

A Note on Inflation, Unemployment and Economic Growth *

Already before the end of World War II the world was equipping itself to fight a relapse into stagnation, pre-war style. It was thought that a situation in which the demand for goods and services would consistently tend to outpace supply would not survive once the ravages wrought by the war had been made good. What was scarcely perceived at the time was the bedevilling role inflation was to have as a constant in the post-war economic scene. This has meant that in several countries policy-makers have been caught off balance; there, in particular, inflation has proved a most intractable problem.

The theory up to the fifties was that monetary stability on the one hand and full employment and growth on the other were concomitant, rather than mutually exclusive, goals. The evidence was supplied by countries with low price rises and high rates of growth attracting labour from countries less successful in pursuing those goals. Generally, moreover, for all its stubbornness, inflation was mild, and came to be known as "creeping inflation". Even before the end of the fifties, however, the notion was put forward of a conflict between monetary stability and full employment, and of the consequent need for a trade-off between the two. To improve the performance in terms of monetary stability, some sacrifice had to be made in terms of employment, and vice versa.

The theoretical underpinning and the statistical evidence to prove the existence of a "trade-off" was first produced in the United Kingdom in the form of the celebrated "Phillips curve"; then in

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many countries for a number of years, that analytical tool was used by Keynesians in their attempts to explain, and predict, the rate of change of money wages by reference to the level of unemployment and its rate of change "except in or immediately after those years in which there is a sufficiently rapid rise in import prices to offset the tendency for increasing productivity to reduce the cost of living".¹

Economic developments in the sixties, however, were to cause increasing dissatisfaction with the theory of a trade-off. The tendency of rising rates of wage and price inflation to coexist with higher levels of unemployment was a new phenomenon in the post-war period. This tendency has been stronger in those countries where the transition from profit inflation to wage-push inflation has been sharper. Profit inflation in the fifties stimulated investment activity; the ensuing high rate of growth in turn helped to keep inflationary pressures within the bounds of "creeping inflation". But once wages became the dominating force behind inflation, the virtuous mechanism of the fifties broke down; declining profits led to less investment and to slower growth — and more inflation.

Differential wage-push was bound to have a much stronger impact on employment and output in open economies linked by fixed exchange rates, which for this reason were in the end abandoned. Under floating rates the impact is more on prices, less on employment. All the more so, since employers have often joined the side of labour in advocating expansionary policies. Exchange rate depreciation is relied upon to offset the loss of competitiveness due to rising prices; but the increase in costs consequent on low capacity utilization, due to restrictive policies, is avoided. This unholy alliance between employers and labour deprives the market system of the self-adjusting element which is implicit in that system when the opposition of roles and interests between buyers and suppliers is allowed normal free play. And this, in turn, has led to greater instability.

In any case, developments in the sixties showed that inflation and unemployment can and do move upwards together, whereas according to the trade-off theory they do not do so on the way down, and therefore it is not feasible for stabilization policies to achieve a reduction of both.

¹ A. W. PHILLIPS, "The Relationship Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica*, vol. 25 (1958), pp. 283-299.

If this asymmetry did exist, it would imply that the path of stagflation is more open to us than the path to full employment *cum* monetary stability. Friedman, however, has pointed out that the Phillips curve rests on the assumption of unanticipated inflation and that it is not so much inflation *per se* as the phases of acceleration which make for the trade-off. He concludes that there can only be a temporary trade-off, not a permanent one: "It [monetary policy] cannot peg the rate of unemployment for more than very limited periods" at levels other than the "natural rate". As we shift from the short to the long run, the Phillips curve becomes a vertical line on which different rates of price increases are associated with the same "natural rate of unemployment".²

Since in the long run the trade-off is non-existent, actual unemployment tends to equate the natural rate. The latter is compatible with any rate of inflation, even a zero or near zero rate; hence, there is no point in embarking upon monetary expansion, which will only stoke up inflation.

This criticism of the Phillips curve is naturally coherent with the mainstay of monetarist doctrine: namely, that monetary policy will cease in itself to be a major source of economic disturbance if the authorities avoid sharp swings in that policy "by adopting publicly the policy of achieving a steady rate of growth in a specified monetary total... it would be better to have a fixed rate that would on the average produce moderate inflation or moderate deflation, provided it was steady, than to suffer the wide and erratic perturbations we have experienced".³

The monetarist criticism of the trade-off concept is shared by the authors of the All Saints' Day Manifesto, published in the *Economist* on 1st November 1975. Speaking of European monetary unification they state that "since the rate of unemployment is not, in the long run, related to changes in the price level, a monetary union cannot be regarded as a cause of unemployment". One of the signatories has subsequently concluded that "Thus, the only thing that a government gives up when it gives up the right to print its own money is the ability to cause inflation and use inflation as one source of revenue... a government which surrenders

² M. FRIEDMAN, "The Role of Monetary Policy", *American Economic Review*, vol. LVIII, March 1968, p. 5.

³ M. FRIEDMAN, *op. cit.*, p. 16.

to an independent central monetary agency the right to issue and control the volume of money gives up very little, and, with an appropriate seigniorage sharing provision, effectively gives up nothing at all".⁴

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If the foregoing is a correct interpretation of the evolution of thinking on the problem of inflation, the present writer feels entitled to express dissatisfaction. The Phillips curve seems to be contradicted by the experience of countries afflicted simultaneously by inflation and stagnation as well as by that of countries enjoying both more stability and more growth. The monetarists' policy proposal in its elegant simplicity leaves one wondering why governments — European governments for instance — should be so unwilling to relinquish whatever degree of autonomy they enjoy in the use of monetary instruments, if monetary policy does not influence permanently the level of employment *and* the rate of growth.

So far in this paper full employment and growth have been used interchangeably. But, of course, they are neither synonymous nor complementary. A low level of unemployment is not necessarily conducive to growth; for what the acceleration of the rate of growth requires in the first place is a re-allocation of resources between current consumption and the production of output-increasing industrial capacity. And it has also been argued that some unemployment is likely to benefit growth, inasmuch as it leads employers to pay more attention to keeping costs down, including labour costs, and to improve techniques of managerial controls. Conversely, a high rate of growth does not necessarily lower unemployment. Economic growth has a different effect on the different sectors of the economy; when incomes rise, the pattern of demand and production shifts in favour of the goods and services with an income elasticity greater than one; labour applied to the production of goods and services with an income elasticity lower than one will tend to become redundant. In fact, employment in an industry will rise only inasmuch as the increase in the demand for its output exceeds the progress of productivity; so that, in terms of employment, we may have declining industries, even if their output is rising. The fact

⁴ M. PARKIN, "Monetary Union and Stabilization Policy in the European Community", in this *Review*, September 1976, pp. 236-237.

that growth affects the pattern of demand and the employment (and the latter's even more than the pattern of output) points to a need for labour mobility. But mobility tends to be increasingly costly on human, social and perhaps also economic grounds; it is deterred by a number of factors, and this leads in the end to higher unemployment (than there need be) also during the upswings.

Now it seems to the present writer that we misread post-war experience when we assume that governments have pursued inflationary expansion of money and credit in order to reduce unemployment. It is probably more accurate to argue that the main goal of economic policy in the post-war period has actually been the maximization of the rate of growth,⁵ despite all appearances to the contrary.⁶

If full employment had been the overriding policy goal, and the proximate criterion for passing judgement on the ability of governments to fulfill their role adequately, it is likely that, conflict or no conflict, a solution would have been found and accepted. In some countries, we have come rather close to a solution, as is shown by the way employment behaved during this last cyclical downswing — which was also the sharpest since the war. Various anti-unemployment schemes have prevented employment, especially in industry, from declining in line with the decline in output. Moreover, in countries where the productivity of labour has tended to decrease in recent years, such a drop in industrial employment as was allowed to take place did not *pro tanto* increase unemployment; for the manpower released by the directly productive sectors, which are also those more exposed to foreign competition, has been partly absorbed by the "non-productive", non-competing sectors of the economy — mainly by the public sector.

Recent experience seems to point to a policy trend towards administrative full employment. If that has become a goal in our society,

⁵ Postan has pointed out that "Since the early post-war years, when it [full employment policy] was officially adopted by governments, it rapidly developed into a policy of economic growth... Most governments were by the end of the fifties pledged to the policy of maintaining the rate of economic expansion higher than the rate at which economies had expanded in any past period of European economic history. Their policies and plans came to be geared to certain irreducible *minima* of growth". (M. M. POSTAN, "An Economic History of Western Europe, 1945-1964", Methuen & Co., Ltd., London, 1967, pp. 27-28.)

⁶ No indictment of hypocrisy is implied by this remark since it is a hard fact of life that governments have been virtually under a compulsion to give growth top priority, for the reasons which will be mentioned presently.

it should be clear, however, that it can be achieved by means other than the inflationary expansion of global demand; it can be arrived at administratively within the framework of the welfare state in the West (as distinct from Eastern Europe where it is done in the context of central planning). And if, by so achieving full employment, governments would then be willing to adopt a (stated and known) rate of growth of money supply which, provided it was steady, would lead to stability, the costs of this further extension of the welfare state would very likely be more than outweighed by the gains from finally putting an end to inflation.

But, unfortunately, it is unlikely that this is the end of the story. The administrative fulfilment of the full employment goal weakens the incentive to use efficiently available resources, including one's own actual or potential skills, thus in the end lowering the system's productivity. The welfare state has come close to guaranteeing, one way or another, full employment; but it has not found a solution for the inefficiency which this tends to breed. And inefficiency is prejudicial to economic growth.

If one placed the goal of full employment explicitly in the realm of *social* policy, it would be easier to justify a policy of administrative full employment and the latent unemployment which it implies in a true economic sense. Then, growth would be seen more clearly to be the overriding *economic* policy goal — and the hardest task. Governments are under a compulsion to give priority to growth. People have grown accustomed to expect year by year, increases in private and public affluence.⁷ The cost of ever-expanding social services in the construction of the welfare state, the introduction of military budgets after the first post-war years, the creeping growth of the public sector and the upward bias in money wages and other incomes have all made calls on the income of industrial countries which only growth could help to meet.⁸ The promotion of economic growth has been an inescapable necessity in the context of rising expectations at macro and micro-level. But not even the unprecedented growth which we have experienced in the post-war period has made it possible to do away with the anomaly of competing

⁷ This helps to explain why it has proved so difficult to adjust to the oil price increase, which for some countries implies surrendering to the oil exporters the "normal" annual increase of the gross domestic product in its entirety.

⁸ To the list should be added the emphasis recently placed on programmes to protect the environment from pollution, and, generally, to improve the quality of life and working conditions. It is difficult to see how these goals can be achieved by a stagnant economy.

groups and bodies making claims on national income adding up to more than 100 per cent.

Perhaps the single most important factor behind this anomaly has been unionized labour. Observations made of the behaviour of trade unions in many industrial countries show, as one would expect, that unions aim, first and foremost, at raising incomes for their members. Union action, on balance, has rather exacerbated the unemployment problem in those countries where it has been and still is important. Trade unions strive for increases in money wages exceeding the growth rate of income in *real terms*. But to this rate, real wage and salary increases will in the end have to come down, except when unions succeed in securing changes in income shares, which again are as a rule much smaller than the money increases claimed.

It is this sort of *reverse* money illusion which is at the root of the inflationary pressures. Whereas money illusion used to create the room for adjustment by reducing real wages when this could not be achieved by acting directly on money wage rates because of their downward rigidity, "reverse money illusion" hinders adjustment since it tends to make money wages (and at times real wages too) increase faster than productivity. Therefore, *reverse money illusion is a perverse kind of illusion, which generates wage push*. Faced with the wage push, governments have experimented with incomes policy as an alternative to really stern monetary and budgetary policies. The experience has on balance been disappointing. Will the monetarist prescription that the authorities adopt "publicly the policy of achieving a steady rate of growth in a specified monetary total" do the trick?

The adoption of monetary targets and their publication have a meaning insofar as they are constraining, and effectively so. If they do not change the expectations and the behaviour of households, companies and unions, there will be either a watering down of the targets themselves, thereby making the exercise largely ineffective, or a rise in the costs to a level that, even though short-term, will still be a deterrent for governments. In the absence of an incomes policy, the "re-entry" (into normality) for countries with double digit inflation is unfortunately a costly operation in terms of foregone output. Also, whatever the virtues of a monetary aggregate and its superiority as a policy target over the interest rate, clearly monetary authorities see themselves under an interest rate constraint;

hence, they are generally not ready to endorse the monetarist prescription regardless of its effect on the level of interest rates.

Moreover, changes in the velocity of circulation of money may foul up the working of a policy based on fixed monetary targets. Their short-term impact may be too disruptive in conditions of floating with external liquidity reserves which are inadequate to smooth out short-term fluctuations of the exchange rate. And, once the latter depreciates, the impact on the domestic cost and price level is bound to be largely permanent in countries where the indexation of wages to the cost of living does not allow it to be undone by a subsequent appreciation of the exchange rate. In other words, there is a "ratchet effect".

It is not intended here to go into the technical details of a policy, which would hinge on the adoption of monetary targets. Still this point about changes in the velocity of circulation goes beyond the realm of technicalities. It does not mean simply that in pursuing such a policy we would have to look to the asset, rather than liability, side of the central bank's or banking system's balance sheet; for it implies that a policy of stability in the long-term growth of monetary aggregates does not rule out corrective measures in the short term. That the point has an important practical relevance is borne out by the recent Italian experience. In Italy, last October, it has been necessary to impose ceilings on bank credit, which was increasing at too fast a pace. The increase was fed not by creation of monetary base, which had been broadly in line with the target, but by a rise in the velocity of circulation *via* the credit multiplier. The fast increase in bank credit was in turn feeding the demand for foreign currency and thereby further depressing the lira exchange rate.

It is worth noting that some central banks have adopted monetary targets. Central banks of countries with a bad record in the matter of monetary stability in general have not done so; when they have, the targets have allowed financing of the nominal growth of the gross national product; they have been only mildly constraining. In those countries it has probably been felt that the adoption of a sufficiently constraining and publicly known monetary target may not be sufficient to restore confidence and convince people that the policy will be effectively carried out, in such a way as to change their deep-seated attitudes, habits and expectations. Far-reaching institutional (and perhaps political) changes might be needed to regain credibility.

In any case, the major obstacle represented by the large size of the public sector deficit should be removed. In various countries, among them Italy, that deficit is now equal to 10 per cent of the gross national product; its financing tends to "crowd out" private investment. Since the deficit is largely due to an excess of current expenditure over revenue, it involves dissaving, i.e. destruction by the public sector of other sectors' savings. The "crowding out effect" is thus closer to 100 per cent than to zero; in their desire to reduce it, governments have in vain relied heavily on monetary financing of the deficit. *A less flexible monetary policy requires a more flexible public expenditure policy*; without the latter, the former is hardly feasible and lacks credibility. This compounds the difficulties. To carry out that policy in the absence of credibility would very likely raise the costs of stabilization to an unbearable level. Wage claims based on unchanged anticipations of price rises would make economic activity fall sharply. *A less flexible monetary policy implies a more flexible wage policy.*

Incomes policy might help to make expectations adjust to the new stabilization policy, and this means that the burden of adjustment would fall on real wages, rather than on the level of economic activity and employment. Then, *the monetarist prescription and incomes policy are not alternatives, but mutually reinforcing approaches during the transition.* (Thereafter, incomes policy would not be needed.) To overcome Italy's inflationary fever, one would think that this should imply halving cumulatively the rate of increase of M_2 (or, more pertinently, of global credit) for a couple of years and reducing even more speedily the rate of wage and salary increases.

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Growth being in fact a compulsory goal, to be regarded in most cases more as a constraint on government action than a policy variable, the Phillips curve and the monetarist criticism thereof miss the real point. This is the relationship of inflation to economic growth, not to employment, which, for the reasons previously mentioned, cannot be regarded as a proxy for growth.

If that is so, it is not enough to argue that monetary policy makes no difference to the rate of unemployment in the long run. And because of this to suggest, as the authors of the All Saints' Day

Manifesto do, that autonomous monetary management has lost all significance is a *non sequitur*.

Autonomous monetary management may still be relevant for growth. Admittedly, growth is the objective about which we know the least, and, therefore, our ability to influence it is the smallest. We cannot "administer" growth in the fashion of the centrally planned economies, and remain mixed economies. Moreover, centrally planned growth carries a high risk of being wasteful, given modern technological developments and the very high sophistication of consumer taste.

We know, however, that in our economies some policies are more likely to elicit growth than others. To illustrate again from monetarist doctrine, it has been forcefully argued that, by making money supply grow steadily but moderately, the monetary authorities would provide a monetary climate favourable to economic growth. There is also a wide consensus on the point that the stop-go policies followed by the United Kingdom (and more recently by Italy) are not conducive to fast growth.

On the other hand, it has yet to be demonstrated that a low level of interest rates is likely to foster economic growth if common to countries which differ from one another because their markets for products and factors of production are only semi-integrated. Equally, the statement that "the precise rate of growth, like the precise monetary total, is less important than the adoption of some stated and known rate"⁹ can hardly be taken to mean that there is no criterion for choosing between alternative rates of growth of money supply.

Professor Friedman correctly concludes from this that there are persuasive reasons for not pegging exchange rates. But to mention once again the authors of the Manifesto, they borrow the monetarist argument that a monetary instrument can only influence nominal variables, not real ones, and argue that the exchange rate has in the long run no influence on real variables. Thus, prospective members of a monetary union do not run the risk of doing damage to their economic growth by surrendering exchange rate autonomy. In other words, the authors of the Manifesto propose to extend to exchange rates the loss of autonomy which is implied for the instruments of domestic monetary policy by Friedman's proposal that monetary

⁹ M. FRIEDMAN, *op. cit.*, p. 16.

authorities give a pledge to make money supply grow by a given yearly rate (to be kept steady over the years).

But the introduction, or the tolerance, of distortions in nominal variables cannot fail to interfere with the process of growth. If the rate of increase in money wages tends to exceed the rate warranted in an open economy by the evolution of productivity and prices relative to the average for competing countries, exchange rate flexibility will help to undo the distortions, which would have appeared if the rates of exchange were fixed. To correct existing maladjustments — or a tendential disequilibrium arising from a higher degree of what was termed above “reverse money illusion” — by means of a credit restriction would not be without consequences for the long-term growth prospects. A credit squeeze hits investments; through its impact on investment activity, a link is established between short-term policies of stabilization and long-term growth performance. Moreover, with an overvalued exchange rate, there is the danger that the economy may come to rest around an equilibrium of sluggish growth or outright stagnation with low levels of employment. This is why exchange rates have in the end been unpegged even by countries where, because of widespread indexation of incomes, there is a real danger that exchange flexibility can start a circular process of faster inflation leading to currency depreciation, and the latter (often reinforced by capital movements triggered by the play of expectations on portfolio adjustments) in turn feeding inflation.

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The general slant of this paper is, regretfully, negative. But can it be otherwise, if one ponders on the present state of so many economies or, to mention another critical case, on the setbacks suffered in the last few years by the process of European monetary and economic integration?

The present writer feels, however, that we shall not make things easier for ourselves by arguing that *the* solution lies in altogether giving up the (judiciously) discretionary use of policy instruments, either out of fear that the tool is too powerful to run the risk of misuse implicit in the present state of our knowledge (monetary aggregates) or because it is essentially irrelevant, since it cannot affect real variables (exchange rates).

In other words, there is now a danger that, following the dis-

appointing experience in the (Keynesian) stabilization policies which culminated in the “fine tuning” doctrine, we will swing to the other (monetarist) extreme and rely too heavily on automatism and rules, i.e. on once-for-all decisions. Surely experience shows that interventionist policies can be harmful when they attempt to interfere with the working of the market at levels of activity where the tolerance of errors is small. Interventionist policies can have destabilizing effects on expectations and hence on investment decisions and even on the propensity to invest. Sound economic growth would benefit from less spasmodic policies; if we can do without spasms, we are likely to have both more growth and more stability. Whether a monetary automatism would alone do the trick is a tempting thought. In the present writer's view, the promising element in the monetarist message to be brought to fruition is its emphasis on the requirements of economic growth *in the long term*: foremost, among them, stability and moderation in the rate of growth of monetary aggregates or, to put it plainly, *good monetary management*. This can be achieved only if it goes hand in hand with a less indiscriminate recourse to compensatory monetary and fiscal policies, which will spare us “stop-go”. The obsessive reliance on monetary demand management preached by the (post-World War II) Keynesians¹⁰ has ended up by seconding the emergence in several countries of conditions in which the quantity of money has become a function of the wage and price level, thereby weakening the market economy's self-adjusting capacity.

The same goes for the exchange rate instrument. It is tempting to think that governments might be willing to surrender the right to use it as an instrumental variable if they could be convinced that it really does not make any difference to the goals which they pursue; but, it is not very realistic. In the view of the present writer, European monetary unification can be enhanced through schemes which do not imply pegging exchange rates 100 per cent irrevocably now. One such scheme hinges upon the early introduction of a European parallel currency — the Europa.

¹⁰ In the *General Theory* Keynes acknowledged that changes in the quantity of money could not be relied upon, any more than a *reduction* in money wages, to bring forth the volume of investment necessary to maintain full employment. In this respect, it is also worth mentioning his remark that “Money rapidly loses the attribute of ‘liquidity’ if its future supply is expected to undergo sharp changes”. (*The General Theory of Employment, Interest and Money*, Macmillan & Co. Ltd., London, 1951, p. 241.)

Finally, it is hoped that the efficiency of economic policy will benefit from the shift of emphasis, for which this paper pleads, towards growth, its determinants and its relationship to anti-inflation policies. For a number of years we have been concerned with the effects of monetary and fiscal policies on aggregate demand and, hence, on the degree of utilization of existing capacity; the concern has been heightened by the policies which have been implemented in the industrial countries to cope with the oil price increase and the associated deterioration in their terms of trade. It is now time to put the emphasis back on the effects of economic policies on the growth rate of productive capacity.

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