

The Relationship between Fiscal and Monetary Policy *

The relationship between fiscal and monetary policy is one of great theoretical complexity, acute controversy and major practical importance. Within the limits of a short lecture it is not possible to do more than indicate some of the issues involved and offer tentative judgements on them without penetrating the world of theory very deeply and avoiding altogether the lush undergrowth of econometrics that now surrounds it. It may be more helpful, on an occasion of this kind, to start with an account of the way thinking has developed on the matter before turning to some of the more obvious theoretical considerations governing the mix of fiscal and monetary policy and the limitations to which each of them is subject.

The idea of using fiscal and monetary policy to procure greater stability in output and employment — indeed the very idea of having a *fiscal policy* or a *monetary policy* — is a comparatively recent one. Before the first World War it was taken for granted that a prudent government would try to maintain a balanced budget in good times and had, although some departure from the rules of financial orthodoxy might be inevitable in time of war.

Similarly, in the days of the gold standard, monetary arrangements were designed to maintain convertibility of the currency into gold at a fixed price, an aim that paid no regard to the possibility that either inflation or unemployment might result.

This possibility, when economic fluctuations first began to be studied, was associated with the behaviour of investment which was seen as highly unstable and liable, therefore, to change abruptly in relation to the thriftiness of the public and their willingness to make the necessary finance available. The instability of investment might communicate itself to the rest of the economy: there could be no guarantee that

* Keynes Lecture to the British Academy, 1981.

the capital market would function in such a way as to preserve an unchanged pressure of demand on available resources. The rate of interest, seen hitherto as fulfilling this function, might not be propelled, quickly and automatically, to the level at which balance was restored between the flow of savings and the flow of capital expenditure and in the process inflationary pressure on the one hand, or a deficiency of demand on the other, might develop and continue. Capital markets, to use the modern jargon, might not "clear" at an unchanged level of activity.

This failure of interest rates to adjust was explained initially in terms of credit creation. Bank credit might add to the flow of loanable funds when capital expenditure was expanding strongly and this would hold down the market rate of interest below its equilibrium or "natural" rate. Conversely, a drop in the expected return from new capital investment might not be accompanied by a fall in market rates of interest on the scale necessary to offset the change in expectations.

At that stage in the development of thinking, two practical conclusions were drawn. One was that monetary policy was central to the problem of economic stability: there could be either inflation, if the banks created more credit than was needed to keep investment and savings in balance, or industrial depression if there was an insufficiency of bank credit, the excess or shortage of bank credit corresponding to a gap between the market rate of interest and the more volatile "natural" rate at which investment would be held within the limits of savings. The second practical conclusion was that if the source of instability lay primarily in the behaviour of investment, the state might secure greater stability by supplementing private investment in bad times through public works of various kinds. In due course this second remedy was elaborated as a scheme for advancing or retarding public investment so as to counterbalance fluctuations in private investment in the opposite direction.

These two lines of thought — one essentially monetary, the other essentially fiscal — were not necessarily consistent with one another. The rates of interest directly affected by banking policy were short-term rates which might have little or no immediate effect on long-term rates. They might, as Hawtrey argued, be of crucial importance for investment in stocks, and stock-building might be the most volatile element in investment. But if the more enduring difficulty lay in preserving stability in fixed investment, how much reliance could be put on banking policy? On the other hand, could the role of the banks be left entirely aside, as it

appeared to be by those who put their faith in public works? Was it right to assume that if public investment took the place of private investment, the rate of interest would be left unaffected?

When Keynes came to consider the matter, he took a more radical line. The fundamental question to be answered was: what determined the level of output? It was not enough to consider fluctuations if these were assumed to be around a trend that represented a sustainable optimum identified with full employment or economic potential. It was necessary also to consider the possibility of persistent underutilisation of available resources because of a deficiency of demand. That deficiency would only persist if there was some defect in the system preventing the kind of response in price that would extinguish the deficiency. In Keynes's view there were two such defects, one relating to the rate of interest and one relating to the behaviour of wages. Neither the capital market nor the labour market "cleared" through price adjustments; and this failure to "clear" was not just periodic, so that essentially intermittent departures from full employment resulted, but might be persistent and give rise to a chronic underutilisation of resources. If savers became more thrifty there was no guarantee that their access of thrift would be translated via the capital market into additional investment: on the contrary, it was entirely possible that investment might not respond, or respond perversely, and that greater thrift would serve only to impoverish the community by depressing the level of income as the only available means of keeping savings in check. Equally, if unemployed wage-earners were willing to accept lower pay, and money wages were reduced in times of depression, there was no guarantee that this would add appreciably to the number of jobs on offer since the reduction in wages could be expected to lead to a corresponding reduction in prices and this might do little or nothing to generate additional demand. Neither the real rate of interest nor the real rate of wages was determined in the way assumed in classical economic theory; and the money rate of interest and the money rate of wages did not adjust so as to allow an excess of thrift or of labour to be absorbed in the same way as a reduction in price allows an excess of some staple commodity to be absorbed in an auction market.

Keynes's ideas formed the basis of demand management in the post-war years. If a deficiency of demand may be the outcome of leaving things to market forces, policies are necessary in order to regulate demand. It also came to be accepted that there need be no presumption that these policies should bear exclusively on the level of investment

rather than on other elements in aggregate demand such as consumer spending. Given the much greater weight that consumer spending has in GNP, it was obviously easier, in trying to effect a given change in total demand, to operate on consumer spending than to make an adjustment of equal magnitude in investment. The speed with which tax changes affect spending compared with the long lead times characteristic of fixed investment pointed in the same direction.

It was also a corollary of Keynesian theory that the horizon of demand management should be short-term. The preservation and prolongation of short-term stability was a natural approach to long-term stability unless there was some fundamental incompatibility between the two. Any conflict between them implied some form of instability at intervals, i.e. recurrent *departures* from a steady rate of growth. To have no concern with the size of these departures was to regard short-term stability as a matter of little importance and to express an unwarranted faith in the self-regulating character of the economic system. Not that short-term demand management and economic stability became the be-all and end-all of economic policy. The long-run balance between the different components of aggregate demand had also to be considered. There was in addition, and always has been, something that we can call supply management which looks to the longer term, may conflict with demand management and is usually a good deal more important.

The Keynesian approach to demand management adopted in the United Kingdom after the war was couched almost exclusively in terms of budgetary action. This emphasis derived largely from pre-war experience when it appeared that, once interest rates had been brought down to a low level and the banks had ample funds, not much more could be hoped for from monetary policy and any fresh stimulus would have to come via the budget. In such circumstances, with Bank Rate held constant at 2 per cent for nearly twenty years, monetary policy was largely passive. In war-time it had been a precept of policy to refrain from raising interest rates and so adding to the tax burden. Then, and in earlier years, Keynes lent his support to efforts to keep down the long-term rate on the grounds that once investors were encouraged to think higher rates appropriate it would not be easy to induce them to return to a régime of cheap money and yet just such a régime might be required by a glut of capital.

When the war was over, fears of a higher debt burden and a possible slump again combined to induce the government to avoid the use of monetary weapons as a means of restricting demand. For this

purpose it turned instead to large budget surpluses supported by rationing and other administrative controls. This preference for fiscal measures may have rested also on antipathy for the rentier and doubts as to the efficacy of high interest rates. There was an appearance of greater certainty about tax changes; Ministers could be offered a rough assessment of the magnitude of the impact of these changes on demand and output which no one would have dared to offer in respect of changes in monetary policy. When the Treasury first engaged in economic forecasting in war-time it did so in terms of an inflationary gap to be closed by budgetary, not monetary measures. Money was left out of the picture, just as it had been in pre-war analyses of government-engineered expansions in demand and output like Lord Kahn's celebrated article in 1931 on the multiplier. In the increasingly sophisticated forecasting of post-war years this neglect of the monetary aspects of the forecast continued.

None the less, in the successive packages of measures introduced to deal with the long series of crises in the 1950's and 1960's it was usual to include a rise in Bank Rate and/or fresh guidance to the banks intended to curb the creation of credit in particular directions. The imposition of hire purchase restrictions, which was an equally regular component of the packages and often the most important, could also be regarded as a monetary measure designed to limit consumer credit. It would be going much too far to imply, therefore, that no regard was paid to monetary conditions; on the contrary, some care was taken to make monetary and fiscal policy pull in the same direction. At no time, however, was there any government action aimed specifically at limiting the money supply; indeed, as Harry Johnson pointed out in 1959, there were no adequate figures of the money supply. The government was content to vary short term interest rates in sympathy with its fiscal stance. At the longer end of the market it took a fairly passive line, seeking to preserve stability in the market for government debt and make what sales of gilt-edged it could at prevailing interest rates.¹

In those days it was possible to concentrate more or less exclusively on the "real" economy, i.e. on income flows, without bothering too much about the financial aftermath of a budget surplus or deficit. The main aim of policy was to get the level of demand right, avoiding too much pressure or too little, and this aim could be fulfilled in different

¹ See M.J. ARTIS, "Monetary Policy" in *British Economic Policy 1960-74* (C.U.P. for National Institute of Economic and Social Research, Cambridge 1978), espec. pp. 229-33.

ways, depending on the use that was made of alternative instruments of policy. If there was pressure on the balance of payments monetary weapons would be more likely to be brought into use. If importance was attached to a higher level of investment, monetary policy might be eased and fiscal policy tightened so as to maintain a constant pressure of demand. The choice of weapons was also affected by the urgency of the situation and the need for quick results. The monetary authorities were in a position to influence the situation more or less continuously while fiscal action was inevitably intermittent. But in a crisis both monetary and fiscal weapons were almost certain to be brought into use to operate in the same direction in mutual support.²

The subordination of monetary to fiscal policy came under challenge in the 1960's from a school of thought which inverted the relationship between the two, giving clear precedence to monetary policy. The need to control inflation was put in the forefront and demand management dismissed as superfluous if not actually damaging. Control of inflation could be secured by limiting the money supply and in no other way. Monetary policy, if aimed at the level of output rather than the level of prices, would be mis-applied and in the long run ineffective. Fiscal policy should be such as to comply with the need to keep the money supply under firm control.

These are propositions that have much in common with pre-Keynesian thinking. The Treasury in the 1920's would have had no difficulty in accepting all of them. In those days unemployment was explained in terms that left out any reference to the level of effective demand and in any event effective demand was thought to be beyond the power of government to influence. Government borrowing to finance public investment was officially regarded as displacing or "crowding out" an equal amount of private investment. The quantity theory of money went without question, usually in a form that linked prices and the money supply with only a passing reference to output. It was precisely these ideas that Keynes sought to overturn: not only sought to overturn but *did* overturn.

The resurrection of these propositions does not mean that they are generally accepted. On the contrary, most economists would dismiss them on much the same grounds as Keynes did: that the capital market and the labour market do not clear in the manner of an auction market.

² These matters are discussed in detail in "Demand Management: Monetary and Fiscal Policy" which forms Chapter 6 of my *Essays in Economic Management* (Allen and Unwin, 1971).

They would suspect that, whatever may be true in academic circles, the influence on governments of such ideas rests less on their intellectual merits than on the way they chime with the temper of the times: the disenchantment with government intervention, the recognition that intervention may not achieve its professed purpose, and the greater disposition to rely on market forces.

We have heard successive Prime Ministers denounce the idea that increased public expenditure can soften the impact on employment of a trade depression. We are told almost every day that an increase in the money supply would serve only to revive inflation and would damage the long-term prospects for increased employment. We have seen an abandonment of direct intervention in the foreign exchange market in order to hold or vary the exchange rate and, what is more surprising, an abandonment of the idea that changes in real exchange rates can be accomplished by intervention. This is a retreat from demand management on the grand scale.

Of course, it is a retreat in principle only and what governments do in practice is very different. It has not resulted in balanced budgets or a steady growth in the money supply or a stable and predictable rate of exchange. The attempt to supersede discretionary government action on the level of effective demand by stated rules and targets governing the operations of the public authorities may have been intended to provide the private sector with a firm basis on which to plan ahead; but if so it has not succeeded.

The very fact that governments have adopted monetary targets and pursued fiscal policies that pay no regard to the current state of employment makes it evident that something has gone wrong with demand management. What is it that has gone wrong and how does it affect the choice of policy, if there is one, between fiscal and monetary instruments?

What has gone wrong is inflation and expectations of inflation, short-circuiting expansionary measures aimed at increasing employment and output on the one hand and out-lasting contractionary measures aimed at reducing inflation on the other. The system of ideas underlying demand management originated in a world of underemployed economies in which the danger of inflation could be almost entirely ignored and higher prices would have been positively welcomed. It was a world in which a rapid increase in the money supply excited no alarm: as, for example, in the four months preceding the conversion of 5 per cent War Loan in 1932 when clearing bank deposits expanded by over 6 per cent

(i.e. at over 18 per cent per annum) while money GNP remained steady or actually fell. With over two million workers unemployed an expansion in demand was unlikely to raise wages very much and such rise as did occur was quite consistent with a downward trend in wage costs. Import prices, too, were remarkably stable in spite of the depreciation of the pound; and the terms of trade, which have so often played a central part in the inflationary process, had swung in Britain's favour to an unparalleled extent — over 25 per cent — between 1929 and 1933.

Yet even in pre-war years it was possible to foresee some of the limitations of demand management. First, there was the difficulty that neither fiscal nor monetary policy was very effective in its impact on the level of costs. Money wages — the largest element in costs — were not sensitive to small changes in demand pressure — as later experience showed — except upwards and in the vicinity of full employment. Other elements in cost were at the mercy of changes in world markets and in the rate of exchange. It followed that demand management could not by itself protect the economy from the danger of inflation.

A second limitation that became apparent in the years before the war was that the available instruments of policy are insufficiently selective. It is not enough to aim at a general and widespread increase in the pressure of demand when the increased pressure is felt unevenly and resources are not fluid. There may be bottlenecks within the economy (for example, in the building industry) or at the level of the world economy (for example, in the markets in primary commodities). Such bottlenecks can generate price increases at strategic points in the economy and if the increases spread to adjoining markets they can rapidly breed a general inflation. Where the bottleneck is of such importance as energy supplies it is capable of thwarting the response in output to an expansion in demand and such an expansion may then produce nothing but inflation.

A rather similar result may follow an over-rapid expansion of demand which gives insufficient time for supply to respond. Pre-war literature dwelt on the case of a boom in private fixed investment that enlarged the flow of expenditure and forced up the price of consumer goods until the new equipment came into use or the financial strain broke the boom. But the danger of inflation from setting out on too steep a path of expansion is not confined to cases of this kind nor is it necessarily confined to situations in which there is little slack in the economy.

These limitations all have to do with maladjustments in the "real" economy. They all relate to the danger of inflation or to the difficulty of

combating inflation without a serious loss of output and employment. When a government is pursuing an expansionary policy the crux of the matter is how much of the expansion in nominal demand will be translated into additional output and how much will spend itself in raising the price level. The bottlenecks in the second and third limitations increase the upward slope of the supply curve and dissipate more of the increase in demand in higher prices. But the first limitation — the insensitivity of costs to changes in demand — brings into question the apparatus of thought enshrined in an aggregate supply curve. If wage-earners react to a rise in the price level by claiming and obtaining a compensatory increase in money wages, costs and prices can rise progressively without any perceptible change in the level of output. If in course of time *expectations* of a rise in the price level begin to govern wage claims and wage settlements, again independently of the level of output, the notion of inflation as a movement along a rising supply curve of output becomes even more inappropriate.

In the first two decades or so after the war the interrelationship between prices, costs and expectations did not greatly limit the effectiveness of demand management, although the pressure of demand was a good deal higher than it afterwards became. The period was one of uninterrupted and, by previous standards, very rapid inflation. But there never seemed much likelihood, except perhaps in 1950-1, that inflation would get out of hand and gather speed unpredictably at a rate that no one could afford to ignore. Once expectations became adjusted to a fairly steady rate of inflation, fiscal policy appeared to work in much the same way as it might be expected to in an underemployed, non-inflationary economy of the pre-war type. What changed matters in the 1970's was a series of jolts to the international economy that shook customary expectations and sent them into a new orbit. The first such jolt was the change in the atmosphere of the labour market after the "events" of May 1968 in Paris. A second jolt, in 1972-3, was partly financial, involving a flight from money into commodities, and partly real, marking the abrupt end of a long period in which the terms of trade moved against staple commodities on world markets. The quadrupling of oil prices at the end of 1973 carried the movement in the terms of trade further and at the same time threw the international economic and financial system out of balance. A further jolt was given to the system by the renewed rise in oil prices in 1979-80. All of these operated to produce rates of inflation in the United Kingdom and other industrial countries unheard of in peace-time. They also introduced major

uncertainties as to the adjustments that would be made both in the immediate future and eventually. These uncertainties, and the expectations to which they gave birth, transformed the task of economic management.

On the one hand, wage-earners, already reacting against the greater weight of taxation they were being asked to bear, found themselves faced with a much more rapid increase in prices, reflecting in large measure the higher cost of imports. Their expectations of real income were not adjusted to the fall by 25 per cent in the terms of trade; and their expectations of money income were adjusted sharply upwards by the observed rise in consumer prices and the uncertainty as to how they would move in future. At the same time, lenders and investors, alarmed by the way inflation was accelerating, were increasingly sensitive to any acts of government savouring of more rapid inflation. They were liable therefore to react strongly to government measures involving an increase in the supply of money or the PSBR and to the extent these reactions raised interest rates or pushed down the exchange rate they frustrated the expansionary intentions of the measures.

Opinion and expectations tended to be based on a perceived threat running from the PSBR to the money supply and from there to prices and the rate of inflation; and these expectations, like the expectations of wage-earners, tended to be self-fulfilling. The fear of inflation discourages the holding of money and titles to money (i.e. debt) and encourages a switch into real assets, titles to real assets (equities) and foreign currencies. Such switches raise the price of assets and make imports dearer, laying the basis for a broader inflationary movement. At the same time, wage negotiators stick out for bigger increases in money wages that produce the very acceleration in prices against which they are seeking to guard.

The shocks to the system over the past decade, therefore, not only precipitated much higher rates of inflation but left it with a hangover that made treatment more difficult. The central issue no longer related to the pressure of demand but to how expectations could be changed. It was not at all clear that either fiscal or monetary policy was well adapted for such purposes. There was an obvious danger that if used to expand output they would be ineffective and if used to damp down inflation would involve a disproportionate loss in output.

Once the main object of policy is to change expectations — or, to use more old-fashioned language, to restore confidence — the issue ceases to be a technical one for economists to decide. It necessarily turns

on what will sufficiently impress those whose expectations must be changed before the system can function again in a normal way. It may be necessary to pander to unfounded beliefs about the causes of inflation, to play for time so as to allow current expectations to die away, or to indulge in a show of strength that arouses expectations of a different kind.

Against this historical background it would be surprising if the same mix of monetary and fiscal policy was appropriate in all situations. Which instruments are preferred must depend on what objectives of policy have priority, whether circumstances favour the use of one set of instruments rather than the other and how it is thought the economy works. If, for example, control of inflation takes priority over getting rid of unemployment, monetary weapons have the advantage that they have an immediate and direct effect on prices just as fiscal weapons have an immediate and direct effect on employment. But it is possible to imagine circumstances in which, with unchanged priorities, monetary policy might be more effective in coping with unemployment and fiscal policy — though this is less likely — in coping with inflation. If, for example, private investment is highly sensitive to small changes in interest rates, and interest rates in turn are highly sensitive to small changes in the money supply, it may be possible, as in 1932, to exert more leverage on employment by a policy of cheap money than would be exerted by higher deficit spending. Indeed, if financial markets interpret a move to balance the budget as pointing to lower interest rates and if lower rates would not provoke a large outflow of capital, a combination of cheap money and *lower* deficit spending might in some circumstances offer the best hope of expanding employment. *Per contra* it is arguable that in the early post-war years, with large excess liquidity that would have survived much higher interest rates, it was preferable to rely on large budget surpluses to keep inflation at bay.

Leaving aside differences in policy objectives and economic circumstances, there remains a sharp difference of view over the way in which fiscal and monetary policies should be combined. On the one view, control of the money supply is the necessary and sufficient instrument for tackling inflation and without such control not much can be done to get rid of unemployment. Without quite arguing that “money is all that matters for changes in *nominal* income and for *short-run* changes in real income”, the monetarist school of thought holds that fiscal policy does not matter, or if it does, is monetary policy

in disguise.³ Neo-Keynesians, on the other hand, have been inclined to attribute prime importance to fiscal policy as a means of regulating employment and to look to some other instrument such as incomes policy for dealing with inflation. Even a neo-Keynesian would be obliged to concede, however, that if financial markets are strongly monetarist in their assessment of economic policy and if wage earners will brook no reduction in real wages in any circumstances, while at the same time inflationary expectations are firmly shared by both groups, there may be no way in which a government can expand the economy by fiscal (or perhaps any other) policy. A mixture of wrongheaded beliefs and confident expectations, dictating the conduct of capital and labour, would be quite sufficient to put an end to the present economic system.

For our purposes it is sufficient to recognise that policy has to deal both with unemployment *and* inflation and that neither fiscal nor monetary policy can be relied upon by itself to get rid of both of them. Monetarists argue that monetary policy could always get rid of inflation but this would be true only if no limit were set to the loss in output or the length of time required. They do not propose any new instrument of policy and see a curtailment of the supply of money both as more feasible and more effective than their critics.

The monetarists are right to emphasise that an expansion in the money supply affects prices in a way that fiscal policy does not. In their view of the inflationary process the line of causation runs from money to prices to costs. An increase in the money supply causes a shift in portfolios towards other assets and hence a rise in their price (including the price of houses, foreign exchange and — in consequence — imported goods of all kinds). It is unlikely that in those circumstances wages will for long show no response and this will reinforce the rise in import costs. But the line of causation may equally well run in the opposite direction. An increase in wages may push up costs and this in turn will push up prices and raise the demand for money. We have to reckon with both possibilities and which is the more typical and the more important is largely an empirical matter.

Where the monetarists are on weaker ground is in assuming that the money supply can be regarded as exogenous and within the control of the authorities. Given that the authorities have to operate through interest rates and not directly on the money supply, they can only

³ A.S. BLINDER and R.M. SOLOW, "Analytical Foundations of Fiscal Policy" in *The Economics of Public Finance* (Brookings Institution, 1974), pp. 9 - 59.

control the supply in so far as they correctly gauge the demand, which responds to every wind that blows throughout the economy and from other economies as well. The more they concentrate their efforts on some target for the money supply in face of the waywardness of demand, the more volatile become the terms and conditions of credit, although the stability of these terms and conditions has an importance of its own. If, as they are bound to do, they allow some weight to the need for an element of stability in interest rates, the money supply will to that extent reflect changes in demand and not simply the intentions of the authorities. Instead of being an instrument of control, it will be a symptom of the state of the economy, a bell-wether of inflationary pressures.

By making the growth in the money supply the touchstone of policy, and fiscal policy entirely subordinate to monetary policy and little more than an aspect of it, monetarism comes near to collapsing all aspects of macro-economic policy into one and disregarding the many facets of any single line of policy, monetary, fiscal or other. To attach over-riding importance to the money supply, when the objectives of economic policy are complex and often conflicting, is to make the same mistake as to stick through thick and thin to a fixed rate of exchange and for much the same reason: that the movement of costs, especially wage costs, may not accommodate itself to some pre-arranged target. Inflexible commitments to such targets may prove very expensive: the same forces that make it difficult to go back to the gold standard or to balance the budget make it unwise in an uncertain world to put on the strait-jacket of unconditional monetary targets.

It is necessary to insist that monetary policy cannot be reduced to the single dimension of the money supply any more than the thrust of fiscal policy can be narrowed to the purely financial consequences of a budget surplus or deficit. It is possible to read an extensive history of monetary policy such as Richard Sayers' three volumes on the Bank of England⁴ without being troubled by the thought that nobody knew what was happening to the money supply. But it is impossible to do so without being impressed by the wide range of central banking operations that have little or nothing to do with the money supply. Both monetary and fiscal policy cover a wide spectrum of measures with very different impacts on the economy; and it would be a travesty to boil

⁴ R.S. SAYERS, *The Bank of England 1891-1944* (C.U.P. 1976).

them down to a single measure of that impact, even when only the macro-economic aspect is under discussion. If one *were* obliged to think in terms of a single dimension, it would be no more reasonable to treat changes in the money supply as a measure of the stance of monetary policy than it is to treat changes in the budget surplus or deficit as a measure of the stance of fiscal policy. The changes occurring in the money supply are the end-product of a highly complex process in which the developments set on foot by the monetary authorities spread throughout the economy. These developments include the repercussions on the rate of exchange and the balance of payments; on budgetary expenditure (e.g. higher interest payments) and tax revenue; on the lending policies of financial institutions; and on the demand for money throughout the economy. The intentions of the authorities, as expressed in the measures adopted, may differ widely from the final outcome and not necessarily in the same direction. There are good grounds for interpreting monetary policy in terms of what the authorities actually do rather than in terms of some target at which they profess to be aiming.

Just as it is not possible to regard fiscal policy as a mere adjunct of monetary policy or *vice versa*, so it is not possible to treat monetary and fiscal policy as if they were completely independent of one another. The different instruments of policy have to be used in combination with one another and the thrust of the various elements in the policy-mix cannot be measured separately. All economic policy instruments interact. What happens when any one instrument is used depends on the setting of the other instruments of policy and the conditions prevailing at the time. The stimulus to output that follows an increase in government spending will depend on the kind of incomes policy adopted and the success attending it. The response to a change in the exchange rate will be affected by the fiscal measures with which it accompanied. And so on.

The "symbiosis", as it has been called, of monetary and fiscal policy is particularly close.⁵ An increase in the budget deficit requires additional borrowing and this affects interest rates, the money supply and the exchange rate. A change in monetary policy taking the form, say, of higher interest rates involves a heavier burden on the Exchequer and has other effects on the fiscal balance through changes in public investment and, so far as the level of activity is reduced, through a fall in tax revenue.

⁵ RALPH C. BRYANT, *Money and Monetary Policy in Interdependent Nations* (Brookings Institution, 1981), p. 231.

These interactions are heightened in a world in which financial markets interpret a larger borrowing requirement or an increase in the money supply as inflationary and regard the second as an almost automatic outcome of the first. Under those conditions the announcement of an expansionary fiscal policy, even before any additional borrowing took place, would be sufficient to procure a rise in interest rates in anticipation, whether the government had it in mind to expand the money supply or not. Such a rise might also accompany an expansion in the money supply even if the government hoped by doing so to *lower* interest rates. Where markets are highly sensitive to the danger of inflation *any* move on the part of the government to expand demand could encounter strong, perverse market reactions. These would be the more important the more powerfully demand is influenced by changes in interest rates and credit conditions as compared with direct changes in income flows.

Although it can be difficult to disentangle monetary and fiscal policy there are clearly some objects of policy to which one set of instruments is more appropriate than the other. It has been usual, for example, to regard fiscal policy as governed mainly by domestic, and monetary policy by international, factors. This does not mean that foreign holders of sterling are oblivious to the state of the British budget or that governments feel debarred from announcing monetary targets related to purely domestic objectives. It is possible also for the budget to be used to procure balance of payments effects through taxes on foreign-held balances or, in opposite circumstances, on the return on British investments abroad: and for monetary restrictions to do duty for higher taxes when electoral considerations tell against additional burdens on the taxpayer. But the limits within which monetary policy can reconcile diverging national and international pressures are narrow. Just as it is difficult to control simultaneously the price *and* the quantity of money — interest rates *and* the money supply — so it is difficult to control simultaneously the quantity of money in Britain and the terms on which it can be exchanged into foreign money i.e. the rate of exchange. If the money supply is overexpanded, some of the excess will overflow on to the foreign exchanges, pushing down the value of sterling and in this and other ways levering up domestic prices. A fall in interest rates, given high international capital mobility, will have similar — perhaps even more powerful — effects. Conversely, if the government fixes a monetary target involving high interest rates it is in no position to resist a rise in the exchange rate and an inflow of funds that

helps to relieve the contrived shortage of money. In the absence of capital controls — and usually also in spite of them — there are limits to the power of any one country to loosen or tighten credit conditions in comparison with other countries. There is, however, enough friction in the system to afford some leeway and countries enjoy more independence in their monetary policies than much current theory allows.

International factors also limit the power of individual countries to make effective use of fiscal policy in order to stabilise demand. Fluctuations in the level of activity in the international economy are almost inevitably reflected in the domestic markets of the leading participants. If they seek to mitigate or offset the fluctuations within their own economy they cannot do so by fiscal action alone without taking liberties with their balance of payments. They can only escape their "share" of an international depression if they are able to divert resources from international to domestic uses and, even if they have large reserves or can borrow abroad, the necessary switch may not be easy to bring about.

The limits to monetary expansion would appear to be fairly narrow in normal circumstances. The monetarists are right to draw attention to the possibility that an overissue of money may drive up prices without first generating additional income. Whether the line of causation is through a rise in the price of domestic assets or a fall in the rate of exchange, monetary expansion carries with it a danger of inflation insufficiently recognised in the past and differentiating it from fiscal expansion. It is not possible to dismiss this danger with the argument that an overissue cannot occur since the demand for money must at all times equal the supply and that if people find themselves with too much money they will get rid of it. No doubt they will: but it is the process of getting rid of it that makes prices rise.

On the other hand, it is equally wrong to think that any increase in the money supply faster than the increase in GNP is bound to prove inflationary. It may be true that there is quite a high degree of stability in the relationship between money balances and GNP and that it would require exceptional tightness or exceptional looseness for the ratio to vary by more than a few percentage points within the year. But that does not entitle us to assume that more money must mean higher prices rather than higher output or that the demand for money balances never changes at all. All we can say is that if the ratio does show a perceptible change this should serve as an alarm bell for those who manage the economy.

In the case of fiscal policy there are limits of a different kind. A large and persistent borrowing requirement adds to the total weight of debt. What effect this will have on the economy depends on a number of factors. First, it depends upon the extent to which it does no more than take the place of private debt creation and leaves the level of economic activity unchanged. In such circumstances there is no obvious reason why rates of interest should be much affected. Second, it depends on the income yielded by the assets created out of government borrowing and whether this is sufficient to cover the debt service or leaves a residue that will swell progressively and absorb an increasing proportion of government revenue. Third, it depends on the rate of inflation. This will undoubtedly cause interest rates to rise and so add to the budgetary interest charge but at the same time it will eat away some of the real burden of debt. A fourth factor to be considered is the addition made to the net wealth of the private sector and the repercussions of this addition on the rate of saving.

It will be apparent that the last two factors interact. There will be no addition to the net wealth of the private sector if the value of the outstanding debt in private hands is being diminished by inflation faster than new debt is being created and marketed to the public. Such a situation is by no means hypothetical. In spite of the large nominal additions to the national debt occasioned by the recurrent government deficits and heavy borrowing of recent years the real value of market holdings of government debt in the United Kingdom has been falling year after year. To a large extent the deficits themselves are spurious since they are inflated by the higher interest rates that have to be offered on new issues of debt because of the very inflation that depreciates outstanding debt.

Why then should governments hesitate to borrow more in a major recession? Not, presumably, because they hold monetarist views. There is nothing inconsistent with orthodox monetarist ideas in increasing the PSBR if, as has been true in Great Britain for the past decade, such borrowing adds little or nothing to the money supply. The hesitations of government derive in part from fear of aggravating inflation and in part from anxiety not to raise interest rates. There are circumstances in which such scruples are well-grounded. If, for example, the government misjudges the amount of slack in the economy — as it would appear to have done in 1972-73 — the higher borrowing requirement will be superimposed on capital requirements that already tax the available finance and will inflate demand when capacity limits have already been

reached. But where there is ample slack, the effects on inflation should be rather different. As the economy expands from a low level of activity to a somewhat higher one, whatever the cause, there may well be additional pressure on prices and interest rates. But if wages rise no faster than they would otherwise, the extra pressure is likely to be small and quite different from the kind of rise occasioned by *continuing* pressure on the price level when demand becomes excessive in relation to capacity.

The effect on interest rates might be more perceptible. In the absence of an expansion in the money supply there would be a greater strain on available funds and some rise in rates might also be necessary sooner or later because of additional pressure on the exchange rate. In addition, if government spending acts as a substitute for private spending, the same level of activity may be regained only at a somewhat higher level of interest rates because the method of finance of the two kinds of spending is not the same. Private investment, especially in manufacturing, is largely financed out of profits and rarely involves extensive long-term borrowing. In a depression the profits disappear while the government's deficit spending comes from money raised in the gilt-edged market or, to a limited extent, on short term. Unless the authorities are willing to expand the money supply, therefore, interest rates are likely to be pushed up and some further "crowding out" of private investment will then result. Normally, however, this will be no more than a partial offset to the initial government stimulus.

Thus the emphasis over the past fifty years has swung from monetary policy to fiscal policy and back again to monetary policy. The swing has gone with changes in the parameters of the economy, in the ideas of economists about how it works, in the aims of policy-makers and in the attitudes and expectations to which the system responds. The old consensus has disappeared and no new consensus has yet been achieved. In this state of uncertainty it would be a mistake for the authorities to proceed with complete confidence in any one economic model or to give priority to any one instrument of policy. Different policies interact and their separate outcomes are almost impossible to measure. What is always required is a set of policies to suit the circumstances.

From this point of view we have to recognise that we lack an instrument for reducing inflation without loss of output and that if inflation is not reduced full employment is compromised. Both monetary and fiscal policy have severe limitations in an inflationary world but

they come into their own again in a world of underemployment as it becomes purged of inflation. In such a world the prime requirement is stability in money wages; only if that condition is fulfilled is it possible to exert the necessary leverage on employment through monetary and fiscal policy.

There has to be somewhere in the system an element of constancy to set limits to its instability. That constancy was once sought in the gold standard, then a fixed exchange rate and now monetary targets. The first two have been abandoned and the third is not what is really required. What is needed in order to impart the necessary inertia is a settled arrangement designed to stabilise money wages. Without such stability the system itself will be unstable and the promise of full employment illusory. But if money wages are kept reasonably stable, fiscal and monetary policy can again combine to restore high levels of output and employment without the risk of insupportable inflation.

Oxford

ALEC CAIRNCROSS