For Stability

Record swings in the dollar since 1980 have intensified a desire for greater exchange-rate stability and have rekindled an interest in exchange-market intervention. The recent U.S.-German experience suggests that intervention does not afford countries an independent policy lever with which to influence exchange rates systematically. Intervention can have a temporary, announcement-type effect on exchange rates by altering expectations, especially expectations about policy, but exchange-rate stability depends on the appropriate-ness, stability, and compatibility of more fundamental macroeconomic policies among nations.

Owen F. Humpage is an economic advisor at the Federal Reserve Bank of Cleveland. The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or the Board of Governors of the Federal Reserve System.

Footnotes


2. If intervention is viewed as a market for bonds or other assets, the theory predicts that intervention will affect the exchange rate. In an example, in 1985 and 1986, the dollar depreciated against the deutsche mark and the yen, but intervention took place in the foreign-exchange market, buying and selling currencies in an effort to stabilize the dollar's exchange rate. These transactions can involve billions of dollars and can risk substantial losses for central banks if they end up holding a currency that depreciates.


4. At the G7 meeting, France, West Germany, Japan, the United Kingdom and the United States discussed policies to reduce global trade imbalances. At the G7 meeting, these countries, together with Brazil and Italy, focused more on policies to stabilize the dollar's exchange rate.

5. The evidence might lead one to this conclusion about the GS episode.


8. One could argue that the dollar would have depreciated faster without intervention, but one cannot confirm this.

Central banks often intervene in the foreign-exchange market, buying and selling currencies in an effort to influence the exchange rates. These transactions can involve billions of dollars and can risk substantial losses for central banks if they end up holding a currency that depreciates. Whether or not central-bank intervention produces a more stable, more predictable exchange rate is not clear and is a subject of debate among economists. Many argue that intervention, as a policy independent of monetary and fiscal policies, has little, if any, effect on exchange rates. The scale of intervention is often small relative to the scale of the market transactions, and past studies suggest that systematic intervention cannot supplant fundamental market forces.

An important aspect of intervention is the potential to alter the money supplies of the countries whose currencies were bought and sold. Such money-supply changes could have a significant influence on exchange rates, which, in turn, are the price of one nation's money in terms of another.

This Economic Commentary summarizes the findings from a recent study of U.S. intervention during the August 1986 and August 1987 episodes. The evidence indicates that day-by-day U.S. intervention was not systematically related to day-by-day exchange-rate movements, but that intervention in some cases did seem to affect exchange rates temporarily. By reviewing the circumstances and events surrounding each episode of U.S. intervention, one can learn about how, and when, central banks might successfully employ an intervention policy.

ECONOMIC COMMENTARY
Federal Reserve Bank of Cleveland

Intervention and the Dollar
by Owen F. Humpage

Central banks often intervene in the foreign-exchange market, buying and selling currencies in an effort to influence the exchange rates. These transactions can involve billions of dollars and can risk substantial losses for central banks if they end up holding a currency that depreciates. Whether or not central-bank intervention produces a more stable, more predictable exchange rate is not clear and is a subject of debate among economists. Many argue that intervention, as a policy independent of monetary and fiscal policies, has little, if any, effect on exchange rates. The scale of intervention is often small relative to the scale of the market transactions, and past studies suggest that systematic intervention cannot supplant fundamental market forces.

An important aspect of intervention is the potential to alter the money supplies of the countries whose currencies were bought and sold. Such money-supply changes could have a significant influence on exchange rates, which, in turn, are the price of one nation's money in terms of another.

This Economic Commentary summarizes the findings from a recent study of U.S. intervention during the August 1986 and August 1987 episodes. The evidence indicates that day-by-day U.S. intervention was not systematically related to day-by-day exchange-rate movements, but that intervention in some cases did seem to affect exchange rates temporarily. By reviewing the circumstances and events surrounding each episode of U.S. intervention, one can learn about how, and when, central banks might successfully employ an intervention policy.

ECONOMIC COMMENTARY
Federal Reserve Bank of Cleveland

Intervention and the Dollar
by Owen F. Humpage

Central banks often intervene in the foreign-exchange market, buying and selling currencies in an effort to influence the exchange rates. These transactions can involve billions of dollars and can risk substantial losses for central banks if they end up holding a currency that depreciates. Whether or not central-bank intervention produces a more stable, more predictable exchange rate is not clear and is a subject of debate among economists. Many argue that intervention, as a policy independent of monetary and fiscal policies, has little, if any, effect on exchange rates. The scale of intervention is often small relative to the scale of the market transactions, and past studies suggest that systematic intervention cannot supplant fundamental market forces.

An important aspect of intervention is the potential to alter the money supplies of the countries whose currencies were bought and sold. Such money-supply changes could have a significant influence on exchange rates, which, in turn, are the price of one nation's money in terms of another.

This Economic Commentary summarizes the findings from a recent study of U.S. intervention during the August 1986 and August 1987 episodes. The evidence indicates that day-by-day U.S. intervention was not systematically related to day-by-day exchange-rate movements, but that intervention in some cases did seem to affect exchange rates temporarily. By reviewing the circumstances and events surrounding each episode of U.S. intervention, one can learn about how, and when, central banks might successfully employ an intervention policy.

Does U.S. intervention have a lasting effect on the foreign-exchange value of the dollar that is independent of monetary policy actions? The author examines evidence from a recent study of U.S. intervention during a three-year period and discusses the relationship between intervention and exchange rates.

...
Although money supplies remain unchanged, the effects of intervention alter the supply of government bonds denominated in one currency relative to the supply of bonds denominated in another currency. In our example above, the Federal Reserve increased the amount of U.S. Treasury securities in the market. If necessary, Germany might offset any impact of intervention on its money supply by reducing the amount of German treasury securities in the market. Under certain conditions, generally thought to exist in the exchange markets, the changing currency composition of bonds in the market could alter exchange rates.

Intervention also can influence exchange rates by altering expectations in the exchange market. Currency traders use all available information, including information about future events, to establish current exchange quotes. Intervention, to the extent that it improves the flow of information in a "disordered" market, offers new information that the market can alter expectations and, hence, exchange rate quotations.

If intervention is to affect expectations, market participants must believe that official attitudes about future economic policies possess better information than they do. With the possible exception of knowledge about future policy changes, monetary policy apparently does not consistently have better information than private dealers. Consequently, intervention that hopes to influence expectations must do so primarily by altering attitudes about future economic policies.

Such intervention is not, however, strictly independent of monetary and/or fiscal policies. Its success depends largely on its ability to inform the market about future policy changes and to hasten its response.

Following the G7 meeting in February 1987, the dollar fell, and its major trading partners, intervention was again heavy, persistent, and closely coordinated, but again it did not exhibit the expected relationship to daily exchange rate movements. This episode differed from the previous episode in that central banks were trying to stem the persistent depreciation of the dollar and to stabilize it relative to the yen and the mark. Sometimes we found a weak relationship in this period, but the sign of the correlation was opposite than which we anticipated. The dollar appeared to depreciate following intervention purchases of dollars.

If intervention is to affect expectations, market participants must believe that official attitudes about future economic policies possess better information than they do. With the possible exception of knowledge about future policy changes, monetary policy apparently does not consistently have better information than private dealers. Consequently, intervention that hopes to influence expectations must do so primarily by altering attitudes about future economic policies.

Such intervention is not, however, strictly independent of monetary and/or fiscal policies. Its success depends largely on its ability to inform the market about future policy changes and to hasten its response.

Following the G7 meeting in February 1987, announcement-type effect occurred immediately following the September 20-21, 1985, G5 meeting. Prior to the meeting, the dollar had been depreciating, but the market was becoming uncertain about how much of a depreciation the United States would accept. On the one hand, economic activity was not robust, suggesting that the Federal Reserve would not tighten at the risk of slowing the economy further; on the other hand, the narrow measure of money was growing above its target range, suggesting that the System might tighten soon to avoid an acceleration of inflation. This created some uncertainty about the dollar, since a depreciation might help real economic growth, but could raise prices. The market was ripe for a signal.

The G5 communique and the highly visible, closely coordinated intervention that immediately followed the meeting seemed to provide two signals to the market. First, because the United States initiated it, the G5 meeting appeared to signal the Administration's hands-off policy toward the dollar. Prior to the G5 meeting, the dollar's persistent strength and the government's deficit were not a major policy concern, and the U.S. Administration did not endorse frequent exchange-market interventions. It now seemed that promoting a dollar depreciation would garner more weight in U.S. policy discussions.

Second, the G5 announcement suggested that the Federal Reserve System would not move aggressively to bring money growth back within the target ranges. In response, the dollar fell a very sharp 5 percent against the German mark and 4.6 percent against the Japanese yen on the Monday following the G5 announcement.

The most dramatic example of this temporary announcement-type effect occurred immediately following the September 20-21, 1985, G5 meeting. Prior to the meeting, the dollar had been depreciating, but the market was becoming uncertain about how much of a depreciation the United States would accept. On the one hand, economic activity was not robust, suggesting that the Federal Reserve would not tighten at the risk of slowing the economy further; on the other hand, the narrow measure of money was growing above its target range, suggesting that the System might tighten soon to avoid an acceleration of inflation. This created some uncertainty about the dollar, since a depreciation might help real economic growth, but could raise prices. The market was ripe for a signal.

The dollar continued to depreciate sharply through October 4, as the market looked for additional confirmation of policy changes, but thereafter any effects of the intervention faded. The dollar began to appreciate against the German mark as further policy initiatives to lower the dollar against the mark were not forthcoming and as the Germanys began to express satisfaction with the mark's appreciation to date. The dollar continued to depreciate somewhat against the yen. Japanese officials had announced some additional policy initiatives to encourage a yen appreciation and had not been as quick as their German counterparts to disavow their currency's appreciation.

By late November, however, West Germany, Japan, and the United States had ceased intervention and the United States did not intervene again until 1987. During the entire G5 intervention episode, the United States sold over $5 billion against German marks and Japanese yen, and other large central banks sold approximately $7 billion. The dollar continued to depreciate throughout 1985 and 1986 in response to changing market fundamentals. Outside of the one-time shift downward in the dollar on September 25 and possibly through October 4, the continued depreciation of the dollar was not related to U.S. intervention.

The importance of policy changes, rather than intervention, was illustrated following the G7 episode. In February 1987, the major central banks met in Paris to discuss exchange rates. The resulting communique, the Louvre Agreement, vaguely suggested that the participants had agreed informally to a set of reference zones for the yen-dollar and the mark-dollar exchange rates. Following the Paris meeting, the volume of foreign central bank intervention increased.

In late March, the United States intervened against the dollar, which depreciated below 150 yen because of fears of a trade war with Japan. From March 25 through April 6, the United States sold the equivalent of $8 billion. Intervention continued intermittently through May and early June with the United States selling a small amount of yen and a modest amount of marks.

As in the G5 episode, the major central banks closely coordinated their intervention efforts in late March and early April. The transactions also were highly visible, at various times, Federal Reserve Chairman Paul A. Volcker, Vice-Chairman Manuel H. Johnson, and U.S. Treasury Secretary James A. Baker acknowledged that intervention was under way.

Unlike the G5 episode, however, the central banks now were trying to offset market forces rather than to push the exchange rate in a direction consistent with the market, and until late in April, they gave no indication that they would alter monetary policies. Consequently, the dollar continued to depreciate against the yen at a rapid pace and did not react.

The dollar-yen exchange rate broke its sharp descent only after policy changes were initiated. At the end of April, Chairman Volcker indicated that the Federal Reserve was "shaping" monetary policy, and Japanese Prime Minister Nakasone indicated that Japan would ease monetary policy. In May, the West German Bundesbank lowered some of its official money market rates. In late May, the Fed also announced a stimulat-