268 HENRY C. WALLICH

in different income and wealth brackets, firms in different industries, may have a significantly different demand for money. To summarize these divergent functions and their shifting weights in a single relation of money to income or to wealth requires courage.

The origin of the money supply, that is, for the most part, "credit," also must be expected to weigh. Whether money is created against a liquid asset like a government bond, or against an illiquid one like a business term loan, makes a difference not only in the first "round" of the new money. The difference in the degree of liquidity added to the economy remains. This seems to be partly reflected in the negative relationship of the demand for money narrowly defined and the "inside money" ratio in Table 1.

Systematic differences, moreover, have been found between cyclical and long-run relations of money and income. If in the long run velocity falls, as Friedman's data and the preceding intercountry comparisons suggest, during cyclical expansions velocity rises with income. Whether it is permanent income or rising interest rates and prices that are associated with this phenomenon, it would be necessary to forecast the cyclical movement, or else interest rates and prices themselves, in order to use money supply as a safe policy guide.

Short-run variations in the relation of money and income may result also from the lag with which income responds to exogenous changes in money. This fact sometimes finds expression in sentiments such as "the quantity theory holds only in the long run" or "to say that doubling money roughly doubles prices does not mean that increasing money by one percent raises prices by roughly one percent."

Money Supply Targets

All that has been said about the difficulty of relating money to income and hence, implicitly, about the defects of a money supply target for monetary policy making does not necessarily mean that the money supply may not be the best target available—all others may be worse. I would be prepared to accept this hypothesis whenever the pursuit of another target produces effects on the money supply that are unsustainable by any reasonable money demand hypothesis. If, for instance, during a cyclical expansion, when interest rates, prices, and velocity tend to rise, pursuit of an interest target, even a rising one, leads to monetary expansion in excess of the economy's