Mr. McDonough examines recent developments and trends in the foreign exchange markets Remarks by the President of the Federal Reserve Bank of New York, Mr. William J. McDonough, before the 39th International Congress of the Association Cambiste International, The Financial Markets Association in Toronto on 30/5/97.

I am delighted to be invited to address the 39th International Congress of the Association Cambiste Internationale (ACI) -- The Financial Markets Association. I must confess to a certain affinity for the foreign exchange community, stemming, no doubt, from my commercial banking experience and my time overseeing the foreign exchange desk at the Federal Reserve Bank of New York. I've long believed that, more so than in most other sectors of the finance industry, there is a real community among those engaged in foreign exchange -- a community that relies on close personal ties and contacts. It is this spirit of community that makes events such as these ACI meetings today and tomorrow so enjoyable and important, giving us the opportunity to renew old friendships and build new relationships that will enable us to do our respective jobs that much better.

In my remarks to you this morning, I would like to highlight some recent developments in the foreign exchange market and share with you my view, as a central banker, of what has been driving some of the trends we've been observing. We heard a lot of talk in the foreign exchange markets in 1996 about the "end of volatility." As the market performance of the last few weeks has demonstrated, such commentary was a bit exaggerated. However, even with the spike in volatility we've seen in recent weeks, there is no question that we have witnessed a remarkable period of relative stability in foreign exchange rates over the past six quarters or so.

What accounts for this relative stability in the foreign exchange markets since late 1995? Economic fundamentals are certainly one factor -- we have had a period of relative price stability in the major world economies, and a general absence of severe market shocks. However, I would argue that what we've been observing is also, in part, a by-product of continuously greater transparency that has characterized the foreign exchange market over the past several years. Moreover, I am convinced that the increased transparency in the foreign exchange markets is beneficial: for the foreign exchange community, for financial markets in general, and for the global economy as a whole.

Before explaining what I mean by greater transparency and why I believe it is so beneficial, I would like to take a quick look at the record itself. Is the talk about declining volatility reflected in hard evidence? Yes, it largely is. Thirty-day dollar-mark and dollar-yen historical volatility remained below 10 percent throughout most of 1996 and the first quarter of 1997, and, even with the price action we saw in May, the spike in thirty-day historical volatility we've observed is not particularly dramatic when compared with similar periods in past years. Similarly, implied volatility on dollar-mark and dollar-yen options traded to near record lows in 1996.

But, as this month has shown, volatility has not been eliminated. There also have been a number of days in the past year and a half with considerable volatility in the foreign exchange market. And, I have no doubt that we'll have many more of these days -- at times, for example, when markets rapidly adjust to new information or when periods of poor liquidity result in exaggerated price swings.

What is clear is that this is a market that is constantly evolving. None of us can say with any certainty whether we're observing the beginning of a trend or an anomalous period

that will ultimately be viewed as a brief lull in volatility. However, I don't think many of you would disagree with me when I say that the foreign exchange market over the past six quarters or so has changed significantly from that in 1994 and 1992. For those of you who, like me, were involved in this business in the 1970s and 1980s following the collapse of the Bretton Woods system, the contrast is very dramatic.

Given these realities, we must ask ourselves what has changed to alter the way foreign exchange rates fluctuate in the global marketplace? It is obvious that this is not a case of declining volume. The foreign exchange survey most recently published by the Bank for International Settlements in 1996 shows that daily volume in foreign exchange grew by almost 50 percent between 1992 and 1995, and we have no reason to think that anything has changed since then to alter this trend.

What has changed, however, is the new, higher level of transparency that has been introduced in recent years into the foreign exchange market. When I speak of transparency, I am actually referring to a combination of several factors. Broadly speaking, I define transparency in this market as the degree to which its participants have equal and simultaneous access to the inputs necessary to price assets and their associated risk accurately. By reducing guesswork and uncertainty, transparency helps to smooth price adjustments and eliminate some of the shocks that can result when market participants discover they have "priced in" assumptions that are inaccurate. In my view, the current move toward greater market transparency is reflected in four broad categories: policy, information, pricing, and risk management.

The increased transparency of central bank policy -- which is a product of deliberate steps taken by policymakers -- is an important aspect of the move toward more transparent overall market conditions that we've been observing. Over the past several years, central banks in a number of countries, most notably in Canada, New Zealand, Australia, and the United Kingdom, have become increasingly convinced of the value of making a public commitment to an articulated and transparent policy standard, usually price stability. By setting clear policy objectives, the makers of monetary policy can eliminate much of the guesswork that central bank watchers must engage in to figure out what the central bank will do next. In so doing, they can help anchor inflation expectations over the long term, and thereby foster economic growth by ensuring a stable price environment.

Many central banks are also increasingly coming to realize that much of the secrecy and cautious signaling that once characterized monetary policy decisions is, to some extent, counterproductive. In recent years, a number of central banks have taken measures to further open up their policy processes to the public. For example, prior to February 1994, changes in monetary policy in the United States were signaled to the market through open market operations. Since that time, the Federal Reserve has publicly announced changes in policy, typically following each meeting of the Federal Open Market Committee, or FOMC. Some policymakers had been concerned that this shift in procedure for communicating policy decisions might create additional market volatility. In fact, a recent study by some of my colleagues at the Federal Reserve Bank of St. Louis found just the opposite -- that announcing policy changes has not led to increased volatility in the federal funds rate. By making information on monetary policy decisions available quickly and broadly, we at the Federal Reserve have helped level the playing field and, I believe, contributed to smoothing the process by which new information on FOMC policy is incorporated more quickly and efficiently in asset prices.

Other central banks have similarly increased transparency in their monetary policy processes. One example is the Bank of England's move to publish the minutes of the monthly policy meetings between the Chancellor and the Bank of England Governor, a practice that is to continue under the new monetary policy council. The Bank of Canada, too, has taken steps to increase the level of transparency in its markets. It now publishes a semiannual monetary policy report and sets an explicit level for its bank rate.

National governments also have contributed to greater transparency in monetary policy by increasingly recognizing the value of endowing their central banks with greater independence. Moves of this sort have occurred in several Western European countries and many emerging market economies, especially in Latin America, over the past several years.

A second area where recent developments have resulted in improved transparency in the foreign exchange market is information technology. Easy and inexpensive access to a vast array of information has changed the way financial markets absorb new data. Most of us in this room sit in offices or trading rooms with keyboard access to data, analysis, and news that once took huge resources to manage. And, neither bankers nor traders have a monopoly on this capacity -- corporate treasurers and institutional investors can pull up most of the same screens we can. At one time, a presence in a local market and access to early newspapers could provide a trading advantage for a large market maker. Today, news from that market is available electronically worldwide with almost no lag. Information is cheaper and easier to come by than ever before. The result? A global market that reacts quickly and efficiently to new data, and participants who have more time to analyze information because they need to spend less time gathering it. One consequence of this improved transparency in information technology is that information gets reflected in asset prices more quickly and more smoothly than ever before.

A closely related development that has also contributed to increased transparency in the foreign exchange market has been the rapid evolution of the price discovery process in the past several years. Electronic brokerage and electronic interbank dealing systems have evolved that have smoothed the dissemination of current pricing and improved market liquidity. Whereas truly competitive pricing was once the province of only the largest market makers, smaller interbank dealers -- and even some foreign exchange end-users -- now also have access to narrow bid-ask spreads. The result so far has been a deeper market and, again, a more level playing field for all market participants, with pricing no longer dominated by a few large players.

The final area in which recent innovations have improved market transparency is risk management. While we are far from being able to rest on our laurels, there is no denying the fact that financial institutions, their customers, and their investors have become more sophisticated over the past several years at evaluating, monitoring, and controlling market risk. If market participants better understand the risk of the positions they put on their books, they are more able to react effectively and efficiently when their assumptions are challenged or unwound. Although it is crucial that rapid innovations in trading and risk management practices continue, most of the institutions represented here have already made important progress along these lines in recent years.

What needs to be stressed, however, is that it is not enough for a firm to develop - for internal purposes alone -- sophisticated new techniques to assess, price, and manage increasingly refined components of financial risk. If financial markets are to function most efficiently, shareholders, creditors, and counterparties of these firms also must be able to

assess the risks when they make their evaluations. In order for them to do this, meaningful information about risks and risk management performance must be available.

The Federal Reserve Bank of New York has been actively involved in encouraging an evolution of disclosure practices that will improve the functioning of financial markets. As you may know, Peter Fisher, an executive vice president of the New York Fed, chaired a working group of the Euro-Currency Standing Committee of the G-10 central banks, which published a discussion paper on "Public Disclosure of Market and Credit Risks by Financial Intermediaries" in September 1994. This so-called Fisher report described how trading and financial risk management practices had developed far beyond the public disclosure of financial information, creating a gap between the precision with which a firm's management could assess and adjust the firm's own risk exposures and the information available to outsiders to help them assess the riskiness of that firm's activities.

Recognizing that such an asymmetry of available information could cause the misallocation of capital among firms and amplify market disturbances, the Fisher report recommended that all financial intermediaries -- regulated and unregulated -- move in the direction of publicly disclosing periodic quantitative information. The information requested would provide estimates relied upon by the firm's management of:

the market risks in the relevant portfolio or portfolios, as well as the firm's actual performance in managing the market risks in these portfolios; and

the counterparty credit risks arising from the firm's trading and risk management activities.

By and large, these proposed measures for reporting risk have been adopted voluntarily by many major banking institutions around the world, with many others moving in that direction. As such, they have contributed importantly to improved transparency in financial markets.

The Federal Reserve Bank of New York has also been deeply involved in efforts to reduce foreign exchange settlement risk -- efforts that should further serve to improve market efficiency and overall financial stability. In October 1994, the New York Fed-sponsored Foreign Exchange Committee issued a major report on "Reducing Foreign Exchange Settlement Risk." The Bank has also been working actively in this area with other central banks through the G-10 central bank Committee on Payment and Settlement Systems, or CPSS, which I have had the pleasure to chair in recent years. Building upon the work of the New York Foreign Exchange Committee, the CPSS published a document in March of last year, often referred to as the Allsopp report, that contains a comprehensive strategy outlining how the public and private sectors can work together to reduce foreign exchange settlement risk. The strategy was endorsed by the G-10 central bank governors and calls for specific action on the part of individual banks and industry groups.

A survey conducted by the CPSS last autumn indicates that individual banks are answering the G-10 governors' call for action. Many banks have made a good start in improving their ability to measure, manage, control, and net their bilateral settlement exposures, and they plan to push these efforts even further over the next year. While this is a very encouraging beginning, we can't ignore the fact that more work must be done by individual banks. With this in mind, the CPSS will continue to closely monitor progress over the next year for any signs of slippage.

The search by individual banks for efficient ways to reduce their foreign exchange settlement risk has brought about important progress at the industry-group level as well. The Allsopp report noted the efforts of FXNET, S.W.I.F.T, ECHO, Multinet, and the Group of 20 banks to offer various types of risk-reducing services, and these ongoing efforts are very encouraging. Some banks are also exploring the elimination of settlement risk altogether by shifting the market to trades that simply settle the gain or loss associated with exchange rate movements -- called "contracts for difference" -- instead of requiring delivery of the underlying currencies.

We are well aware that many market participants are currently debating what constitutes the most efficient multi-currency netting and settlement services. While there will be potential winners and losers, I believe that the market as a whole should ultimately benefit from this rigorous competition. At the same time, settlement risk reduction should not be used to justify the concentration of market power. The G-10 central bank governors have long been on record in favor of fair and open access to services that permit participation by a broad range of institutions, consistent with the prudent management of risk. Such access was formally adopted as a requirement for multilateral netting systems, and I am convinced that the G-10 central banks would apply a similar standard when evaluating the start-up of any major multi-currency settlement service.

In sum, the evolution toward more transparent foreign exchange markets that we've observed in the past several years is largely a product of both technological progress in the private sector and conscious policy decisions in the public sector. None of the policy decisions, I should stress, were taken with any explicit or implicit intention of reducing market volatility. On the contrary, the policy community has viewed moves toward increased transparency as desirable ends in and of themselves for a number of reasons.

For one, transparency promotes a more level playing field for all market participants. In other words, transparent markets tend not to be dominated by just a few players. Rather, they are open to new entrants, large and small. In such markets, no one group of institutions or type of institution can develop a monopoly on information or competitive pricing. As in most industries, competition in the area of financial services spurs innovation, better service for customers, and a more efficient allocation of resources.

Second, transparency in these markets also promotes investment. If money and investment fund managers or corporate CFOs can better understand the risks entailed in various investment alternatives, they are more likely to make the investment decisions best suited to their needs. The result, again, is a more efficient allocation of global capital than would otherwise be possible.

To the extent, therefore, that reduced volatility in the foreign exchange market stems from improved transparency, I would view this result as a beneficial by-product -- one that also contributes to the ultimate goal of economic and monetary policy: namely, sustained growth and a stable price environment.

The move toward increased transparency in global markets and the accompanying relative decline in foreign exchange market volatility and trading ranges that we have observed in the last year and a half have posed considerable challenges to market makers, spot traders, and brokers, on both an institutional and a personal level. There is an axiom in these markets that volatility is good for market makers. I believe that this is a short-sighted view. On the contrary, I

would submit that excessive volatility not only frightens investors, but also potentially undermines growth and, in so doing, benefits none of us.

As a result, I cannot help but conclude that stable -- and not volatile -- markets are in the best interests of both central banks and the financial community. Stability in foreign exchange and other financial markets, along with price stability, is vital to the promotion of sustainable economic growth and rising living standards for everyone. Reducing the diversion of resources to deal with uncertainty and volatility allows resources to be directed toward more productive uses and, in so doing, promotes long-term growth by increasing the resource base available to the economy.

We have seen in high-inflation economies how the transfer of resources away from productive activities and into financial transactions geared toward dealing with inflation uncertainty can negatively affect growth. We have also seen how a proliferation of tax code dodges can decrease the available resource base. If individuals must spend more time engaging in financial maneuvers because of uncertainty, then more of the economy's productive capacity is transferred to the activity of handling transactions. An expansion of the financial sector that stems from an increasing number of people employed to handle distortions arising from inflation and its attendant uncertainty is growth that diverts resources better employed elsewhere. By contrast, an expansion of the financial sector that stems from growth of productivity is growth that offers benefits to all.

The same basic principle applies to the foreign exchange market. Foreign exchange rates are fundamentally determined by market forces and should be free to fluctuate as a vital adjustment mechanism for the global economy. However, excessive volatility, like price instability, can diminish resources otherwise available for productive growth. The economy in which we live and work is a global one, and becomes more so every year. Regions and industries in need of private capital and investors requiring adequate returns benefit when money can move across national boundaries without excessive risk or hedging costs. Foreign exchange markets that are more stable and more transparent ultimately will better allow investors to allocate their capital efficiently, thereby improving global economic growth.

Change is difficult in any industry and can put enormous stress on individuals. I'm not ignoring this dynamic. However, I am persuaded that, in the long run, what is good for economic growth is in the best interests of the financial community, and, in turn, benefits the individuals that make up that community. Just as U.S. industries went through enormous stress in the 1970s and 1980s in coping with a new era of expanding international trade and emerged in the 1990s as among the most competitive in the world, so too must global financial institutions adapt and find new ways to add value and share in the larger benefits that transparency and reduced volatility can bring.

We central bankers can contribute to this process. While we can do little to limit market volatility directly, we can work toward more transparent markets supported by sound infrastructure, and by these means lay the groundwork for market stability. And, while we're not in the business of determining market rates or the ranges in which rates should trade, what we are trying to do is move increasingly toward improving the transparency of our own operations as an end in and of itself.

Our collective efforts, along with developments in information technology and risk management techniques, have already contributed to improved market stability. The growing, and successful, commitment of central banks to the achievement of price stability as

their primary goal is another crucial and positive contribution toward market stability. Moreover, where we as central banks see gaps that develop in the global financial system, as we did in the areas of market risk and settlement risk management, we play the role of facilitator to private sector solutions. As central bankers, we tend to view our role in the global financial markets as ensuring that the necessary infrastructure is in place to promote well-functioning markets for all players. Then we step aside and let the markets take care of themselves.