A New Keynesian Approach to Full Employment

James Meade
University of Cambridge

SUMMARY: *Neither monetarist nor conventional keynesian stabilization policies seem able to cope with the present combination of inflation and high rates of unemployment. This article presents a new, but keynesian approach: demand management policies should be oriented towards maintaining a stable but moderate growth of nominal income, while structural changes in the functioning of labour and goods markets should secure maximum real growth of demand and employment. These reforms could well – stressing the importance of wage-fixing proceedures – involve socialization of ownership; on the other hand, the necessity of private management is underlined. Finally, the international aspects of the New Keynesianism is discussed with a special emphasis on the need for international cooperation.*

I am greatly honoured by the invitation to speak at this conference to celebrate the centenary of the birth of John Maynard Keynes. Personally, like many others, I owe more to him than I can express. In my very first years as an economist I had the inestimable privilege of being a member of the small group, including Richard Kahn, Joan and Austin Robinson, and Piero Sraffa, which in 1930/31 met weekly to discuss and develop the analysis in Keynes' Treatise on Money which had just been published. In fact to some extent we played the role of midwives at the birth of the ideas which Keynes was evolving for inclusion in his General Theory of Employment, Interest, and Money. Later on in the war years when Keynes was working in the Treasury from 1940 until his death in 1946, I was employed as a member of the Economic Section in the Cabinet Offices; as a result – I had the privilege of seeing him at work on domestic and international war finance and on plans and preparations for domestic and international reconstruction. I admired him beyond measure; and he has been the decisive influence in the formation of my ideas about, and attitudes towards, economic policies and institutions. He was a man of magical personality and with a fantastically wide span of interests and occupations, ranging from the manipulation of public and

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private finances to the collection of pictures and books and the promotion of the ballet. I will not attempt to describe the richness of his personality. But there is one feature of his character which I would like to stress. Beneath the wit, the charm, and the magic of his personality there lay an overpowering desire to build a free-er, more sensible, more efficient, fairer, and better domestic and international society. He devoted his life to this effort and indeed in the end killed himself by overwork at it. I stress this because of the fashionable attemts to ascribe all our present economic ills to Keynes. To one who has attempted to work beside him in this task, such a depreciation of such a man appears both absurd and obnoxious.

I am, I fear, no scholar; and I would fail badly in the task if I attempted to pay my tribute to his memory by recounting and appraising the development of his thought on economic policies and institutions. Instead I am going to discuss the present problem of heavy unemployment which is common to all the countries of the free-enterprise mixed-economy industrially-developed world. This is certainly a problem for the cure of which Keynes, if he were alive, would be pouring out a stream of new ideas – each one being not necessarily completely consistent with its predecessor; and I feel that it is fit that a disciple of Keynes should pay tribute to him by attempting, however inadequately, to carry on that discussion.

I am one of that generation of young men and women who in the 1920s and 1930s in the United Kingdom turned to economics because of the prevailing mass unemployment. We belived that it was both stupid and wicked to do nothing about poverty in the midst of potential plenty, that is to say, to allow resources of men and machinery to rust in involuntary idleness when there were so many real needs to be satisfied. We fell under the spell of Keynes. We believed that effective demand could be stimulated, and the production of useful things thus be restarted, by a combination of moneraty policies to ease the terms on which funds could be borrowed for capital development, of fiscal policies which would expand public demands for goods or services or would leave people with larger tax-free disposable incomes to spend themselves on goods and services, and of foreign-exchange-rate policies which would prevent too much of the increased demand from expending itself on imports and thus causing an intolerable balance-of-payments problem. During the 1930s there continued to be a tug-of-war both in debate and in policies between these ideas and the more orthodox attitudes to financial questions.

During the war in the United Kingdom there was much discussion of post-war-plans; and in 1944 the war-time coalition government of Conservative, Liberal, and Labour members published a White Paper on Employment Policy in which

the government accepted the duty of maintaining a high and stable level of employment. In the simultaneous international discussions which resulted in the setting up of the International Monetary Fund and the International Bank for Reconstruction and Development and in the signing of the General Agreement on Tariffs and Trade, the idea of governmental responsibilities for maintaining effective demand and so a high and stable level of employment played an important role. Keynes himself was one of the chief architects of this domestic and international structure.

There followed a quarter of a century of the most prosperous and most rapidly growing international economy. In the United Kingdom the standard of living grew more rapidly than ever before in its history, although we were often apt to regard it as a period of failure because we were not growing as rapidly as the majority of other similar economies. One must not, of course, argue *post hoc, propter hoc.* Many scholars tell us that there were good reasons for the bouyancy of real demands and economic activity in this period which had nothing to do with the conscious adoption by governments of Keynesian financial policies to stimulate demand. However, it is at least true that governments did not adopt anti-Keynesian restrictive policies of a kind which would have inhibited this golden age of prosperity; and it may be that expectation by businessmen that governments would if necessary live up to their newly accepted responsibility for the maintenance of a high and stable level of employment encouraged the atmosphere of confidence in which the current expansion took place.

However this may be, the interesting question for a Keynesian is not whether it was Keynesian policies which caused the period of prosperity, but rather why it was that Keynesian policies were not adopted in the subsequent period of world depression to stimulate demand in order to restore a high and stable level of employment.

The immediate answer to this question is obvious. During the 1930s when the General Theory was being written mass unemployment was combined with stagnant, and indeed for much of the time with slowly falling, money prices and wage rates. An expansion of effective demand which was desired in order to deal with the mass unemployment of men and other resources could then be regarded as positively desirable also in order to put a stop to fall in money prices with its undesirable effects on the real value of indebtedness; at any rate there was no overriding fear that it would lead to a rapid and possibly explosive inflation of money prices, money costs, and money incomes.

In the 1970s and 1980s the situation was, of course, completely different. The growth of heavy unemployment was accompanied by a rapid price inflation and

indeed in the United Kingdom at times with the threat of a real explosive, run-away inflation. The authorities were faced with a tragic dilemma: should they expand in order to put an end to the tragic waste of idle resources or should they restrict expenditures at the risk of causing more unemployment and bankruptcies in order to stop the inflationary explosion? In my view we would all now be fighting – and most probably fighting with considerable success – the world depression with Keynesian anti-depression policies and we would never have heard of monetarism, Mrs Thatcher, or President Reagan if it had not been for the threat of excessive and explosive price inflation.

But it may be asked, was not the threat of explosive price inflation itself the result of the previous adoption of lax, expansive, Keynesian, financial policies? I do myself believe that during the 1950s and 1960s, in the United Kingdom at least, the policies for financial expansion were overdone. We then ran the economy at unemployment levels of 3%, 2% or even 1% as compared with the range of 10% to 20% in the inter-war period; and there was a perpetual underlying tendency for wage and price inflation. There may well during these years have been some undesirable demand-pull inflation. But certainly in the case of the United Kingdom it is very difficult to ascribe the inflationary pressures in the 1970s and 1980s to the pull of excess demand. Profit margins during this period were very markedly eroded, which clearly suggests that the immediate cause of continuing price inflation during this period of declining effective demand and increasing unemployment was the upward pressure of wage costs and imported material costs the effects of which in causing a price inflation were in fact slightly damped down by the reduction of profit margins.

The dilemma of the choice between expansionary policies for full employment and restrictive policies for the battle against inflation is a very real one, and one which Keynes would certainly have recognised. It is indeed a total misrepresentation of that great man to represent him as an irresponsible inflationist. I can vouch for this myself personally. I had a number of discussions with him in the last years of his life on this topic as the government's post-war plans were under discussion. He was acutely aware of the fact that the success of Keynesian employment policies ran a great danger of being frustrated by inflationary pressures and in particular by inflationary wage-cost pressures.

If there were text-book perfect competition in the labour market, upward pressure on money wage costs would not occur in times of heavy unemployment. Wage contracts are set in terms of money; if there were unemployed workers seeking work in a perfectly competitive labour market, they would be undercutting existing money wage rates. I am not arguing either that it is possible, or that it

would be a good thing if it were possible, to introduce perfetly competitive conditions in the labour market. Indeed I strongly oppose measures which would involve the elimination of any social support for the unemployed in order to sharpen their appetites for jobs, and the prohibition of any trade union or similar arrangements in order to reduce the defences of those in work from inroads by the unemployed. In the case of the labour market, workers' organisations are needed to offset the monopsonistic bargaining powers of large-scale employers and to improve the workers' information about market conditions; and social support for those who in a dynamic economy are bound from time to time to be unemployed for no fault of their own, is clearly needed on humanitarian grounds. Institutional arrangements which impede the forces of competition are not always wrong. But where they exist their actions should be subject to appropriate social control. What I *am* arguing is that the application of this principle to labour market arrangements lies at the heart of our present troubles.

The basic function of a trade union is to obtain the best possible rate of pay for those employed in the sector concerned rather than to set a rate of pay in that sector which will open up opportunities of employment to the greatest possible number of outsiders – to those in less well-paid jobs or to those who are wholely unemployed, including in particular the unemployed school leavers among the least privileged sections of society. There is nothing morally wrong with this attitude; it is the proper function of a trade union official to look after the interests of his own employed members; but it needs to be exercised within accepted social restraints. It has, however, one most important implication for our present problems.

As a depression develops with falling demand and growing unemployment a trade union may exercise great restraint in its wage claims because those in employment whose interests it represents will fear that they may lose their jobs if they price their services too high. But when demand starts to rise again this element of wage restraint will disappear; as soon as unemployment begins to fall, those in employment will feel no threat to their jobs and will have an incentive to enjoy the advantages of a growing demand for their products by improving their own rates of pay rather than by opening up to the outsiders/opportunities for new jobs in their sector. This will be particularly true if the depression of demand has been severe and has lasted for some time, since in this case many elderly workers who have lost their jobs during the recession will no longer be seeking work. They will have been replaced by school leavers who have never been in jobs and who have, therefore, never been trade union members. Those who are still in employment will have little direct interest in such unemployed outsiders. It is for reasons

of this kind that in my opinion we would be foolish to believe that any current restraints in wage claims which are due to the past process of recession can be relied upon to continue during any future period of recovery.

The real inflationary danger from an upward pressure of wage claims is not so much from a persistent but constant rate of price inflation, provided that it is not excessively high, but rather from an explosive inflationary situation in which the rate of price inflation threatens continually to increase. This can happen if monopolistic wage claims are inconsistent either absolutely with the rate of increase of productivity or relatively with each other.

Thus suppose that we all demand a 5 per cent per annum rise in our real standards of pay though output per head is rising only at 2 per cent. This year we demand a 5 per cent rise in money pay. This causes cost to rise by only 3 per cent since output per head is rising by 2 per cent. This 3 per cent rise in costs may at first eat into profits, but sooner or later it will cause selling prices to rise by 3 per cent per annum to cover the rise in costs. But when the cost of living starts to rise by 3 per cent per annum, we shall all demand a money wage increase of 8 per cent – 3 per cent to cover the cost of living and 5 per cent to give us the real increase at which we aim. The 8 per cent rise in money pay will cause a 6 per cent rise in costs after allowing for increased productivity. We shall then demand a rise of 11 per cent in money pay – 6 per cent to offset the cost of living plus 5 per cent to attain our real target; and so on in an explosive inflationary spiral.

A similar result can occur as a result of inconsistant relative wage claims. Suppose group A insists on being 5 per cent ahead of group B, while group B insists on being at least on a level with group A. Group A obtains its 5 per cent rise; group B follows with a 5 per cent rise to catch up; group A responds with a further 5 per cent rise to keep ahead; and so on. This leap-frogging process may well speed up as each group in turn realises that it has failed to achieve its objective. Once more we have an explosive inflationary spiral.

At this point it may well be asked why, if my analysis of the power and effect of monopolistic wage-fixing institutions is correct, they did not display their devastating inflationary possibilities during the golden age of full employment of the 1950s and 1960s, but rather suddenly started to do so during the less prosperous and ultimately depressed conditions of the 1970s and 1980s. Certainly in the United Kingdom there does seem to have been a rather sharp change in this respect at the end of the 1960s and the start of the 1970s. To what could it have been due?

A first possibility is that there was simply a progressive increase in the institutional power of organised pressure groups which in addition became more and more willing to exert their own power to enforce their own ambitious claims. I am

no sociologist and I have no idea why such changes of attitude should occur rather abruptly, if they do so occur; but is is interesting to note that this was just the period when aggressive student unrest rather suddenly swept through our world.

A second possibility for which there seems to be some hard evidence is that for one reason or another the 1970s were a period when output per head rose less rapidly than before. People may well have carried over into a period of less rapid growth of output per head claims to which they had got used during a previous period of more rapid growth and which, though over-ambitious and highly inflationary in the new period, were not so over-ambitious or inflationary in the previous period.

A third development was, of course, the fourfold increase in the price of imported oil set by the OPEC oil producers in the first half of the 1970s. Such a development can best be thought of as a reduction in the output per head of the goods needed for domestic consumption, since it means that each unit of home produced goods for export will exchange for a smaller amount of imports needed for home consumption. To put it another way, at any given level of domestic prices and costs (including the money wage rate) the cost of living will be higher because of the direct and indirect element of oil consumption in that cost. Any attempt to raise the money wage rate to offset the higher cost of imported oil would trigger off an explosive upward spiral of wages chasing prices of the kind which I have described, since people would be seeking a real rate of pay which was inconsistent with the lower productivity of their exported output in terms of imported consumption.

Suppose my analysis of the present wage-fixing problems to be broadly correct. What should a Keynesian like myself recommend as a possible way out of our present troubles?

An Orthodox Keynesian would, I suppose, recommend that we should use the whole panoply of financial policies – monetary policy, fiscal policy, and foreign exchange rate policy – to expand the effective demand for goods and services until we had regained a high level of employment and that we should then design these policies to stabilise the demand for labour at that level. Some Orthodox Keynesians hold the view that the danger of this leading to an explosive wage-cost-price inflation is greatly exaggerated and that some gentle persuasion and nudging on the labour front could keep inflationary pressures within tolerable bounds. Other, and in my view more realistic, Orthodox Keynesians fully recognize the inflationary dangers of such a policy and would urge that Keynesian expansion of demand for full employment be combined with an effective central-

ized incomes policy to prevent rates of pay from rising in an explosive inflationary manner.

I myself find difficulty in accepting these recommendations on the ground that such a centralised incomes policy, while it would in my view centainly be needed if an Orthodox Keynesian expansionary policy were adopted, would require a degree of intervention and control over money wages and prices, which might well be impossible to administer and would in any case be unacceptable if an effective alternative approach could be found. While accepting the basic Keynesian analysis of effective demand and while recommending the full panoply of Keynesian financial policies for the management of demand, I am led to stand the Orthodox Keynesians on their heads in an upside-down posture which I will call that of New Keynesianism.

Incidentally, before I explain what I mean by this gymnastic excercise, let me make it clear that I am not necessarily labelling Keynes himself as an Orthodox Keynesian, and I am not suggesting that he would necessarily need to be stood on his head if he were still with us. He would, I feel sure, still qualify as a Keynesian; but what particular brand of Keynesianism he would now be promoting is anybody's guess - probably some imaginative and constructive brand of his own. How I wish that he could be with us in our present troubles.

Let me explain what I mean by the reversal of functions between what I have called Orthodox, and what I have called New, Keynesianism. The Orthodox Keynesian doctrine is to use financial policies to achieve satisfactory levels of real effective demand and so of the *real* national income and, if necessary, to control the fixing of money rates of pay so is to prevent unacceptable rates of *money* price inflation. By New Keynesianism I mean a policy of using the whole panoply of Keynesian financial policies to maintain a steady but moderate rate of growth of total monetary expenditures on domestically produced goods and services and so of the national *money* income, and against this background to reform wage-fixing institutions so as to promote *real* output and employment in each sector of the economy.

Recent experience has persuaded me that we do need some monetary anchor. I do not like the idea of using for this purpose a fixed monetary price of gold or indeed of a composite basket of standardised primary products. I am not attracted by the idea which is implied by Orthodox Keynesianism that one should by central control fix the money price of labour instead of the money price of gold or of some basket of commodities. Nor do I see any merit in selecting one particular form of liquidity - M_1, M_2, or M_3 - and keeping this particular stock of assets on a steady growth path while investors are free to shift their funds into and out of

this particular kind of property. But I do see great merit in looking directly at the total national money income and controlling money expenditures with the whole armory of fiscal, monetary, and foreign-exchange rate policies so as to keep the total of available money incomes on a steady growth path. Against this background money wage rates could play their proper role on a decentralised basis in matching supplies and demands for labour at full-employment levels.

It is not technically difficult for an economist to devise blue prints for suitable wage-setting institutional arrangements, taking into account for each country its historical background, and its laws, customs, and existing institutions. In the case of the United Kingdom I personally would suggest a combination of some reforms of labour law to restrain certain of the trade unions' excessive monopoly powers and of some increases in legal and institutional constraints or controls over the setting of selling prices by monopolistic businesses, in order to make it difficult for them to play a part in the inflation of money wages, costs, and prices. Against the background of a resolute financial policy designed to maintain the total money national income on a moderate and steady growth path, I would like to see some central representative body set up to assess the economic effects of such a policy and as a result to announce a norm or average increase in the rate of pay which would in these circumstances promote the attainment and maintenance of a high and stable level of employment. I would recommend the institution of a national structure of pay tribunals to which either party to a dispute about rates of pay could refer the case, the duty of the tribunal being to make an award which corresponded to the current national norm, unless the setting of a somewhat higher or lower award seemed to it to be desirable in order to promote employment and output by balancing supply and demand for labour in the particular sector under examination. I would like to see the application of certain sanctions against those who took industrial action against the terms of such an award. All this might be combined with a special inflation tax on increases in rates of pay which exceeded the norm by some stated percentage.

I do not want to dwell on these particulars since they would obviusly need to be designed differently to suit the conditions of each country. But I would like to emphasize two points: first, that in my opinion a really radical reform of wage-setting institutions is essential for the health and welfare of our sort of free democratic world; and, second, that obtaining general acceptability of any such set of reforms is essential for their working and politically far and away the most difficult domestic economic problem.

I fear that this calls for a revolution in present attitudes. A decentralised system for setting rates of pay in each sector of the economy in such a way as to promote

output and employment in that sector means that wage-fixing cannot be used as a main instrument for achieving a more equal and fair distribution of income. The appallingly difficult task is to persuade people to think of the wage rate not primarily as an instrument for achieving a desirable distribution of income as between wages and profits and as between different types of labour, but primarily as an instrument for promoting the full and efficient employment of labour. This does not mean that we should be unconcerned about these distributional problems. What it does mean is that somehow or other the emphasis must be decisively shifted onto other measures – such as welfare services, social benefits, and taxation – to achieve a socially acceptable distribution of income and property.

Indeed, such a shift of emphasis is desirable not only for the promotion of employment but in the direct interests of a decent redistribution of income as well. For it is true, at least in the United Kingdom, that for the relief of real poverty reliance on tax arrangements, social benefits, and welfare services is a more efficient tool than adjustment of low pay. The fact is that the correlation between powerty and low pay is surprisingly low; there are many low paid workers who are not in poverty, being members of a family with other earners and few dependents, and many who are not low paid but are in poverty, being members of a family with no other income but many dependents with, perhaps, special needs. Taxation, social benefits, and welfare services unlike rates of pay can be moulded to fit needs and resources.

I am myself convinced that for the reasons which I have already discussed the application of Keynesian expansionary policies is held up by present attitudes and institutions which connect wage claims with the attainment of absolute or relative levels of real income (which may well be inconsistent with what is in fact attainable) rather than with the promotion of output and employment. This is, in my view, already the basic impediment for planning for prosperity. But if we peer into the future the implications of this clash between the use of the wage rate to obtain a desirable real income target and its use to promote output and employment may become even more formidable. I refer to the possible, though by no means certain, implications of the new technological revolution through which we are passing in communications, information services, data processing, control systems etc. – what for short I will call Chips and Robots.

It is certain that Chips and Robots will substantially increase the total amount that could be produced with any given amount of Men and Machinery; but a basic question to which the answer is, I think, uncertain is whether it will make Men less valuable in production relatively to Machinery, – whether, that it to say,

it will raise the return on capital relatively to the real wage offered to the worker – and if so how much.

If Chips and Robots turn out simply to raise productivity without basically affecting the relative marginal products of labour and capital, there will be no long-run fundamental increase in the problem of reconciling full employment with a decent distribution of income. The owners of capital will receive a real income, say, twice as great, but the real rate of pay in that case will also be twice as great. No doubt there will be less employment because, if we can judge from past history, the higher real income of the worker will be taken out largely in increased leisure – shorter working hours, longer holidays, earlier retirement etc. But this is compatible with an unchanged distribution of real standards between workers and owners of capital; and it does not imply any lasting increase in involuntary unemployment, though during the process of change, as employment is reduced in occupations taken over by Robots and is expanded in occupations in which labour remains important relatively to machinery, there will be serious problems of structural and frictional unemployment.

But the situation would be quite different if Chips and Robots turned out to make capital very much more important relatively to labour. Imagine for a moment the extreme possibility. Let us suppose that Robots can produce everything, including manufacturing and replacing each other, and that they require an absolute minimum of labour to attend them. The wages of labour are transformed into profits earned on Robots. But the ownership of property is at present much less equally distributed than the ability to work; and the profits on the Robots would thus be more highly concentrated than the previous wage earnings. Although output per head might be immensely increased, either competition among workers for the small number of jobs would reduce the real wage absolutely to a very low level or else, if by trade union or similar action the real wage was held up, there would be a large volume of involuntary unemployment among those who were not privileged to get the few jobs available at the fixed rate of pay.

No doubt the change will be nothing like as stark as I have just depicted it. But if it turns out that Chips and Robots have a substantial influence of this sort on the distribution of real income as between income from property and income from work, it is possible that reliance on the existing mechanisms for the redistribution of income through taxation and social welfare would not be enough. In this case attention would have to be paid to two other possible developments.

The first would consist of measures to redistribute the private ownership of property so that society becomes a property-owning democracy, in which the representative citizen was a represenlive owner of property as well as a representa-

tive potential worker. The national income, including the products of the Robots, would again be more equally divided and the workers' decreased employed would again become voluntary leisure rather than involuntary unemployment.

The second development would be by means of what I will call topsy-turvy nationalisation, by which I mean socialization of ownership with privatization of management instead of socialization of management with privatization of ownership. With the nationalization schemes with which we are familiar in the United Kingdom the government takes over for centralised public management the actual physical machinery and equipment (e.g. the railway lines and rolling stock), but in compensation it issues national debt to the previous owners who continue to receive interest on their capital. By topsy-turvy nationalisation I mean a process whereby the management of the physical equipment (e.g. the Robots) is left in the hands of a multiplicity of small competing privately managed companies, while government by means of a capital levy, wealth tax, or death duties gains an unencumbered ownership of shares in these competing companies. It could hold these shares directly; or could invest the capital in various privately operated investment trusts whose job it would be in competition with each other to invest the money in turn in what they considered to be the most promising companies operating the Robots. By this means all part of the profits of such companies would indirectly accrue to the government, which could use the revenue to finance a social divided or other form of social benefit to the generality of citizens, who would thus receive an income other than their income from work, so that once again involuntary unemployment could be transformed into voluntary leisure.

Now I personally believe that a society which combined elements of redistributive taxation and social welfare, with elements of property-owning democracy and topsy-turvy nationalisation would in any case be a very desirable kind of society to live in, though I have no desire to hide the fact that I have said nothing about the very difficult measures which would be needed to produce a real property-owning democracy or to achieve any considerable degree of topsy-turvy nationalisation. I wish only to point out that it might conceivably in the future become necessary to face these difficulties, if we wanted to combine full employment in a free-enterprise society with a tolerable distribution of income.

But our immediate unemployment problem is not primarily due to Chips and Robots. In two years from 1979 to 1981 the volume of industrial production in the United Kingdom fell by some 15%, at which depressed level it stagnated. By no stretch of the imagination can more than a very small part of this sudden collapse be ascribed to the introduction of new technologies. A major part of our

present trouble remains a case of lack of Keynesian effective demand complicated by the threat of an explosive inflation if Keynesian expansionary policies were introduced.

So much for the problem of wage-fixing. The other half of the problem of restoration of Keynesian full employment relates to the management of the total money demand for the products of a country's economy by means of fiscal, monetary, and foreign exchange policies. When I planned this lecture, I had intended to devote equal attention to both halves of the problem; but since in my opinion it is the wage-fixing problem which is the basic impediment to a succesful Keynesian attack on unemployment, I make no apologies for having devoted a disproportionate amount of my time to its discussion. In the short time that remains to me I can only state very briefly and very dogmatically my own views on financial demand-management policies without really adequate discussion of them.

Let me start by considering the position of a single country - let us call it New Keynesiana - which alone is going to attempt to devise its financial policies on the New Keynesian principle of adjusting total money expenditures on its domestically produced goods and services so as to keep the total of its domestically produced money income on a steady growth path. The first basic question is whether it should rely primarily on monetary or on fiscal policies for this purpose. If, as I would hope, the country concerned is attempting to remain a member of an open world economy without reliance on controls of capital movements, it will in my opinion have to rely on its domestic fiscal policy rather than on its domestic monetary policy for the control of total money expenditures on goods and services. With freedom of international capital movements it will not be able to set its domestic monetary policy, that is to say its domestic structure of interest rates, without regard to interest rates in other countries. Even if it allows the foreign exchange value of its money to float freely, it cannot set its domestic interest rates seriously out of line with interest rates in the rest of the world without causing an intolerable overshooting of the foreign exchange value of its currency away from any reasonable equilibrium level.[1]

1. The influences at work may be illustrated by the following much over-simplified numerical fable. Suppose the rate of interest in the USA to be 20 per cent and in the UK to be 10 per cent, and that this divergence were confidently expected to last for three years and then to stop. If in these conditions the £ depreciated by some 30 per cent below the natural competitiveness level which was expected to rule in three year's time when the divergence of interest rates was expected to cease, the expected yields on the present investment of funds in the USA and the UK would be equalised. An owner of £s who bought $s now would gain

Thus New Keynesiana would be using its wage-fixing institutions to maintain employment and designing its budgetary balance to keep its total money national income on a planned steady growth path. It would be wise in my opinion to allow the exchange value of its currency to float fairly freely, but to employ its domestic interest rate structure to influence international capital flows in such a way as to maintain, without too great a reliance on the use of its foreign exchange reserves, a rate of exchange which maintained a reasonable degree of competitiveness of its main products relatively to similar products of other countries. In other words it would attempt by the use of monetary policy to induce continuous adjustments of the money rate of foreign exchange which reflected divergences between movements in its own domestic money costs and prices and the rate of inflation of such money costs and prices in its main competitor countries.

The competitiveness of New Keynesiana's products *vis-a-vis* similar products of its main competitors would have to be measured by some index of the ratio of its own money costs measured in its own domestic currency to money costs in foreign countries converted at the ruling rate of exchange into New Keynesiana's domestic currency. Let us call this the real rate of foreign exchange as contrasted with the money rate of exchange. The question remains at what level should it choose to stabilize this real rate of exchange. Let me discuss the answer to this question by considering the following horror story.

Suppose that everything is going along nicely when, alas, New Keynesiana is faced with a serious world depression which greatly reduces the world demand for her exports at the current real rate of exchange, i.e. at their current relative competitiveness. The fall in the demand for her exports will threaten to cause a reduction in the total money demand for her products and on New Keynesian fiscal-policy grounds she will offset this by increased government expenditures, or perhaps rather by reduced taxation, to promote an offsetting increase in public or private expenditures on goods and services. The country's demand for imports will thus be maintained in spite of the reduction in the world's demand for her exports. Suppose New Keynesiana attempts to finance this current account deficit on her balance of payments by a rise in domestic interest rates to attract foreign funds on capital account. This rise in interest rates will discourage domestic investment in capital development of all kinds; and to offset this additional threat

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some 30 per cent over the next three years from the 10 per cent higher rate of interest enjoyed in the USA, but he would lose 30 per cent by the fact that he would pay now 30 per cent more £s to buy the $s than he would receive at the end of the three years when he bought back the £s at the natural competitiveness rate of exchange.

to the maintenance of her money national income on its planned steady growth path, her fiscal policy will need to be further relaxed and her budget deficit still further increased.

Thus New Keynesiana will be confronted with a persistent budget deficit and ever growing national debt with its every growing interest burden, and will almost certainy be simultaneous faced with a continuing loss of foreign exchange reserves or a continuing building up of official debts incurred in foreign currencies, since it is most unlikely that she could or should finance the whole of the current account deficit by raising domestic interest rates sufficiently to attact private funds.

If she cannot ride out this tempest, what can she do about it?

A first possibility is that she should impose restrictions on her imports to divert away from foreign products on to New Keynesiana's own products a sufficient amount of domestic expenditures to replace the reduction in the world's expenditures on her exports. This would deal simultaneously with both her balance of payments and her budget deficit problem; and it would be perfectly permissible under the GATT articles for her to employ import restrictions on balance of payments grounds in such circumstances. Yet in spite of this, I greatly hope that New Keynesiana would be able to avoid this solution. Freedom of commerce is still a very fragile structure; and I greatly fear that if New Keynesiana were to adopt this policy, although for her it would be perfectly justifiable on good macroeconomic grounds, it would inevitable lead to protectionist retaliation by other countries which, since they were not preventing their own domestic depressions, would have no macroeconomic justification for protection but neverthless would have exceptionally strong protectionist political pressure from their depressed industries. There is in addition another very formidable problem connected with the imposition of import restrictions on balance of payments grounds: should such restrictions be discriminatory or not? Should two deficit countries be obliged pointlessly to restrict imports from each country or should they be allowed to discriminate against imports from the surplus countries only? And if various countries had various degree of deficit or surplus on their balances of payments, what would be the appropriate structure of degree of discrimination if the problem were to be tackled by import restrictions? The experience of commercial and financial arrangements after World War II suggests that this is a very formidable political and economic issue.

A second possibility for New Keynesiana is, of course, to depreciate her real exchange rate. Ultimately it may be assumed that by making her products more competitive, demand at home and abroad will be sufficiently diverted on to New Keynesiana's products as to cope with the problem and thus to relieve both the

balance of payments problem and the budget deficit problem. But because of the time lags involved in the adjustment of channels of trade to new price relationships, the immediate and temporary effect may be a worsening of these two problems. The rise in the prise of imports due to the exchange depreciation may immediately make the balance of trade deficit even greater than before. It will only be when price changes have had time to reduce the demand for foreign products and to increase the demand for New Keynesiana's products that the situation will be relieved. During the downward slope of the infamous J-curve the strain on the balance of payments and thus on the budget will be magnified. The exchange rate variation will achieve an ultimate solution, but at the expense of a temporary once-for-all worsening of the deficits both on the balance of payment and on the budget.[2]

There is, of course, a third and better solution, namely by means of international cooperation which would avoid the ravages of such fluctuations in world economic activity; and indeed for very obvious reasons the smaller the country, the more important it becomes for New Keynesiana to rely on such international action. An international order for a free-enterprise world of New Keynesianas could be constructed more or less on the following principles.

Each menber country would set a target for the planned growth of its own domestically produced money income. Each member country would devise its own fiscal regulator mechanisms for keeping money expenditures on this target path. Each country would design its own institutions for the control of prices and the setting of rates of pay for the promotion of its own real output and employment. These would all be national responsibilities, though international exchange of information and ideas about them would no doubt be useful.

International decisions and obligations would relate to interest rate policies, foreign exchange rate policies, and the provision and use of international reserves and liquidity. The principles of operation can be enumerated under the following five headings:

(i) Agreement would be needed on a structure of targets for the members' real

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2. Two colleagues of mine (David Vines, economist, and Jan Maciejowski, control engineer) have been engaged on applying New Keynesian principles to a dynamic model of the UK economy, which they have used in an attempt to answer the question: "What would have happened in the 1970s and 1980s to the UK economy if these New Keynesian policies had been applied in spite of the world depression? The horror story related above for New Keynesiana reproduces what their enquiries suggest would have happened in this period to the UK. These results will be included in "Vines, Maciejowski, and Meade. Stagflation Volume 2. Demand Management" to be published later this year by Allen and Unwin, London.

foreign exchange rates, these rates being chosen so as to ensure a reasonable level of competitiveness for each member's products relative to the products of the whole groups of countries.

(ii) Agreement would be needed on a structure of domestic interest rate. The levels of these rates relatively to each other would influence the international flows of capital funds and thus the demands for the various national currencies; and they would accordingly be set in such a way as to help to preserve the agreed target real foreign exchange rates without undue reliance on the use of official foreign exchange reserves. This structure of relative domestic interest would need to be continually surveyed and revised as experience showed that such revisions were needed for the attainment of the target real exchange rates.

(iii) The absolute level of the whole structure of domestic interest rates would, if necessary, be subject to revision in an upward or downward direction, without disturbance of the relative levels needed to preserve the real exchange rate targets. Thus if the majority of members were finding it difficult to maintain their domestic money income targets without the stimulus of undesirably large budget deficits, the occasion would have arisen for a general reduction in the whole structure of interest rates, which would stimulate domestic investment expenditures in the countries concerned and would thus reduce the need for stimulus by budget deficits. And conversely an upward shift of the whole structure of domestic interest rates would be appropriate in conditions of an otherwise widespread need for excessively high taxation and budget surpluses to prevent an undesired inflation of money national incomes.

(iv) The case for a revision of the real exchange rate targets would arise if one country or group of countries was having to run undesirable budget deficits to prevent domestic deflations of their national incomes, while another was having to run undesirable budget surpluses to prevent domestic inflations. In this case a depreciation of the real exchange rates of the former group and appreciation for the latter group, together with an appropriate reduction of domestic interest rates in the former group and increase in the latter group, would be appropiate. When these changes had had time to work themselves out the exports of the former group would have risen and of the latter would have fallen relatively to their imports; and this shift of world demand for the products of the two groups of countries would reduce the deflationary influences and so the need for budget deficits in the first group of countries and *vice versa* in the second inflationary group. These changes would be furthered by the reduction of interest rates in the former group of countries which would promote domestic investment and thus further reduce their need for stimulus through budget deficits, and *vice versa* in the

second inflationary group of countries. And the change in relative interest rates would be compatible with the preservation of the new target real exchange rates, since the former group of countries would have more favourable balances of payments on current account and would therefore need less inducements to attract funds from abroad on capital account, and *vice versa* for the other group.

(v) However, during the period needed for the changes in real exchange rates to work out their effects on the balance of trade (that is to say, during the period of the downward slope of the infamous J-curve) the problems of the two groups of countries might well be intensified rather than relieved, since for the time being the balance of trade of the former group of deflationary countries might be worsened instead of improved; and *vice versa* for the other group. There would during this transitional period be a very strong case for relying upon the use of foreign exchange reserves or other forms of official finance to cover the temporary balance of payments deficit of the former group at the expense of the temporary balance of payments surplus of the latter group, rather than to attempt to maintain the new target real exchange rates by a temporary but wholely perverse rise, instead of a fall, in the domestic interest rates in the former group and a temporary but wholely perverse fall, instead of a rise, in interest rates in the latter group. The covering of the perverse downward section of the J-curve is the occasion *par excellence* for the official financing of temporary imbalances in international payments.

I have no time to discuss these rules adequately, but only to assert dogmatically that in my opinion arrangements on these lines would enable national New Keynesian policies to be woven into an effective international whole.

So I will end this long rigmarole by asking the question: "Can we restore Keynesian full employment?" The answer is "Certainly Yes; but only on the two conditions of a suitable reform of national wage-fixing institutions and a suitable reform of international financial institutions, both of which reforms are essential economically but will be extremely difficult if not impossible to achieve politically." It is the politicians, not the economists, who have the really difficult task.