How well are the exchange markets functioning?

Foreign exchange is probably one of the most widely discussed and yet least understood subjects of our times. Nearly all newspapers now carry a daily article reviewing the previous day's events, and columnists and editorial writers frequently elaborate on these events in the broader context of their views on economic policies. Over recent years the academic literature has been replete with articles on one aspect or another of foreign exchange, often using highly sophisticated mathematical and econometric techniques. On a more down-to-earth level, numerous corporate treasurers have written books explaining how and when they hedge their exposures. Governments have of course always had a close interest in foreign exchange policy, but it was traditionally a matter to be discussed only by central bankers and finance ministers. Now almost everyone in government seems to have an urge to make his or her views known on foreign exchange matters. In all this blare of public discussion, the ones who seem to have been heard the least are the very practitioners of the trade—the foreign exchange dealers themselves in commercial banks and central banks around the world.

To be sure, traders disagree on everything of importance relating to foreign exchange. We only need to look at those daily press stories which pick up bullish comments on a currency from one trader in Frankfurt and bearish comments from another in London. Ask a group of traders how they feel the market should be organized and you are sure to start an argument. But then that is what a market is all about, meeting the needs of a large number of people whose views and interests vary. A market is not a mathematical abstraction or a politician's dream but very much a part of the real world.

I think therefore it is time to focus on the exchange market as it really is and address its real problems. In laying out some of my own ideas to you, I run the risk of showing my own biases, as an economist and central banker as well as a market practitioner, but my hope is at least to generate serious discussion on market-related issues. Thus, my interest is on how well the foreign exchange markets for major currencies—including the Canadian and United States dollars—are functioning, as distinct from whether exchange rates should be fixed or floating or where they should be.

Basically, it can be said that the foreign exchange market fits very closely the ideal of a perfectly competitive market. There are numerous participants, as actual and potential buyers and sellers in both the interbank market and the more retail market between banks and their commercial customers. Rates for all major currencies are widely quoted, and deals can be done virtually around the clock. There is a considerable amount of information at traders' disposal—again from the news services, from government sources, from advisory services, and from the market itself as participants talk to each other. Communications are rapid and, if a trader cannot reach another by one means, he has others he can turn to. Technology is evolving rapidly.

Each day billions of dollars of transactions are conducted flawlessly through a set of conventions, of common trading terminology among people of many national languages, and of confirmation and payments

Remarks by Scott E. Pardee, Senior Vice President, Federal Reserve Bank of New York, before the FOREX Association of Canada in Toronto, Canada, on Friday, January 26, 1979.

procedures consistent with the various national regulatory structures and legal codes. Errors occasionally occur, but they are normally resolved in an amicable way. This achievement is to the credit of the many thoughtful people in the exchange market who have contributed to its evolution over the years and who are adding to the market's strength in these uncertain times.

But many problems do exist. A smoothly functioning market is said to have depth, breadth, and resiliency. Depth means that a sizable amount of business can be done without having a significant impact on the exchange rate. In practice, this means that the market makers in the interbank market are prepared to absorb temporary excesses of supply and demand into their own positions. While generally this is the case, it is not always so. On occasion, they feel inhibited from taking on large orders for a variety of reasons. These include the very volatility of exchange rates which raises the risk of loss in covering the position later on, internal limits on positions that do not permit enough room in a trader's position to absorb a sizable transaction, and external limits on the banks' ability to deal as with exchange controls. The problem of depth varies with different currencies and over time. Whereas in the "good old days" many market-making banks were prepared to deal perhaps several hundreds of millions of dollars against major currencies and carry the positions overnight—if not longer—most are very likely to give ground now after doing ten million dollars or so, lest they get stuck with a position they cannot unwind quickly. At times, the market is so thin that the hint of a large possible transaction coming on the market will cause traders to shrink back, leading to a rate effect even if the transaction is not carried out.

Breadth means that many traders are willing to make a market at any particular time. If you do not like one trader's rates, you can always shop elsewhere. On some occasions, the markets may very well lack breadth in this sense, particularly in the forward market. A few banks are still willing to make a commitment to that market, accepting both the risks and the substantial forward book it entails, while others have pulled back to concentrate on dealing spot.

Aside from this, I would argue that the exchange markets today have greater breadth than at any time before. More banks than ever are prepared to deal, within individual money centers as well as between centers. This has led to changes in traditional trading patterns, as in the United States last year when direct dealing between banks became more prevalent and international brokering was introduced on a wide scale.

The increase in numbers applies to the general market as well as to the interbank market. There has been a sharp increase in the number of corporations, individuals, and even official institutions which turn to the exchange market for their needs either as buyers and sellers of goods internationally or as managers of funds. And we have new markets such as those on established commodity futures exchanges in the United States. The volumes involved have scaled upward sharply.

The question of breadth raises two potential issues. First, the increasing cost of staffing and equipping a modern trading room and back office could at some stage give banks at the core of the market such a competitive edge that others may retrench into correspondent banking relationships. So far at least, more banks seem to be gearing up for the long haul than pulling back. Second, the proliferation of institutions related to the market—banks, brokers, advisory services—has already stretched thin the available pool of foreign exchange talent, certainly in the United States. The pressures on available talent heightens the risk of serious mistakes, through a weakness in internal management control systems, overwork, or inexperience. Serious problems have been avoided in the last couple of years but are entirely possible down the road.

Resiliency means that a large order to buy or sell a particular currency can be absorbed in the market without generating a cumulative movement in the rate. If a currency declines, will it recover on its own or will it continue to drop as a result of internal market dynamics? Here the record of recent years has been poor. The most visible swings in rates have been under floating exchange regimes, but substantial one-way pressures have built up under fixed rates as well, and I have come to believe that the lack of resiliency in exchange markets is an inherent characteristic of those markets.

Too often, as soon as a currency comes under, say, selling pressure, that pressure begins to cumulate. In part this reflects the very speed of communications, the facility with which trades can be entered into, and the number of people prepared to act at a given moment. But the responses are often quite out of proportion to the importance of an immediate event. Thus, the fact that a particular currency is declining is flashed around the world in seconds. Market commentary and the news services quickly provide an explanation for the decline, ascribing it to a statement by a government official, release of an economic indicator, a large sell order, or even a rumor. Sometimes these explanations are far-fetched, but the conjunction of a decline in a currency plus a plausible explanation for that decline can trigger a widespread reaction in the same direction as many market participants respond virtually at once. This reaction itself adds credence to the explanation and may draw in additional sellers. It is not unusual to find situations in which hundreds of millions of dollars are suddenly on the move.

The sellers may be risk-taking speculators, but they may also be risk-adverse hedgers. The speculator of course thrives on volatility, seeking to be the first to buy on the way up and first to sell on the way down, the longer the ride the better. The hedger fears volatility and may hasten to cover his exposures when he sees a wide movement against him, lest he take bigger losses by waiting longer. But once a rate begins to move both the risk seeker and the risk avoider may suddenly be on the same side of the market, adding to the one-way pressure on the rate for the moment and to general volatility once profit taking sets in. The less the depth and breadth of the market, the wider the amplitude of the swings. But, in a bearish or bullish market, the one-way pressures may persist for some time, pushing rates to levels that may overshoot by a wide margin any conceivable equilibrium rate which might be based on broader economic considerations.

The concept of equilibrium in the exchange market is of course an elusive one. The exchange market is always in equilibrium to the extent that supply and demand coming into the market at a particular moment are matched off at a going price. But the supply and demand may have little or no relation to broader economic considerations, such as trade, current account or basic payments balances, relative rates of inflation, or even relative interest rate differentials. From an economic policy point of view, however, it is important that exchange rates over time do reflect a broader economic equilibrium within and among countries and, if not, policy adjustments have to be made. The policy decisions are not always easy, given the trade-offs among different economic objectives within a country and between domestic and international objectives. So it would be extremely dangerous for policymakers to react to every swing in the exchange rate, lest the volatility of exchange market sentiment be projected into other sectors of the economy. Moreover, exchange rate changes may give some unwelcome feedbacks into the domestic economy. The best example is the vicious circle in which domestic inflation leads to an exchange rate depreciation which generates such a bearish exchange market atmosphere that the rate is pushed even further than could be explained by inflation differentials. To the extent that this excessive decline of the rate persists, it ratchets up the cost of imports and import substitutes and thereby aggravates domestic inflation all the more.

It is under these conditions that central bank intervention plays a role. For the United States, since 1973 we have mainly intervened to counter disorderly conditions in the exchanges. Definitions of disorder vary, but my definition includes several important elements. At base is the unwillingness of market makers to cushion the pressures hitting the market by absorbing buy or sell orders into their positions. This unwillingness reflects their perception of the increased risks involved, for whatever reason, in carrying a position if only for hours or overnight. It is generally reflected in a widening of bid-asked spreads traders quote to each other and to customers, but wider spreads are not the only piece of evidence. A trader may quote the same spreads to a good customer and then unload his position in the market as quickly as possible. Or he may go the other way and effectively refuse to quote at all. When many traders shrink back, the market loses depth and breadth, which in turn leads to a lack of resiliency. Pressures in the market become increasingly one way; rate movements become cumulative and volatile. Traders, including corporate treasurers, portfolio managers, and even the man on the street begin to respond to the rate movements alone rather than to their judgment of the medium- or long-term outlook for a currency. Under these conditions, central bank intervention can play a smoothing or cushioning role, limiting the length of the ride for the speculators and reassuring the hedgers that they can remain on the sidelines. But in the extreme, when one-way trading prevails to the extent that rates overshoot, forceful central bank action may well be needed to correct the excessive swings of the rate. On November 1, for the first time since the United States dollar was floated, the United States authorities intervened precisely for the purpose, as President Carter put it, to correct the excessive decline of the dollar.

How can these inherent problems of the exchange market be avoided? The responsibility is as great for private market participants, including the individual trader in a commercial bank, as it is for the authorities. We are in a period in which exchange market matters are unusually politically sensitive. At times of heightened tensions in the exchange markets, ill-advised actions by some market participants may not only be costly to themselves but also to the market as a whole. For the commercial bank trader, there are now a variety of carefully considered codes of ethics and internal management manuals to guide him. FOREX, both at the national and international levels, is playing a commendable role in seeking to improve the professionalism and expertise of its membership. To the extent that these efforts are successful—and this comes down to the conduct of each individual trader—the market will be improved.

This does not absolve the authorities, particularly the central bank, from responsibility to improve the market. It is imperative that the central bank maintain close contact with the market, not only for carrying out intervention policies but also for gauging how well the market is functioning. In the Federal Reserve Bank of New York we have always sought to maintain such contacts. We have recently enhanced that effort through the sponsorship of a Foreign Exchange Committee made up of senior foreign exchange officers of banks in the United States and the heads of foreign exchange brokerage firms.

One way in which the authorities can improve the functioning of the exchange market is to avoid mechanisms which inhibit competitive forces in the market, such as arbitrary exchange controls. This is easy for someone from the Federal Reserve to say, since the United States lifted the remaining barriers to capital outflows back in 1974, and presently there is little stomach within the government to employ them again. But most controls are essentially an effort to stifle pressures coming from one side of the market. They may work well in the short run. But over time they may create serious distortions and trading problems, even to the extent of favoring some market participants over others. Moreover, they may encourage systematic evasion by some participants. Consequently, where such controls are used, they should be relaxed as soon as the opportunity arises.

Even intervention should be considered a limited instrument, reserved mainly for calming nervous markets and smoothing excessive fluctuations in rates. As one's time horizon lengthens, into periods of weeks, months, and years which can more successfully be analyzed by the standard tools of economic analysis and econometrics, the exchange markets show through as being reasonably efficient. Exchange rate movements over time tend to be consistent with the broader movements of basic economic indicators, such as trade and current account balances and relative rates of inflation. Therefore, intervention to counter longer term trends could easily be counterproductive in terms of the efforts to achieve equilibrium in the exchange market. At the same time, however, excessive dependence on the exchange rate as a means of adjustment has many drawbacks. The lags are just too long and the expectational effects too unpredictable. The focus of longer term adjustment policy should rather be on other basic policy tools, such as fiscal and monetary policy and commercial policy.