

Implications for Money Supply Targets

What do these data tell us about the reliability of money supply targets for central banks?

A central bank contemplating such a target will primarily employ estimates based on local time series rather than international cross sections. The cross-section results, however, suggest that it will encounter two difficulties.

1. Since the demand for money is responsive to changes in interest rates and price movements, as well as to gradually rising per capita income, stable money/income ratios cannot be expected. The central bank will have to take into account these other variables which make much more complex the forecasting of the demand for money. Efforts I undertook to relate the variability of M_1/Y and $(M_1 + M_2)/Y$, measured about their trend, to per capita income or other explanatory variables, including those employed in Table 1, were not very successful. The results suggest that countries enjoying a high rate of real growth of GNP have a more stable relation of money to income, but further work will have to be done to establish and evaluate this tentative finding.

2. The variables examined, while significant, account for only a small part of the total variability of the money/income ratios. Many of the influences not accounted for are likely to be country specific. In time series analysis of national data these influences would disappear. But the suspicion remains that the very high explanatory values achieved in such analysis by a small set of variables is partly a product of the statistical technique. Quite possibly there lurk underneath unspecified variables that may upset the central bank's estimates. A few are worth listing.

One is the differential behavior of money under alternative definitions. As long as there is no agreement on the choice to be made between, or the weights to be assigned to, the two kinds of money, and the two do not correlate closely, whatever signals are thrown off by one may be countermanded by the other.

Another trap underlies the fact that concepts of money as well as of income are highly aggregated. Households determine their cash balances with respect to income, and probably wealth; firms with respect to sales and perhaps assets; local governments and other nonprofit entities with respect to payments and receipts. Households