SPEECH

Fisher: Global Currency Market Risks and Rewards

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Remarks by Executive Vice President Peter R. Fisher before the 19th Asia Pacific Financial Markets Assembly It is a pleasure to be with you this morning. I am honored to have been invited to speak to you today and I would like to thank the organizing committee for giving me this opportunity to share with you some of my personal views about the communications between foreign exchange traders and monetary authorities.

The risks and rewards which currency traders confront each day depend not only on your positions, but also on your objectives, your constraints, and your time horizons. What is true for individual traders and banks is also true for monetary authorities. The difference is that monetary authorities make choices about which policies to adopt and there are trade-offs associated with each choice, just as there are risk-return trade-offs when a trader decides to take on a new position.

In my efforts to understand the behavior of foreign exchange markets, I have learned that I should listen carefully for evidence of your current positions but, also, that I must understand your specific objectives, constraints and time horizons if I want to understand your individual risk-reward profiles. In order for you to understand the risk-reward profiles of individual central banks and monetary authorities -- that is, for you to understand our policy reaction functions -- I think that you might benefit from the effort to look beyond the current cyclical position of our economies and strive to understand better our objectives, our constraints and our time horizons.

To a significant extent, the foreign exchange policy of any country or monetary authority is reflected in the ongoing inter-action and dialogue -- that becomes embedded in the exchange rate -- between foreign exchange traders and the monetary authority. That conversation will be more effective the better we understand one another.

This morning I am *not* going to discuss United States exchange rate policy. Secretary Rubin does that from time to time and I think he has been quite clear on the subject. What I *will* do is discuss my personal observations on some of the difficulties inherent in the overall process of communication among all traders and monetary authorities.

In speaking to you today, my chief aim is to avoid becoming a living example of Winston Churchill's observation that: "There is no sphere of human thought in which it is easier to show superficial cleverness and the appearance of superior wisdom than in discussing questions of currency and exchange."

With that in mind, I thought I would begin by discussing an example of one country's experiences in global financial markets. This country abandoned its long-maintained currency peg, stunning the market. Lax monetary policy allowed an acceleration of inflation just as fiscal deficits began to increase, together leading to a second wave of currency turmoil and depreciation. The high interest rates with which the central bank was forced to respond exposed weaknesses in the banking sector and in bank supervision, leading to government bailouts of financial institutions and further volatility in the exchange market.

As you may have guessed, I am not discussing current events but, rather, the recent past history of the United States of America. The currency peg abandoned was the dollar's peg to gold under the Bretton Woods system. The lax monetary policy was that of the early and mid-1970s. This was followed by increased deficits in the mid- and late-1970s and the currency turmoil and depreciation associated with the dollar's weakness in 1978 and 1979. The response was the high interest rates in the early years of Paul Volcker's chairmanship of the Federal Reserve which brought to the surface in the 1980s underlying problems in our banking and savings and loan sectors and weaknesses in bank supervision, particularly in the U.S. thrift industry. Government bailouts of Continental Illinois and our entire savings and loan industry were one result. At the same time, we saw another round of volatility in the exchange market for the dollar in the mid- and late 1980s.

I cite the example of my own country for two reasons. First, while there are many differences between industrialized and developing nations, those differences should not blind us to the similarities in the basic problems we face managing our economies and our financial sectors. Second, over the last 25 years policymakers in the United States have had a wide range of opportunities to observe first-hand the punishment of financial markets for policy errors. On a number of occasions, we took full advantage of those opportunities and saw their long-lived consequences.

My own, direct experience as a central banker only covers the last twelve years and I have been involved in United States foreign exchange operations only since 1990. During my relatively brief experience observing and operating in foreign exchange markets, I have been struck by the variability in the effectiveness of communications between market participants and monetary authorities. At times this communications channel works very well. At other times, communications are less than optimal, and at times ineffective. Some of the barriers to clear communications appear to stem from the different perspectives we each have of our common subject.

- First, traders and monetary authorities often have quite different assumptions about the relative role and importance of the exchange market as an adjustment mechanism.

- Second, traders and monetary authorities have quite different objectives and time horizons.

- Third, both traders and monetary authorities have a tendency to view sterilized foreign exchange intervention with a certain schizophrenia.

I will address each of these three issues in turn.

Most traders understand the factual setting of the countries whose currencies they trade, having a basic understanding of the relative size of the external sector and the role that the exchange rate plays both as an adjustment mechanism and in the formulation of monetary policy. However, in the course of trading numerous currencies against one another, and in the excitement of rapidly moving markets, I have observed that many traders' behavior actually reflects a simplified and homogenized set of assumptions about the role of the exchange rate for any particular country. Thus, in the hurly-burly of the market, trading behavior reflects the implicit assumptions that:

- All countries have significantly open economies, with large external sectors that weigh heavily in the overall mix of economic activity; therefore,
- The risk of imported inflation is significant -- and equally significant -- in all countries; and, thus
- The exchange rate channel is the single, most important mechanism (for all countries) in the maintenance of price stability.

From the monetary authorities' perspective, however, differences in the relative size of their countries' external sectors, and the relative role of the exchange rate channel, matter quite a bit. Foreign exchange markets, after all, are only one of a number of possible channels of macroeconomic adjustment. There is the basic interest rate channel, reflecting and affecting the cost of investment and consumption. There are also equity price channels, reflecting and affecting the replacement cost of capital goods, property market valuations and wealth effects on consumption. And there are also credit channels, through bank and non-bank balance sheet adjustments.

Theoretically, the optimal arrangement for monetary authorities is to have all of these channels functioning effectively. As a practical matter, however, not all of these channels can be expected to operate smoothly all of the time, nor are they all equally important in all countries. What matters is that *sufficient* adjustment mechanisms exist to provide for the efficient allocation of capital, labor, goods and services in response to changes in their supply and demand.

However, each monetary authority is confronted with the necessity of making a fundamental choice on its policy tools and targets, choosing whether principally to emphasize the interest rate or the exchange rate as the lever which it intends to use to implement policy. Thus, the role of foreign exchange markets -- both as an adjustment mechanism and as a policy tool -- varies considerably from country to country.

The United States has a relatively small external sector: the sum of imports and exports is around 20 percent or so of GDP. As a consequence, the dollar's movements, and the exchange rate channel generally, have been traditionally seen as of somewhat lesser importance to domestic price stability than is the case in countries with larger external sectors -- particularly those countries where the sum of imports and exports nears or exceeds their total GDP.

But even with a relatively small external sector, the exchange rate of the U.S. dollar has provided and does provide an important and powerful adjustment mechanism which, during the last two decades, has helped our economy respond to economic shocks. Indeed it is increasingly evident, I think, that the recently low inflation rates in the United States have been, in part, attributed to the dollar's recent strength and, therefore, that the exchange rate channel may be playing a greater role in our economy than we have been assuming.

Here in Hong Kong, with the pegged exchange rate mechanism, the exchange rate channel plays almost no role as a macro-economic adjustment mechanism. As a consequence, greater reliance is placed on other asset price adjustments, through equity, property and wealth channels as well as through credit channels. As the recent resilience of Hong Kong's exchange rate regime has demonstrated, the absence of a foreign exchange adjustment mechanism has not been an insurmountable obstacle for Hong Kong, given that other adjustment mechanisms are available. Of course, this does not mean that adjustment to external shocks can be avoided. What it does mean is that adjustments can be made other than through the exchange rate channel -- as equity traders and real estate brokers are undoubtedly aware.

Our European colleagues are in the process of completely giving up the exchange rate channel as a mechanism for adjustment within the European economy. As a consequence, the exchange rate channel will be significantly less important for those countries within the Euro-zone than has been the case for each individual country. Some of the smaller, very open economies among the likely members of EMU have large external sectors, whereas, at its inception, the Euro-zone is likely to have an external sector of similar size to that of the United States. With respect to external balance, this will cause a significant decline in the relative importance of the exchange rate as a channel for economic adjustments and, thereby, tend to reduce its importance for the conduct of monetary policy.

My point is that in order to understand the reaction functions of *different* monetary authorities, one needs to understand the relative role of the exchange rate for *each* monetary authority -- both as an adjustment mechanism and as a tool of monetary stability.

A second area where the different perspectives of traders and monetary authorities leads to less-than-optimal communication is in our different objectives, which are themselves related to our very different time horizons.

The objective of trading is to secure a profit (or avoid a loss). This depends directly and critically on the levels and trends of exchange rates. Some

traders have long-term horizons, which can be measured in days. Others have somewhat shorter horizons, measured in hours or minutes.

From the perspective of monetary authorities, however, the time horizon is somewhat longer -- measured in months and years -- because of the long-lags with which monetary impulses affect our economies.

In terms of objectives, obviously, monetary authorities with fixed or pegged exchange rate regimes are acutely interested in levels. But now focusing my attention on countries, like my own, with floating rate regimes, particular exchange rate levels are not of interest in and of themselves. The exchange rate is principally of interest to the monetary authorities for what the market is suggesting about the adjustment mechanism and the functioning of the market itself.

As I have already suggested, at the macro-economic level, our principal interest is in whether the exchange market is providing an effective channel of adjustment. For the currencies of the major economies in the world, there is also the question whether the exchange rate is providing adjustments that facilitate global balance and global growth. At the micro-financial level, we also care about whether the foreign exchange market is functioning efficiently, or whether it is trading purely on momentum with an absence of normal two-way risk and, thereby, compromising the role it may play as a healthy adjustment mechanism.

With our different objectives and time horizons, communication can be awkward. Traders inevitably want to know whether the monetary authorities want their currencies to trade a few pips higher or lower. When the monetary authorities speak of wanting a strong currency, you hear us only in terms of the impact that our words may have on the levels and trends that affect your positions. In order to speak to you, we are forced to address you in terms that relate to your positions in the short-run, even when our principal interest is in the long-run.

My fear is that when monetary authorities speak of strong currencies, traders only have an image in their mind of Olympic weight lifters: muscle-bound and straining to press greater and greater weights over their heads, where a single measure -- kilos lifted or exchange rate level -- defines the strongest.

My own image of a strong, floating-exchange-rate currency corresponds to those athletes that compete in the Olympic decathlon: who are flexible and adaptable in different settings, who are strong *and* swift *and* sure footed; whose success is not measured in a single test of brute strength but through meeting an array of challenges.

Finally, I am continually surprised at the impoverished state of our dialogue on the subject of the effectiveness of foreign exchange intervention by monetary authorities. I am especially surprised to find foreign exchange market participants, analysts and journalists who do not comprehend the distinction between sterilized and unsterilized intervention.

- **Sterilized intervention** -- where, as in our case, any purchases or sales of currency are offset in domestic open market operations in order to maintain the domestic interest rate environment unchange -- **is of limited efficacy and its use is of some controversy**.

- **Unsterilized intervention** -- where purchases or sales in the currency market are allowed to play through into the supply of clearing balances and, thus, affect the interest rate environment -- **is a potent monetary tool of unquestioned efficacy**.

What surprises me about the public dialogue on *sterilized* intervention, is the apparent schizophrenia of all market participants. On some occasions, traders, analysts, journalists and even some central bankers, speak with fear and trembling of the grave risk that central banks might enter the market. If intervention is thought to be near at hand, or is threatened, each pip in an exchange rate's movement is attributed to the ebb and flow of anticipation of the awful moment when the central bank might come into the market.

On other occasions, traders and observers deride the central bankers for their futile efforts, for the folly of even thinking they could influence the market, and for the low levels of reserve holdings which cannot possibly be expected to have any impact on the enormous foreign exchange market.

It seems to me that the truth lies somewhere in the middle, in the sense that there are elements of truth in both images.

I think it is important that we all take time to remind ourselves that there is no robust model of exchange rate determination -- particularly with respect to explaining the behavior of exchange rates in the short run. All attempts to explain or model exchange rate movements *ex ante* are equally bad. Today's spot rate is just as good a predictor of next month's spot rate as is the current forward rate -- and neither one is very good. Indeed, many of us in this room owe our jobs to the lack of a robust model of exchange rate determination.

My own effort to reconcile these contradictory responses to sterilized intervention begins by distinguishing three distinct levels of causation of exchange market movements.

In the long-run, measured in years, all card-carrying central bankers agree that we can find no evidence of an enduring impact of sterilized intervention. In this long-run, *economic fundamentals* determine exchange rates.

In the medium-term, measured in months, *expectations* dictate the course of exchange rates: both expectations about future economic fundamentals and expectations about the course of interest rates and exchange rates themselves. In my own view, in floating rate regimes, currency trading tends to reflect a continuous search for relative, real growth differentials, evidence for which may be found in economic data, in interest rates, or in the behavior and commentary of the monetary authorities.

In the short-run, measured in hours and days, *changes in traders' positions* determine the course of exchange rates: how much are traders trying to sell and how much are other traders trying to buy. We all poke fun at the traders' explanation of last resort: "More buyers than sellers", but not

because it is inaccurate, rather because it fails to tell us anything about particular motive and causation.

Sterilized intervention can affect traders positions in the short-run. If it succeeds in changing positions -- in causing certain positions to become unprofitable, forcing their owners to cover them -- then it provides a moment when traders may pause to reassess and change their expectations. In this way, sterilized intervention can sometimes influence exchange rates in the medium term, mainly by providing signals, from the monetary authorities, about the likely course of real growth differentials and other fundamental factors.

However, intervention has risks for the monetary authority that must be considered. The fact of an intervention may provide traders with a pause to reassess their expectations but they may choose not to change their expectations, in which case sterilized intervention may have only a very transitory impact or none at all.

Even worse, the fact of intervention may lead to a change in positions but in the opposite direction from what was intended. Instead of providing a jolt that leads to a reassessment and a reversal of sentiment, sterilized intervention by central banks can itself create liquidity illusions: inducing sellers to come into the market in the expectation that the central bank will provide sufficient liquidity to enable all of them to exit their positions -- positions that might otherwise have been maintained.

In June of 1994, I experienced exactly this phenomenon. Each time we entered the market to buy dollars, the dollar traded lower as wave upon wave of sellers incorrectly assumed that we were prepared to buy all of the dollars they intended to sell. As a result, our intervention induced exactly the opposite short-run reaction than we had hoped for.

On other occasions, however, both before and since, our interventions have been more directly effective and we have managed to shift both short-run positions and medium-term expectations in the direction we intended.

It occurs to me that we have no robust model of short-run exchange rate determination, and we have no clear impression of the short-run efficacy of sterilized intervention, perhaps because we have no universal theory of human behavior or group dynamics. Markets are individuals bargaining for their own accounts. If we do not have an all-embracing theory of human motivation and action, we are unlikely to get much further in modeling short-run exchange rate behavior.

It seems the best we can do is work a little harder to understand all of those who participate in foreign exchange markets. You and your behavior in trading foreign exchange markets each day are part of the dialogue which helps me and other central bankers understand markets better. I have developed a little scar tissue along the way and the learning that has gone with that scar tissue is of considerable value.

I have tried, this morning, to return the favor by offering you some of my thoughts on the dialogue between the foreign exchange market and the monetary authorities. I am convinced that the better I understand your risk-reward profiles, the better I will understand markets. I am also convinced that the better you understand our risk-reward profiles, the better you will understand our policies.