On the Endogeneity of the Money Stock

A COMMENT (*)

1. This comment of mine relates to the "key question" put by Prof. Fisz (on page 221) in the following terms. "Is the money stock best viewed as an endogenous variable — determined by the interaction of the financial and real sectors — and outside the direct control of the central bank? Or is it more nearly correct to view it as an exogenous variable — as a policy instrument — that the authorities can control, and whose behaviour can be made to conform to the stabilization guidelines?"

In dealing with these questions, Fisz emphasizes (p. 220) that a "sharp contrast" exists as to their solution, according to whether one is thinking in terms of the real value of the money stock or — as is generally the case — of the nominal money stock. In the case of the real value, there is, he says, "considerable agreement" that this is an endogenous variable, outside the control of the monetary authorities.

Admittedly, the public (households and firms) are in the last analysis, as is known, arbiters in determining that value. Their unrestrainable intervention in the goods market and the financial market sooner or later give rise to more or less incisive changes in price levels and interest rates, even in ways and to an extent that diverge from the intentions of the monetary authorities. Therefore the questions are not by Fisz (as "basic issues") solely in relation to the nominal money stock.

Fisz assumes that, unlike what has just been said regarding the real value, one cannot in the case of the nominal money stock give an unambiguous answer as to whether this is endogenous or not. True, he includes the public among the leading participants whose preferences in the composition of their portfolios help to determine the nominal money stock, which he describes as being "at any moment in time the result of portfolio decisions by the central bank, by the commercial banks, and by the public" (p. 218). In making this explicit admission, however, he limits himself to considering the public's behaviour only as regards the composition of their portfolios, without taking into account that for the specific purpose of deciding whether money stock is endogenous or not, it is also necessary to consider the public's behaviour as regards the size of their portfolios (1).

Thus Fisz ignores those processes which, with the contribution of the various leading participants, give rise to the "creation" of money stock, that is, to the changes in its nominal amount. And he likewise ignores those channels through which the public, as a whole, can exercise not only a positive, but also a negative influence on the money stock by ridding themselves of the part which exceeds the quantity desired (as outlined in footnote 2).

He attributes to the public's influence, although he places this formally on a similar footing to the influence of the other leading participants, an almost marginal but never determinant role. Consequently he is unable to give, as was said, an unambiguous reply regarding the endogeneity of the money stock. He mentions the view that money can be regarded, "at least in part" (p. 224), as an endogenous, or at least a "sufficiently endogenous", variable (p. 225), just as though the question was not simply to decide whether it is an endogenous or an exogenous variable, but rather what the different "degree" of its endogeneity may be.

2. These conclusions could be regarded as unexceptionable in relation to the premises from which Fisz starts. But, though it is not difficult to understand the importance attributed to the composition of the portfolio of the public, it is certainly inadmissible to ignore the no less important factor, viz. the size of this portfolio.

Fisz's line of argumentation and hence his conclusions ought, then, to be modified. In particular, when considering the public's influence on the money stock, the preferences between money and any other financial asset are not the only point that must be taken


(1) I have explained this point in section 1.4 of my Introduzione alla economia creditizia (Bourget, 1963).
into account. In addition, indeed primarily, the closest attention must be paid to the more fundamental preferences that have an influence on the size of the portfolios, that is, on the formation of income and savings, as well as on the use of savings by the individual savers, in both direct investment and loans to third parties, with or without the intermediation of the banking system. It is then that the high degree of endogeneity of the money stock, considered in its nominal sense, becomes evident, even if this endogeneity is reached through processes and channels that differ from those relative to the endogeneity of its real value (2).

In this way the "sharp contrast" between the nominal money stock and its real value disappears. Also from the nominal point of view, stress must be laid on the endogeneity of the money stock, for its changes always reflect the complex interactions of the financial and real sectors (3). In other words, to adopt the term used in the past, not only the real value but also the nominal amount of the money stock are linked with all the "living forces" that operate in the economic system.

To assert that the money stock is endogenous does not rule out, of course, that the monetary authorities can "control" or, to put it better, "govern" the nominal amount. They can do so, provided always that they are disposed to engineer, or else to permit, the changes that such a policy may cause in the levels of prices and interest rates as well as in employment and, as a consequence, in the trend of the economic cycle and growth.

Amedeo Gambino

(4) It suffices to mention that the public's negative influence on the real value of money manifests itself felt through the "regression" of money in the goods market (price level) or in the financial market (interest rate level), while its negative influence on the nominal money stock makes itself felt through the reflux of the loans that give rise to its creation. As a matter of fact, the basic channel through which the public makes its negative influence felt on the nominal money stock is the convertibility of money. This holds good today, in the same way that was emphasized by Ricardo at the time of the Bulletin Report.

(5) Even though I did not use the term "endogeneity", it was one of the issues that I endeavored to illustrate at length in my Introduzione (op. cit.).

REPLY (*)

Professor Amedeo Gambino in his comment "On the Endogeneity of the Money Stock" raises several questions about the sharp distinction that I draw between the nominal money stock and the real money stock in "Some Issues in Monetary Economics" (1). In this article, I treat the nominal money stock as an exogenous variable—in the sense that it may serve as a target variable and policy instrument—and contrast it with the real money stock which I treat as an endogenous variable with an equilibrium solution determined by the interaction of the financial and real sectors and outside the direct control of the monetary authorities. Professor Gambino argues in his note for the following points: (1) that portfolio decisions by the public do affect the nominal money stock and it should also be viewed as an endogenous variable; (2) that I limit the public's impact on the nominal money stock to a marginal influence partly because I stress only the factors affecting the composition of liquid assets and ignore those that determine the size of the public's portfolio; (3) that the sharp distinction that I draw between the nominal money stock and the real value of the stock tends to disappear if we take account of the preferences affecting both the size and the composition of liquid assets holdings. But while Professor Gambino argues for treating the nominal money stock as an endogenous variable, he does not deny that the monetary authorities "control" or "govern" the amount outstanding.

I can attempt to answer the points raised in Professor Gambino's comment by assuming that he is questioning primarily my classification of the nominal money stock as an exogenous variable. My criterion is that it can be controlled by the authorities and serve as a target variable, and this classification does de-emphasize the influence of portfolio decisions by the public. Professor Gambino, on the other hand, wishes to highlight the role of the public and treat the nominal money stock as an endogenous variable, while conceding that it may be controlled by the central bank. But the

(*) Financial support from the National Science Foundation and from Wayne State University is gratefully acknowledged. I would also like to thank my colleague, Professor Wilbur Thompson for helpful comments.