signed by the client as a tri-party agreement, or, alternatively, the client may sign a side letter agreeing to the terms of the reverse give-up process described in the Reverse Give-Up Agreement. In the Reverse Give-Up Agreement, the parties should define whether any limits apply to trades that a give-up party (or a second prime broker) will accept from a prime broker, or to offsetting trades that a prime broker may enter into with the give-up party. The parties should also delineate the operational procedures associated with reverse give-ups, including: (i) which parties are responsible for providing trade notices upon which the give-up party or second prime broker will rely in accepting trades; (ii) the processes for trade acceptance and rejection by the give-up party or second prime broker, and for allocation and reallocation of trades by the client; and (iii) the processes for confirmation of trades. The Reverse Give-Up Agreement should also specify which parties in the reverse give-up relationship act as calculation agent(s) for purposes of interpretation of post-trade events.

D. The Master FX Agreements

The Master FX Agreements used in the reverse give-up context include the ISDA Master Agreements and the Foreign Exchange Committee Master Agreements (IFEMA, ICOM [International Currency Options Market Master Agreement], and FEOMA). All parties involved in reverse give-up relationships ordinarily execute close-out master netting agreements with each other that provide the underlying terms and conditions of their foreign exchange trades. The Master FX Agreements generally do not contain provisions that specifically address reverse give-up issues, although this may be possible in certain contexts. For example, a give-up party may set limits in the Master FX Agreements on the trades it will enter into with a client or a fund, which would apply to trading activity generated by reverse give-ups as well as other trading activity with the client or fund.

[2]See Part III. C.

[3]The Master FX Give-Up Agreement is available at http://www.newyorkfed.org/fxc/masterfxgiveupagreement.pdf.
The Compensation Agreement is available at http://www.newyorkfed.org/fxc/compagreement.pdf.

Committee Letter

Announcing the Publication of *Overview of the OTC Foreign Exchange Market: 2009*

November 9, 2009

Dear Market Participant,

In early 2009, the Foreign Exchange Committee organized a working group to consider the effectiveness of the foreign exchange market over the recent period of financial market instability and to determine lessons that could be learned to improve the resiliency of the marketplace going forward. The group concluded that while the foreign exchange market continued to function well throughout the period—allowing investors to continue to execute necessary transactions and manage currency exposures—certain opportunities exist for additional improvement.

Accordingly, the working group prepared the accompanying paper to provide an overview of the foreign exchange marketplace and to describe some of the current tools available to mitigate foreign exchange risks. The paper also recommends priorities designed to further strengthen the marketplace. The Foreign Exchange Committee and its Buy-Side Subcommittee endorse the paper and would like to share it with you.

The document is organized as follows:

I. **Introduction**

II. **Brief Overview of FX Market**

- a. Liquidity of the Global Foreign Exchange Market
- b. Use of the Foreign Exchange Market by Corporations and Investors
- c. The Role of the U.S. Dollar in the Global Foreign Exchange Market

III. **Selected Tools for Effective Risk Management in the Global Foreign Exchange Market**

- a. Availability of Continuous Linked Settlement (CLS)
- b. Important Factors Mitigating Counterparty Credit Risk in the OTC FX Market
- c. Significant Efforts to Manage Operational Risk and Strengthen Legal Documentation Underpinning Foreign Exchange Transactions

IV. **Looking Ahead: Priorities for the Industry**

V. **Conclusion**

We hope that you find the paper helpful and informative.

Richard Mahoney
Chair
Foreign Exchange Committee

Foreign Exchange Committee Member Firms

Banco Itaú S.A.
Bank of America
Bank of Montreal
Barclays Capital
BNY Mellon
Calyon
Citigroup
Credit Suisse
Deutsche Bank
Goldman Sachs & Co.
ICAP North America
JP Morgan Chase
Morgan Stanley & Co.
Royal Bank of Scotland
Standard Chartered Bank
State Street Global Markets
TD Securities
Thomson Reuters
Tradition Financial Services
UBS
Union Bank
Wells Fargo

Buy-Side Subcommittee Member Firms

AllianceBernstein
Artemis Financial Advisors LLC
CalPERS Investments
Fischer Francis Trees & Watts
Fortress Investment Group LLC
General Electric Company
Tudor Investment Corporation

Overview of the OTC Foreign Exchange Market: 2009

I. Introduction

Following the recent period of financial market disruption, over-the-counter (OTC) markets have garnered significant attention. The Foreign Exchange Committee (FXC) and its Buy-Side Subcommittee have prepared this paper to provide a concise overview of the wholesale over-the-counter foreign exchange (FX) market[1] and to highlight various features of the marketplace that can help investors and corporations more effectively manage the risks associated with maintaining an international portfolio. The foreign exchange market is one of the most mature and transparent of the OTC markets, and its depth and transparency are important to investors, borrowers, and corporations. Historically, the FX market has withstood a number of disruptions, including various currency crises in the 1990s; the adjustment in global equity markets in 2000; a series of corporate events, including the bankruptcies of WorldCom, Enron, and Refco; and the most recent financial crisis, which included the bankruptcy of Lehman Brothers.

The FXC and its Buy-Side Subcommittee believe that the FX market functioned well and remained transparent, accessible, and relatively liquid during the most recent crisis. (This conclusion is consistent with findings of the Foreign Exchange Joint Standing Committee in a September 2009 paper.[2]) Participants were able to execute trades and manage their currency exposure on an uninterrupted, twenty-four-hour basis in a relatively liquid market. The forward FX market was affected by the challenges in the wholesale U.S. dollar (USD) funding markets, leading to significantly higher funding costs for USD positions, and elevated FX implied and actual volatility, leading to a widening of bid/offer spreads. Nevertheless, the market continued to function—prices were made, deals were transacted, and trades were settled. Still, the crisis highlights opportunities to further bolster the strength of the OTC FX market. This paper contains a discussion of some of those opportunities, many of which are being actively pursued by various industry groups, including the FXC and its counterparts abroad.

II. Brief Overview of FX Market

a. Liquidity of the Global Foreign Exchange Market

The global foreign exchange market is one of the most liquid financial markets in the world. According to the most recent Bank for International Settlements (BIS) survey of global foreign exchange volume, conducted in April 2007, global daily average turnover in traditional foreign exchange instruments was estimated to total $3.2 trillion.[3]

Liquidity in the foreign exchange market stems in part from the vast number of participants located around the globe and from the availability of a wide range of electronic communication networks that provide brokerage services and direct-dealing capabilities. The wide variety of trading venues, which range from telephone contact with dealer trading desks to single-dealer electronic portals or multibank portals, captures and reflects the total liquidity of the market and allows nontraditional institutions, investment managers, and corporations direct access to the market and significant price transparency. These

[1] The wholesale OTC FX market is composed of spot FX, forward FX, FX swap (equivalent to a spot and forward deal conducted simultaneously), and FX option transactions. FX forward contracts may settle through exchange of the underlying currencies (that is, on a deliverable basis) or by payment of the "in-the-money" amount calculated in accordance with the terms of the contract (that is, on a non-deliverable basis). In a non-deliverable forward contract (NDF), one of the currencies is typically that of an emerging market and the party purchasing the currency has no need to take physical possession of it. NDF and deliverable forward contracts serve as important hedging instruments in the market.

[2] The paper is available at http://www.bankofengland.co.uk/markets/forex/fxjsc/fxpaper090923.pdf.

[3] The survey is available at http://www.bis.org/publ/rpfxf07t.pdf?noframes=1.

institutions have augmented the liquidity that has traditionally been provided by large commercial and investment banks, resulting in deeper, more consistent liquidity virtually twenty-four hours a day during the business week.

Moreover, the depth of continuous liquidity throughout the twenty-four-hour foreign exchange trading day is a critical component of the efficient functioning of other U.S. capital markets. These features significantly reduce the risk that a reduction in trading activity could leave an investor unable to liquidate, fund, or offset a position at or near the market value of the asset.

b. Use of the Foreign Exchange Market by Corporations and Investors

Each day, FX market participants enter into millions of transactions across the globe. The growth of global investing and internationally diversified corporations has contributed to significant expansion of the foreign exchange market in recent years. Corporations and investors require access to the FX marketplace for a number of reasons.

Corporations regularly participate in the foreign exchange market to:

- repatriate earnings from abroad;
- export goods abroad/import goods to the domestic market;
- make payments to nonlocal suppliers and service providers;
- invest in plant, equipment, and businesses abroad;
- fund cross-currency balance-sheet needs;
- hedge net investment exposure or foreign balance-sheet/income-statement positions;
- hedge net income, bid-to-award risk, and flows associated with royalties and dividends.

Investors regularly participate in the foreign exchange market to:

- repatriate earnings from abroad;
- ensure adequate liquidity to meet obligations to pension owners, 401(k) owners, and other investors;
- settle the purchase or sale of foreign assets, for example, by allowing foreign investors to purchase U.S. assets;
- hedge the currency risk associated with holding foreign assets;
- offset sovereign risk;
- take currency views to manage portfolio risk and return.

Given the diversity of these needs, it is critical for corporations and investors to access a wide range of OTC FX products and to tailor the settlement dates of such products to their business requirements. The flexibility of OTC FX markets and products allows these corporations and investors to manage their risk, and their day-to-day business operations, more effectively.

c. The Role of the U.S. Dollar in the Global Foreign Exchange Market

The U.S. dollar is widely viewed as the world's premier reserve currency. It plays a critical role in facilitating global trade and investment:

- More international contracts are denominated in USD than in any other currency.
- Commodities and many other globally traded goods are typically priced in USD.
- The United States is historically a recipient of "safe-haven" flows during crises and times of global economic and market disruptions.

This critical role played by the dollar underscores the importance of maintaining an accessible and efficient marketplace. Additionally, the USD's central role in currency markets makes it easier for investors to hold dollar-based assets and results in lower borrowing costs for dollar-based debtors. It also provides a competitive advantage for U.S.-based corporations (which have correspondingly less FX risk than comparable firms based outside the United States). Therefore, the special role of the U.S. dollar, coupled with the transparent and liquid nature of foreign exchange markets, is a major factor underpinning global trade and capital markets.

Although more than 80 percent of all FX trades are estimated to involve the USD,[4] the United States is eclipsed by the United Kingdom as the largest FX trading center. According to the most recent regional foreign exchange committee turnover surveys, conducted in April 2009, average daily turnover in OTC foreign exchange products in North America was less than half the turnover reported in the United Kingdom.[5]

III. Selected Tools for Effective Risk Management in the Global Foreign Exchange Market

The FXC would like to highlight some of the features of the foreign exchange market that contributed to its robust function and that served to mitigate some of the core risks, including settlement risk, counterparty credit risk, and operational risk.

a. Availability of Continuous Linked Settlement (CLS)

To reduce systemic settlement risk, the industry created CLS Bank in 2002 at the behest of central banks around the world. Settlement risk refers to the capital at risk from the time an institution meets its obligation under a contract (through the advance of funds or securities) until the counterparty fulfills its side of the transaction, which can occur many hours later in a different jurisdiction. CLS Bank dramatically reduces settlement risk for FX payments by performing settlement on a payment-versus-payment basis. Settlement of both legs of each FX trade is simultaneous, thus eliminating any time lag between the flows of the two settlement currencies that gives rise to settlement risk. CLS does not guarantee settlement, but instead protects against loss of principal by ensuring that neither leg of the FX trade will settle unless both legs can be settled at the same time. CLS currently settles seventeen currencies and settles payments arising from a range of foreign exchange products, including FX spot, forwards, swaps, non-deliverable forwards, and the exercise of options. In May 2008, the BIS released "Progress in Reducing Foreign Exchange Settlement Risk," a report drafted by the Committee on Payment and Settlement Systems.[6] The report surveyed foreign exchange trading activity across 109 institutions and estimated average daily FX settlement obligations for those institutions at $3.8 trillion. Of that amount, $2.1 trillion, or 55 percent, was estimated to settle through CLS Bank.

The importance of settlement risk in the foreign exchange market reflects certain key characteristics. First, FX spot and forward contracts are full notional contracts that require settlement of full cash amounts; they are not contracts for differences that require settlement of net profit or loss. For investors and corporations that make payments in foreign currency and hedge FX exposures, the ability to physically settle contracts is central to their use of the FX market. Second, each currency transaction involves more than one sovereign currency, so there is often a time-zone difference in the settlement of the two sides of the transaction. Given the scale of the FX market, any one participant could have settlement risk exposure to many hundreds of millions of dollars between the time the Asian currencies are settled locally and the time payment is made on the USD legs in New York. In the aggregate, systemic risk exists because a breakdown in FX settlement could produce a chain reaction in which firms fail to receive payments, causing them to be unable or unwilling to make payments to others. The industry created CLS Bank to better manage this risk within the FX market.

[4] According to the April 2007 BIS triennial survey, approximately 86 percent of reported FX spot, swap, and outright forward market turnover included the USD. The survey is available at http://www.bis.org/publ/rpfxf07t.pdf?noframes=1.

[5] Average daily turnover in total OTC FX products was $1,269 billion in the U.K. market, according to a report issued by the Foreign Exchange Joint Standing Committee, compared with $527 billion in the North American market, as reported in the Foreign Exchange Committee's turnover survey.

[6] The report is available at http://www.bis.org/publ/cpss83.pdf.

Additionally, CLS is supported by a robust legal framework that ensures finality of settlement and funding in its system.

Following the September 14, 2008, announcement of the imminent default of Lehman Brothers, payments among financial institutions settling in CLS continued uninterrupted. CLS served its stated function of reducing systemic risk and ensuring that despite the large notional size of FX trades around the world, financial institutions had the confidence to make payments into the system because they were protected against the loss of principal. Indeed, for those active in the OTC FX market over the past two years, it became very clear that use of payment-versus-payment settlement services, such as CLS, was critical to maintaining market integrity and functioning and to preventing further spread of the financial crisis.

In addition, CLS acts as an information repository, providing real-time information to members as well as reports to the central banks whose currencies settle in CLS on the gross and net cash flows per currency that will result from the daily settlement cycle. The repository is currently being enhanced to expand reporting flexibility and the range of instruments captured.

b. Important Factors Mitigating Counterparty Credit Risk in the OTC FX Market

Counterparty credit risk in the OTC FX market, as in markets for other traded products, is managed through counterparty credit analysis and risk management, which often involve instituting appropriate credit support arrangements between the trading parties. It is important to note that because the vast majority of transactions in the OTC FX market are short-dated (under one year in duration), there is relatively less credit risk associated with them compared with that of products whose average tenor is longer. Additionally, the transparency and liquidity of the OTC FX market facilitate accurate calculation of the exposure associated with open OTC FX trading positions, which in turn allows institutions to have a higher level of confidence that collateral posted to secure obligations under these transactions will be sufficient to cover the outstanding exposure.

The efficient exchange of collateral between institutions to offset the risk associated with unrealized gains and losses for open OTC FX contracts is a highly effective tool in managing the credit risk of the transactions. Collateral exchange is typically provided under the terms of credit support annexes (CSAs) to master agreements for FX transactions. In effect, CSAs provide many of the risk-reducing benefits of a central exchange while maintaining the flexibility offered by an OTC market, but without engendering the practical challenges that a country-specific central counterparty model would likely face in a highly international marketplace.

c. Significant Efforts to Manage Operational Risk and Strengthen Legal Documentation Underpinning Foreign Exchange Transactions

Various processes take place between execution and settlement of an FX transaction. These processes are typically supported by the operations division of financial institutions, and the risks associated with that responsibility form the core of operational risk. Managing these risks requires a solid understanding of products as well as processes to confirm and control the lifecycle of a transaction. Similarly, having robust and well-understood legal documentation is central to reducing risks in the FX market. The FX industry —led by various international FX committees and industry groups, such as the International Swaps and Derivatives Association, Inc. (ISDA), EMTA (a trade association for emerging markets), and the FXC—has undertaken considerable work in recent years to improve the operational infrastructure and the legal contracts underpinning transactions within the FX market.

On the operations front, industry participants in the FX market joined representatives from other asset classes in making a series of commitments to regulators in October 2008 to further strengthen the operational infrastructure for OTC derivatives. This effort emerged from the work initiated by the President's Working Group on Financial Market Developments.[7]

The 2008 commitments made to regulators on behalf of the OTC FX market build upon previously completed industry efforts to improve the operational infrastructure of the OTC FX market.

[7]Details on other ongoing efforts to improve the operational infrastructure of the OTC derivatives markets can be found at http://www.newyorkfed.org/newsevents/otc_derivative.html.

Since October 2008, the FX industry has continued to work to meet specific targets related to the increased automation of transaction processing. The commitments also include providing transparency in the form of metrics around OTC FX contract execution and demonstrating increased electronification of those contracts.

On the legal front, FX industry participants have continued to seek opportunities to enhance and standardize trade documentation improvements that would also help facilitate increased automation of the confirmation process. Some key successes include standardization of non-deliverable forward and non-deliverable option confirmations in selected emerging market jurisdictions, creation of common forms of give-up agreements and compensation agreements for use in OTC FX prime brokerage arrangements, and development of master confirmation agreements. These efforts have been further supported by CLS's sponsorship of protocols through which market participants have agreed to best practices for FX and non-deliverable forward trades, practices such as legally binding confirmations and standard terms for trades processed in CLS.

The FX industry's efforts to strengthen documentation are ongoing. The Financial Markets Lawyers Group (FMLG),[8] in collaboration with the FXC's Operations Managers Working Group (OMWG)[9] and ISDA, is currently drafting a standard form of novation protocol for use with FX products. The FMLG, OMWG, ISDA, and EMTA are also working together to develop definitions for new emerging market currency pair combinations as well as a standard form of confirmation for various exotic products. Another FMLG initiative involves the creation of a contractual infrastructure to permit parties using certain trading and settlement platforms to rely on the electronic execution notice generated by those systems as a legally binding confirmation.

Additionally, the FXC and similar committees abroad produce best-practice recommendations for the FX industry that cover trading as well as operational activities. These best-practice recommendations are cited as a benchmarking tool.[10]

IV. Looking Ahead: Priorities for the Industry

For many years, the global foreign exchange marketplace has helped foster the growth of international business and the prudent management of risks associated with global business and investment portfolios. Because the foreign exchange market is so central to the global economy, ensuring a liquid and robust marketplace is of utmost importance.

Of course, more can and will be done by the industry. In some cases, industry efforts are already under way; in others, the FXC and its Buy-Side Subcommittee believe that particular initiatives need to be identified and prioritized.

First, payment-versus-payment settlement services, such as CLS, proved very effective in mitigating systemic risk. We believe that further expansion of such services is warranted and in the best interest of both the industry and the regulatory community. In particular, we recommend the following:

- Payment-versus-payment settlement services, such as CLS, should be expanded to cover a greater array of currencies, regions, and products.
- The largest FX market-makers should be encouraged to become direct members of CLS, if eligible to do so.
- Any large and significant counterparties that indirectly participate in CLS through a member institution should, as a best practice, have a collateralized line for the exposure such participation presents to its member.

On this point, a number of efforts are already in progress. For example, CLS currently has efforts under way to implement same-day and next-day settlement within CLS for additional trades, to

[8] The FMLG comprises lawyers in leading worldwide financial institutions who support foreign exchange and other financial market trading. The FMLG advises on legal issues relevant to OTC foreign exchange and other OTC financial markets.

[9] The OMWG is a standing working group of the FXC that advises on operational issues relevant to OTC FX markets.

[10] The FXC website provides more information (http://www.newyorkfed.org/fxc/).

work with several jurisdictions to add further currencies to the settlement service, and to work with forums involving buy-side firms to extend participation. Efforts are focusing on efficiencies in straight-through-processing, FX protocols and standards, and participation in NDFs to enhance industry matching. There is an active campaign under way to educate the broad FX marketplace on the risk-mitigating benefits of utilizing a payment-versus-payment settlement service. The number of participating entities using CLS settlement has grown 35 percent since the beginning of 2009, bringing total CLS use to more than 6,000 third-party participants in addition to the 57 direct settlement members.

Second, the use of CSAs for counterparty risk management should be expanded. Clients that deal in foreign exchange as an asset class and take large speculative or highly leveraged positions should adequately collateralize the positions.

Third, ongoing efforts to standardize documentation and to improve the operational efficiency of the OTC foreign exchange market are critical and must continue to be a priority. Future commitments will likely take the form of higher levels of electronification of vanilla and barrier option products as well as increased standardization and electronification of complex exotic products.

Fourth, it is imperative that any efforts to improve the resilience of the marketplace take into account the global and twenty-four-hour nature of the foreign exchange market. Each foreign exchange transaction involves at least two sovereign currencies. The marketplace itself is spread across a series of liquid trading centers in different time zones and operates twenty-four hours a day, each business day. Absent such consideration of these key characteristics of the foreign exchange market, the potential for negative unintended consequences of any efforts to improve market resiliency is quite large.

Fifth, it is important to note that this paper is intended to address the wholesale foreign exchange market. The FXC has been clear in its belief that the retail market for foreign exchange requires prudent regulation.[11]

V. Conclusion

The volatile financial conditions that began in summer 2007 and peaked following the default of Lehman Brothers in September 2008 provided a significant test of the foreign exchange market's ability to withstand major disruptions and continue operating in a manner that protects the end-user. The market functioned well, despite strains seen in international funding and credit markets, and enabled participants to measure and mitigate risk dynamically in a global marketplace. During this time, transaction costs were elevated, owing to the volatility and spillover from U.S. dollar funding challenges. However, systemic risk mitigants built into the OTC FX market structure over the years proved successful in providing a liquid and continuous market despite the volatility, defaults, and disruptions of the last two years.

Despite this success, opportunities exist for further improvement in the FX market. The Foreign Exchange Committee believes that further expansion of the availability of payment-versus-payment services, such as CLS, is a highly effective way to mitigate settlement risk. Similarly, broader use of credit support annexes could lead to sizable reductions in counterparty credit risk. Significantly, both efforts can be accomplished globally without the challenges inherent in a regulatory effort coordinated across countries.

The Foreign Exchange Committee and its subcommittees and working groups remain committed to fostering risk management improvements in the FX market. To that end, we will continue to offer recommendations and guidelines and to support actions that facilitate greater contractual certainties for all parties active in foreign exchange.

[11] Guidance on this matter can be found at http://www.newyorkfed.org/fxc/2005/fxc051209.pdf.

Committee Letter

Commenting on Proposed Rule to Establish a Leverage Limitation for Retail Forex

February 20, 2009

Ms. Marcia E. Asquith
Office of the Corporate Secretary
FINRA
1735 K Street, N.W.
Washington, D.C. 20006-1506

Dear Ms. Asquith:

The Foreign Exchange Committee respectfully submits this letter in response to the issuance by the Financial Industry Regulatory Authority (FINRA) of proposed FINRA Rule 2380, which would establish leverage limitation on retail foreign exchange currency transactions (the "Rule"). The proposed Rule was published in Regulatory Notice 09-06 on January 21, 2009 (the "Notice"). This letter addresses certain of the Foreign Exchange Committee's general concerns with the potential adoption of the Rule and, specifically, the leverage limitation that would be imposed on retail foreign exchange transactions to a ratio of no more than 1.5 to 1.

The Foreign Exchange Committee (FXC) was formed in 1978 under the sponsorship of the Federal Reserve Bank of New York and includes representatives from major domestic and foreign commercial and investment banks and foreign exchange brokers. The FXC represents many of the most significant participants in foreign currency trading in the United States.[1]

Overview

During the past decade, the retail foreign exchange currency trading (retail forex) market has experienced significant growth, due largely to the fact that the forex market is a useful tool that allows investors to hedge their foreign currency exposure and provides risk mitigation and hedging opportunities for highly correlated products that might not trade twenty-four hours a day. We understand and share the concerns that have been raised by FINRA regarding participation by retail investors, particularly those who are less sophisticated and may engage in more speculative transactions. However, there are sufficient protections in place to address these concerns, and artificial limitations on leverage will serve only to restrict the market and deprive market participants of necessary hedging tools.

Congress recently enacted the CFTC Reauthorization Act (CRA) as part of the larger Food, Conservation, and Energy Act of 2008. The CRA amended the Commodity Exchange Act (CEA) to make clear the Commodity Futures Trading Commission's (the Commission) comprehensive regulatory authority over retail forex transactions, except as otherwise provided for in the CEA. This language was intended to eliminate any confusion as to the Commission's authority over retail forex transactions, created by the passage of the Commodity Futures Modernization Act of 2000. The CRA also clarified that the antifraud provisions of the CEA extended to the offer and sale of all transactions made to retail customers on a leveraged or margined basis and requires retail forex dealers registered with the National Futures Association (NFA) to maintain at least $20 million in capital. These antifraud provisions and net capital requirements are designed to protect the retail forex customer trading through an NFA-registered entity from fraud or bad faith actions on the part of the forex dealer.

[1] The FXC members in 2009: Banco Itaú S.A., Bank of America, Bank of Montreal, Bank of Tokyo Mitsubishi-UFJ, Calyon, Citigroup, Credit Suisse, Deutsche Bank AG, Goldman Sachs & Co., ICAP North America, JP Morgan Chase, Morgan Stanley & Co., RBS, Reuters, Barclays, Standard Chartered Bank, State Street Corporation, TD Bank, TFS Brokers, The Bank of New York Mellon, UBS, UniCredit, and Wells Fargo.

Congress' focus on antifraud and net capital requirements for NFA-registered retail forex dealers underscores its judgment that these are the appropriate tools that should be applied to retail forex transactions entered into by otherwise regulated entities, such as registered broker-dealers. There is no indication in the legislation, or elsewhere, that Congress intended restrictions on leverage to be imposed as a means of protecting retail participants. While we applaud the laudatory goal of protecting retail forex customers, we believe that the approach taken in the Notice and the proposed Rule raises several important public policy concerns.

Comments of the Foreign Exchange Committee

The FXC believes that the protections currently in place with respect to retail forex transactions are adequate to protect retail market participants and that the proposed Rule is unnecessary and potentially counterproductive.

The Current Regulatory Regime Provides Adequate Safeguards. In addition to the regulatory framework developed by CRA for the retail forex market, the current forex industry operates under a best practices environment that seeks to protect the customer from fraud and manipulation, as well as the reputation of the financial counterparty. In 2005, the Financial Markets Lawyers Group (FMLG)[2] was asked to provide the FXC with its views on the legal framework underlying the retail-wholesale boundary in the foreign exchange market.[3] This document sets forth guidelines for firms engaged in forex transactions and established that when firms enter into a transaction, firms must take into account the sophistication of a counterparty, the nature of their relationship with the retail customer, and the type of transaction being contemplated or executed. The letter suggests that if the counterparty is relatively unsophisticated, the firm should take additional steps to adequately disclose the risks of specific transactions. Finally, the letter noted the importance for firms to take a flexible approach to working with their customers, to ensure the best possible outcome.

In addition, FINRA Regulatory Notice 08-66, dated November 4, 2008,[4] has already established appropriate standards and principles to be applied to the retail forex market under NASD Rule 2110, which would apply to all FINRA members. NASD Rule 2110 governs the Standards of Commercial Honor and Principles of Trade and FINRA rightly expects its broker-dealer members to comply with NASD Rule 2110.

The combination of the best practices established by the forex community and the widespread implementation of NASD Rule 2110 will go far to ensure that forex customers are protected from fraudulent transactions and market manipulation in the future. While we appreciate FINRA's concern for retail forex customers, the current regulatory scheme provides ample protection of these market participants.

Unnecessary Harm Caused by Proposed Leverage Ratio. Even if additional regulatory safeguards are warranted for retail forex customers, we believe that imposing a leverage limitation will not be effective in protecting such customers and that it will in fact undermine the existing market and harm market participants by restricting their opportunities. As an initial matter, we would like to note that since foreign currency transactions are not securities and are not subject to the federal securities laws, we therefore question the basis for FINRA's legal authority to regulate the terms of transactions in this market. While we recognize that FINRA may be able to regulate the sales practices of broker-dealers, even in connection with non-securities, we are not aware of the foundation for FINRA's authority to control the actual terms of non-securities transactions.

Moreover, we strongly believe that the proposed leverage ratios could effectively preclude broker-dealers from participating in the forex market in its current form. The proposed ratio will prevent even highly capitalized broker-dealers from entering into forex transactions with market participants who are not ECPs, regardless of the capitalization level of the broker-dealer. As a result, these broker-dealers will no longer be able to conduct transactions with well-financed individuals, small businesses, or other investment entities that do not qualify as an ECP, but who nonetheless need access to forex transactions, as the cost of such a transaction at the proposed

[2] The FMLG advises on legal issues relevant to OTC foreign exchange and other OTC financial markets and is under the sponsorship of the Federal Reserve Bank of New York. The FMLG is comprised of lawyers who support foreign exchange and other financial markets trading in leading worldwide financial institutions.

[3] Foreign Exchange Committee 2005 *Annual Report*, commenting on the retail foreign exchange market ("Appendix 3: Legal Framework for Understanding the Retail-Wholesale Boundary in Foreign Exchange") 210-13 (2005).

[4] *FINRA Regulatory Notice 08-66* (Retail Foreign Exchange Currency).

leverage of 1.5 to 1 would essentially price out these market participants. In addition, the proposed ratio could have the effect of significantly limiting the number of dealers with whom a customer may engage in forex transactions and may leave a customer with no alternative but to enter into a forex transaction with other types of dealers that are not subject to this limitation. The proposal will therefore operate to the detriment of retail forex participants by preventing them from trading with regulated, and potentially better capitalized, broker-dealers. Neither alternative is in the best interest of the customer.

Further, while we do not believe that any rigid leverage ratio is appropriate, a level of 1.5 is clearly too low and fails to take into account the fact that volatility in the currency markets is generally lower than that of the equity markets. Volatility and risk in the currency markets also fluctuate fairly rapidly, and it is impossible to establish any single leverage ratio that will be appropriate in all market environments.

Finally, we believe that it is simply not feasible to establish a leverage limit that applies to all transactions because the appropriate degree of leverage will depend on a variety of factors, including the needs and objectives of the parties, volatility and other characteristics specific to the transaction.

FINRA Should Confirm an ECP Carve-Out. Separately, while ECPs are carved out of the Notice, we urge FINRA to clarify that Regulatory Notice 08-66, which addresses some of the same concerns as the Notice, also does not apply to transactions with ECPs. Moreover, we believe that being classified as an ECP should not be deemed to be the absolute factor in determining whether a customer would be deemed "retail" or not. Therefore, we also urge FINRA to clarify that some participants that are not ECPs may in fact have such institutional resources available to them that they should not be considered retail participants.

To the extent that Regulatory Notice 08-66 is a guideline for FINRA members, we find it helpful as it allows broker-dealers to navigate their relationships with their customers with some flexibility. Given the importance of context in dealing with forex customers, the FXC supports the adoption of policy guidelines over "hard and fast" rules that may do more to harm the market than protect the customer. We appreciate the policy implications of Regulatory Notice 08-66, since we also believe that broker-dealers that engage in retail forex transactions should comply with FINRA rules. This compliance benefits retail forex customers and dealers, by providing clear norms and standards for both parties.

Conclusion

The FXC is fully supportive of the requirements on retail forex transactions imposed under the CRA and of the application of FINRA's standards and industry best practices to broker-dealers engaged in retail forex transactions. We are confident that these provisions will continue to allow the currency markets to operate fairly and transparently. However, the imposition of the proposed leverage limitations will effectively prevent broker-dealers from offering forex transactions to their customers, which will in turn simply result in such customers utilizing NFA-registered forex dealers or unregulated, offshore firms that are not subject to any capital standards or antifraud restrictions. This could not have been the intent of Congress in passing the CRA; and the best interests of customers will not be advanced by the leverage limitations in proposed FINRA Rule 2380.

The FXC appreciates the opportunity to provide these comments. Should you require any further information, please do not hesitate to contact us.

Sincerely yours,

Richard Mahoney
Chair
Foreign Exchange Committee

"Life after Stress Testing: Adapting FX to the New Financial Services Environment"

Excerpts from the keynote address presented by Richard Mahoney, Chair, Foreign Exchange Committee, at Forex Network New York 2009, a conference sponsored by *Profit & Loss* Magazine, New York City, June 3, 2009.

Introduction

I'd like to express my personal congratulations to everyone at *Profit & Loss* on reaching your tenth anniversary. Ours is a business that thrives on information, and publications like *P&L* are an indispensable part of our media mosaic. These are tough times for the news industry, and I want to assure the team at *Profit & Loss* that we never take our financial news providers for granted.

Walking through lower Manhattan on my way here this morning, I couldn't help reflecting on how much the world has changed during the past eight years. It would be an understatement to say that much of that period has been a stressful time—indeed, "stress testing" has become as much a part of our vocabulary as "9/11."

My thesis today is that our foreign exchange market has, in fact, been stress tested—and has passed with flying colors. I'll talk a little bit about the institutional arrangements that enabled us to successfully handle stress testing, with special emphasis on an institution I know well—the New York Fed. I'll touch on lessons learned and the shape of things to come.

Interesting Times for Risk Management

Any discussion of the work done by the New York Fed's Foreign Exchange Committee during these—as the Chinese say, *interesting* times—must begin with the notion of risk. Even before we heard the names Jérôme Kerviel and Bernie Madoff and learned the fate of Bear Stearns and Lehman Brothers, the world's public and private sectors were grappling with a series of distinct but related challenges, all of them carrying the label "risk": financial system risk, economic risk, inflation and inflationary expectations risk, currency risk, moral hazard risk, and perhaps policy independence risk.

At the Foreign Exchange Committee, we had been examining the toxic mix of these risks and their impact on the foreign exchange market. Then as the events of 2008 unfolded, the tenor of our work changed from deliberations to crisis management.

The Foreign Exchange Committee – Structure and Function

To understand how the Committee responded to this challenge, it's helpful to first understand the Committee's basic structure and function. The Committee was established thirty years ago as an independent body under the sponsorship of the Federal Reserve Bank of New York. It serves as a forum to facilitate communication between the markets and the Federal Reserve System and, where appropriate, official institutions in the United States and abroad. The Committee focuses on improving risk management practices as well as develops recommendations and issues papers on related topics.

Basically, the Foreign Exchange Committee can have up to thirty members, with responsibility for inviting members to serve resting with the Federal Reserve Bank of New York. Institutions represented on the Committee are chosen with consideration of their participation in the North American FX market and their size and general importance. Individuals are considered based on their role, market stature, and commitment to the industry, as well as on their ability to speak for their institutions. The Committee is made up of New York City-based banks, other U.S. banks, foreign banks, investment banks and other dealers, intermediaries, and the New York Fed. Member terms are typically four calendar years. The Committee also has a Membership Subcommittee; other work streams are organized on an ad hoc basis. The Foreign Exchange Committee has a formal document of organization, which you can find on our website [http://www.newyorkfed.org/FXC/]. There, you'll also find listings of past and present membership, publications, and annual reports.

It's important to note that the Committee is not a rule-setting body. Everything we publish is presented as recommended best practices or guidelines.

By and large, the FX market has fared well over the past eight years compared with some other markets—in fact, it has performed well in this country over the last twenty years. The Committee's success in contributing to the stability of our market can be traced back to the Federal Reserve Bank of New York's insight in organizing the original Committee as a broadly diversified mix of institutions.

Transcending Roles to Cooperate in the Public Interest

In our relationships with one another, we're sometimes clients, almost always counterparties, and invariably competitors. Getting a group of banks to transcend their natural stakeholders—clients, shareholders, employees, and so on—and cooperate in the public interest is a fairly unique accomplishment. The Committee's work to ensure that we have a smoothly functioning marketplace has been battle tested—stress tested, if you will—over the last eighteen months, but it's the product of a process that's been under way for years.

The success of the Committee's work is a credit not just to the men and women who sit as members, but also to the associated professionals within our own institutions whose input we seek across a wide range of issues. Depending on the kind of advice we need or the issues we're investigating, we can bring together groups of risk managers, lawyers, or compliance officers from our respective banks. Normally, people in these positions wouldn't have an opportunity to collaborate across institutions on an industry-wide basis. Providing that opportunity has proved to be a tremendously successful Committee initiative.

Also important to the Committee's work is the input we receive from two standing working groups: the Operations Managers Working Group and the Chief Dealers Working Group. We also collaborate with the Financial Markets Lawyers Group.

Combining the long and short perspectives, what we've been doing for the past fifteen years proved to be enormously helpful as we shifted to a crisis management mode in the days following the Bear Stearns events.

The Committee's Role in Crisis Management

You all know the crisis management timeline: what started out as a rapid expansion of alpha trading strategies and leverage during the run up to the bursting of the housing bubble became a financial crisis, and the financial crisis morphed into a global economic crisis. These events were followed by the even more urgent concern that further destabilization could lead to social or geopolitical crises.

The impact of these events on the Committee was considerable to say the least. Generally, our role, and how we advise the Fed, are determined in response to how the world is evolving and what the implications of that evolution are for market functioning, policy, transparency, and risk, as well as for end-user efficiency.

In the wake of last year's events, our working groups have focused on various dimensions of the global financial crisis. These groups have been looking at risk management, in particular, "what went wrong" last year, the as-yet unaddressed broader issue of systemic risk, and the market's increased focus on counterparty risk. Systemic risk is the risk that one market participant's failure to meet its required obligations will prevent other participants or financial institutions from meeting theirs. Last autumn, this type of risk became intertwined with a particularly malevolent strain of reputational risk—the impact of negative public opinion on capital and liquidity. These are interrelated topics, but mitigation techniques point to the possibility of new market structures.

We are also looking at the Committee itself, and how we functioned during the crisis. As I mentioned earlier, the Foreign Exchange Committee is an advisory group to the New York

Fed. We're not a crisis management group. But we found ourselves doing that last year. An advisory group in the private sector can do only a limited amount of crisis management. So we're always asking ourselves how we can communicate more effectively with the market—and in an appropriate manner. On the latter score, I will note that, to guard against anti-trust considerations, we have a Federal Reserve lawyer present anytime we meet, whether physically or by conference call.

Global Financial Markets in the Aftermath of the Crisis

In terms of broad market outcomes, two of the most probable implications of the financial crisis are the need for increased capital in the financial system and the need for increased supervision of financial system participants. Whether that supervision takes the form of new regulation, broader regulation, consistent regulation, or better adherence to existing regulation isn't certain at this point—but we will see more supervision. Our FX market will perform well under this increased scrutiny.

Despite the current economic climate, the trends of cross-border investment, diversification across asset classes, and channel and platform evolution will continue. Nondealers will continue to make up a significant part of these markets—smaller commercial and investment banks, mutual and pension funds, central banks and sovereign funds, insurance companies and corporates, wealth managers, and hedge funds. Transparency and resiliency are important to mitigating systemic risk, so we are seeing movement toward centralized exchanges and clearing. The repositioning of classic mid- and back-office functions—trade affirmation and confirmation, settlement and reconciliation, pricing and valuation, collateral and trade lifecycle management—is likely to have a significant impact on market structure and business models. These trends, against a backdrop of continued technological and regulatory evolution, foreshadow major changes in the global financial markets.

The benefits of the shift to central counterparties—transparency, risk mutualization, and efficiency through netting—will compel some markets and asset classes to move in this direction. How this will impact the foreign exchange market is unclear at the moment.

Lessons Learned from the Financial Crisis

The need for standardized documentation is one of the major crisis management lessons learned from the meltdown. It's difficult to unwind or replace trades if documentation isn't uniform. A hidden benefit from standardization of documentation is that it makes negotiation much easier. If everyone put the same language on the back of barrier option confirmations, for example, disagreement over what constitutes a barrier breach would be virtually eliminated.

Other examples of important standardization include ISDA documentation terms associated with defaults—what constitutes an event of default and what actions one would take in a closeout. Consensus on those terms is important. The more we can encourage consistency, the more predictable the outcomes will be in a crisis. This in itself is a risk mitigant.

Counterparty risk is a topic that deserves special attention, because it's become a matter of such acute concern. And no wonder: the credit crisis triggered huge liquidity concerns and was accompanied by two spectacularly large instances of fraud. Everyone wants to know more about their counterparty; rogue trading and fraudulent portfolio management are just as alarming to investors as evaporating collateral and a credit crunch. We've learned that liquidity is neither infinite nor free, and business models are being rethought.

The Future: What Lies Ahead

I'll shift to a preview of where I see our market heading and what we foresee down the road in terms of regulatory changes; I'll also offer some thoughts on the aspects of our market that will endure once all the dust from the meltdown events has settled.

Market Outlook

Let's look at the market first. I think FX volumes have stabilized at lower levels. The world has deleveraged, and by that I'm referring to the world in all aspects—algorithmic traders, retail traders, or just cross-border trade and finance professionals. Global equity indexes were down about 40 percent last year and down another 10 to 15 percent during the first quarter, before they rebounded in the past two months. Those declines are reflected in the net asset values of global funds, so the FX transactions needed to hedge the exposures may be down 40 to 50 percent across those market segments.

Global equity markets will recover, but slowly. We probably will not see the leverage in the markets either at the high end—at the institutional level—or at the low end—at the retail level—that we saw in 2006 and 2007. Global GDP growth is likely to be negative in 2009, so I don't see a quick reversal or an uptick in global FX volumes. The markets will recover eventually.

What about structural changes? The rise of hedge funds has been a dominant theme in institutional investing for the past several years. The hedge fund industry's prime broker model is evolving rapidly. Two years ago, as much as two-thirds of the prime brokerage market was dominated by three firms, with a larger number of firms operating on the market's periphery. The world seems to be evolving toward a multi-prime rather than a single-prime broker model, with collateral perhaps being segregated at a third party. I would expect to see a resurgence in interest in foreign exchange prime brokerage. Sophisticated collateral management will become important to all participants. Concerns over collateral ownership in bankruptcy and segregation of collateral suggest that a different business model from the one we had in prime brokerage twelve months ago is now desirable.

And how will evolving market conditions and market structures impact the work of our Committee? As I mentioned, keeping the New York Fed abreast of market conditions is one of our key functions, and the collection of timely and accurate data for trend analysis will be a major area of focus.

One of the areas we're especially interested in is liquidity, particularly in the forward FX market beyond three months. However, it's difficult to collect the data; we're already asking operations managers to amass a fairly onerous amount as it is. Still, we do discuss our empirical observations, as well as general issues about liquidity and the depth and breadth of the market at different times during the global dealing day.

Some issues are parochial and will surface only when an incident occurs. For example, the Gulf countries and EBS and Reuters now post rates for major currencies on Saturday. The existence of a 24/7 platform implies a 24/7 market. But can you really trigger a barrier option on a Saturday afternoon? There may be differences of opinion about what critical mass of activity warrants barrier breach, or what happens when one platform deals at one rate and another platform doesn't. Liquidity fragmentation brings its own set of challenges for the market. Market and platform evolution will rule out a "one-size-fits-all" approach.

Given all the turmoil in recent months, the FX market has been amazingly efficient and has served a broad constituency very well—although everything could change if bank capital requirements argue for different prices based on counterparty credit quality or the mechanics of settling the trade. Retail foreign exchange is undergoing rapid transformation; post-crisis regulatory change is likely, and the intersection of advanced trading platforms, dark pools of liquidity, and path-dependent options is certain to have important ramifications.

Dialogue is essential to our ability to meet these challenges, and our Committee has initiatives under way with similar groups around the world, such as the Joint Standing Committee in the United Kingdom, the Foreign Exchange Contact Group of the European Central Bank, the Canadian Foreign Exchange Committee, the Tokyo Foreign Exchange Market Committee, the Treasury Markets Association of Hong Kong, the Singapore Foreign Exchange Market Committee, and the Australian Foreign Exchange Committee. These interactions are ongoing and focused on gathering timelier and more accurate FX trend analysis data.

The adaptability and resiliency of our market may give us a measure of insulation from the credit, leverage, liquidity, and risk management issues that have roiled other markets. But we must recognize that we're in the midst of fundamental changes to the structure of the global financial landscape. Key to our adaptability and resilience has been the commitment of public and private FX leaders to embrace and accommodate change in a manner consistent with transparency and market integrity.

The Role of the Individual

We live in a world of advanced technology—indeed, much of the discussion at today's conference will address the role of technology in our market. Allow me to close with a word on the importance of people to our business. One of our industry's success stories last year was the extent to which settlement through CLS was executed smoothly during the collapse of Lehman and Bear Stearns. Credit for much of that success belongs to the senior credit officers who cleared the transactions for those two institutions.

Our market is an amalgamation of private institutions, each making individual risk decisions. Different institutions might have different views on any one of these topics, so the concept of trying to move the entire industry toward consensus is fragile. In any areas where these new developments are occurring, there will be winners and losers. Some people will perceive developments as threats to their business model, others will see a competitive advantage—there are bound to be differences of opinion. We have to be careful in areas such as documentation to recognize what we have in common without denying what makes us different as market participants.

Conclusion

I'd like to close with some personal thoughts. Trading vocations are often described with martial analogies—courage and daring, for example. In the Samurai Bushido Code (the warrior code of the samurai), the brother of valor is rectitude—the power to decide on a course of conduct with reason, and without wavering. It's related to the Japanese *giri*—or duty—that individuals owe to their families, their employers, and society at large. Compensation may be a way of keeping score, but it speaks little about the values that matter—veracity, justice, and sincerity. Adhere to these values, and be proud of your market, your profession, and your employer.

Announcement

Contact: Jamie Pfeifer
Telephone: 212-720-1265

Foreign Exchange Committee Releases FX Volume Survey Results

New York, January 25, 2010

The Foreign Exchange Committee today released the results of its eleventh Survey of North American Foreign Exchange Volume. For the October 2009 reporting period, key findings are featured below.

- Average daily volume in total over-the-counter foreign exchange instruments (including spot transactions, outright forwards, foreign exchange swaps, and options) rose to $675 billion in October 2009 from $527 billion in April 2009, a 28.1 percent increase. Still, the figure was below the $762 billion reached in October 2008—the highest average daily volume reported in the survey's five-year history.
- The rebound in average daily volume since the April 2009 survey was broad-based, occurring across all instrument types, counterparty types, and execution methods as well as across most currency pairs.

"Throughout the challenging market environment in the third and fourth quarters of 2008, the FX market remained active, liquid, and robust," said Jeff Feig, Chair of the Foreign Exchange Committee. "While there was an understandable drop in volumes in early 2009—as counterparties and clients contended with lower asset levels and reassessed their market, credit, and other risks—we are not surprised that market participants have returned to actively managing their exposures in the FX markets and that volumes have continued to grow."

The survey was developed in order to provide the market with frequent information on the size and structure of foreign exchange activity in North America. To achieve a representative survey, the Committee invited twenty-five leading financial institutions active in the North American foreign exchange market to contribute data on the level of turnover during the month of October 2009. The Committee also collaborated with the United Kingdom's Foreign Exchange Joint Standing Committee (FXJSC), the Singapore Foreign Exchange Market Committee (SFEMC), the Canadian Foreign Exchange Committee (CFEC), and the Australian Foreign Exchange Committee (AFXC), which conducted similar surveys for the U.K., Singaporean, Canadian, and Australian markets, respectively, over the same period. The FXJSC, SFEMC, CFEC, and AFXC are also releasing their survey results today.

For the purposes of the survey, turnover is defined as the gross value of all new deals entered into during the reporting period and is measured in terms of the notional amount of the contracts. Survey data are broken out by four foreign exchange instruments, thirteen currency pairs, four counterparty types, and five execution method categories and are reported both in terms of daily average and total monthly volume. The reporting basis for the survey is the location of the price-setting dealer. While similar in nature, the survey is not comparable to the Bank for International Settlements' Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity, given the differences in the reporting methodologies.

The Foreign Exchange Committee includes representatives of major domestic and foreign commercial and investment banks engaged in foreign exchange transactions in the United States, as well as foreign exchange brokers. The Committee's objectives include 1) serving as a forum for the discussion of best practices and technical issues in the foreign exchange market, 2) fostering improvements in risk management in the foreign exchange market by offering recommendations and guidelines, and 3) enhancing the legal certainty of foreign exchange contracts through the development of standard documentation. The Committee was formed in 1978 under the sponsorship of the Federal Reserve Bank of New York.

The results of this survey, together with the list of reporting dealers and explanatory notes, are available online at http://www.newyorkfed.org/fxc/volumesurvey. The results of the other surveys are also available online as follows:

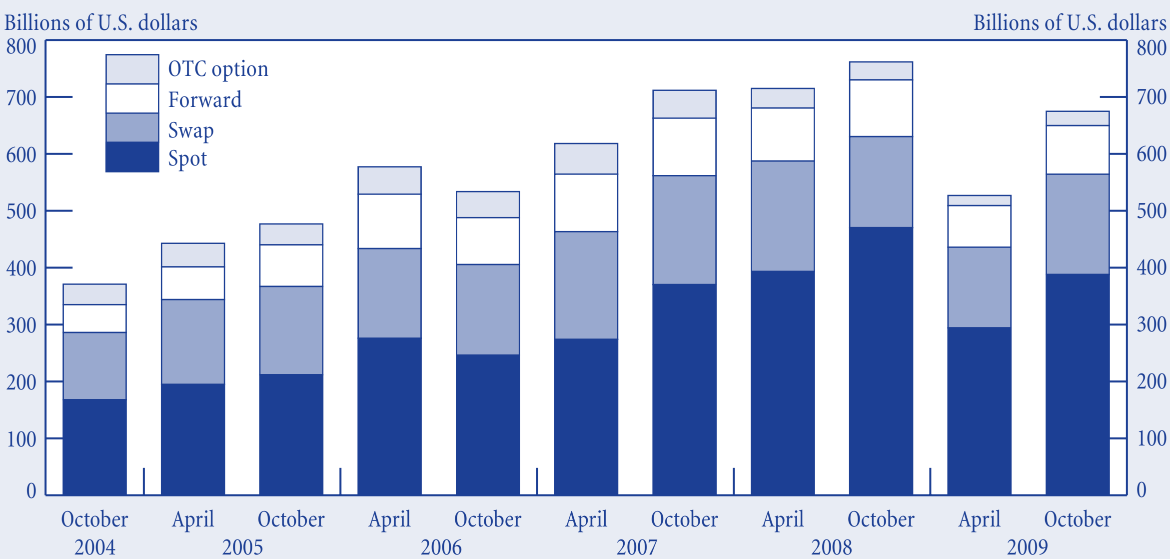
The Foreign Exchange Joint Standing Committee's survey for the U.K. market:
http://www.bankofengland.co.uk/markets/forex/fxjsc/index.htm

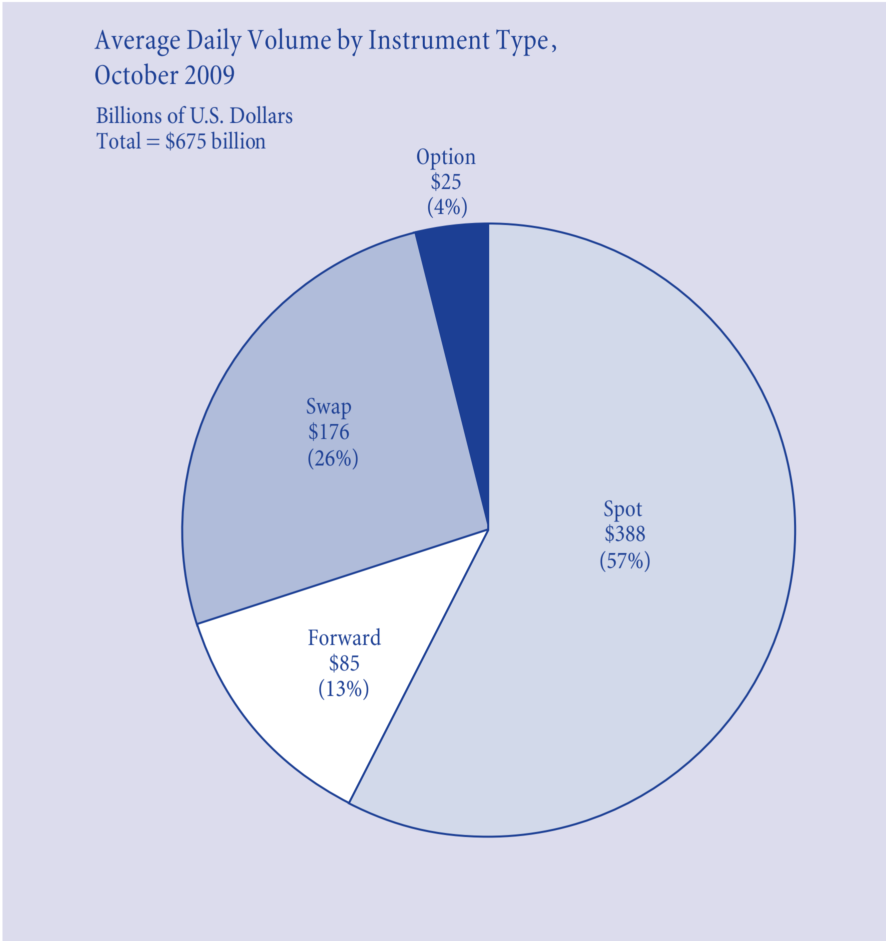
The Singapore Foreign Exchange Market Committee's survey for the Singaporean market:
http://www.sfemc.org/statistics.asp

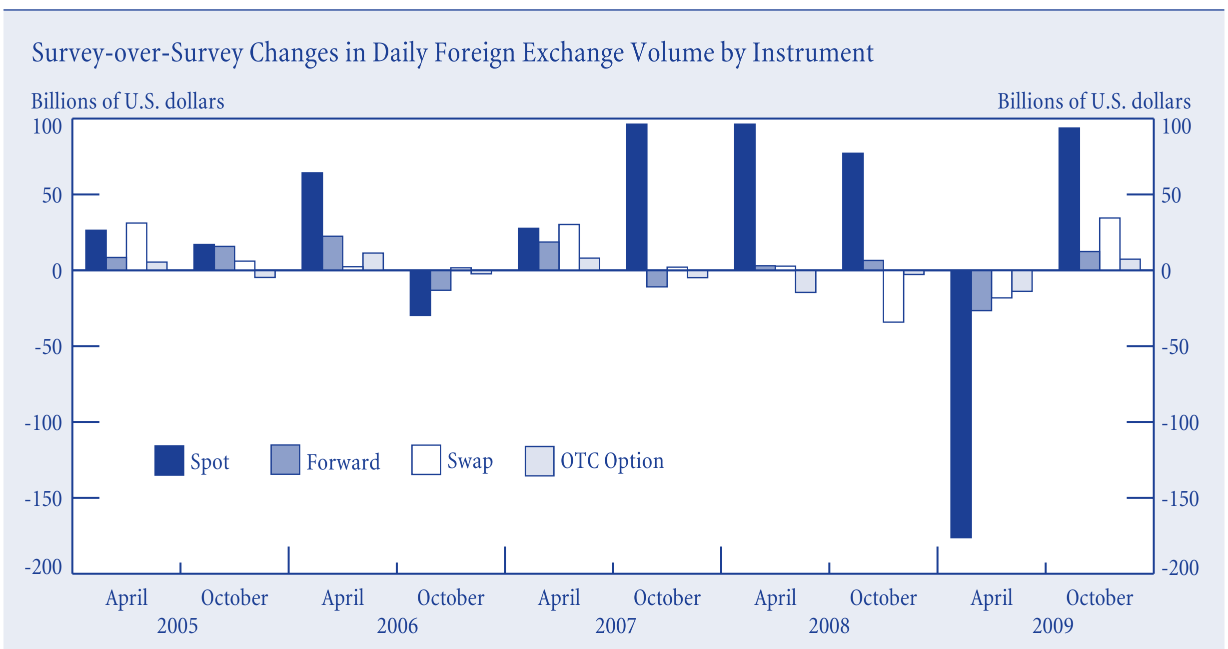
The Canadian Foreign Exchange Committee's survey for the Canadian market:
http://www.cfec.ca/fx_volume.html

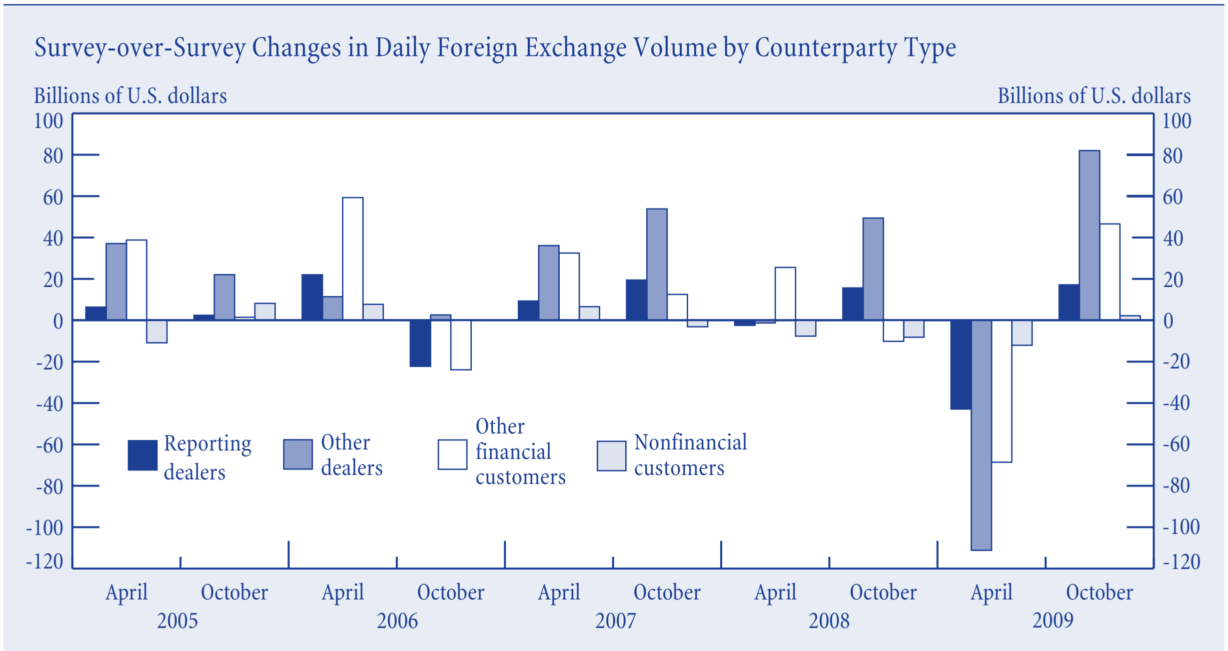
The Australian Foreign Exchange Committee's survey for the Australian market:
http://www.rba.gov.au/AFXC/Statistics/FXTurnoverReports/2009/Oct_2009/index.html.

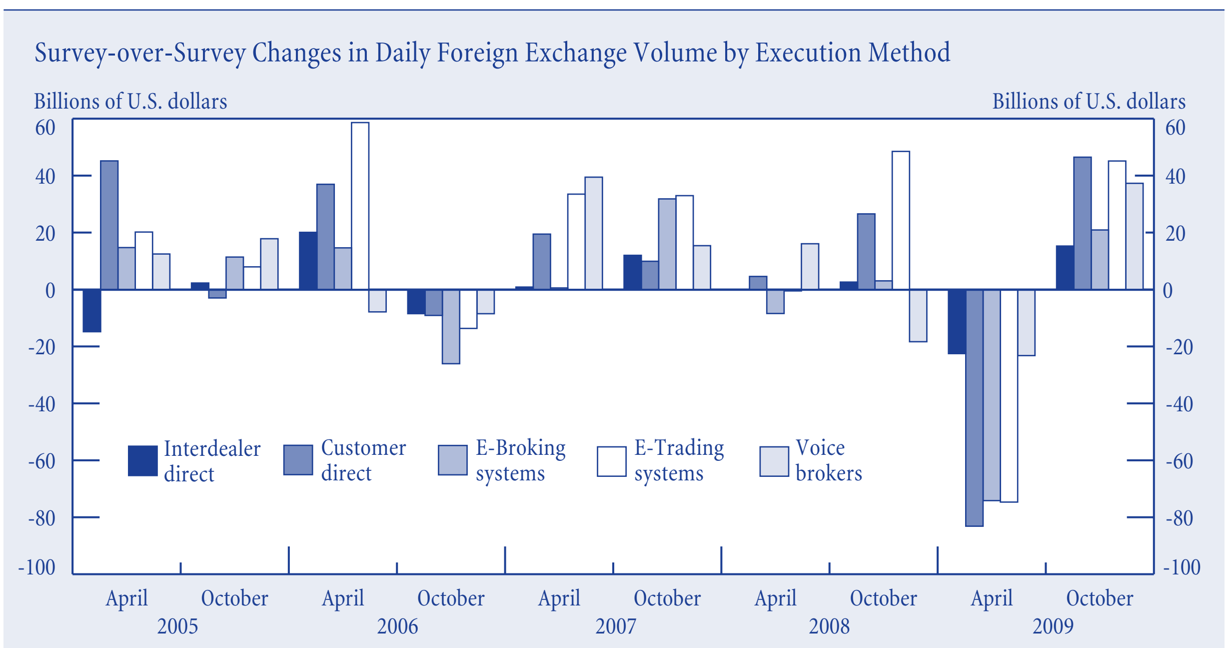
Daily Foreign Exchange Volume by Instrument



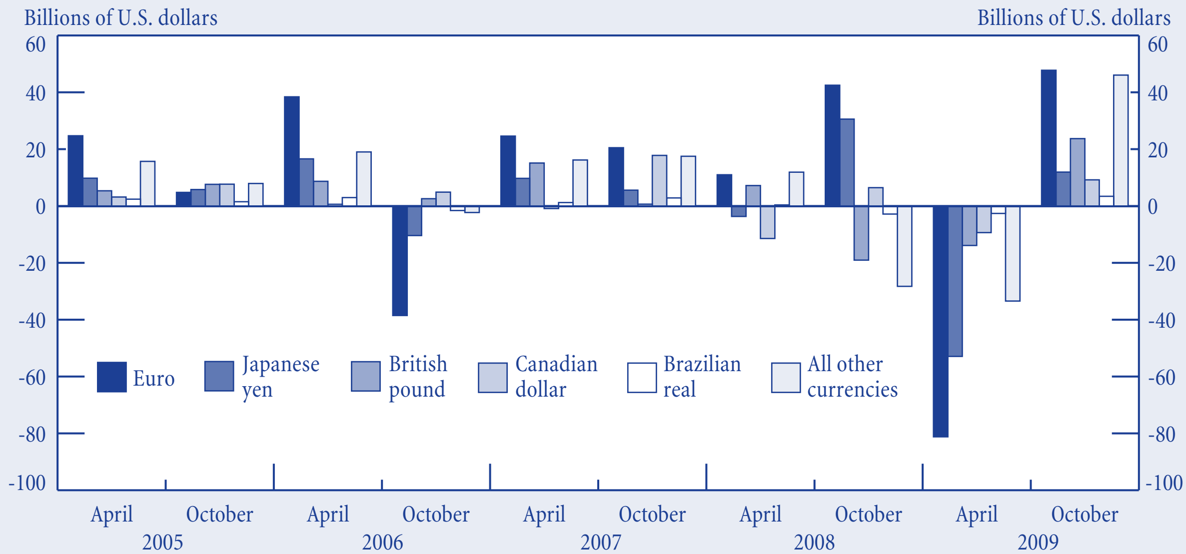

Average Daily Volume by Instrument Type, October 2009
Billions of U.S. Dollars
Total = $675 billion
Option $25 (4%)
Swap $176 (26%)
Spot $388 (57%)
Forward $85 (13%)


Survey-over-Survey Changes in Daily Foreign Exchange Volume by Instrument
Billions of U.S. dollars
Billions of U.S. dollars
100
50
0
-50
-100
-150
-200
Spot
Forward
Swap
OTC Option
April
October
2005
2006
2007
2008
2009


Survey-over-Survey Changes in Daily Foreign Exchange Volume by Counterparty Type
Billions of U.S. dollars
Billions of U.S. dollars
100
80
60
40
20
0
-20
-40
-60
-80
-100
-120
Reporting dealers
Other dealers
Other financial customers
Nonfinancial customers
April
October
April
October
April
October
April
October
April
October
2005
2006
2007
2008
2009


Survey-over-Survey Changes in Daily Foreign Exchange Volume by Execution Method
Billions of U.S. dollars
Billions of U.S. dollars
60
40
20
0
-20
-40
-60
-80
-100
Interdealer direct
Customer direct
E-Broking systems
E-Trading systems
Voice brokers
April
October
April
October
April
October
April
October
April
October
2005
2006
2007
2008
2009

Survey-over-Survey Changes in Daily Foreign Exchange Volume by U.S. Dollar versus Other Currencies



Survey of North American Foreign Exchange Volume

Explanatory Notes

Survey Terms and Methods

The Survey of North American Foreign Exchange Volume is designed to measure the level of turnover in the foreign exchange market. The survey defines foreign exchange transactions as spot, forwards, swaps, and options that involve the exchange of two currencies. Turnover is defined as the gross value in U.S. dollar equivalents of purchases and sales entered into during the reporting period. The data cover a one-month period in order to reduce the likelihood that very short-term variations in activity might distort the data.

Turnover is measured in terms of nominal or notional amount of the contracts. No distinction is made between sales and purchases (for example, a purchase of $3 million against the U.S. dollar and a sale of $2 million against the U.S. dollar would amount to a gross turnover of $5 million). Nondollar amounts are converted using the prevailing exchange rate on the transaction date. Direct cross-currency transactions are counted as a single transaction.

Transactions passing through a vehicle currency are counted as two separate transactions against the vehicle currency (for example, if a bank sells $1 million against the euro and then uses the euro to purchase Japanese yen, the reported turnover would be $2 million). Transactions with variable nominal or notional principal amounts are reported using the principal amount on the transaction date.

The data collected for the survey reflect all transactions entered into during the reporting month, regardless of whether delivery or settlement is made during the month.

Average daily turnover was obtained by dividing the total volume by the number of trading days in the month. There were twenty-five reporting dealers for the October 2009 survey.

Consolidation Rules

The survey covers all transactions that are priced or facilitated by traders in North America (the United States, Canada, and Mexico). Transactions concluded by dealers outside of North America are excluded even if they are booked to an office within North America. The survey also excludes transactions between branches, subsidiaries, affiliates, and trading desks of the same firm.

Instruments

The survey is divided into separate schedules by product type. If a transaction is composed of several component instruments, each part in principle is reported separately, if feasible.

- Spot transactions are single outright transactions that involve the exchange of two currencies at a rate agreed to on the date of the contract for value or delivery within two business days, including U.S. dollar-Canadian dollar (USD-CAD) transactions delivered within one day.
- Outright forwards involving the exchange of two currencies at a rate agreed to on the date of the contract for value or delivery at some time in the future (more than one business day for USD-CAD transactions or more than two business days for all other transactions). This category also includes forward foreign exchange agreement transactions (FXA), non-deliverable forwards, and other forward contracts for differences.
- Foreign exchange swaps involve the exchange of two currencies on a specific date at a rate agreed to at the time of the conclusion of the contract, and a reverse exchange of the same two currencies at a date further in the future at a rate agreed to at the time of the contract. For measurement purposes, only the long leg of the swap is reported so that each transaction is recorded only once.

- Currency options are over-the-counter contracts that give the right or the obligation—depending upon whether the reporter is the purchaser or the writer—to buy or sell a currency with another currency at a specified exchange rate during a specified time period. This category also includes exotic foreign exchange options such as average rate options and barrier options.

Counterparties

The survey covers four types of counterparties:

- reporting dealers participating in the survey,
- other foreign exchange dealers that do not participate in the survey,
- other financial customers that are end-users in the foreign exchange market, and
- nonfinancial customers for all other counterparties not defined above.

Transactions between two reporting dealers are reported twice, once by each dealer. The total figures are adjusted to avoid the double counting of such trades.

Maturities

Turnover reported in forwards and swaps is further broken down by original contractual maturity using the following three splits:

- up to one month, including contracts having an original maturity of less than thirty-one calendar days,
- one month to one year, including contracts having an original maturity of thirty-one calendar days but no more than one year, and
- more than one year, including contracts with an original maturity of greater than one year.

Turnover reported for options are broken down by maturity using the following three splits:

- up to one month, including options with an expiration date of less than thirty-one calendar days,
- one to six months, including options with expirations of 31 to 180 calendar days, and
- more than six months, including options with expirations of more than 180 calendar days.

Execution Method

Transactions are also reported according to the execution method used to settle the transaction. Execution method is broken down into the following five categories:

- interbank direct transactions between two dealers in which both dealers participate in the semiannual survey and are not intermediated by a third party (for example, executed via direct telephone communication or direct electronic dealing systems such as Reuters Conversational Dealing),
- customer direct transactions between the reporting dealer and customers or nonreporting dealers that are not intermediated by a third party (for example, executed via direct telephone communication or direct electronic dealing systems such as Reuters Conversational Dealing),
- electronic broking systems transactions that are conducted via an automated order matching system for foreign exchange dealers (for example, EBS and Reuters Matching 2000/2),
- electronic trading systems transactions that are conducted via multibank dealing systems and single-bank proprietary platforms that are generally geared toward customers (for example, FXall, Currenex, FXConnect, Globalink, and eSpeed), and
- voice broker transactions that are conducted via telephone communication with a foreign exchange voice broker.

In addition, a separate item capturing the total number of trades is reported for each currency pair and instrument type.

Reporting Dealers

Bank of America
Bank of Montreal
Bank of Tokyo-Mitsubishi
Barclays Capital
BNP Paribas
BNY Mellon
Calyon
Canadian Imperial Bank of Commerce
Citigroup
CSFB
Deutsche Bank AG
Goldman Sachs & Co.
HSBC Bank USA
JP Morgan Chase Bank
Mizuho Corporate Bank
Morgan Stanley & Co.
Royal Bank of Canada
Royal Bank of Scotland
Skandinaviska Enskilda Bank
Société Générale
Standard Chartered Bank
State Street Corporation
Sumitomo Mitsui Banking Corporation
UBS Bank
Wells Fargo Bank N.A.

Tables

MARKET SHARE, October 2009

Percent

INSTRUMENT	First Quintile (Five Dealers)	Second Quintile (Five Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
Spot Transactions					
Ranges held	>=5.21	3.68 - 1.65	1.51 - 0.87	0.75 - 0.29	<=0.29
Market share	78.83	11.55	6.22	2.41	0.99
Outright Forwards					
Ranges held	>=6.95	6.74 - 3.17	3.11 - 1.84	1.38 - 0.38	<=0.11
Market share	57.63	25.93	11.55	4.53	0.37
Foreign Exchange Swaps					
Ranges held	>=6.66	4.79 - 3.41	3.35 - 2.52	2.46 - 1.36	<=1.02
Market share	53.75	20.97	14.41	9.04	1.84
OTC Foreign Exchange Options					
Ranges held	>=8.63	7.85 - 2.14	1.68 - 0.69	0.64 - 0.11	<=0.06
Market share	62.54	28.64	6.75	1.98	0.08

COUNTERPARTY	First Quintile (Five Dealers)	Second Quintile (Five Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
Reporting Dealers					
Ranges held	>=8.32	6.34 - 3.05	2.63 - 1.80	1.28 - 0.74	<=0.53
Market share	58.34	23.66	11.27	4.88	1.88
Other Dealers					
Ranges held	>=4.78	3.42 - 2.09	2.07 - 1.53	1.50 - 0.72	<=0.34
Market share	72.61	12.70	8.87	5.15	0.68
Other Financial Customers					
Ranges held	>=4.13	3.89 - 3.10	2.94 - 1.08	0.28 - 0.08	<=0.04
Market share	72.53	17.64	9.07	0.72	0.05
Nonfinancial Customers					
Ranges held	>=5.22	4.49 - 3.25	2.61 - 1.66	1.60 - 0.68	<=0.68
Market share	61.49	19.39	10.44	6.31	2.35

Notes: The data are adjusted for double reporting of trades between reporting dealers. Total market share may not sum to 100 percent because of rounding.

MARKET SHARE, October 2009

Percent

CURRENCY PAIR	First Quintile (Five Dealers)	Second Quintile (Five Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
U.S. DOLLAR versus					
Euro					
Ranges held	>=5.43	5.41 - 2.22	2.01 - 1.47	1.46 - 0.51	<=0.22
Market share	69.99	15.45	9.20	4.62	0.74
Japanese yen					
Ranges held	>=7.33	4.01 - 2.31	2.12 - 1.30	1.26 - 0.50	<=0.44
Market share	68.91	16.49	8.68	4.76	1.18
British pound					
Ranges held	>=4.76	3.79 - 2.28	2.21 - 1.04	0.97 - 0.60	<=0.39
Market share	71.76	15.62	7.61	4.24	0.75
Canadian dollar					
Ranges held	>=5.71	4.66 - 2.61	2.59 - 1.85	1.78 - 1.29	<=0.35
Market share	62.16	18.94	10.55	7.51	0.84
Swiss franc					
Ranges held	>=5.90	3.42 - 2.85	1.80 - 1.00	0.92 - 0.35	<=0.18
Market share	73.78	15.60	6.75	3.42	0.46
Australian dollar					
Ranges held	>=4.13	3.88 - 2.58	2.20 - 0.93	0.77 - 0.22	<=0.20
Market share	74.37	15.82	6.75	2.47	0.59
Argentine peso					
Ranges held	>=9.42	7.08 - 0.92	0.46 - 0.17	0.00 - 0.00	<=0.00
Market share	80.56	17.95	1.48	0.00	0.00
Brazilian real					
Ranges held	>=8.47	8.18 - 4.96	3.24 - 0.50	0.38 - 0.03	<=0.02
Market share	59.51	30.10	9.27	1.10	0.02
Chilean peso					
Ranges held	>=10.89	8.17 - 1.50	1.38 - 0.02	0.02 - 0.00	<=0.00
Market share	71.96	25.08	2.93	0.04	0.00
Mexican peso					
Ranges held	>=6.81	6.45 - 3.97	3.62 - 1.13	0.87 - 0.16	<=0.12
Market share	60.58	25.30	11.00	2.82	0.31
All other currencies					
Ranges held	>=5.46	5.44 - 2.87	2.37 - 1.36	1.15 - 0.32	<=0.29
Market share	64.30	22.52	9.36	3.17	0.64
EURO versus					
Japanese yen					
Ranges held	>=4.58	4.33 - 1.54	1.45 - 0.98	0.56 - 0.22	<=0.21
Market share	78.23	13.20	6.05	1.81	0.70
British pound					
Ranges held	>=4.18	3.39 - 1.30	1.27 - 0.88	0.81 - 0.24	<=0.17
Market share	78.81	12.60	5.56	2.55	0.48
Swiss franc					
Ranges held	>=5.45	4.76 - 1.91	1.40 - 0.88	0.61 - 0.17	<=0.17
Market share	74.14	17.29	6.21	1.77	0.60
ALL OTHER CURRENCY PAIRS					
Ranges held	>=7.73	5.94 - 2.28	1.87 - 1.42	1.12 - 0.66	<=0.45
Market share	65.07	21.31	8.44	4.42	0.79

Notes: The data are adjusted for double reporting of trades between reporting dealers. Total market share may not sum to 100 percent because of rounding.

MARKET SHARE, April 2009

Percent

INSTRUMENT	First Quintile (Six Dealers)	Second Quintile (Six Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
Spot Transactions					
Ranges held	>=3.13	2.64 - 1.49	1.37 - 0.39	0.39 - 0.34	<=0.31
Market share	80.30	11.40	5.71	1.84	0.76
Outright Forwards					
Ranges held	>=5.23	4.98 - 3.10	2.89 - 0.79	0.79 - 0.20	<=0.13
Market share	63.65	24.28	9.25	2.40	0.41
Foreign Exchange Swaps					
Ranges held	>=4.39	4.34 - 3.06	2.49 - 1.79	1.79 - 0.71	<=0.32
Market share	58.98	22.76	10.40	7.14	0.72
OTC Foreign Exchange Options					
Ranges held	>=7.30	7.23 - 3.16	1.87 - 0.80	0.80 - 0.13	<=0.02
Market share	64.07	26.72	6.83	2.37	0.02

COUNTERPARTY	First Quintile (Six Dealers)	Second Quintile (Six Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
Reporting Dealers					
Ranges held	>=5.82	5.75 - 2.90	2.57 - 1.44	1.44 - 0.45	<=0.39
Market share	59.23	24.16	10.63	4.92	1.06
Other Dealers					
Ranges held	>=3.94	2.99 - 2.18	2.13 - 0.75	0.75 - 0.37	<=0.25
Market share	73.80	15.32	7.74	2.69	0.48
Other Financial Customers					
Ranges held	>=5.70	3.71 - 1.65	1.57 - 0.24	0.24 - 0.04	<=0.03
Market share	78.15	16.19	5.06	0.56	0.05
Nonfinancial Customers					
Ranges held	>=4.85	3.27 - 2.82	2.58 - 1.31	1.31 - 0.53	<=0.46
Market share	65.53	18.04	10.79	3.93	1.72

Notes: The data are adjusted for double reporting of trades between reporting dealers. Total market share may not sum to 100 percent because of rounding.

MARKET SHARE, April 2009

Percent

CURRENCY/PAIR	First Quintile (Six Dealers)	Second Quintile (Six Dealers)	Third Quintile (Five Dealers)	Fourth Quintile (Five Dealers)	Last Quintile (Five Dealers)
U.S. DOLLAR versus					
Euro					
Ranges held	>=3.66	3.45 - 2.24	2.17 - 1.00	1.00 - 0.22	<=0.20
Market share	72.54	15.04	9.28	2.56	0.57
Japanese yen					
Ranges held	>=4.20	3.20 - 2.14	2.06 - 0.91	0.91 - 0.57	<=0.55
Market share	72.49	14.88	8.19	3.63	0.83
British pound					
Ranges held	>=4.47	4.42 - 1.66	1.54 - 0.87	0.87 - 0.41	<=0.22
Market share	72.62	17.23	6.77	2.89	0.49
Canadian dollar					
Ranges held	>=5.19	4.55 - 2.75	2.59 - 1.28	1.28 - 0.21	<=0.18
Market share	62.20	21.83	10.43	5.02	0.51
Swiss franc					
Ranges held	>=3.34	2.83 - 1.73	1.73 - 0.53	0.53 - 0.14	<=0.10
Market share	76.61	14.25	7.09	1.65	0.41
Australian dollar					
Ranges held	>=4.17	4.13 - 1.88	1.67 - 0.55	0.55 - 0.28	<=0.08
Market share	75.79	16.93	4.98	2.03	0.28
Argentine peso					
Ranges held	>=7.77	5.41 - 1.13	0.85 - 0.02	0.02 - 0.00	<=0.00
Market share	82.29	15.58	2.12	0.02	0.00
Brazilian real					
Ranges held	>=7.20	6.00 - 2.10	1.60 - 0.24	0.24 - 0.04	<=0.00
Market share	70.14	25.00	4.33	0.52	0.00
Chilean peso					
Ranges held	>=5.94	4.82 - 1.85	0.49 - 0.01	0.01 - 0.00	<=0.00
Market share	80.08	18.79	1.10	0.02	0.00
Mexican peso					
Ranges held	>=5.70	5.22 - 2.06	2.04 - 0.65	0.65 - 0.07	<=0.03
Market share	65.02	25.08	8.10	1.71	0.11
All other currencies					
Ranges held	>=5.25	4.81 - 3.15	2.22 - 0.88	0.88 - 0.21	<=0.19
Market share	65.05	22.76	9.21	2.41	0.58
EURO versus					
Japanese yen					
Ranges held	>=2.53	2.43 - 1.24	1.21 - 0.34	0.34 - 0.17	<=0.14
Market share	83.50	10.51	4.39	1.19	0.42
British pound					
Ranges held	>=4.54	3.50 - 1.36	1.27 - 0.59	0.59 - 0.24	<=0.22
Market share	79.11	13.73	4.86	1.91	0.39
Swiss franc					
Ranges held	>=3.69	2.55 - 1.09	1.05 - 0.64	0.64 - 0.11	<=0.08
Market share	83.65	10.19	4.35	1.52	0.30
ALL OTHER CURRENCY PAIRS					
Ranges held	>=5.72	3.67 - 2.14	1.35 - 0.95	0.95 - 0.49	<=0.14
Market share	70.97	19.29	5.68	3.65	0.41

Notes: The data are adjusted for double reporting of trades between reporting dealers. Total market share may not sum to 100 percent because of rounding.

1. TOTAL FOREIGN EXCHANGE VOLUME, October 2009

Millions of U.S. Dollars

AVERAGE DAILY VOLUME

Instrument	Current Amount Reported	Dollar Change over Previous Year	Percentage Change over Previous Year
Spot transactions	387,961	-82,423	-17.5
Outright forwards	85,471	-14,196	-14.2
Foreign exchange swaps	176,284	16,311	10.2
OTC foreign exchange options	25,086	-6,547	-20.7
TOTAL	**674,802**	**-86,855**	**-11.4**

TOTAL MONTHLY VOLUME

Instrument	Current Amount Reported	Dollar Change over Previous Year	Percentage Change over Previous Year
Spot transactions	8,535,078	-2,283,769	-21.1
Outright forwards	1,880,335	-412,059	-18.0
Foreign exchange swaps	3,878,283	198,938	5.4
OTC foreign exchange options	551,822	-175,708	-24.2
TOTAL	**14,845,518**	**-2,672,598**	**-15.3**

Note: The lower table reports notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers; there were twenty-three trading days in October 2008 and twenty-two in October 2009.

2a. SPOT TRANSACTIONS, Average Daily Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty				
	Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	22,472	76,248	34,003	2,940	135,663
Japanese yen	8,624	28,087	12,841	897	50,449
British pound	6,848	26,973	13,038	1,050	47,909
Canadian dollar	4,617	14,557	7,384	1,144	27,702
Swiss franc	2,094	7,873	3,616	224	13,807
Australian dollar	4,127	14,966	9,583	355	29,031
Argentine peso	28	30	12	9	79
Brazilian real	470	906	703	236	2,315
Chilean peso	87	146	101	23	357
Mexican peso	2,009	4,495	1,911	263	8,678
All other currencies	2,749	8,327	6,802	968	18,846
EURO versus					
Japanese yen	2,134	8,451	4,218	167	14,970
British pound	1,696	7,311	3,740	272	13,019
Swiss franc	1,146	3,601	1,652	127	6,526
ALL OTHER CURRENCY PAIRS	3,153	9,812	5,024	621	18,610
Total[a]	**62,254**	**211,783**	**104,628**	**9,296**	**387,961**

2b. OUTRIGHT FORWARDS, Average Daily Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty				
	Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	1,672	2,933	10,067	2,801	17,473
Japanese yen	706	1,400	5,401	872	8,379
British pound	656	1,064	5,693	995	8,408
Canadian dollar	440	1,139	4,030	1,517	7,126
Swiss franc	210	537	1,484	327	2,558
Australian dollar	576	2,068	3,900	512	7,056
Argentine peso	49	45	32	13	139
Brazilian real	1,139	2,425	1,304	336	5,204
Chilean peso	504	789	161	44	1,498
Mexican peso	388	729	895	308	2,320
All other currencies	2,229	4,526	7,462	1,252	15,469
EURO versus					
Japanese yen	97	329	431	128	985
British pound	106	507	823	205	1,641
Swiss franc	67	318	328	146	859
ALL OTHER CURRENCY PAIRS	573	1,717	3,310	756	6,356
Total[a]	**9,412**	**20,526**	**45,321**	**10,212**	**85,471**

Notes: The tables report notional amounts of average daily volume adjusted for double reporting of trades between reporting dealers. The amounts are averaged over twenty-two trading days in October.

[a] Figures may not sum to totals because of rounding.

2c. FOREIGN EXCHANGE SWAPS, Average Daily Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	6,260	33,134	12,791	1,757	53,942
Japanese yen	4,621	11,155	6,188	854	22,818
British pound	2,785	9,899	5,627	734	19,045
Canadian dollar	4,499	15,077	5,249	1,638	26,463
Swiss franc	2,206	7,917	1,964	165	12,252
Australian dollar	1,457	5,638	3,887	300	11,282
Argentine peso	1	0	0	0	1
Brazilian real	37	76	45	12	170
Chilean peso	8	58	7	1	74
Mexican peso	1,512	3,535	812	320	6,179
All other currencies	2,647	9,403	5,327	688	18,065
EURO versus					
Japanese yen	55	206	252	77	590
British pound	40	199	307	309	855
Swiss franc	35	208	258	28	529
ALL OTHER CURRENCY PAIRS	355	1,526	1,798	340	4,019
Total[a]	**26,518**	**98,031**	**44,512**	**7,223**	**176,284**

2d. OTC FOREIGN EXCHANGE OPTIONS, Average Daily Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	1,837	1,613	1,679	1,350	6,479
Japanese yen	772	768	1,422	396	3,358
British pound	376	352	336	306	1,370
Canadian dollar	465	687	505	376	2,033
Swiss franc	207	135	122	130	594
Australian dollar	328	405	470	210	1,413
Argentine peso	0	0	1	0	1
Brazilian real	447	473	333	527	1,780
Chilean peso	9	4	0	11	24
Mexican peso	251	278	153	119	801
All other currencies	549	531	721	777	2,578
EURO versus					
Japanese yen	246	107	125	85	563
British pound	135	161	151	94	541
Swiss franc	240	158	146	168	712
ALL OTHER CURRENCY PAIRS	762	920	814	343	2,839
Total[a]	**6,624**	**6,592**	**6,978**	**4,892**	**25,086**

Notes: The tables report notional amounts of average daily volume adjusted for double reporting of trades between reporting dealers. The amounts are averaged over twenty-two trading days in October.

[a] Figures may not sum to totals because of rounding.

2e. AVERAGE DAILY VOLUME, by Execution Method and Currency Pair, October 2009

Columns 1-6 in Millions of U.S. Dollars

Currency Pair	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
U.S. DOLLAR versus							
Euro	20,503	72,409	39,613	63,903	49,368	245,796	103,694
Japanese yen	8,338	30,433	12,240	26,872	21,838	99,721	60,065
British pound	6,427	21,650	19,738	24,548	15,033	87,396	42,696
Canadian dollar	4,735	17,791	16,466	16,131	18,219	73,342	34,800
Swiss franc	3,342	9,277	4,168	7,916	9,222	33,925	17,458
Australian dollar	3,450	13,834	12,288	16,809	8,888	55,269	34,387
Argentine peso	62	115	51	26	43	297	51
Brazilian real	2,241	4,863	1,424	667	2,365	11,560	1,685
Chilean peso	337	887	483	173	681	2,561	363
Mexican peso	2,136	4,993	5,666	2,873	6,468	22,136	6,848
All other currencies	6,292	21,004	7,522	12,319	15,993	63,130	24,691
EURO versus							
Japanese yen	1,560	6,537	1,794	7,964	1,782	19,637	15,939
British pound	1,149	4,116	4,678	6,622	1,466	18,031	9,890
Swiss franc	794	3,106	1,115	3,697	1,402	10,114	6,224
ALL OTHER CURRENCY PAIRS	4,059	11,331	4,027	12,564	4,682	36,663	28,072
Total[a]	**65,425**	**222,346**	**131,273**	**203,084**	**157,450**	**779,578**	**386,863**

2f. AVERAGE DAILY VOLUME, by Execution Method, Instrument, and Counterparty, October 2009

Columns 1-6 in Millions of U.S. Dollars

	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
INSTRUMENT							
Spot transactions	34,607	120,941	89,295	149,781	55,580	450,204	347,754
Outright forwards	9,075	35,051	6,849	28,867	15,032	94,874	32,037
Foreign exchange swaps	15,283	50,880	32,895	23,638	80,103	202,799	5,563
OTC foreign exchange options	6,459	15,474	2,233	799	6,736	31,701	1,511
Total[a]	**65,424**	**222,346**	**131,272**	**203,085**	**157,451**	**779,578**	**386,865**
COUNTERPARTY							
Reporting dealers	65,424	0	47,426	42,124	54,608	209,582	93,372
Banks/other dealers	0	120,785	71,098	62,635	82,414	336,932	93,394
Other financial customers	0	79,403	11,455	92,100	18,481	201,439	161,070
Nonfinancial customers	0	22,157	1,293	6,225	1,948	31,623	39,029
Total[a]	**65,424**	**222,345**	**131,272**	**203,084**	**157,451**	**779,576**	**386,865**

Notes: The amounts reported in the tables are averaged over twenty-two trading days in October and are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3a. SPOT TRANSACTIONS, Total Monthly Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	494,376	1,677,450	748,058	64,670	2,984,554
Japanese yen	189,721	617,910	282,495	19,736	1,109,862
British pound	150,655	593,397	286,840	23,105	1,053,997
Canadian dollar	101,568	320,249	162,446	25,178	609,441
Swiss franc	46,059	173,210	79,549	4,920	303,738
Australian dollar	90,792	329,244	210,832	7,811	638,679
Argentine peso	615	666	265	194	1,740
Brazilian real	10,350	19,938	15,469	5,181	50,938
Chilean peso	1,908	3,213	2,228	501	7,850
Mexican peso	44,194	98,899	42,051	5,782	190,926
All other currencies	60,470	183,200	149,651	21,302	414,623
EURO versus					
Japanese yen	46,954	185,917	92,794	3,674	329,339
British pound	37,303	160,837	82,271	5,977	286,388
Swiss franc	25,221	79,219	36,349	2,804	143,593
ALL OTHER CURRENCY PAIRS	69,357	215,858	110,539	13,656	409,410
Total[a]	**1,369,543**	**4,659,207**	**2,301,837**	**204,491**	**8,535,078**

3b. OUTRIGHT FORWARDS, Total Monthly Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	36,775	64,516	221,482	61,612	384,385
Japanese yen	15,521	30,796	118,818	19,178	184,313
British pound	14,430	23,411	125,252	21,882	184,975
Canadian dollar	9,680	25,052	88,655	33,364	156,751
Swiss franc	4,623	11,818	32,650	7,199	56,290
Australian dollar	12,662	45,504	85,811	11,261	155,238
Argentine peso	1,072	982	696	293	3,043
Brazilian real	25,056	53,350	28,699	7,403	114,508
Chilean peso	11,098	17,350	3,539	962	32,949
Mexican peso	8,530	16,045	19,699	6,785	51,059
All other currencies	49,039	99,569	164,170	27,553	340,331
EURO versus					
Japanese yen	2,135	7,246	9,479	2,805	21,665
British pound	2,336	11,161	18,107	4,509	36,113
Swiss franc	1,466	6,985	7,225	3,215	18,891
ALL OTHER CURRENCY PAIRS	12,608	37,773	72,811	16,632	139,824
Total[a]	**207,031**	**451,558**	**997,093**	**224,653**	**1,880,335**

Note: The tables report notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3c. FOREIGN EXCHANGE SWAPS, Total Monthly Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	137,731	728,953	281,405	38,657	1,186,746
Japanese yen	101,659	245,414	136,137	18,782	501,992
British pound	61,278	217,788	123,791	16,158	419,015
Canadian dollar	98,986	331,697	115,487	36,032	582,202
Swiss franc	48,537	174,166	43,215	3,621	269,539
Australian dollar	32,045	124,042	85,524	6,607	248,218
Argentine peso	20	11	0	0	31
Brazilian real	807	1,673	992	257	3,729
Chilean peso	179	1,268	148	29	1,624
Mexican peso	33,263	77,762	17,857	7,049	135,931
All other currencies	58,236	206,865	117,186	15,146	397,433
EURO versus					
Japanese yen	1,202	4,532	5,534	1,696	12,964
British pound	890	4,375	6,746	6,791	18,802
Swiss franc	774	4,579	5,676	624	11,653
ALL OTHER CURRENCY PAIRS	7,800	33,566	39,551	7,487	88,404
Total[a]	**583,407**	**2,156,691**	**979,249**	**158,936**	**3,878,283**

3d. OTC FOREIGN EXCHANGE OPTIONS, Total Monthly Volume, October 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	40,418	35,491	36,931	29,708	142,548
Japanese yen	16,979	16,888	31,279	8,707	73,853
British pound	8,274	7,746	7,383	6,729	30,132
Canadian dollar	10,222	15,111	11,109	8,276	44,718
Swiss franc	4,548	2,979	2,678	2,865	13,070
Australian dollar	7,213	8,912	10,343	4,630	31,098
Argentine peso	0	0	12	0	12
Brazilian real	9,824	10,403	7,320	11,593	39,140
Chilean peso	193	98	11	233	535
Mexican peso	5,515	6,107	3,365	2,624	17,611
All other currencies	12,074	11,676	15,853	17,086	56,689
EURO versus					
Japanese yen	5,420	2,358	2,750	1,871	12,399
British pound	2,968	3,546	3,315	2,068	11,897
Swiss franc	5,282	3,479	3,206	3,703	15,670
ALL OTHER CURRENCY PAIRS	16,772	20,231	17,905	7,542	62,450
Total[a]	**145,702**	**145,025**	**153,460**	**107,635**	**551,822**

Note: The tables report notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3e. TOTAL MONTHLY VOLUME, by Execution Method and Currency Pair, October 2009

Columns 1-6 in Millions of U.S. Dollars

Currency Pair	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
U.S. DOLLAR versus							
Euro	451,060	1,593,005	871,480	1,405,857	1,086,090	5,407,492	2,281,277
Japanese yen	183,429	669,521	269,280	591,189	480,437	2,193,856	1,321,439
British pound	141,396	476,295	434,231	540,047	330,735	1,922,704	939,305
Canadian dollar	104,169	391,400	362,248	354,891	400,824	1,613,532	765,609
Swiss franc	73,514	204,102	91,707	174,161	202,885	746,369	384,083
Australian dollar	75,902	304,338	270,337	369,788	195,536	1,215,901	756,522
Argentine peso	1,357	2,534	1,119	572	943	6,525	1,119
Brazilian real	49,312	106,977	31,322	14,682	52,033	254,326	37,078
Chilean peso	7,404	19,507	10,628	3,796	14,986	56,321	7,986
Mexican peso	46,995	109,842	124,646	63,205	142,290	486,978	150,657
All other currencies	138,423	462,099	165,483	271,009	351,837	1,388,851	543,203
EURO versus							
Japanese yen	34,325	143,813	39,470	175,218	39,212	432,038	350,662
British pound	25,274	90,558	102,909	145,689	32,246	396,676	217,584
Swiss franc	17,476	68,324	24,527	81,340	30,855	222,522	136,924
ALL OTHER CURRENCY PAIRS	89,292	249,273	88,600	276,416	103,006	806,587	617,586
Total[a]	**1,439,328**	**4,891,588**	**2,887,987**	**4,467,860**	**3,463,915**	**17,150,678**	**8,511,034**

3f. TOTAL MONTHLY VOLUME, by Execution Method, Instrument, and Counterparty, October 2009

Columns 1-6 in Millions of U.S. Dollars

	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
INSTRUMENT							
Spot transactions	761,349	2,660,692	1,964,482	3,295,175	1,222,766	9,904,464	7,650,594
Outright forwards	199,646	771,117	150,683	635,074	330,693	2,087,213	704,817
Foreign exchange swaps	336,230	1,119,349	723,681	520,045	1,762,267	4,461,572	122,384
OTC foreign exchange options	142,105	340,434	49,136	17,568	148,192	697,435	33,238
Total[a]	**1,439,330**	**4,891,592**	**2,887,982**	**4,467,862**	**3,463,918**	**17,150,684**	**8,511,033**
COUNTERPARTY							
Reporting dealers	1,439,332	0	1,043,381	926,732	1,201,387	4,610,832	2,054,174
Banks/other dealers	0	2,657,268	1,564,145	1,377,975	1,813,099	7,412,487	2,054,679
Other financial customers	0	1,746,858	252,012	2,026,200	406,573	4,431,643	3,543,548
Nonfinancial customers	0	487,461	28,445	136,956	42,855	695,717	858,633
Total[a]	**1,439,332**	**4,891,587**	**2,887,983**	**4,467,863**	**3,463,914**	**17,150,679**	**8,511,034**

Notes: The amounts reported in the tables are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

4a. OUTRIGHT FORWARDS, Total Monthly Volume by Maturity, October 2009

Millions of U.S. Dollars

Currency Pair	Maturity: Up to One Month	One Month to One Year	More Than One Year
U.S. DOLLAR versus			
Euro	233,893	182,298	4,959
Japanese yen	122,488	76,125	1,205
British pound	120,900	77,575	920
Canadian dollar	96,438	67,441	2,539
Swiss franc	36,193	24,341	369
Australian dollar	122,782	43,964	1,144
Argentine peso	2,228	1,568	314
Brazilian real	96,515	42,037	1,002
Chilean peso	24,652	18,244	1,143
Mexican peso	26,873	30,699	2,008
All other currencies	153,300	226,908	9,155
EURO versus			
Japanese yen	14,950	8,823	15
British pound	27,785	10,509	147
Swiss franc	15,498	4,838	10
ALL OTHER CURRENCY PAIRS	92,332	58,247	1,840
Total[a]	**1,186,827**	**873,617**	**26,770**

4b. FOREIGN EXCHANGE SWAPS, Total Monthly Volume by Maturity, October 2009

Millions of U.S. Dollars

Currency Pair	Maturity: Up to One Month	One Month to One Year	More Than One Year
U.S. DOLLAR versus			
Euro	953,831	359,406	11,225
Japanese yen	440,338	158,746	4,555
British pound	378,220	99,547	2,515
Canadian dollar	571,432	104,627	5,116
Swiss franc	229,410	83,971	4,684
Australian dollar	238,454	40,595	1,205
Argentine peso	19	31	0
Brazilian real	4,232	304	0
Chilean peso	368	1,067	368
Mexican peso	140,483	26,826	1,871
All other currencies	373,202	80,574	1,883
EURO versus			
Japanese yen	7,690	6,103	367
British pound	12,054	7,319	316
Swiss franc	10,721	1,602	100
ALL OTHER CURRENCY PAIRS	71,947	24,072	177
Total[a]	**3,432,401**	**994,790**	**34,382**

Note: The tables report notional amounts of total monthly volume that are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

4c. OTC FOREIGN EXCHANGE OPTIONS, Total Monthly Volume by Maturity, October 2009

Millions of U.S. Dollars

	Maturity		
Currency Pair	Up to One Month	One to Six Months	More Than Six Months
U.S. DOLLAR versus			
Euro	95,868	62,428	24,659
Japanese yen	23,619	33,749	33,454
British pound	16,087	19,650	2,658
Canadian dollar	18,349	27,027	9,558
Swiss franc	10,828	5,781	1,006
Australian dollar	16,909	16,214	5,183
Argentine peso	0	0	12
Brazilian real	11,982	30,235	6,739
Chilean peso	71	649	7
Mexican peso	10,185	10,381	2,551
All other currencies	14,472	42,316	11,967
EURO versus			
Japanese yen	7,796	9,067	949
British pound	7,267	6,744	851
Swiss franc	10,169	10,353	427
ALL OTHER CURRENCY PAIRS	22,051	44,152	13,014
Total[a]	**265,653**	**318,746**	**113,035**

Note: The table reports notional amounts of total monthly volume that are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

1. TOTAL FOREIGN EXCHANGE VOLUME, April 2009

Millions of U.S. Dollars

AVERAGE DAILY VOLUME

Instrument	Current Amount Reported	Dollar Change over Previous Year	Percentage Change over Previous Year
Spot transactions	294,183	-99,078	-25.2
Outright forwards	73,109	-20,065	-21.5
Foreign exchange swaps	141,809	-52,330	-27.0
OTC foreign exchange options	17,759	-16,628	-48.4
TOTAL	**526,860**	**-188,101**	**-26.3**

TOTAL MONTHLY VOLUME

Instrument	Current Amount Reported	Dollar Change over Previous Year	Percentage Change over Previous Year
Spot transactions	6,472,025	-2,179,667	-25.2
Outright forwards	1,608,398	-441,411	-21.5
Foreign exchange swaps	3,119,799	-1,151,222	-27.0
OTC foreign exchange options	390,656	-365,832	-48.4
TOTAL	**11,590,878**	**-4,138,132**	**-26.3**

Note: The lower table reports notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers; there were twenty-two trading days in April 2008 and in April 2009.

2a. SPOT TRANSACTIONS, Average Daily Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	16,150	53,122	28,060	2,868	100,200
Japanese yen	7,759	20,706	11,341	882	40,688
British pound	4,810	15,584	8,710	880	29,984
Canadian dollar	3,774	12,232	6,205	1,164	23,375
Swiss franc	1,826	5,782	2,868	177	10,653
Australian dollar	2,841	9,247	5,481	253	17,822
Argentine peso	24	16	1	13	54
Brazilian real	366	486	265	175	1,292
Chilean peso	74	85	30	20	209
Mexican peso	1,491	3,228	1,400	282	6,401
All other currencies	2,264	5,540	4,969	961	13,734
EURO versus					
Japanese yen	2,267	8,575	4,952	170	15,964
British pound	1,426	5,298	2,922	223	9,869
Swiss franc	1,335	4,505	3,275	141	9,256
ALL OTHER CURRENCY PAIRS	2,363	7,148	4,720	451	14,682
Total[a]	**48,770**	**151,554**	**85,199**	**8,660**	**294,183**

2b. OUTRIGHT FORWARDS, Average Daily Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	1,171	7,497	6,916	2,976	18,560
Japanese yen	656	3,016	4,235	1,261	9,168
British pound	436	1,442	4,159	1,200	7,237
Canadian dollar	223	805	3,033	1,230	5,291
Swiss franc	200	780	1,435	348	2,763
Australian dollar	280	1,155	2,140	343	3,918
Argentine peso	51	49	13	13	126
Brazilian real	1,184	1,389	1,149	245	3,967
Chilean peso	508	496	130	17	1,151
Mexican peso	276	590	776	247	1,889
All other currencies	1,669	2,908	5,465	1,074	11,116
EURO versus					
Japanese yen	123	789	710	81	1,703
British pound	60	290	471	190	1,011
Swiss franc	93	187	321	99	700
ALL OTHER CURRENCY PAIRS	471	954	2,665	419	4,509
Total[a]	**7,401**	**22,347**	**33,618**	**9,743**	**73,109**

Notes: The tables report notional amounts of average daily volume adjusted for double reporting of trades between reporting dealers. The amounts are averaged over twenty-two trading days in April.

[a] Figures may not sum to totals because of rounding.

2c. FOREIGN EXCHANGE SWAPS, Average Daily Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	6,352	25,859	9,246	1,531	42,988
Japanese yen	4,886	9,370	4,370	797	19,423
British pound	2,192	8,820	3,399	681	15,092
Canadian dollar	5,847	11,825	4,572	2,058	24,302
Swiss franc	1,635	4,477	1,546	312	7,970
Australian dollar	1,224	4,854	2,191	272	8,541
Argentine peso	2	1	0	0	3
Brazilian real	60	36	27	15	138
Chilean peso	19	28	10	5	62
Mexican peso	1,592	3,058	810	347	5,807
All other currencies	2,078	6,456	2,529	533	11,596
EURO versus					
Japanese yen	11	86	155	20	272
British pound	35	348	371	141	895
Swiss franc	176	159	515	24	874
ALL OTHER CURRENCY PAIRS	517	1,380	1,680	269	3,846
Total[a]	**26,626**	**76,757**	**31,421**	**7,005**	**141,809**

2d. OTC FOREIGN EXCHANGE OPTIONS, Average Daily Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	1,204	776	1,149	924	4,053
Japanese yen	933	974	1,021	869	3,797
British pound	183	122	148	261	714
Canadian dollar	312	417	221	206	1,156
Swiss franc	163	107	142	228	640
Australian dollar	123	165	132	136	556
Argentine peso	1	0	2	0	3
Brazilian real	210	137	134	182	663
Chilean peso	7	9	1	5	22
Mexican peso	170	186	142	99	597
All other currencies	357	231	488	339	1,415
EURO versus					
Japanese yen	323	76	235	127	761
British pound	224	155	202	68	649
Swiss franc	269	346	241	177	1,033
ALL OTHER CURRENCY PAIRS	395	553	364	388	1,700
Total[a]	**4,874**	**4,254**	**4,622**	**4,009**	**17,759**

Notes: The tables report notional amounts of average daily volume adjusted for double reporting of trades between reporting dealers. The amounts are averaged over twenty-two trading days in April.

[a] Figures may not sum to totals because of rounding.

2e. AVERAGE DAILY VOLUME, by Execution Method and Currency Pair, April 2009

Columns 1-6 in Millions of U.S. Dollars

Currency Pair	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
U.S. DOLLAR versus							
Euro	13,813	58,468	34,766	47,933	35,697	190,677	78,338
Japanese yen	7,776	27,367	13,241	21,248	17,677	87,309	43,022
British pound	3,681	14,761	14,779	16,345	11,079	60,645	29,181
Canadian dollar	5,128	15,796	14,732	13,427	15,196	64,279	24,746
Swiss franc	1,793	7,481	3,697	6,521	6,357	25,849	12,964
Australian dollar	1,880	8,499	7,531	10,108	7,283	35,301	24,395
Argentine peso	74	85	20	27	57	263	53
Brazilian real	1,704	2,462	814	767	2,133	7,880	1,308
Chilean peso	400	591	464	168	428	2,051	316
Mexican peso	2,596	4,704	3,926	2,358	4,638	18,222	4,474
All other currencies	4,640	13,072	5,826	9,934	10,754	44,226	19,117
EURO versus							
Japanese yen	1,504	6,129	2,833	8,759	2,198	21,423	15,781
British pound	693	3,175	3,347	5,483	1,469	14,167	7,735
Swiss franc	885	3,550	1,483	5,876	1,941	13,735	6,625
ALL OTHER CURRENCY PAIRS	3,593	9,732	2,907	9,003	3,245	28,480	23,620
Total[a]	**50,160**	**175,872**	**110,366**	**157,957**	**120,152**	**614,507**	**291,675**

2f. AVERAGE DAILY VOLUME, by Execution Method, Instrument, and Counterparty, April 2009

Columns 1-6 in Millions of U.S. Dollars

	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
INSTRUMENT							
Spot transactions	23,786	91,903	69,227	118,361	39,671	342,948	256,158
Outright forwards	7,194	34,210	6,232	21,653	11,213	80,502	26,744
Foreign exchange swaps	14,686	39,626	33,904	17,443	62,771	168,430	7,596
OTC foreign exchange options	4,493	10,133	1,001	500	6,498	22,625	1,176
Total[a]	**50,159**	**175,872**	**110,364**	**157,957**	**120,153**	**614,505**	**291,674**
COUNTERPARTY							
Reporting dealers	50,160	0	47,877	31,637	45,647	175,321	75,551
Banks/other dealers	0	93,635	56,843	46,920	57,508	254,906	134,212
Other financial customers	0	61,239	4,531	73,897	15,192	154,859	68,617
Nonfinancial customers	0	20,997	1,114	5,502	1,807	29,420	13,293
Total[a]	**50,160**	**175,871**	**110,365**	**157,956**	**120,154**	**614,506**	**291,673**

Notes: The amounts reported in the tables are averaged over twenty-two days in April and are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3a. SPOT TRANSACTIONS, Total Monthly Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	355,304	1,168,677	617,312	63,096	2,204,389
Japanese yen	170,704	455,523	249,507	19,401	895,135
British pound	105,824	342,839	191,615	19,366	659,644
Canadian dollar	83,032	269,109	136,508	25,605	514,254
Swiss franc	40,178	127,203	63,101	3,887	234,369
Australian dollar	62,496	203,443	120,580	5,570	392,089
Argentine peso	526	341	26	296	1,189
Brazilian real	8,059	10,690	5,827	3,860	28,436
Chilean peso	1,628	1,870	655	436	4,589
Mexican peso	32,793	71,027	30,809	6,202	140,831
All other currencies	49,809	121,876	109,326	21,146	302,157
EURO versus					
Japanese yen	49,880	188,651	108,942	3,732	351,205
British pound	31,382	116,565	64,274	4,896	217,117
Swiss franc	29,367	99,112	72,052	3,094	203,625
ALL OTHER CURRENCY PAIRS	51,989	157,248	103,832	9,927	322,996
Total[a]	**1,072,971**	**3,334,174**	**1,874,366**	**190,514**	**6,472,025**

3b. OUTRIGHT FORWARDS, Total Monthly Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Counterparty: Other Dealers	Counterparty: Other Financial Customers	Counterparty: Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	25,767	164,935	152,150	65,475	408,327
Japanese yen	14,431	66,353	93,178	27,752	201,714
British pound	9,590	31,713	91,488	26,401	159,192
Canadian dollar	4,910	17,703	66,736	27,068	116,417
Swiss franc	4,403	17,160	31,572	7,652	60,787
Australian dollar	6,155	25,407	47,083	7,538	86,183
Argentine peso	1,123	1,069	290	294	2,776
Brazilian real	26,043	30,561	25,283	5,393	87,280
Chilean peso	11,170	10,903	2,859	372	25,304
Mexican peso	6,073	12,976	17,078	5,436	41,563
All other currencies	36,711	63,969	120,221	23,622	244,523
EURO versus					
Japanese yen	2,702	17,364	15,611	1,786	37,463
British pound	1,318	6,383	10,368	4,188	22,257
Swiss franc	2,055	4,116	7,052	2,174	15,397
ALL OTHER CURRENCY PAIRS	10,365	20,993	58,631	9,226	99,215
Total[a]	**162,816**	**491,605**	**739,600**	**214,377**	**1,608,398**

Note: The tables report notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3c. FOREIGN EXCHANGE SWAPS, Total Monthly Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	139,752	568,891	203,412	33,687	945,742
Japanese yen	107,496	206,142	96,137	17,532	427,307
British pound	48,225	194,031	74,771	14,987	332,014
Canadian dollar	128,635	260,148	100,595	45,266	534,644
Swiss franc	35,972	98,485	34,014	6,871	175,342
Australian dollar	26,926	106,778	48,199	5,995	187,898
Argentine peso	46	12	0	0	58
Brazilian real	1,318	796	595	339	3,048
Chilean peso	426	605	210	111	1,352
Mexican peso	35,029	67,287	17,811	7,643	127,770
All other currencies	45,721	142,042	55,639	11,729	255,131
EURO versus					
Japanese yen	239	1,882	3,418	440	5,979
British pound	772	7,651	8,153	3,111	19,687
Swiss franc	3,877	3,491	11,334	536	19,238
ALL OTHER CURRENCY PAIRS	11,372	30,351	36,950	5,916	84,589
Total[a]	**585,806**	**1,688,592**	**691,238**	**154,163**	**3,119,799**

3d. OTC FOREIGN EXCHANGE OPTIONS, Total Monthly Volume, April 2009

Millions of U.S. Dollars

Currency Pair	Counterparty: Reporting Dealers	Other Dealers	Other Financial Customers	Nonfinancial Customers	Total
U.S. DOLLAR versus					
Euro	26,495	17,071	25,273	20,319	89,158
Japanese yen	20,527	21,426	22,452	19,110	83,515
British pound	4,019	2,690	3,264	5,742	15,715
Canadian dollar	6,874	9,180	4,864	4,523	25,441
Swiss franc	3,582	2,352	3,117	5,027	14,078
Australian dollar	2,697	3,635	2,898	2,982	12,212
Argentine peso	21	3	34	0	58
Brazilian real	4,617	3,008	2,954	4,011	14,590
Chilean peso	156	192	21	114	483
Mexican peso	3,748	4,081	3,129	2,180	13,138
All other currencies	7,849	5,089	10,747	7,450	31,135
EURO versus					
Japanese yen	7,105	1,665	5,177	2,793	16,740
British pound	4,929	3,411	4,436	1,489	14,265
Swiss franc	5,918	7,621	5,304	3,899	22,742
ALL OTHER CURRENCY PAIRS	8,685	12,160	8,013	8,528	37,386
Total[a]	**107,222**	**93,584**	**101,683**	**88,167**	**390,656**

Notes: The tables report notional amounts of total monthly volume adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

3e. TOTAL MONTHLY VOLUME, by Execution Method and Currency Pair, April 2009

Columns 1-6 in Millions of U.S. Dollars

Currency Pair	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
U.S. DOLLAR versus							
Euro	303,886	1,286,302	764,846	1,054,535	785,325	4,194,894	1,723,447
Japanese yen	171,066	602,082	291,293	467,445	388,894	1,920,780	946,487
British pound	80,974	324,732	325,135	359,590	243,743	1,334,174	641,983
Canadian dollar	112,809	347,516	324,105	295,398	334,321	1,414,149	544,410
Swiss franc	39,436	164,585	81,329	143,463	139,863	568,676	285,203
Australian dollar	41,354	186,982	165,688	222,366	160,218	776,608	536,686
Argentine peso	1,629	1,872	436	598	1,248	5,783	1,169
Brazilian real	37,491	54,162	17,906	16,880	46,935	173,374	28,770
Chilean peso	8,789	12,992	10,202	3,701	9,408	45,092	6,942
Mexican peso	57,122	103,479	86,381	51,882	102,041	400,905	98,418
All other currencies	102,087	287,583	128,174	218,549	236,599	972,992	420,564
EURO versus							
Japanese yen	33,080	134,836	62,317	192,688	48,355	471,276	347,177
British pound	15,254	69,853	73,629	120,622	32,326	311,684	170,171
Swiss franc	19,476	78,093	32,627	129,276	42,709	302,181	145,754
ALL OTHER CURRENCY PAIRS	**79,053**	**214,094**	**63,959**	**198,065**	**71,390**	**626,561**	**519,636**
Total[a]	**1,103,506**	**3,869,163**	**2,428,027**	**3,475,058**	**2,643,375**	**13,519,129**	**6,416,817**

3f. TOTAL MONTHLY VOLUME, by Execution Method, Instrument, and Counterparty, April 2009

Columns 1-6 in Millions of U.S. Dollars

	Execution Method: Interdealer Direct	Customer Direct	Electronic Brokering Systems	Electronic Trading Systems	Voice Broker	Total	Total Number of Trades
INSTRUMENT							
Spot transactions	523,295	2,021,859	1,522,999	2,603,943	872,755	7,544,851	5,635,469
Outright forwards	158,273	752,610	137,114	476,366	246,693	1,771,056	588,364
Foreign exchange swaps	323,101	871,765	745,888	383,746	1,380,962	3,705,462	167,117
OTC foreign exchange options	98,846	222,927	22,031	11,003	142,962	497,769	25,866
Total[a]	**1,103,515**	**3,869,161**	**2,428,032**	**3,475,058**	**2,643,372**	**13,519,138**	**6,416,816**
COUNTERPARTY							
Reporting dealers	1,103,511	0	1,053,304	696,016	1,004,227	3,857,058	1,662,115
Banks/other dealers	0	2,059,980	1,250,550	1,032,251	1,265,169	5,607,950	2,952,674
Other financial customers	0	1,347,248	99,674	1,625,743	334,231	3,406,896	1,509,572
Nonfinancial customers	0	461,936	24,501	121,044	39,745	647,226	292,456
Total[a]	**1,103,511**	**3,869,164**	**2,428,029**	**3,475,054**	**2,643,372**	**13,519,130**	**6,416,817**

Note: The amounts reported in the tables are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

4a. OUTRIGHT FORWARDS, Total Monthly Volume by Maturity, April 2009

Millions of U.S. Dollars

Currency Pair	Maturity: Up to One Month	One Month to One Year	More Than One Year
U.S. DOLLAR versus			
Euro	280,665	150,224	3,195
Japanese yen	133,915	80,480	1,734
British pound	96,540	71,884	343
Canadian dollar	76,469	44,286	557
Swiss franc	38,595	26,262	326
Australian dollar	55,717	36,233	375
Argentine peso	2,257	1,608	25
Brazilian real	75,536	36,935	847
Chilean peso	23,710	12,089	669
Mexican peso	22,530	24,512	582
All other currencies	123,686	154,459	3,078
EURO versus			
Japanese yen	32,218	7,740	201
British pound	15,140	8,338	83
Swiss franc	11,286	6,100	54
ALL OTHER CURRENCY PAIRS	68,202	40,764	602
Total[a]	**1,056,466**	**701,914**	**12,671**

4b. FOREIGN EXCHANGE SWAPS, Total Monthly Volume by Maturity, April 2009

Millions of U.S. Dollars

Currency Pair	Maturity: Up to One Month	One Month to One Year	More Than One Year
U.S. DOLLAR versus			
Euro	773,599	304,496	7,382
Japanese yen	380,165	146,764	7,858
British pound	292,411	86,045	1,770
Canadian dollar	572,002	88,738	2,525
Swiss franc	155,514	53,426	2,358
Australian dollar	181,553	32,166	1,094
Argentine peso	99	3	0
Brazilian real	3,789	575	0
Chilean peso	461	1,213	101
Mexican peso	133,250	27,445	2,092
All other currencies	241,019	57,893	1,930
EURO versus			
Japanese yen	2,923	2,943	342
British pound	6,255	14,161	35
Swiss franc	7,470	15,042	597
ALL OTHER CURRENCY PAIRS	73,033	22,465	455
Total[a]	**2,823,543**	**853,375**	**28,539**

Note: The tables report notional amounts of total monthly volume that are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

4c. OTC FOREIGN EXCHANGE OPTIONS, Total Monthly Volume by Maturity, April 2009

Millions of U.S. Dollars

	Maturity		
Currency Pair	Up to One Month	One to Six Months	More Than Six Months
U.S. DOLLAR versus			
Euro	49,301	47,888	18,456
Japanese yen	28,688	39,806	35,535
British pound	9,608	7,795	2,324
Canadian dollar	13,608	12,840	5,856
Swiss franc	6,987	7,391	3,278
Australian dollar	7,833	5,711	1,357
Argentine peso	6	72	0
Brazilian real	6,670	9,070	3,463
Chilean peso	205	323	107
Mexican peso	5,436	7,656	3,784
All other currencies	11,974	22,246	4,756
EURO versus			
Japanese yen	3,591	5,437	14,810
British pound	8,137	8,951	2,100
Swiss franc	8,696	13,533	6,424
ALL OTHER CURRENCY PAIRS	13,349	22,755	9,954
Total[a]	**174,089**	**211,474**	**112,204**

Note: The table reports notional amounts of total monthly volume that are not adjusted for double reporting of trades between reporting dealers.

[a] Figures may not sum to totals because of rounding.

Reference Material

Document of Organization

The Foreign Exchange Committee is an industry group that has provided guidance and leadership to the global foreign exchange market since the Committee's founding in 1978. The Committee is an independent body sponsored by the Federal Reserve Bank of New York. The Federal Reserve Bank of New York views the Committee as an advisory group that provides insight on market conditions, identifies market-related problems, and suggests solutions or next steps.

Committee Objectives

The Foreign Exchange Committee's objectives are:

- to provide a forum for discussing issues in the foreign exchange and related international financial markets;
- to serve as a channel of communication between these markets and the Federal Reserve System and, where appropriate, other official institutions in 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 papers on market issues and practices with a view toward improving the functioning of the foreign exchange markets; and
- to work with the other organizations representing participants in relevant financial markets.

Committee Composition

The Committee strives to ensure fair presentation and consideration of all points of view and interests in the market at all times. The composition of the Committee can include New York-headquartered banks, other U.S.-headquartered banks, foreign banks, dealers, foreign exchange brokerage firms, other financial entities that transact in the foreign exchange market, and the Federal Reserve Bank of New York (ex officio). In general:

- The Committee consists of no more than thirty members.
- Institutions participating in the Committee are chosen in consideration of: a) their participation in the foreign exchange market and b) their importance. Selection of participants remains flexible to reflect changes as they occur in the foreign exchange market.
- Members are chosen with regard to their firm, their job responsibilities within that firm, their market stature, and their ongoing role in the market. Members should have a broad knowledge of the foreign exchange market and should be in a position to speak for their respective institutions;
- The membership term is four calendar years. A member may be renominated for additional terms; however, an effort will be made to maximize participation in the Committee by institutions eligible for membership. The normal term of the Committee's Chair, who will not be a Federal Reserve Bank of New York official, is no more than three years.
- Responsibility for choosing member institutions rests with the Federal Reserve Bank of New York. The Membership Subcommittee, chaired by a Federal Reserve Bank official, advises the Federal Reserve on membership issues.

Committee Procedures

Meetings

- The Committee will meet at least six times per year. The meetings will follow a specified agenda; however, the format of the discussions will be informal. In addition to regularly scheduled meetings, a meeting of the Committee may be requested at any time by five or more members.
- Members are expected to attend all meetings in person. Alternates cannot be sent.

- Meetings of the Committee will be held either at the Federal Reserve Bank of New York or at other member institutions. Meetings may be held elsewhere, as agreed by the Committee.

Input from Buy-Side Firms

- A Buy-Side Subcommittee was established in 2008 to provide a forum for discussing matters of mutual concern to dealers and nondealers in the foreign exchange market. This group is intended to broaden the dialogue on foreign exchange and supplementary best practice efforts conducted under the sponsorship of the Foreign Exchange Committee.
- The Buy-Side Subcommittee is composed of selected members of the Foreign Exchange Committee and selected members representing nondealer firms active in the foreign exchange market.
- The Buy-Side Subcommittee meets roughly four times per year.

Working Groups

- Standing working groups may include an Operations Managers Working Group and a Chief Dealers Working Group. These groups will be composed of market participants with an interest and expertise in projects assigned by the Committee, but membership decisions rest with the Federal Reserve of New York.
- Committee members will be designated as working group liaisons. The liaison's role is primarily one of providing guidance to the working group members and fostering effective communication between the working group and the Committee. In addition, a representative of the Federal Reserve Bank of New York will be assigned as an advisor to each working group.
- The Committee may designate additional ad hoc or standing 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 working groups and otherwise in discussions and deliberations.

Recommendations and Publications

- Any recommendation the Committee wishes to make on market-related topics will be discussed and decided upon by the Committee. 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 via the Committee's website or other means.
- The Committee will also publish an annual report, which will be made available on the Foreign Exchange Committee's website (http://www.newyorkfed.org/fxc/).

Membership Responsibilities

The Foreign Exchange Committee is composed of individuals from institutions that participate actively in the foreign exchange market as well as other financial markets worldwide. As senior officers of such institutions, Committee members have achieved stature in their own organizations and the marketplace, and have acquired expertise that is invaluable to attaining the Committee's objectives. In joining the Committee, these individuals expand their focus beyond their own institutions to encompass the entire market.

A member's ongoing communication with the markets worldwide generates information that is necessary to the Committee's deliberations on market issues or problems. Each member must be an effective communicator and problem solver with a commitment to raise and, when possible, resolve market and industry issues. Effective individual participation is critical for the collective effort to succeed.

The responsibilities of membership apply equally to all Committee members and are:

- to attend all meetings in person;
- to function as a communicator to the Committee and to the marketplace on matters of mutual interest, bringing issues and information to the Committee, contributing to discussion and research, and sounding out colleagues on issues of concern to the Committee;
- to 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.

Membership Subcommittee

The Membership Subcommittee manages the organization of the Committee by selecting new members, assigning duties, assessing the participation of the current membership, and changing, if needed, the composition of the Committee. The Federal Reserve Bank of New York representative on the Committee chairs the Membership Subcommittee. Subcommittee members (see next page for 2009 and 2010 membership) include the Committee's Chair as well as several long-standing and respected members of the Committee.

Much of the subcommittee's work occurs during October and November as the Committee prepares for the upcoming year. In its first conference call, the subcommittee:

- reviews the current Committee membership, taking account of meeting attendance and project participation over the past year;
- notes members whose four-year terms expire at year-end; and
- lists members who resigned or intend to resign prior to the end of their term because of developments at their institution such as retirement, resignation, reassignment, or merger activity.

In planning for the new year and considering new individuals for membership, the Committee may reduce or increase its size while recognizing that the Document of Organization caps the number of members at thirty.

Members whose terms are expiring may be invited to renew for an additional four-year term. The Committee's core group of long-standing members, whose terms have been renewed several times, benefits the entire group by providing a consistency of objectives and an enhanced knowledge of the Committee's history. Members who have been unable to meet the expectations for attendance and project participation may be asked to either step down or recommend others within their organization who might provide the Committee with more active and consistent support.

When discussing new members, the subcommittee considers each candidate's caliber, position, and recognition in the marketplace, as well as the degree of importance the candidate's institution has in the foreign exchange arena. The subcommittee considers individuals who have contacted the Committee directly. In addition, members of the Committee, the subcommittee, or other market participants may nominate an individual who they feel will benefit the Committee's mission.

The subcommittee also weighs the institutional composition of the Committee in its membership decisions on the theory that membership should reflect the overall composition of the actual market. During 2010, the Committee's membership will include individuals from commercial and investment banks and from interdealer brokers.

Finally, the subcommittee designates appropriate members to function as liaisons to facilitate communication between the Committee and its existing working groups. The liaisons for 2009 and 2010 for the two existing working groups are identified on the next page.

Foreign Exchange Committee Member Assignments, 2009 and 2010

2009

Committee Chair
Richard Mahoney

Liaisons for Working Groups
Chief Dealers
Russell LaScala
Jamie Thorsen

Operations Managers
Robert Catalanello
Peter Connolly

Membership Subcommittee
Jeff Feig
Richard Mahoney
Patricia Mosser (Chair)
Jamie Thorsen

Risk Management and Compliance Subcommittee
Peter Connolly
Jamie Thorsen

2010

Committee Chair
Jeff Feig

Liaisons for Working Groups
Chief Dealers
Robert Catalanello
Jamie Thorsen

Operations Managers
Peter Connolly

Membership Subcommittee
Jeff Feig
Patricia Mosser (Chair)
Jamie Thorsen

Risk Management and Compliance Subcommittee
Peter Connolly
Jamie Thorsen

Meetings, 2009 and 2010

The Foreign Exchange Committee meets approximately eight times a year. The Chair, working with the executive assistant and other representatives from the Committee's sponsor, the Federal Reserve Bank of New York, is responsible for the agenda. In preparing for the meetings, the Chair solicits advice from Committee members and receives updates from members who interact with the Operations Managers Working Group and Chief Dealers Working Group.

The meetings are action-oriented rather than information-based. Each meeting opens with a discussion and analysis of market conditions. The Chair often asks members specific questions and requests feedback, comments, or advice. During the markets development portion of the meeting, the discussions not only provide important information and guidance for the Committee's sponsor, but often plant the seeds for future projects and initiatives. A review of specific industry developments, including legal matters, follows this part of the meeting.

In the second half of each meeting, the members address specific projects or initiatives of the Committee and its associated working groups. The individual members who sponsor the Committee's projects lead the discussion, with the objective of obtaining approval of next or final steps.

2009	2010
January 8	January 7
February 5	February 3
March 12	March 11
May 7	May 5
June 11	June 30
September 10	September 16
October 8	October 14
November 5	November 17

Member List, 2009

Richard F. Mahoney, Foreign Exchange Committee Chair
Executive Vice President
BNY Mellon

Anthony Bisegna
Senior Managing Director
State Street Global Markets

Graham Broyd
Managing Director
Royal Bank of Scotland

David Castle
Managing Director
Standard Chartered Bank

Robert Catalanello
Managing Director
Calyon

Peter Connolly
Executive Vice President
Wells Fargo

Jeff Feig
Managing Director
Citigroup

Rodolfo Fischer
Executive Vice President
Banco Itaú S.A.

Susan Gammage
Executive Vice President
Thomson Reuters

William Hirschberg
Managing Director
Barclays Capital

Moti Jungreis
Managing Director
TD Securities

Russell LaScala
Managing Director
Deutsche Bank

Michael Leibowitz
Chief Executive Officer
Tradition Financial Services

Stephen Mettler
Managing Director
Morgan Stanley & Co.

John Nixon
Executive Director
ICAP North America

Troy Rohrbaugh
Managing Director
JP Morgan Chase

Fabian Shey
Managing Director
UBS

Jamie Thorsen
Executive Managing Director
Bank of Montreal

Peter Tomozawa
Managing Director
Goldman Sachs & Co.

Christopher Vogel
Managing Director
Bank of America

Steven Yanez
Managing Director
Credit Suisse

Masamichi Yasuda
General Manager and Treasurer
Bank of Tokyo-Mitsubishi UFJ

BUY-SIDE SUBCOMMITTEE

Adnan Akant
Managing Director
Fischer Francis Trees & Watts

Anthony Bisegna
Senior Managing Director
State Street Global Markets

Mark Brown
Managing Director
Tudor Investment Corporation

Graham Broyd
Managing Director
Royal Bank of Scotland

Eric Busay
Portfolio Manager–Global Fixed Income and Currency
CalPERS Investments

David Castle
Managing Director
Standard Chartered Bank

Jeff Feig
Managing Director
Citigroup

Michael Leibowitz
Chief Executive Officer
Tradition Financial Services

Giulio Martini
Chief Investment Officer–Currency Strategies
AllianceBernstein

John Nixon
Executive Director
ICAP North America

Mike Novogratz
Director and President
Fortress Investment Group LLC

Karen Parker Feld
Principal and Chief Investment Officer
Artemis Financial Advisors LLC

David Rusate
Managing Director–Foreign Exchange and Commodities
General Electric Company

FEDERAL RESERVE BANK OF NEW YORK (EX OFFICIO)

Steven Friedman
Assistant Vice President
Federal Reserve Bank of New York

Patricia Mosser
Senior Vice President
Federal Reserve Bank of New York

Jamie Pfeifer
Foreign Exchange Committee Secretariat
Federal Reserve Bank of New York

Brian Sack
Executive Vice President
Federal Reserve Bank of New York

COUNSEL

Michael Nelson
Counsel and Vice President
Federal Reserve Bank of New York

Member List, 2010

Jeff Feig, Foreign Exchange Committee Chair
Managing Director
Citigroup

Anthony Bisegna
Senior Managing Director
State Street Global Markets

Robert Catalanello
Managing Director
Crédit Agricole CIB

Peter Connolly
Executive Vice President
Wells Fargo

Rodolfo Fischer
Executive Vice President
Banco Itaú BBA

Mohammed Grimeh
Managing Director
Standard Chartered Bank

William Hirschberg
Managing Director
Barclays Capital

Moti Jungreis
Managing Director
TD Securities

Russell LaScala
Managing Director
Deutsche Bank

Stephen Mettler
Managing Director
Morgan Stanley & Co.

John Nixon
Executive Director
ICAP North America

Troy Rohrbaugh
Managing Director
JP Morgan Chase

Fabian Shey
Managing Director
UBS

Dan Silber
Managing Director
HSBC

David Steck
Managing Director
Nomura Securities

Jamie Thorsen
Executive Managing Director
Bank of Montreal

Peter Tomozawa
Managing Director
Goldman Sachs & Co.

Steven Yanez
Managing Director
Credit Suisse

BUY-SIDE SUBCOMMITTEE

Adnan Akant, Subcommittee Co-Chair
Managing Director
Fischer Francis Trees & Watts

Jeff Feig, Subcommittee Co-Chair
Managing Director
Citigroup

Anthony Bisegna
Senior Managing Director
State Street Global Markets

Mark Brown
Managing Director
Tudor Investment Corporation

Eric Busay
Portfolio Manager–Global Fixed Income and Currency
CalPERS Investments

Giulio Martini
Chief Investment Officer–Currency Strategies
AllianceBernstein

John Nixon
Executive Director
ICAP North America

Mike Novogratz
Director and President
Fortress Investment Group LLC

Karen Parker Feld
Principal and Chief Investment Officer
Artemis Financial Advisors LLC

David Rusate
Managing Director–Foreign Exchange and Commodities
General Electric Company

FEDERAL RESERVE BANK OF
NEW YORK (EX OFFICIO)

Patricia Mosser
Senior Vice President
Federal Reserve Bank of New York

Anna Nordstrom
Assistant Vice President
Federal Reserve Bank of New York

Jamie Pfeifer
Foreign Exchange Committee Secretariat
Federal Reserve Bank of New York

Brian Sack
Executive Vice President
Federal Reserve Bank of New York

COUNSEL

Michael Nelson
Counsel and Senior Vice President
Federal Reserve Bank of New York

Acknowledgments

The Foreign Exchange Committee acknowledges the many people who contributed to the Committee's output in 2009 and early 2010, including:

Chief Dealers Working Group Members

2009

Roger Boehler, UBS
Robert Bogucki, Barclays Capital
Milko Campusano, Bank of America
Steven Cho, Goldman Sachs & Co.
Michael Chobor, Wells Fargo
Jerry Connor, Bank of Montreal
Erik Depol, Wells Fargo
Michael Gibbens, TD Securities
Peter Gorra, Royal Bank of Scotland
Kelvin Hebburn, Morgan Stanley & Co.
Simon Jones, Citigroup
Claudia Jury, JP Morgan Chase
Kevin Lawrie, BNY Mellon
Jack Linker, Thomson Reuters
William McCarthy, State Street Global Markets
Patrick McInerny, Standard Chartered Bank
Cameron McKay, Deutsche Bank
Paul Mischenko, HSBC
Ed Monaghan, Royal Bank of Canada
Takayuki Nishinaka, Bank of Tokyo-Mitsubishi UFJ
Fulinda Rouse, ICAP North America
Marco Antonio Sudano, Banco Itaú S.A.
Brian Zirlin, Calyon

Foreign Exchange Committee Liaisons:
Russell LaScala, Deutsche Bank
Jamie Thorsen, Bank of Montreal

Federal Reserve Bank of New York Liaisons:
Richard Charlton, Counsel
Niall Coffey, Foreign Exchange and Investments
Jamie Pfeifer, Foreign Exchange Committee Secretariat

2010

Roger Boehler, UBS
Robert Bogucki, Barclays Capital
Milko Campusano, Bank of America Merrill Lynch
Steven Cho, Goldman Sachs & Co.
Jerry Connor, Bank of Montreal
Michael Gibbens, TD Securities
Peter Gorra, Royal Bank of Scotland
Kelvin Hebburn, Morgan Stanley & Co.
Simon Jones, Citigroup
Claudia Jury, JP Morgan Chase
Akira Kato, Bank of Tokyo-Mitsubishi UFJ
Robert Levine, Crédit Agricole CIB
Jack Linker, Thomson Reuters
William McCarthy, State Street Global Markets
Patrick McInerny, Standard Chartered Bank
Cameron McKay, Deutsche Bank
Paul Mischenko, HSBC
Fulinda Rouse, ICAP North America
Marco Antonio Sudano, Banco Itaú BBA

Foreign Exchange Committee Liaisons:
Robert Catalanello, Crédit Agricole CIB
Jamie Thorsen, Bank of Montreal

Federal Reserve Bank of New York Liaisons:
Richard Charlton, Counsel
Niall Coffey, Foreign Exchange and Investments
Jamie Pfeifer, Foreign Exchange Committee Secretariat

Operations Managers Working Group Members

2009

Arthur Ambrose, Goldman Sachs & Co. (Chair)
Katherine Andrews, Bank of America
Sal Arena, HSBC
Lauren Asaro, Royal Bank of Scotland
Susan Balogh, Goldman Sachs & Co.
Laura Coward, Bank of Montreal
Neil Dello Stritto, Bank of Tokyo-Mitsubishi UFJ

Olga DeMelo, Bank of Montreal
Joe Demetrio, BNY Mellon
Eileen Dignen, SWIFT
Nick Doddy, Barclays Capital
Murali Enamandram, Citigroup
Larry Fitzgerald, Standard Chartered Bank
John Fusco, Morgan Stanley & Co.
Antonio Carlos Genovese, Banco Itaú S.A.
Philip Glackin, JP Morgan Chase
Andrew Harvey, Morgan Stanley & Co.
George Helwig, Royal Bank of Scotland
Waleska Jurczak, Wachovia Bank N.A.
Martina Kane, Credit Suisse
Phil Kenworthy, CLS Bank
Steven Kim, Deutsche Bank
Alister King, Wells Fargo
Tahir Mahmood, Wells Fargo
Rich Maling, State Street Global Markets
Michael Mulholland, Credit Suisse
Graeme Munro, JP Morgan Chase (Deputy Chair)
Jean Napthine, Royal Bank of Canada
Andrew Newcomer, UBS
Ricardo Pacheco, Banco Itaú S.A.
Joe Palamara, Wachovia Bank N.A.
Robert Perez, ICAP North America
Robin Perlen, Bank of America
Ellie Perry, BNY Mellon
Nicholas Picini, Merrill Lynch
Nancy Riyad, HSBC
Michael Rober, State Street Global Markets
Stacy Rosenthal, SWIFT
Daniel Ruperto, Goldman Sachs & Co.
David Schmied, JP Morgan Chase
John Schoen, ICAP North America
Peter Slater, CLS Bank
Chip Sviokla, Deutsche Bank
Barry Tebbut, UBS
Chris Wood, Merrill Lynch

Foreign Exchange Committee Liaisons:
Robert Catalanello, Calyon
Peter Connolly, Wells Fargo

Federal Reserve Bank of New York Liaisons:
Catherine Kung, Legal
Jamie Pfeifer, Foreign Exchange Committee Secretariat
Peter Roethel, Foreign Settlement Services

2010

Arthur Ambrose, Goldman Sachs & Co. (Chair)
Sal Arena, HSBC
Jude Colangelo, UBS
Laura Coward, Bank of Montreal
Neil Dello Stritto, Bank of Tokyo-Mitsubishi UFJ
Olga DeMelo, Bank of Montreal
Joe Demetrio, BNY Mellon
Eileen Dignen, SWIFT
John Donato, ICAP North America
Michael Douglas, Bank of America Merrill Lynch
Robert Eby, Morgan Stanley & Co.
Murali Enamandram, Citigroup
John Fusco, Morgan Stanley & Co.
Philip Glackin, JP Morgan Chase
Michael Hanlon, Standard Chartered Bank
George Helwig, Royal Bank of Scotland
Michael Hughes, Barclays Capital
Martina Kane, Credit Suisse
Phil Kenworthy, CLS Bank
Steven Kim, Deutsche Bank
Alister King, Wells Fargo
Rich Krzos, Royal Bank of Scotland
Tahir Mahmood, Wells Fargo
Rich Maling, State Street Global Markets
Rafael McKenzie, JP Morgan Chase
Michael Mulholland, Credit Suisse
Jean Napthine, Royal Bank of Canada
Ricardo Pacheco, Banco Itaú BBA
Robert Perez, ICAP North America
Robin Perlen, Bank of America Merrill Lynch
Ellie Perry, BNY Mellon
Nancy Riyad, HSBC
Michael Rober, State Street Global Markets
Marc Romain, Barclays
Kenneth Rozycki, Brown Brothers Harriman
Daniel Ruperto, Goldman Sachs & Co.
David Schmied, JP Morgan Chase
Peter Slater, CLS Bank
Chip Sviokla, Deutsche Bank
Barry Tebbut, UBS
Jorge Usandivarus, Banco Itaú BBA

Foreign Exchange Committee Liaisons:
Peter Connolly, Wells Fargo

Federal Reserve Bank of New York Liaisons:
Sandra Lee, Legal
Jamie Pfeifer, Foreign Exchange Committee Secretariat
Peter Roethel, Foreign Settlement Services

Index to 1997-2009 Annual Reports

The Foreign Exchange Committee
33 Liberty Street, 9th Floor
New York, NY 10045
www.newyorkfed.org/fxc