In sum, because political pressures on the Federal Reserve are currently asymmetrical it is politically easy, and perhaps even politically imperative, for it to raise interest rates but difficult to lower them. Although predicting money growth is hazardous, my best guess is that this asymmetrical situation will lead to money growth on the M_2 definition remaining below 5 percent, on the average, until after the cyclical contraction has begun.

The Federal Reserve's initial moves to lower the federal funds rate will not occur until it is fairly obvious that the recession is at hand, and the initial moves will be small and cautious. The weakening economy and the recognition that the monetary authority's policy is changing will produce sharp declines in money-market interest rates other than the federal funds rate; money growth will remain low as the Federal Reserve holds the funds rate above other rates. As the recession deepens, it will move the federal funds rate down more aggressively. At some point the funds rate will catch up with other money-market rates and money growth will begin to rise. I have no way of knowing how long this process will take. But I predict that when we look back a year from now, it will be clear that the sharp deceleration of money growth that began in November 1978 and continued into the early months of the cyclical contraction reflected a policy that was unambiguously inferior to a policy of adhering to the Federal Reserve's own announced money growth targets.

The current acceleration in inflation was caused, or at least exacerbated, by money growth in excess of the monetary authority's announced targets in 1976–78. If money growth below announced targets is now associated with recession, these two observations will offer further evidence that a policy of actually achieving monetary targets adjusted gradually over time promises better outcomes than a policy that ignores such targets.

Discussion

IF POLICY were as restrictive as Poole suggested, reasoned David Fand, interest rates would have exploded in recent months when nominal GNP was rising sharply. Fand concluded that accelerated innovations in finan-

cial markets, such as corporate RPs, "offshore dollars," money-market instruments in the thrift institutions, and the growth in money-market mutual funds, have created an "invisible" money that does not appear in the conventional figures. He would have gone even further than Porter, Simpson, and Mauskopf in identifying this new money and adding it to conventional M_1. William Fellner also emphasized the limitations of Poole's conventional aggregates, and went on to argue that households were shifting from financial assets in general to real assets. He noted that the velocity of higher-order aggregates was rising, including aggregates containing some of the new instruments that Porter, Simpson, and Mauskopf had explored. Although he questioned the way the authors' equations were specified, Franco Modigliani found they implied that M_1 growth, once adjusted, has not been very restrictive. Arthur Okun, using the framework Poole had developed many years ago, asked why Poole had not considered whether the *LM* curve had shifted. In view of the evidence that new financial instruments had shifted it inward, holding interest rates constant was a compromise strategy. If Fellner were correct and the *IS* curve had shifted outward at the same time, as indicated by an increased demand for real assets, rates should even be raised further, despite the weakness in the monetary aggregates. Poole replied that recent developments had increased the uncertainty about money demand and that this called for paying increased attention to interest rates but not for abandoning the monetary aggregates.

Much of the discussion centered on what the recent uncertainties in interpreting the monetary aggregates implied for the conduct of monetary policy. Robert Hall concluded that the instability of the money-demand function made the monetarist prescription of steady monetary growth of little use; but this did not imply that the strategy of pegging interest rates was acceptable. He suggested that the real challenge for monetarism was to alter the financial system to provide a monetary asset for which steady growth is a good policy prescription. James Tobin pointed out that the dichotomy between pegging interest rates and holding money growth constant was never the relevant policy issue. Optimal policy has to be made in the context of either an implicit or explicit model relating economic goals and financial variables over which the Federal Reserve has some control. Monetary aggregates have no unique role in this decision process. No aggregate offers direct mechanical control over the quantity of transactions. And no aggregate is uniquely, or even particularly, useful

as a leading indicator of the economy. The extreme recent instability of velocity might serve the useful purpose of forcing policymakers and the public to think more carefully about the role of the monetary aggregates in policymaking. Modigliani agreed with Tobin's description of policymaking; he suggested further that the issue of the Federal Reserve's credibility would disappear if policy were expressed more realistically in terms of economic targets rather than certain monetary aggregates. The public would expect some inaccuracies in the projections but not the mysterious, and often irrelevant inaccuracies of the present procedure. James Duesenberry believed the recent conduct of monetary policy could be explained by the uncertainty regarding the correct settings for interest rates and money growth. With controlling inflation as the primary goal, policymakers minimized the risk of being too accommodating by holding up interest rates despite the unusual weakness in the aggregates. Poole objected that, in general, such a policy of concentrating on either interest rates or growth in the aggregates—depending on which one minimized the dominant risk at the time—would actually exacerbate the cycle. Duesenberry also pointed out that developing a broader definition for money to use as a criterion for action was a separate matter from selecting an aggregate for policy to control. He agreed with Tobin and others that no aggregate, including the monetary base, was a sufficient target for the conduct of monetary policy.

Several participants doubted that one could find a new monetary aggregate that would bear a more stable relationship to GNP than the present ones did. Modigliani noted that even the equations that the authors were able to fit with the benefit of hindsight had properties that appeared structurally unconvincing and made him doubt that they would continue to fit well in the future. In particular, he found the long adjustment lags in the equations implausible. Stephen Goldfeld pointed out that the use of offshore dollars was not yet widespread but represented a great potential source of "money" if the use of domestic financial instruments were curtailed. Robin Marris noted that new developments in payments technology were drastically changing conventional concepts of money. Before long, households would be cash managers just as some businesses are today.