On the Endogeneity of the Money Stock

A COMMENT (*)

1. This comment of mine relates to the "key question" put by Prof. Fand (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, Fand emphasizes (p. 226) 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 put by Fand (as "basic issues") solely in relation to the nominal money stock.

Fand 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

(*) On an article "Some Issues in Monetary Economics", by D. I. Fand, this *Review*, September 1969, pp. 215-248.

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 Fand 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 Fand 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.

Fand'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* (Boringhieri, 1969).

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.

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(2) It suffices to mention that the public's negative influence on the real value of money makes itself felt through the " rejection " of money in the goods market (price level) or in the financial market (interest rates 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 make their 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 Bullion Report.

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