

Is the Distinction Between Inside Money and Outside Money Fruitful?

1. - The distinction between inside money and outside money¹ has won an honorable place in monetary theory from the time J. Gurley and E. Shaw² made of it the basis of the more typical features of their work,³ using it, above all, to establish (as an "important result") (p. 83) the point that with its introduction "monetary policy ceases to be trivial or neutral".

According to neo-classical theory money is neutral and monetary policy in the long run trivial, provided there is no rigidity in prices or incomes, no "money illusion" and that the elasticity of price expectation is not equal to unit. Conversely, according to G-S, the adoption of the distinction between inside and outside money would show that even if all of the above conditions were realized, money would not be neutral if, as is true in real life, inside and outside money coexist. They maintain that monetary policy would be neutral only if, and insofar as, there were proportional changes in the quantity of the two types of money, which implies, to quote Graziani,⁴ a particular limitation on the "neutrality of money theorem".⁵ In other words, in their "hunt for the conditions in

¹ Inside money is here taken to mean the money created by the banking system against an "internal" debt, that is, against a debt of the public (households and firms) who hold the money in question as a credit against the banking system. Outside money is therefore understood as the money created by the banking system against an "external" debt towards the public, that is, against Treasury or foreign indebtedness (the acquisition of reserves in gold being placed on the same footing as foreign indebtedness); or else is taken to mean fiat money, that is, non-convertible money issued by the State.

² From this point onwards they will be shown by the letters G-S.

³ *Money in a Theory of Finance*, Washington, 1960.

⁴ In *Teoria economica* (Edizioni Scientifiche Italiane), 1967, p. 409.

⁵ According to GRAZIANI "a change in the quantity of money existing in the system, providing it leaves unaltered the distribution of income between individuals, causes a proportional change of all monetary prices and leaves unchanged relative prices and the quantities produced" (GRAZIANI, *op. cit.*, p. 402).

which money is neutral",⁶ G-S appear to have added a new condition to those discovered by the neo-classical school. To a much greater extent than in other cases, this condition is unattainable in reality, as it can be ruled out that the changes in the quantities of the two types of money are proportional.

And this is exactly the "important result" of the distinction between inside and outside money. A *coup de grâce* would thus be given to the neutrality of money theorem. The fruitfulness of the distinction lies in the solution — or in making a decisive contribution to the solution — of the ever-recurring debate on the importance of monetary policy.

2. - However, the demonstration offered by G-S of the point that money could be neutral only if the changes in the two types of money singled out by them were proportional is based on an assumption which is anything but unobjectionable. As a result, the series of arithmetical illustrations by means of which the demonstration is developed (starting from page 75) are not convincing.⁷

The assumption in question has been explicitly formulated by G-S on page 74: "Although the private economy issues bonds, and so can... maintain some one real stock of bonds, it has no control over nominal money. Hence it cannot... maintain the desired real stock of money". Accordingly, in the model elaborated by G-S, only the banking system (symbolized by them in the Banking Bureau), complying with the instructions issued by the "monetary authorities" (symbolized by them in the "Policy Bureau"), can take the initiative to change the quantities of the two types of money, both by purchasing goods and services from the public — and thus creating outside money — and by purchasing securities (bonds) held by the public through open-market operations — and thus leading to the creation of inside money. These operations would thus result in opposite changes in the availability of money and of bonds in the public's portfolio. They would also lead to a more or less sizeable divergency between the portfolio composition gradually

⁶ SCHUMPETER, on page 1088 of his *History of Economic Analysis*, in speaking of "a hunt for the conditions in which money is neutral", adds that this research "led to the discovery that no such conditions can be formulated, that is, that there is no such thing as neutral money".

⁷ Those examples are, indeed, not sufficiently lucid. A clear re-elaboration of them, in exhaustive terms, has been presented by GRAZIANI, on pages 409-11 of *Teoria economica* (*ibid.*).

resulting from open-market operations and that "desired" by the public, according to individual preferences and the diverse market conditions/influencing such preferences.

Should inside money be created by open-market operations the aforementioned divergency would appear, according to G-S (p. 74), in the composition of the public's portfolio (that is, in the "portfolio mix"), compared with the pre-existing one (which can be assumed to be the "desired" composition), i.e. a virtual scarcity of securities and by contrast a virtual surplus of money. Then, until the "desired" composition is restored, there would be a stimulus to apply the surplus money to the purchase of securities, which would drive up the prices of securities causing a corresponding fall in the rate of interest. It is exactly in such changes in the rate of interest, as a real element of the economic system, that the non-neutrality of money becomes evident: always providing — to repeat — that the "desired" composition is not then reestablished, as could happen through an increased issue of securities or new creation of outside money.

3. - And it is in supplying proof of this that the previously mentioned series of arithmetical examples are introduced.

Actually, these examples provide tangible proof that when only outside or only inside money exists and money of either type is issued (leading to a corresponding increase in the price level), the "desired" composition would be restored by a reduction of the real value of existing bonds and consequent issue of new ones. Further, it is made clear by means of examples that when there exists a mix of outside money, there is only one possibility of restoring the "desired" composition, i.e. when the changes of the two types of money are proportional. It is obvious, however, that this conclusion is valid only insofar as the assumption — on which the entire series of examples is based — is also valid, which, as already stated, is far from being beyond question.

The basic assumption is that the creation of money is exclusively an exogenous process, carried out by banks, at their discretion and in accordance with the instructions of the "monetary authorities". But in this way it is ignored that both inside and outside money can also be created on the initiative of the public.⁸ This is particularly true

⁸ I have dealt at length with this thesis in previous writings, the last occasion being in my *Introduzione alla economia creditizia* (Boringhieri, 1969).

when people like to keep their savings with banks in a monetary form. In this case, the assumption that money is exclusively created by banks and the inference that the public have no way of influencing the volume and, consequently, the real value of the money stock, amount to a distortion of reality. That is to say, one ends by ignoring the endogeneity of the money stock.⁹

4. - Another distortion of reality by the G-S model is the assumption that the creation of inside money by banks is only effected by means of open-market operations. Thus, it is overlooked that — especially in countries such as Italy — open market operations are not the only and not even the principal way through which banks create inside money. Direct lending to the public, through the classical operations of discounts, advances, loans and so on, is a far more important way of creating money still today. Certainly, new debt instruments are thus created by the public, but they are created without releasing any bonds from their portfolios. Hence, there are no offsetting changes in money and bonds as previously envisaged.

There would thus be no "important result" such as G-S attribute to the distinction between outside money and inside money, while the distinction could no longer be considered fruitful with regard to neutrality of money and the importance of monetary policy. There appears to be no justification, in fact, for maintaining that the distinction implies a new condition for the achievement of neutrality, and least of all should it be assumed that it destroys the usefulness of the "neutrality of money theorem". All things considered, the theorem can in fact still be quite valid, provided neutrality is seen in a long run perspective and there is full compliance with the conditions — explicit or implicit — established by the classical and neo-classical schools. Then, and only then can one exclude that changes in the quantity of money can have a "lasting" effect on the real economic variables.¹⁰

AMEDEO GAMBINO

Rome

⁹ On this subject, see my article "On the Endogeneity of the Money Stock" in the September 1970 issue of this Review.

¹⁰ This conclusion has already been outlined in my paper "Sulla neutralità della moneta creditizia", in the June 1967 issue of *Moneta e Credito* (published by Banca Nazionale del Lavoro).