

5. *What Definition of Money?*

Reference was made above to the leakage from the money supply through the creation of time deposits. The problem goes deeper, however. All near-monies are substitutes for money in some degree. The exact equivalents are unknown. No doubt they vary from time to time and from holder to holder. The historical evidence seems to say that it does not matter greatly whether a fixed money growth rule is based upon money supply narrowly or broadly defined, i.e. including or excluding time deposits. For the broad definition, a higher rate of growth would be needed than for the narrower, since time deposits have grown more rapidly. But recent gyrations of time deposits and other near-monies make clear this much: either the conditions that in the past made the two types of rules equivalent have changed, or else that equivalence and hence the precision of the monetary growth rule itself was of a very rough sort. The rules specified by Representative Reuss have tried to take unstable behavior of near-monies into account. But they do not provide for quantitatively precise adjustment. In the present state of knowledge, not even a discretionary policy can take erratic behavior of near-monies adequately into account. To allow for it accurately in a fixed money growth rule would be even more difficult.

6. *The Relation of Money to Income*

Less than twenty years ago, it was fashionable to argue that money had no influence on income. Monetary policy was considered powerless by a great majority of economists in and out of government. Today we are in danger of overshooting in the opposite direction. The existence of an effect running from money to economic activity seems well documented. Its mechanics and its timing are only imperfectly understood.

That the relationship should be between the rate of money *growth* and the *level* of economic activity, for one thing, is not intuitively obvious. One would expect more likely a relationship between the *level* of money supply and the *level* of economic activity, or else between their respective rates of growth. The principal reason why some investigators have chosen the rate of growth rather than the level of money supply seems to be that historically the money supply has declined much less frequently than the level of economic activity. Thus, the level of money and the level of activity have at times moved in opposite directions, casting doubt on the relationship. On the other hand, a relationship between a rate of growth and a level may well be meaningless. It is true of any time series moving in a cyclical, i.e. wave-like pattern, that its rate of growth must decline before the absolute value of the series can decline. Thus, to the extent that money and economic activity are in fact correlated, the rate of money growth is bound to decline before the level of activity, without this implying any causal relationship.

Furthermore, while there is good reason to think that money influences activity, it is obvious also that activity can influence money. It does so by stimulating the demand for bank credit. The banks can meet this demand by using their excess reserves and by borrowing from the central bank. Moreover if the central bank is interested in maintaining reasonably stable interest rates, it will supply the banks with reserves needed to meet a strong loan demand. Alternatively, if the central bank is determined to curb an expansion, the appearance of incremental loan demand may cause it to tighten the financial markets even more than the incremental demand itself would. Thus, an incipient change in the level of economic activity may very well cast its shadow ahead, in the form of a prior change in the demand for credit and in the rate of growth of money.

To the extent that money does determine income, the mechanics of this influence remain only partly resolved. There is wide agreement that interest rates play a key role. But if interest rates are the mechanism that transmits impulses from money to the real economy, why look at money instead of at interest rates?

One possible answer to this question is that there is a "direct effect", running from money to income and bypassing interest rates. An increase in money may raise aggregate demand, not because money holders buy securities and drive down interest rates, but because they use their excess money holdings to buy goods directly. This is the manner in which the "quantity theory" often is explained: "when people have more money than they want, they spend it and drive up prices."

But the "direct effect" is less plausible than appears. Households presumably make a decision how much to consume and how much to save. If they accumulate