On balance, then, we believe that the weakness in demand deposits is likely to deepen; but we are not sure, and we certainly cannot predict the speed. In this light, new doubt arises about the advisability of setting policy targets in terms of M_1 . One factor in the choice of monetary policy instruments is the relative stability of the money-demand relation compared with the relation of real expenditures to interest rates. It is widely accepted that the more stable the former relationship is relative to the latter, the more likely is a policy target using monetary aggregates to outperform an interestrate instrument in achieving target values for expenditures. The deeper uncertainty in predicting money demand suggests paying more attention than formerly to other aggregates and to interest rates in formulating monetary policies.

Discussion

ROBERT HALL noted that the average velocity of money of about five that is observed in the aggregate statistics is wildly inconsistent with the observed behavior of most individuals, suggesting that the commonly used model of money demand seriously misses explaining aggregate money demand. There are apparently large components of money demand that require alternative explanations. James Tobin remarked that business deposits, in particular, cannot be explained by the inventory model of money demand, and thought that compensating balances represented the most promising avenue for improving the explanation. He was not persuaded by Enzler's dismissal of the compensating-balance argument and noted that in 1975, business loans had fallen for the first time in the history of the series, after rising very persistently at an average annual rate of about 10 percent since 1959. Deposits are probably not held against currently outstanding loans as much as against some weighted average of past and expected loans. Thus, the expectation of a shift from reliance on loans to open market instruments and from short-term to long-term borrowing might explain the decline in money demand better than Enzler's attempt had. Daniel Brill agreed with Tobin's views about the importance of business loans and compensating balances and suggested that these balances might be related to

lines of credit. During 1975, there was a contraction of these lines as well as a reduction of actual loans outstanding. In the same vein, Stephen Goldfeld urged the need for further disaggregation in analyzing money demand as the most promising avenue for explaining the recent weakness. Jared Enzler conceded that more attempts could be made to relate loans and compensating balances to money demand as an improvement to a simple transactions approach. But he pointed out that money holdings by sector did not show the weakness concentrated in business deposits, which is where it should show up if the answer to the mystery centered on compensating balances.

Hall also questioned the basic structure of the money-demand model that predicts a rise in velocity at the start of a business upswing. This property of the model follows from the lagged adjustment of money balances to income surprises. However, he argued that income surprises come in the form of money, so that a lag in adjustment should lead to a temporary fall rather than rise in velocity. On this view, the large rise in velocity in the early quarters of the present expansion was an even greater mystery than the standard model indicated. Whatever model was correct and however erratic the relation of money demand to income, Hall read the empirical evidence as saying that money demand was highly inelastic with respect to interest rates. As a result, the pursuit of a monetarist policy by the Federal Reserve translated any shift in money demand into an opposite shift in real GNP. In this sense, the recent weakness in money demand was a major factor behind the strong expansion of the economy thus far.

Franco Modigliani found the analysis of bank debits to demand deposits quite useful and suggestive. The decline of debits relative to GNP was clearly an important link in any explanation of recent money demand, and its explanatory power came on top of any effects attributable to foreign balances held in U.S. banks or to compensating balances held by business firms, neither of which affected the debit analysis. He noted that foreign deposits were an additional part of the story, as the table in the paper showed. He also found the past income peak a useful substitute for actual income, but was dubious about the importance of substituting peak interest rates for current rates in explaining the current weakness in money demand since their effect would have to be highly transitory in order to fit historical data.

William Fellner thought that the rate of inflation, which had not been investigated by the authors, might well be an important determinant of

money demand. He reasoned that, at modest inflation rates, the response of money demand might be captured by the short-term interest rate as it is typically modeled. However, with the more rapid inflation rates experienced in recent years, the desire to conserve on money balances might be intensified. Such behavior would be consistent with a nonlinear utility curve such that the difference between earning nothing and earning 5 percent was not as great as the difference between losing 10 percent and losing 5 percent.

Modigliani and Brill noted that Poole's analysis of Federal Reserve targeting procedures correctly identified the ambiguities in the present system of reporting. Both the method of describing targets and their use for several monetary aggregates provided the Fed with leeway in its conduct of policy. But Poole's suggested changes would be desirable only if it was desirable to tie the Fed's hands tighter. Both felt that Congress should focus on economic results rather than on the technicalities of the Federal Reserve's operations. Modigliani suggested that the Fed be made to relate its monetary policy to real goals for the economy and to explain how its conduct of monetary policy helped achieve those goals. In the same vein, Charles Holt suggested that the paper could have provided some perspective on the issues raised by Modigliani and Brill by addressing the question of legislative intent: what kind of objectives Congress has in mind and the extent to which the present system or any alternative furthers those objectives.

Modigliani took issue with Poole's dismissal of interest-rate targets for the conduct of Federal Reserve policy. While conceding that a precise interest-rate target could not be maintained indefinitely, for the practical conduct of monetary policy, interest-rate targets for relatively short periods of time, such as a quarter, would be perfectly feasible. At a minimum, the Fed should make it clear that it would violate any targets it proposed for monetary aggregates if trying to maintain them would lead to undesired changes in interest rates. He noted that the steep rise in interest rates in mid-1974 resulted from an excessive attachment to targets for money growth.