

Two Types of Monetary Policy

This article¹ distinguishes two approaches to monetary policy, here called respectively the “demand management” approach; and the “monetary aggregates” approach – or monetary targetry. These two approaches are described more fully in section 1. The contrast between them (section 2) helps to clarify the nature of monetary targetry. The banking system provides one among other routes along which savings are channelled to investors; and monetary targetry – as distinct from demand management – consists essentially (it is here argued) of control of the degree of such banking mediation. That involves manipulation of the degree to which the non-bank public distributes its holdings and financial assets as between bank debt and other assets, and its indebtedness as between borrowings from banks and other debt.

There is now widespread disillusionment with the results achieved by attempts at monetary targetry. In seeking reasons for this failure, the crucial question, though not that usually asked, is why this diversion of financial flows proved difficult or impossible to achieve (section 3). The article mainly reflects the experience of the United Kingdom, which was previously among the strongest adherents of targetry, but which has now practically abandoned targetting. This disillusionment has its counterpart in the experience of other countries; and the article concludes with a brief comparison with the situation in Italy (section 4).

¹ The article is based on a lecture given in October 1989 at the Bank of Italy on the future of monetary policy, which here appears in much modified form. Earlier antecedents are the book by J.C.R. DOW and IAIN SAVILLE (1988), *A Critique of Monetary Policy*; DAVID LAIDLER's review article in the *Journal of Economic Literature*, September 1989; and the new preface to the paperback edition of the book (1990) which expands the original argument in response to subsequent criticism.

1. Two types of monetary policy defined

During the first three decades after World War II British governments used both fiscal and monetary policy to control the rate of growth of aggregate demand. By the 1970s demand management was becoming discredited. The new emphasis of monetary policy in 1971 (which at first did not involve any disavowal of demand management) put more weight than before on controlling the money stock and on interest rates as a means of controlling money. A monetary target was first announced in 1976. The new Conservative government in 1979 then upgraded monetary targets, seeing them as an alternative to, and superior to, demand management.

In what I here call the *demand management* approach, monetary policy had been seen as one among other instruments of demand management. The objects of policy included the control of inflation; and the strategy was to control demand with that object among others. Controlling the rate of demand is likely to have an effect on the rate of growth of the monetary aggregates. But that effect is likely to be quite limited. Moreover it was a side effect only and not the object of the strategy; nor was it seen as essential to the aim of controlling inflation.

In the *monetary aggregates* approach, by contrast, monetary policy is regarded as consisting of controlling the rate of growth of the monetary aggregates. That is seen (on standard monetarist grounds) as the necessary and sufficient means to the control of inflation. The strategy is to control the growth of the aggregates by manipulating short-term interest rates. The variation of interest rates is likely to have an effect on total demand and real activity. But here it is this effect on real activity that is likely to be minor. This effect, too, is not the object of the policy; nor is the effect seen as essential to controlling the growth of the aggregates.

In many respects, then, the policy of managing the monetary aggregates appears as the *opposite* of the kind of monetary policy associated with demand management.

The two sorts of policy are not only distinct in concept, but in practice were equally clearly separate. For instance John Fforde, when discussing the new policy of 1971 (of which he was a chief architect), has explained that manipulation of interest rates was thought to offer a means of controlling the rate of monetary growth

without having much effect on output.² That is, a rise of interest rates was thought to bring a fall in money holding along a demand-for-money function *with income being constant*. Nor, as he implies, would manipulation of output growth have been thought a politically feasible way of controlling monetary growth, since it would have caused too much loss of output and employment. It follows that control of the aggregates, since it was not to be obtained by manipulating output and income, had to be sought by redirecting financial flows (see further section 2).

Background assumptions

The transition to monetary targetry went with the increased influence of ideas coming from monetary theory. Economic textbooks usually adopt the traditional assumptions that the monetary authorities can control the monetary base; that monetary base controls the stock of money; and that the stock of money controls the price level. Much recent macro theory consists of an increasingly complex superstructure built on these simple propositions, which usually assumes also that the price structure is highly flexible.

These assumptions are part of a very long-standing tradition, which has never been properly reassessed. How far it is based on an adequate micro theory, and in particular on a satisfactory account of the behaviour of banks and more especially central banks, has passed without rigorous re-examination. This is the more remarkable in that no central bank operates as if these propositions were true. Though central banks often pay lip-service to control of the money base, and all are aware that what they do affects banks' reserves, none claim complete control of money, still less of the price level; and operators in central banks are usually well aware that they are small operators in large financial markets, and that their power is limited.

The adoption of monetary targets by many monetary authorities in the decade since the mid-1970s can be seen as a half-way attempt

² "Experience also suggested an adequately reliable relationship between M3 and nominal interest rates of a form implying that sufficient control of the former could be obtained without movements in interest rates so large as to set up intolerable economic side effects" (J.S. FFORDE, 1982, reprinted in *Bank of England Quarterly Bulletin*, June 1983).

to unite monetary theory and central-bank practice. Central banks declared they would control money in such and such a way, with a view to influencing the price level. But they did not seek to do so by monetary base control, in the terms the monetary theorist sees it. They aimed not to control prices, but to the more modest aim of controlling only the rate at which prices rose; and even then they aimed to bring it under control only gradually. This was *de facto* an admission that prices were not highly flexible, but rather considerably inflexible. This alliance between textbook theory and central bank operation was thus (inevitably) imperfect; and that has served as a potent source of confusion.

Emphasis on base control has probably fostered a tendency to think of control of the monetary aggregates as being made in isolation, without involving other parts of the financial system.³ In fact any change must be systematic. Since money is in practice mostly bank deposits, monetary change involves change in the banks' deposits, and thus also in their assets; and must thus involve compensatory changes in the public's non-bank debts and non-bank assets.

2. Monetary targetry necessarily involves the redirection of financial flows

I will here set out the argument that control of the rate of growth of the aggregates, if not to be obtained by varying the rate of growth of output or real income, must involve reintermediation or disintermediation, *i.e.* inducing financial flows to pass through banks, or the reverse. Since this proposition may appear puzzling, it may be useful to put the argument formally.

It has already been made clear that demand management and monetary targetry cannot in practice be completely separated. Thus a rise in interest rates intended to affect the economy by controlling the growth of money will inevitably also to some degree affect demand,

³ MILTON FRIEDMAN has likened base control aiming to control the money stock to a rationing system for steel which would for instance have a direct one-for-one effect on car production: see quotation in *A Critique of Monetary Policy*, p. 142.

and hence output, directly; and if the rise in interest rates is large, the direct effect on output may be appreciable. In order to make the argument clear, however, let us suppose that the authorities succeed in controlling money, as they intend, without affecting output, and that output is not significantly altered.

First define the financial system. There is a flow of finance between final savers and final borrowers (*i.e.* lenders or borrowers other than financial intermediaries). Define the net stock of financial assets to comprise the value of assets acquired by final savers over time that represent claims, directly or indirectly, on final borrowers. Indirect claims here means claims owned by final savers on a financial intermediary matched by claims by the intermediary on final borrowers. The duplication involved in intermediation is excluded from the net stock of financial assets, F (*i.e.* bank deposits are included but not the debts to banks of borrowers from them, since these are the counterpart of bank deposits). \dot{F} is the change in the net stock.

Since part of saving is not done by those who invest, and part of investment is not done by those who save, indebtedness as between final savers and final investors (*i.e.* the net stock of financial assets) will increase by a fraction of total investment or saving.

$$\dot{F} = aI \equiv aS \quad (1)$$

where I = the current value of investment \equiv saving, S ; a = a fraction which may vary with long-period or cyclical influences but which we may here assume constant.

Assume that bank deposits are held only by final savers and bank loans are given only to final borrowers. Financial assets consist then of bank deposits (B) which equal bank loans, plus direct claims on final borrowers (NB , signifying non-bank loans).

$$B + NB = F \quad (2)$$

or
$$\dot{B} = b\dot{F} \quad (2')$$

where b is a fraction which may vary for reasons we can ignore, but is assumed also to be capable of being influenced by the authorities. Bank deposits may be taken to represent broad money.

The value of investment may be supposed to be a function of the change in real output (\dot{Y}) and the price level (\dot{P}). For instance the function might be of the form

$$I \equiv S = c + d\dot{Y} + e\dot{P} \quad (3)$$

where c , d , and e are constants. Assume that prices are relatively inflexible so that the price change (\dot{P}) is not significantly affected by a small change in the rate of change of real output (\dot{Y}).

The argument then proceeds as follows. One way in which the authorities might seek to alter the money stock (B) would be for them to alter national output (Y), for instance by changing interest rates. This course we rule out by assumption: the authorities, we assume, are not engaged in demand management, so that any change in interest rates is too small to alter output significantly. Since prices are inflexible and since output and the pressure of demand are not altered significantly by interest rates, it can also be assumed that prices are not greatly altered. It also follows (from equation 3) that investment and saving, (from equation 1) that the rate of change of financial assets, and (from equation 2') that the rate of change of the money stock (\dot{B}), are all little changed by the (small) change in output.

Hence, if the authorities are to obtain a significant effect on the stock of broad money it must be by altering b in equation (2'), *i.e.* by altering the composition of the financial assets held by the non-bank public as between bank deposits and other assets.

Monetary targets may also be applied to narrow money (say $M1$). The nearest substitute for narrow money is probably the rest of broad money, so that controlling narrow money requires the relocation of holdings of narrow money (B') into (or out of) other money (B''). Since total bank deposits are unaffected ($B' + B'' \equiv B$) there will be no redirection required for bank lending (nor implications for non-money assets or for the creation of non-bank debt).

The argument about broad money can be put in more general terms. Take a demand-for-money diagram in which the stock of broad money is shown on one axis and the interest rate on the other, with each level of income being represented by a separate curve. The operation of monetary policy in seeking to regulate the money stock is to be conceived as action "along" a curve relating the stock of broad money to the level of interest rates. It is hoped that income will not be affected (or not much): hence a shift induced by interest-rate variation has alone to do the job.

The alternative way of operating would be to aim to affect income and output. That would also affect money growth and inflation; but inflation would be affected only because output was affected, and the parallel effect on money would be a side issue. This method of monetary policy has therefore to be seen as demand management.

It may, then, now be clear why a policy aimed at controlling broad monetary growth without resorting to demand management has to work by redirecting financial flows. A slowdown of monetary growth means that less of the growth of total financial assets must take the form of broad money, and more must consist of non-money. The lending public has to be induced to hold fewer bank deposits than otherwise, and more other sorts of assets. On the reverse side of the balance sheet borrowers have to supply more non-monetary assets, by borrowing more through non-bank channels, so that the scale of bank intermediation falls. In a relative sense, and in comparison with what would otherwise have been, it is a process of disintermediation.

Monetary policy pursuing broad money targets is typically intended to be implemented by raising or lowering interest rates. The essential question to be asked is then whether or not manipulation of interest rates is capable of bringing about this sort of reintermediation/disintermediation out of money. Many people, it seems, have not seen that this is the crucial question about broad money targetry.⁴ Implementation of narrow money targets involves much less redirection of financial flows, and will be discussed in the next section.

3. Possible reasons for the failure of monetary targetry

It has become fashionable to argue that the process of financial innovation has eroded the distinctions between different sorts of financial assets, and thus made money more difficult to control. Recent innovations have indeed probably made money and non-money assets closer substitutes. But by making it easier to make the public move from one to another, that ought, one would have thought, to have made monetary control not more difficult but easier.⁵

⁴ Though critical of *A Critique of Monetary Policy*, LAIDLER (*Journal of Economic Literature*, September 1989) states the question in this way; COBHAM (*Economic Journal*, March 1989), and GOODHART (*Economica*, August 1989) do not.

⁵ There appears to be resistance to accepting explanations of a sort that would have operated in the 1970s as well as the 1980s, and would thus not merely excuse the recent abandonment of monetary targets, but discredit the whole enterprise of targets since their inception.

My own preferred line of explanation starts from the observed fact that central banks, despite the relatively small scale of their financial operations, exert widespread direct influence on the level of interest rates within their own currency area.

The argument is⁶ that the manner of the central bank's influence over interest rates – similar in many ways to its influence over exchange rates – springs from the nature of equilibrium in asset markets. The characteristic of an asset market is that the stock of assets (if it can be added to at all) can be added to only slowly, and (if it gets depleted at all) can be depleted only slowly. If the stock is quite unchangeable, prices are subject to no constraint at all: like the price of Picassos, they are what they are expected to be, and can be anywhere. If the stock can be even slowly supplemented or depleted, a high price will increase the stock, and *vice versa*: in the long term there is thus an equilibrium price. The equilibrium can be foreseen, so that present interest rates are tied to expected interest rates. Since expectations about future interest rates are very uncertain, expectations about them are weakly held, and subject to fashion and follow-my-leader. A strong lead from the central bank can therefore (within certain limits) exercise a dominating influence. But because the central bank affects interest rates by affecting expectations, it exerts an influence over all interest rates in general, and has no way of affecting *relative* interest rates in any systematic way.

This means that when central banks raise interest rates – which is how they typically seek to control the stock of money – that does nothing to make deposits relatively less attractive to hold, or borrowing from banks more expensive relative to other sources of finance. Broad money therefore cannot be controlled this way. Narrow money can, but only within the range within which the central bank can impose its will on market interest rates. This line of reasoning also defines the limitations of monetary base control (which must also operate by affecting the banks' lending and borrowing rates); and helps to explain why central banks have never adopted it.

This seems a more plausible way to explain why monetary targets were not achieved than the alleged effects of financial innovation.

⁶ Dow (September 1988) "Uncertainty and the Financial Process and its Consequences for the Power of the Central Bank", in this *Review*; and Dow and SAVILLE (1988), chapters 3 and 4.

4. Some comparisons between the United Kingdom and Italy

Both Italy and the United Kingdom had ceilings on bank lending, which the UK abandoned in 1980 and Italy more recently – in each case I think for similar reasons. Both countries then moved towards a policy of seeking to control the growth of money; both adopted a broad definition of money as the target variable.

One factor which shaped the attitude of the Bank of Italy is what one might call the weakly organised nature of the Italian state. There is some trace of that sort of preoccupation in British attitudes, as perhaps with all central banks. One reason for example why Britain chose a broad monetary target was because it appeared to be a way of exerting restraint on government borrowing from the banks, and hence government borrowing in total. I think the reasoning was fallacious,⁷ and the restraint ineffective; the same, I suspect, may be said of Italy.

In this article I have sought to define two distinct possible approaches to monetary policy – one in which monetary policy aims to influence demand, the other to influence the monetary aggregates. There are two corresponding ways of regarding a monetary target. Thus a target can serve, first, merely as a guide in making decisions about interest rates, seen as a tool of demand management. Such a guide may be thought useful because, in conditions of inflation, the "real" level of interest rates, and hence the "thrust" of policy, is difficult to judge. That is the more empirical, less ambitious approach. There is, second, a more monetarist view in which the rate of monetary growth is directly important as the instrument for controlling inflation. That is the more ambitious and more ideological approach.

Inside a central bank, as in any other institution, there is likely to be a coalition of different philosophies; and no doubt the emphasis is difficult to characterise in either country. I used to imagine that English and Italian people, while different in other ways, both possessed an awareness of human fallibility and the limited nature of human capabilities. I suspect, however, that on this matter, Italy has

⁷ See what is said of the so-called monetary counterparts identity in *A Critique of Monetary Policy*, p. 112.

had the less ideological approach to monetary policy in recent years, and has placed less high hopes on it. If that is so, I would say the Italians have been the wiser, and have accordingly less need to reassess the past.

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