

KEYNES LECTURE

## INFLATION IN THE WORLD ECONOMY

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ANYONE who chooses as broad a title for a lecture as I have done for this one should perhaps give an excuse, or at least an explanation. All I can say is that I've done it before—which provides what I believe the criminal lawyers call 'evidence of system'. Twenty-five years ago, I published a study relating to the years 1939–51, which, with what can now be seen as less than perfect felicity, I entitled 'The Great Inflation'.<sup>1</sup> The views of the mechanism of world inflation that I stated in it were, I think, such as were then, and in the following decade, quite widely shared by economists of my generation, who had been brought up in the heat of the Keynesian Revolution, and exposed to the facts of wartime and early post-war inflation. I should like first briefly to restate those views, and then to examine the events of the last 25 years in the light of them, to see how far they still provide useful tools of analysis and interpretation.

There are three broad classes of prices to be considered; the prices of manufactured goods, the prices of foodstuffs and raw materials, and the prices of labour services—wages and salaries. In the view I am expounding, these behave quite differently. Prices of manufactures in most countries (probably more so here than in the United States) are governed by cost of production, and are not very sensitive, directly, to changes in the pressure of demand. The prices of most foodstuffs and raw materials, on the other hand, are very sensitive to pressure of demand, and also to factors, such as weather or discoveries of new sources, which affect their supply. Wages and salaries are different again. In so far as they are determined by collective bargaining, either supplemented or unsupplemented by state regulation, they are of limited flexibility; they are inflexible downwards, they are responsive to at

<sup>1</sup> A. J. Brown, *The Great Inflation*, Oxford 1955.

least any substantial increases in the cost of living, and they are apt to creep upwards independently of these increases, as a result of the natural aspirations, and the bargaining-power, of employees' organizations.

It follows from this that any increase in prices that enter into the cost of living—import prices, for instance—will set off a price-wage spiral; wages and salaries rise because the cost of living has risen, this raises costs of production of manufactures (unless it is offset by productivity increases), and also the cost of many services, and so raises the cost of living further. So wages and salaries rise again, and so on indefinitely. The same spiral is set in motion if the independent, upward, creep of wages and salaries goes faster than the rise of productivity.

The spiral, however started, can be discouraged, so to speak, by monetary stringency, or other measures that reduce demand, but because of the downward rigidity—indeed, the independent upward bias—of wages and salaries, and the method of pricing manufactures, the immediate impact of such restraint is mainly on sales and activity rather than on prices. They raise unemployment. How much unemployment there has to be to prevent wages and salaries from drifting upwards faster than productivity, and so pushing prices, is a question that was subsequently very much discussed. On the basis of British and American data, I thought 25 years ago that unless some changes were made through incomes policy or otherwise the amount of unemployment required might be unacceptable.

The final point of this diagnosis was that fluctuations of the flexible prices—mainly those of foodstuffs and raw materials—have a ratchet effect in raising the general price and wage level. Rising flexible prices push the whole price and income structure upwards, creating a permanent rise in money incomes which prevents flexible prices from returning to their former level even when the cause of their original rise is removed. I discussed commodity-price stabilization as a measure for mitigating world inflationary tendencies, but recognized that, even if successful, it would still leave the more spontaneous elements of wage-creep as a problem.

But what, you will say, about the money supply? The traditional picture of the inflationary boom, fuelled by credit creation, could hardly have been absent from the mind of anyone trying to write comprehensively about inflation in the war years. But for the leading economies in the post-war world, the picture was rather of management directed at total expenditure, with the money stock

left largely to adapt itself to the needs of trade, subject only to manipulations mainly in the interest of the government's own finances.

This is the broad picture of the world-wide inflationary process that I want to set beside what has happened since the early 'fifties—to be specific, say in the 25 years 1953 to 1978. I must, however, at once qualify the term 'world-wide' which I have just used. In the centrally-planned economies of eastern Europe, there has, according to the available official indices, been no inflation at all in this time. The prices in question are administered, not formed in the market, and where these countries have free markets (for some agricultural produce, for instance) they do, indeed, show signs of inflationary pressure from time to time; but that is not important in the context of our present discussion. I shall leave the planned (or, more strictly, production-planned) economies aside, remarking only that their freedom from major inflation is to be attributed to their having prices and incomes policies which, in their particular political circumstances, really do work.

Among the remaining, market, economies there has of course been a great variety of experience over these 25 years. In some of them—the United States, western Germany, and Venezuela for example—the consumer price-level (and also the comprehensive index applicable to the national product as a whole) rose between two and two-and-a-half fold. In some others—France, Japan, India—it roughly quadrupled. In this country, it rose nearly fivefold. Beyond these, there are what one may call 'the wild ones'—Brazil with a 1,300-fold increase, for instance, and Argentina with a 20,000-fold one. Fascinating though these 'wild ones' are, I shall have to leave them aside, too, in order to concentrate on what is more significant for the world economy as a whole.

Out of this varied inflationary experience, can we make a picture of anything like a single world inflationary process? It is easiest for the first fifteen years or so—1953 to, say, 1968—when the Bretton Woods system of fixed exchange-rates ruled, with limited exceptions. Then comes a period of about three years when, although exchange-rates were under strain, they were not entirely flexible, and were, so to speak, seeking a new alignment. When this new alignment came, in the Smithsonian Agreement of December, 1971, it lasted only for a short time, and was succeeded by a gradual transition to the system of floating—albeit a 'dirty' form of floating, with much governmental intervention in the foreign exchange markets—which still prevails.

Let us start, then, with the Bretton Woods period, up to about 1968. In this period, there is one set of prices, of world-wide significance, to which we can appeal without it mattering which of a wide range of currencies we choose to express them—the prices of internationally traded goods. The United Nations indices, expressed in United States dollars, will serve our purpose. It is perhaps a little surprising, now, to see that these indices show very little in the way of inflation at all. The index for foodstuffs and raw materials actually fell by 4 per cent, and that for fuels by 8 per cent. Only the index for manufactured goods rose, and that only by 8 per cent in the 15 years—not much of an inflation. Yet, in the same period, the indices of *retail* prices of goods and services in all the main countries rose very considerably; by 31 per cent in the United States, 41 per cent in Germany, 60 per cent here, 73 per cent in Japan, 79 per cent in France, and over 100 per cent in India. How does one account for these differences?

The most obvious line of explanation is one that appeals to differences of productivity-growth between industries producing traded goods and those providing goods and services which do not enter into international trade, but do, of course, enter into price-levels of final consumption and investment in their countries of origin. In its neatest form, this line has been developed by Norwegian and Swedish economists.<sup>1</sup> The essential part of the argument is that wages in any country tend to move parallel to each other in the industries producing internationally traded goods and in other industries. So the prices of non-traded goods will rise in relation to those of traded goods if the advance of productivity in providing them is less fast than in the traded goods industries.

The reason why the Japanese retail price index rose by 73 per cent, even though the prices of Japanese exports actually fell was that the rapidly-rising wages generated in the export industries, where productivity increased very fast, spread into the provision for the home market of those goods and services which did not benefit by such a rapid rise of productivity. A variation of this argument probably holds for India; it is likely to be relevant for all developing countries where competition with internationally-traded goods is the province of the modern (and modernizing) sector of the economy, while the cost of living still depends largely on traditional industries that are not modernizing so fast.

Whether this 'Scandinavian' theory explains all the differences

<sup>1</sup> See: G. Edgren, K. O. Faxen, and C. E. Odhner, *Wage Formation and the Economy*, London, 1973.

in retail price inflation in roughly the period I am talking about has been investigated for the OECD countries (broadly, the industrial countries) by Professors Maynard and Van Ryckeghem.<sup>1</sup> They conclude that it provides only a partial explanation. The export prices of different industrial countries did not, in fact, change at the same rates; those of Japan, as I have mentioned, and also of Italy, actually fell. Those of the United States rose by nearly 20 per cent, and those of France and the United Kingdom (in domestic currency) by more than 30 per cent. Because of this, indeed, both this country and France fell off the Bretton Woods bandwagon during the period, and hung on behind at reduced parities. With all allowances for the considerable statistical pitfalls of such comparisons, it seems clear that the forces of the market, plus the impact of policies, failed to keep the industrial exporters in line with each other. Moreover, collectively, in the world as a whole, the labour markets plus the growth of productivity failed to *reduce* the world price of traded goods, as would have been necessary if consumer prices, on average, were to stay more or less constant.

Why were there such differences in competitive performance? If we start from the fact that wage-rates failed to keep in line with productivity-increases, then it is natural to turn to the pressures of demand in the labour-markets, as measured (inversely) by rates of unemployment. Did the United Kingdom, France, and the United States fail to keep in line because their fiscal and monetary authorities, so to speak, ran their economies 'too hot'? This was the time of the discovery and the first application to policy discussions of the Phillips Curve, the empirically discovered and subsequently rationalized inverse relationship between unemployment rates and the speed of increase of wage-rates within countries. So long as you take such a relation literally, as representing the whole of the relevant truth, then the answer to the question I have just asked is self-evident. Higher unemployment would have gone with lower wage-inflation; therefore in relation to the objective of slower increase (or actual decrease) of manufacturing and similar costs, unemployment was 'too low'.

My own view published in 1955, as I said earlier, was that, in the United Kingdom at least, the rate of unemployment that was high enough for this purpose was likely to be too high for the electorate, and perhaps for anyone making a rational choice between evils. On the basis of mainly inter-war evidence, I put it a good deal higher than was suggested by some of the early

<sup>1</sup> G. Maynard and W. van Ryckeghem, *A World of Inflation*, London, 1976.

econometric work in the late 'fifties and early 'sixties. My view now, which, in relation to this country, I have elaborated elsewhere,<sup>1</sup> is that it is all a good deal more complicated than was thought then, since national competitive performance, inflation, investment, and productivity-growth are interconnected, within any country, in ways that tend to promote the operation of vicious or virtuous circles. The United Kingdom has for a long time been in a vicious circle. Because our rate of productivity-growth is low, and because, too, of the way our collective bargaining arrangements work, our consumption aspirations run ahead of our productive performance; so wages rise. Therefore our competitive performance is poor, which means that profits are low, investment is low, and so our productivity-growth is slow, which is where we started. The United States had some predisposition to a vicious circle (or, at least, not a strongly virtuous one) because its productivity-growth was restricted by the very fact of its past success—it was operating near to the frontiers of industrial practice, not catching up with the best practice, as some of its competitors were. On the other hand, the Japanese, the Italians, the Germans, and (with some qualifications) the French, coming up from behind, and assisted by their reserves of rural labour coming into non-agricultural employment, were in virtuous circles. For the time being, at all events, they were in a situation where improvement of incomes ran ahead of aspiration, so that there was always plenty over to finance improvement and keep it rapid. (There is no time now to go into the qualification concerning France). It follows that to say that all the less competitive countries needed was a touch on the brake would be a gross oversimplification; indeed, a touch on the brake might well have damaged their total competitive performance rather than improving it.

If you accept this, then it may follow that the same holds for the world economy as a whole; that a falling average price of traded goods and an (on average) constant consumers' price-level might not have been easily attainable by a decrease in the total pressure of world demand, though it might have been attainable through institutional changes slowing down the speed of operation of the price-wage spiral in a number of leading countries. In a competitive situation, the strongest competitors in some degree set the pace. Everyone else was to a large extent occupied in competing with the Japanese, the Italians and the Germans (most of them not

<sup>1</sup> A. J. Brown, 'Inflation and the British Sickness', *Economic Journal*, No. 353, March, 1979.

quite managing it). The Japanese were substantially reducing the prices of their exports, and do not seem to have been greatly worried by the rise in their retail prices. Others, even if they were worried, were no doubt doing their best according to their lights.

In view of what I said earlier about the passive or accommodating nature of monetary policy, it is interesting to see what actually happened to the monetary situation in this period. Here and in the United States money supply grew markedly less fast than income, so that, by 1968, both economies were substantially less liquid, on any reasonable definition of the term, than they had been in 1953, or even before the war. Many other countries including France, Germany, Japan, Italy, and India, moved in the opposite direction. Reduced liquidity may be a result either of restrictive monetary policy or of a decreased desire to hold money. Of the latter there may be some indirect evidence in the United Kingdom and the United States; in both of them there was a shift of preference from bonds to equities in 1959 which may indicate a disenchantment with monetary assets generally, including cash or bank deposits. But in France, Italy, and Japan, where liquidity increased at this time, the rate of decline in the value of money to consumers was faster than here or in the United States. No simple conclusions can be drawn, but it is superficially paradoxical that the countries generally held to have relied most on monetary policy—Germany and Japan—increased liquidity in their economies, while some notorious followers of a passive or only intermittently active line decreased it. I do not myself think that differences in monetary stance were the main determinants of differences in outcome between the principal countries; for those I would look to the complexes of influences to which I have already referred.

But, when all is said and done, there would have been relatively little worry about world inflation if it had stayed at the rates of the later 'fifties and early 'sixties. From about 1968, however, the dollar world prices of internationally traded goods began a decisive increase. In the three years to 1971, foodstuffs and raw materials (which had been decreasing in price) rose by 11 per cent. Fuels, which had also been decreasing, rose by 29 per cent. The rise in the prices of manufactures, which had been less than 1 per cent a year, accelerated to over 5 per cent. It was only late in 1971 that the dollar fell substantially against other currencies, so these accelerations of price-increase were not just a matter of shifting exchange rates.

The first thing to note about this acceleration of inflation is that, while it began in a period of high total demand pressure (though not clearly higher than some previous ones) it continued well beyond it. By 1971, activity in the world economy was definitely in a recession. Nor was there the rise of relatively flexible primary product prices in relation to the stickier, more cost-determined, prices of manufactures which is characteristic of most booms in world demand. As I have mentioned manufactures rose more than foodstuffs and raw materials (or even more than an index of all primary products, including fuels). The acceleration was not, apparently, primed by an increase in money supply, which began, for the OECD countries as a whole, only in the middle of 1970. The burden of increased money transactions before that was borne mainly by an increase in the velocity of circulation.

So what was the nature of this acceleration of inflation? In the discussion of the time, it was described as a 'wage-explosion', or as a series of wage-explosions at somewhat different times in different countries. Let us take nothing for granted; was this the nature of the event, or only a conspicuous symptom? I should like to apply three tests. First, did wages accelerate, initially, in relation to the prices of goods, leaving the latter to catch up later? Second, did wages rise faster than might have been predicted from the course of other variables on which their course had seemed to depend? And, thirdly, was there a shift of the distribution of income in favour of wage and salary earners which cannot be explained by other circumstances of the time?

The first test is easy. Wage inflation *did* rise sharply both absolutely and in relation to the inflation of consumer prices, in the United Kingdom from late 1967, in the United States during 1968, much more dramatically during that year and the two following in Germany, and during 1969 and 1970 in Italy. In France, the 'Events of May' were followed by a year of wage-increase running some 10 per cent per annum above the contemporary rise of the consumer index.

The second test concerns the extent to which the accelerated wage-inflation went beyond what might have been predicted, not only from consumer price movements, but from other factors previously found useful for this purpose—in practice mostly the unemployment rate used as an inverse measure of pressure of demand. They did so strongly in most of the OECD countries. This was the time when the versions of the Phillips Curve found tolerably good at explaining the wage-movements of the 'fifties and earlier 'sixties began to yield gross under-estimates. This

change has generated a great deal of controversy, into which I have no time now to enter. In some countries there are specific factors; for instance, the political events in France and the increase of taxation in the United Kingdom, which seem to provide plausible explanations of otherwise inexplicable increases in wage-claims and wage-settlements. For some countries it has been argued that improved social security benefits increased the tolerability of unemployment, and so made the unemployment rate an unreliable indicator of the true amount of slack in the labour market. To these I will add only the suggestion that accumulated experience of inflation may at this point have had a once-for-all effect on the expectations of wage-bargainers, as it apparently had done on those of investors in 1959. Everything, no doubt, has a cause; my chief concern with this acceleration of wage-inflation is not, for the moment, with what caused it, but with the question whether it, rather than an acceleration in the market for goods, was the dominant feature of the late 'sixties.

The third test also bears on this question. At the beginning of this lecture I described the price-wage spiral in which the prices of goods and the wages or salaries of labour chase each other upwards. If this is happening at a constant rate, it seems quite likely that it will not be accompanied by any change in the distribution of total income between wage and salary earners on the one hand and receivers of gross profit income on the other. Although the process consists of alternate increases in wages and profits in particular firms or industries, in the economy as a whole these alternating advances will be scrambled together into a fairly smooth, parallel increase. But if there is a sudden jump in the rate of wage and salary growth, there is likely to be a shift of income away from profits, because prices will not be fully adjusted at once, and if there is a series of successively bigger wage-jumps, the share of profits will stay down or even decline further. There is no certainty about this; it depends on the mechanism of price-adjustment, and we must also write after it, as after so much else, the cautious words 'other things being equal'. Among the other things that may not be equal is the general level of activity in relation to capacity. Fuller use of capacity by itself generally means a shift towards profits.

This bears on the possibility of distinguishing between two kinds of inflation; the one in which wages push, and profits are at least initially squeezed, and the one in which additional demand, usually assisted by new money, pulls prices and profits up first, and wages come clambering after. I like to think of this as the

Pantomime Horse Problem. Prices are the front legs, wages the back legs, profits the body in between. If the front legs accelerate, pulling the back legs after them, they stretch the body; if the back legs accelerate and push the front legs, then the body is squeezed. To the spectator it is hard to see which is happening unless he can detect the compression or extension of the body.

A calculation of the gross profit share of income in each of nine OECD countries is provided in the McCracken Report,<sup>1</sup> and it is instructive to see how this share changes with alterations in the rate of increase of hourly wages, remembering that, in the absence of any wage-push or profit-pull, one would expect both series to stand low in slack times and high in boom. Making allowance for this, the general impression, for the years 1967–71, is that they move in opposite directions in the United States, Germany, the United Kingdom, Italy, Canada, and The Netherlands, which suggests that changes in wage-push were the dominant force in those countries. In Japan and France, on the other hand, the profit share and wage inflation move broadly parallel, suggesting, on the face of it, that demand changes ruled the roost there; though there may be other explanations.

There is much here that needs further study; but my general conclusion is that the acceleration of inflation in the late 'sixties—which, remember, was virtually the *re-starting* of inflation so far as internationally traded goods were concerned—was mostly due to a wage-explosion. Things *are* sometimes what they seem.

Can one say the same of the next, most dramatic, and most discussed phase, dominated by the boom of 1973, and the petroleum crises that followed it? The general view is that the boom, primarily in the goods market rather than the labour market, was due in the first instance to a failure of demand management, in that all, or nearly all, the industrial countries allowed, or engineered, expansion at the same time; that this was facilitated (some say caused) by a plethora of money and of international reserves due to an over-expansionary United States policy, and that the resulting expansion of world income ran up against an unlucky temporary shortfall in supplies of several primary commodities. The subsequent action of OPEC was another piece of bad luck.

Much of this is true, but it is not the whole truth. Fiscal policy in the main OECD countries taken together, and in the United

<sup>1</sup> Organisation for European Co-operation and Development, *Towards Full Employment and Price Stability*, Paris, 1977.

States in particular, was contractionary throughout the years 1971-4. (The United Kingdom in 1972 was the most glaring exception.) It *was* monetary policy that was outstandingly expansionary, and the basis for this was, indeed, the vast increase in holdings of dollars by central banks outside the United States, mainly in 1971 and 1972. The source of these, however, as Professor Corden<sup>1</sup> has pointed out, was the loss of confidence in the dollar by private holders, who had been content to accumulate that currency throughout the previous decade. Their holdings had come both from net sales to the United States and from American loans. In short, it was the breakdown of the world Dollar Standard that caused so many dollars to be dumped into the laps of central banks.

One might still say that, if governments had not wanted to expand the bases of their domestic money supplies so drastically, they should have acquired these dollars for their exchange equalization accounts with money borrowed from the public. Alternatively, they should have appreciated their currencies against the dollar. With exchange rates no longer firmly fixed, it was in principle possible for them to avoid importing inflation, as it would not have been, say, ten years earlier.

Why such avoiding action was not widely taken is a question more often asked than satisfactorily answered,<sup>2</sup> and I shall not try to answer it now, apart from two remarks. First, the will to avoid inflation at the cost of lost opportunities for important sections of the community was not always very strong. Second, in some important countries, including this one, there were substantial expansions of the money supply in addition to anything that can be accounted for by increase of foreign (or, indeed, in some cases any) reserves.

At all events, money supply increased in the industrial countries during 1971 and 1972 some 4 to 7 per cent a year (according to definition) faster than money income increased, so that liquidity was strongly augmented. This is the star case of monetary expansion preceding an acceleration of inflation; without it the evidence for a regular sequence of this kind would be in much poorer shape. In the event, whatever the precise mechanism by which such monetary expansions work their way into additional expenditure (and this is still a surprisingly obscure area), it cannot

<sup>1</sup> W. M. Corden, *Inflation, Exchange Rates, and the World Economy*, Oxford, 1977.

<sup>2</sup> See, for example, the excellent Brookings Institution symposium, L. B. Krause and W. S. Salant (eds.), *Worldwide Inflation*, Washington, 1977.

be supposed that the boom of 1973 met with much monetary constraint.

This boom of 1973 was, at least superficially, a world boom of the classical kind in which the flexible prices of foodstuffs and raw materials rose more than the less flexible prices of manufactures. Short-term (that is to say, year to year) movements of the relative prices of primary materials and manufactures show a loose inverse relationship with relative movements of the corresponding production indices, and what happened in 1971-3, when manufactured output increased by 18 per cent and primary by only 5 per cent, was not out of line with previous experience. The relative price of primary products, allowing for some time-lag, rose by about 13 per cent.

But this relative rise of primary prices is perhaps less impressive than the absolute rise—no less than 47 per cent—in the prices of internationally-traded manufactures, upon which it was superimposed. What happened to these prices of traded manufactures was in strong contrast with experience of the 'fifties and 'sixties; they rose considerably more in most of the main countries than the prices of those manufactures that were not traded. It has been suggested (by the McCracken Report) that this shows the effect of demand pressure, where buyers sought to circumvent internal supply bottlenecks by importing. This may well be so; if it is, it also suggests that prices of home-produced goods were relatively insensitive to the same demand pressure. It may be relevant, also, that in the 'fifties and 'sixties the prices of traded manufactures were kept down by the extraordinary strong price competition of Japanese and Italian goods in particular, and that in the 'seventies things had changed. Japanese wage-costs per unit of output had risen more than most, and the Italian economic miracle was over.

This links to a more general point. While the inflation of the early to middle 'seventies was (in origin, at least) an inflation in the market for goods rather than that for labour, labour costs followed remarkably closely behind. Over the years 1971 to 1974, in most countries for which the data are available, wage-costs per unit of output in manufacturing rose about as much as unit prices of manufactured exports (both measured in dollars). The important exception is the United States, where they rose markedly less. Let us return to the pantomime horse, remembering, however, that profits in this period were compressed not only, possibly, by wages, but also, certainly, by worsening of the terms of trade in most industrial countries.

For what it is worth, it seems that, between 1971 and 1976, the

gross profit share of income still moved in the main inversely with the rate of wage-increase in most countries—in Japan, Germany, the United Kingdom, Italy, The Netherlands, Sweden, and even, in spite of other evidence, the United States. Only in France (again) and, this time, in Canada did the evidence go the other way. When one remembers that wage-levels are generally much more important than the terms of trade, it looks as if wage-push played a far from passive part in the events of this time. One is tempted (though the temptation should perhaps be slightly resisted), to say that, whatever the identity of the donkey-engine that raises the anchor, the main engine that drives the ship of inflation seems to be the price-wage spiral. All that needs to be added is that the ratchet mechanism worked very reliably when the relative shortage of primary products vanished. Primary prices came down after 1974, and again in 1978; but not very much. The world prices of traded manufactures merely wavered, and went on rising, along with incomes—the incomes that sustained the flexible prices. We had seen it all twenty-five years earlier in the Korean war.

That is the end of my story; what is the moral? In a sense, I have already drawn it by persuading myself (if not my audience) that the events of the last twenty-five years can, in the main, be interpreted in terms of the working of the machinery I described at the outset. Most of this is, of course, controversial. Controversy flourishes both here and in the United States on the extent to which prices of manufactures are, indeed, cost-determined and not directly affected by pressure of demand. For the most part, the evidence seems to me to be on the side of this proposition; but the behaviour of foreign trade prices in 1972–3 calls for further investigation. The flexible behaviour of most foodstuff and raw material prices is not denied, though it is perhaps not investigated as much as one might expect. Wages are the real battleground, in theory as I would hold them to be also in real life. The practical question is simply whether a tolerable amount of slack in the economy, induced by monetary or fiscal stringency, can bring the rate of increase of wages into line with the rate of increase of productivity. After a period in the 'sixties when some of the econometric evidence seemed to point to an affirmative answer, everything has become more cloudy, and a demonstration that such an attempt can succeed in any of the older industrial countries is still lacking. We await the outcome of current attempts with interest, though my own view, as I have indicated, is that complex circular processes are involved, and that the

elusive growth of productivity may be at least as vulnerable to these measures as ever wage-inflation is.

This brings me to my final reflection. The period about which I have been talking is a very special one; for the world economy as a whole it has shown by far the fastest sustained growth of real income per head of any period of similar length on record. The industrial market economies, the OECD countries, collectively raised their per capita real income at about  $3\frac{1}{2}$  per cent a year over the 20 years from 1953 to 1973. The median national rate of growth of per capita income for the 123 countries of the world for which there are published estimates<sup>1</sup> was, between 1960 and 1973, about 2.9 per cent a year, which is faster than the United Kingdom is supposed to have managed over even its best eight-year periods in the nineteenth century, and quite a lot better than we were doing at the time in question. In other words, never, so far as we know has the material wellbeing of mankind improved so much over a generation, even allowing for the stormier weather after 1973.

When one compares this record with the swathe that deflation cut through human progress in the nineteen-thirties, one is indeed tempted to write off the distortions and inequities of recent inflation as trivial. There is, of course, more to it than that. As Professor Wilson remarked in a previous Keynes lecture,<sup>2</sup> the trouble with inflation is not so much the harm it has done as its transparently self-reinforcing tendency, which raises the spectre of hyperinflation at the end of the road, or (I would add) of resort to remedies that could easily be worse than the disease.

The dilemma implied in this is a real one for the market economies, not in the sense that they have to choose between cumulative inflation and a curtailment of their prosperity and growth, but in the sense that any way that avoids the one without incurring the other is politically and socially hard—though not, I believe, impossible. But the task I set myself in this lecture was only to examine a diagnosis of the disease; I beg to be excused on this occasion from suggesting a cure.

<sup>1</sup> See the useful compilation by R. J. Tyrrell, 'World Growth', *National Westminster Bank Quarterly*, August, 1976.

<sup>2</sup> Thomas Wilson, 'The Political Economy of Inflation', *Proceedings of the British Academy*, Vol. lxi, 1975.