Research Department
Federal Reserve
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FRBSF Weekly Letter

Falling Dollar?

Many financial observers have argued that when (or if) the economy weakens this year, real GNP will fall, and thereby lead to lower money demand and interest rates. These developments, they argue, will then put downward pressure on the dollar in foreign-exchange markets. But will a weakening economy necessarily lead to a weaker dollar? For a number of reasons, the results should be otherwise.

The crucial point to remember is the nature of the initial disturbance which is generally expected to affect the 1980 economy. The expectation is for a cyclical decline (or deceleration) in the nation's aggregate demand. This disturbance would then generate all the other effects—on income, money demand, and interest rates. On this basis, we could well conclude that the cyclical decline in demand will in fact strengthen the dollar.

Exchange rates, and a weakening economy

A year or two ago, many analysts argued that the dollar was weak because the U.S. economy was strong, with real GNP rising faster in this country than abroad. The idea was that the cyclical upturn was stimulating imports and so weakening the trade deficit, and also pushing up prices—in both cases weakening the dollar. Yet some of these same commentators are arguing now that the dollar will weaken as the economy weakens—ignoring the now beneficial effects on trade and prices, and instead concentrating on the supposed effects of lower interest rates. The two positions are clearly inconsistent.

With respect to the earlier (1978) situation, empirical evidence supports the view that upward cyclical movements in income had generated a downward movement in dollar exchange rates. Therefore, today, the reverse would be expected: downward cyclical movements should lead to an improvement in prices and in the balance of payments, and so to an improvement in the outlook for the dollar.

The argument for a weaker dollar tends to confuse (in economists' jargon) a movement *along a money-demand schedule* with an enormous *shift in that schedule*. True enough, in the latter case, when economic actors suddenly decide to hold fewer dollars than previously at any given level of prices, interest rates, and exchange rates, the dollar should weaken. But that is not the situation that we are currently discussing. Rather, in the present case, the initial disturbance is in the goods markets, and falling income and falling interest rates will then have offsetting effects on the quantity of money demanded. The initial disturbance should cause prices, incomes, and interest rates to change to maintain equilibrium in all markets, but without an autonomous decline in money demand, there need be no weakening in dollar exchange rates.

Some might argue that the dollar should weaken as foreign investors reduce their demand for dollar assets, because of the decline in U.S. interest rates associated with a weakening economy. But in net terms, demand for U.S. assets need not be any lower than before, because U.S. investors are likely to make up for the decline in foreign demand. In other words, the market should be willing to hold the same or a larger amount of assets at lower interest rates because domestic purchasers, when reducing their demand for goods during an economic slowdown, are likely to increase their demand for assets at the same time. That is, foreign investors are not getting out of dollars because of a decline in confidence for dollar assets, but rather because aggressive buying by U.S. investors is pushing down interest rates and bidding them out of the market. Again, in that event, there need be no decline in the value of the dollar.

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Endogenous variables

The argument linking falling interest and exchange rates also seems specious because it posits a close relationship between two variables, interest rates and exchange rates, both of which are in fact endogenous. The argument suggests that interest rates determine exchange rates. Yet in reality, *both* variables respond to disturbances or shocks to underlying economic parameters. Some types of shocks will cause them to move in opposite directions. Thus, knowing only how interest rates are changing need not tell us anything about how exchange rates are changing.

For example, as argued above, a shock to aggregate goods demand will cause interest and exchange rates to move in opposite directions. Similarly, a decline in inflation expectations in the U.S. would lower U.S. interest rates and strengthen dollar exchange rates: again moving them in opposite directions. However, changes in money supply or money demand would—in the short-run, at least—move interest and exchange rates in the same direction. The analysts linking falling exchange rates to cyclically declining interest rates have apparently confused the results from money-demand or money supply shifts with the phenomena of aggregate demand shifts such as we have already discussed.

Monetary-control perspective

Even if there were some theoretical basis for linking falling interest rates and falling exchange rates, there is no practical reason for deliberately keeping interest rates high (by slowing money growth), as a means of calming exchange markets and strengthening the dollar. Indeed, such a step could be counterproductive, by leading market participants to question the direction of Federal Reserve policy, which since last October 6 has focused directly on bank-reserve growth rather than on the Federal-funds rate. Market participants might decide that if the monetary authorities try to hold interest rates up on the downside of the business cycle, they will also likely try to hold interest rates down on the upside of the cycle. Such a perception would increase long-run inflation expectations, and thus reduce long-run confidence in the dollar.

To understand this argument, recall that we have emphasized that no automomous decline in money demand is likely to occur during the cyclical decline this year. However, even if one were to occur, the issue would then shift to whether the Fed should drop its money supply targets and hold interest rates up in response to such a disturbance. Now for years, economists have argued over whether the Fed should target monetary aggregates or interest rates in response to shocks to the economy. The argument for concentrating on the aggregates, which is implicit in the Fed's October 6 policy shift, centers around the point that the Fed would be forced to make constant changes in the money supply if it attempted to iron out every shock to interest rates. Such a process would destabilize the money supply, and in extreme cases could lead to explosive inflationary or deflationary episodes. By endeavoring to control the money supply instead, the Fed permits the market to determine interest rates and allocate credit. Short-run interest fluctuations may be more erratic, but over the long-run, interest rates (and exchange rates) will be more stable, simply because periods of severe inflation or recession will be avoided through better control of the money supply.

Thus, the Fed may improve short-run stability if it were to hold interest rates steady in the face of every alleged shift in money demand,

but it would do so at the almost certain expense of greater long-run instability in the economy. The argument is not that further tightening now would be bad in and of itself, but that it would engender expectations of continued erratic (and perhaps explosive) money growth in the future. Therefore, expectations of future money growth and inflation could undo any beneficial effects obtained from further tightening of policy in the present situation.

In sum, our analysis suggests that there are both theoretical and practical reasons for doubting that falling interest rates at home will weaken the position of the dollar abroad, and/or that policy should tighten further to keep rates high. This popular argument can be criticized on theoretical grounds for involving several basic fallacies, which misinterpret the nature of money demand and mistakenly link the movements of interest rates and exchange rates. Finally, in practical terms, it appears questionable because it would suggest that the Fed should reverse a policy decision made on the basis of long and thoughtful study.

Michael Bazdarich

Alternate Strategies Toward Inflation

The Fall 1979 issue of the *Economic Review* contains four articles discussing various aspects of inflation. The articles are titled:

* The Phenomenon of Inflation, and the Prospects for Anti-Inflation Policy
* Conducting Effective Monetary Policy: The Role of Operating Instruments
* Optimal Control and Money Targets: Should the Fed Look at "Everything"?
* Exchange-Rate Policies and Inflation: Theory and Evidence

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 1/16/80	Change from 1/9/80	Change from year ago @ Dollar	Change from year ago @ Percent
Loans (gross, adjusted) and investments*	137,601	+ 365	+ 17,210	+ 14.30
Loans (gross, adjusted) — total#	114,914	+ 351	+ 16,620	+ 16.90
Commercial and industrial	32,929	− 61	+ 4,196	+ 14.60
Real estate	43,859	+ 230	+ 8,588	+ 24.30
Loans to individuals	24,536	− 75	+ 4,479	+ 22.30
Securities loans	1,559	+ 85	− 242	− 13.40
U.S. Treasury securities*	7,147	+ 12	− 527	− 6.90
Other securities*	15,540	+ 2	+ 1,117	+ 7.70
Demand deposits — total#	46,207	− 634	+ 3,704	+ 8.70
Demand deposits — adjusted	33,596	− 509	+ 2,205	+ 7.00
Savings deposits — total	28,564	− 233	− 1,686	− 5.60
Time deposits — total#	58,977	− 121	+ 8,020	+ 15.70
Individuals, part. & corp.	50,127	− 149	+ 8,811	+ 21.30
(Large negotiable CD's)	21,478	− 445	+ 2,111	+ 10.90

Weekly Averages of Daily Figures	Week ended 1/16/80	Week ended 1/9/80	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (−)	68	68	14
Borrowings	208	30	61
Net free reserves (+)/Net borrowed(−)	− 139	38	− 47
Federal Funds — Seven Large Banks			
Net interbank transactions [Purchases (+)/Sales (−)]	+1,807	+1,795	+1,050
Net, U.S. Securities dealer transactions [Loans (+)/Borrowings (−)]	− 68	+ 72	+ 445

* Excludes trading account securities.

Includes items not shown separately.

@ Historical data are not strictly comparable due to changes in the reporting panel; however, adjustments have been applied to 1978 data to remove as much as possible the effects of the changes in coverage. In addition, for some items, historical data are not available due to definitional changes.

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