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UK UNEMPLOYMENT - ANALYSIS AND POLICY PROPOSALS

A Report prepared for the Prime Minister  
by Professor Patrick Minford and members  
of The Liverpool Research Group in  
Macroeconomics\*, under the overall direction  
of the Economic Adviser to the Prime Minister.

- \* We gratefully acknowledge the substantial assistance of Adrian Smith at No. 10 Downing Street, and of other officials at the British Embassies in Bonn, Brussels, Paris, Stockholm and Rome.

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# UNEMPLOYMENT IN THE UK - ANALYSIS AND POLICY PROPOSALS

## Introduction and Summary

### Introduction

Unemployment in the United Kingdom fluctuated moderately within the range of 1-2% of the labour force throughout the 1950s and early 1960s. From the middle of the 1960s it began a more or less steady rise, by 1970 to 3%, by 1976 to 6%, and by 1982 to 12%. Part of the current higher unemployment ratio is to attributed to the extremely severe world recession associated with US policies to reduce inflation while insufficiently curbing public sector deficits. Another part is the effect associated with the government's policies to reduce UK inflation. Both these effects are temporary in nature; in response to the government's policies at home and as a better balance in US fiscal and monetary policies allows world real interest rates to fall, recovery from the recession will occur, though at a rate and with a timing that is inherently hard to predict as world events over the past two years have repeatedly demonstrated.

However, these elements account for a limited part of the unemployment total. Precise calculations are difficult, but, assuming none of the proposals made here were to be carried out, unemployment at the next peak of the economic cycle whenever that comes would seem unlikely to fall below 2-2½ million (8-10% of the labour force); some others would regard even the upper end of that range as optimistic, a view that would leave even more of the rise in unemployment to be explained by factors other than the recession at home and abroad.

In this Report, we focus on these 'underlying' factors and remedies for them rather than on cyclical or 'demand-management' factors and policies. We fully accept the present framework of government demand-management and anti-inflation policy; and within that framework, discussion of details for the money supply and PSBR targets lies outside the scope of our Report.

### The Causes of Unemployment

It is a widespread opinion among economists, and one which we fully endorse, that the proximate cause of unemployment is excessively high wage costs, produced either by high wages or by low productivity. We have identified this as a strong mechanism in the UK.

However, one cannot stop at this point in the analysis and proclaim, as has from time to time been done, that government can by direct intervention in the wage setting process reduce real wages or increase productivity. Such direct intervention (or incomes policy) has repeatedly failed to achieve anything of the sort in the UK, besides being inconsistent with the economic freedom that is this government's aim. The reason for this failure is that there are market forces and distortions of considerable power driving real wages and productivity to the levels we observe. In order to modify these levels and so the level of unemployment, we have to understand these forces and modify the market distortions.

This Report identifies two major distortions in the UK labour market which prevent real wages and productivity adjusting naturally to shifts in technology, demand, and industrial structure, and relocating those freed from one sector into other sectors.

The first and most basic is the operation of the unemployment benefit system. The minimum flat rate benefit including any supplementary benefit 'top-up' is paid indefinitely to an unemployed man for as long as he remains unemployed; such a man will very naturally expect to be re-employed at a wage after tax and work expenses which is at least as high as this benefit, and probably somewhat higher because he may not wish to 'work for nothing' whatever his personal attitude towards work. His work even at this wage may well be poorly motivated because of his lack of reward, so that productivity also suffers. Hence wages cannot effectively fall below this level for even the most unskilled worker; this level then acts as a floor under the whole wage structure. And working practices accepted at this unskilled level may similarly affect higher levels of the occupational structure. It follows that shifts in economic conditions which would warrant a fall in real wage costs, will only have a limited effect on them and unemployment will result instead. This mechanism in other words substantially limits the wage flexibility of the UK economic system.

The second major factor is the power of unions to raise wages relative to non-union wages. Given the way the benefit rate sets a floor below the non-union wage, as unions raise wages for their members the workers who then lose their jobs cannot all find

alternative work in the non-union sector because wages there do not fall sufficiently; the overall effect is increased unemployment.

These are the fundamental causes isolated in our Report. Other factors are contributory but not fundamental in the sense that were these causes to be withdrawn the other factors would not add to unemployment. Such factors include changes in taxation, shifts in technology, adverse movements in the terms of trade and in world demand for UK products, and changes in population size and structure; many of these are frequently cited in press and other commentary on unemployment as 'reasons' for unemployment. They are so only in the limited sense we have defined; to repeat, if wages and productivity adjusted without constraint these factors would not alter unemployment but would instead have their effect on real wages. We pay little attention to them accordingly in what follows.

The explanation of the labour market we have just given is not to be tested by any very simple relationships such as for example one between unemployment and the ratio of benefits to work-income. There are a number of complex interactions which need to be disentangled. The Report details some work of this nature that we have undertaken; some 1100 observations of postwar UK behaviour have been used in this work and the analysis given emerges unrefuted from these tests. These were supplemented by analysis of the postwar experience in 4 continental countries,

Germany, France, Italy and Belgium. These provided econometric support for the approach and useful institutional comparisons; in particular we found that the behaviour of Belgian wages and unemployment closely mirrored that of the UK, even in the size of its unemployment problem - because of its similar flat rate benefit system and powerful unions, while in the other 3 countries with ratio systems behaviour - as the approach predicts - was quite different. We also obtained estimates of the relevant relationships for the UK; these, approximate as they must be, form the basis of the estimated effects of policy changes shown below.

### Policy Proposals

Our proposals fall into four parts:

- a) suggested changes in the benefit system
- b) supporting changes in tax and income supplements for those in work
- c) changes in the law and institutions regulating labour market behaviour
- d) a number of other measures to improve the operation of labour and closely related markets.

Colloquially, a) may be said to deal with the 'unemployment trap', b) with the 'poverty trap', c) with union monopoly power; d) deals with minimum wages, regional issues, and the housing market



Taken as a whole, our proposals are capable of reducing unemployment very substantially over a five year period; politically we believe them to be well capable of implementation with public acceptance as a programme for reducing unemployment, though they will be strongly resisted by particular vested interests. They will increase incentives and get the labour market operating effectively once again.

a) The Benefit System

Wage flexibility is substantially reduced by the fixed ( 'flat rate' ) benefit level. This is because benefits do not vary with wage levels. This is to be contrasted with the practice in a number of continental countries - for example, Germany, France, Italy and Denmark - where benefits are awarded essentially in a particular ratio to wages; hence as wages fall, benefits fall in like proportion and do not act as a floor below wages, reducing their flexibility.

Our first proposal is therefore to introduce a maximum statutory ratio ( or 'Cap' ) of 70% for total unemployment benefits to net income in work. This is similar to the ratio used on the continent, e.g. Germany 68%, Italy 67%, This Cap would be widely seen as just in view of the need to maintain minimum work incentives. It would be simple to work ( continental practice shows it to be quite feasible ), and it would, according to our estimates, bring about a sizeable reduction in unemployment: nearly ½ million over 5 years. It would also of course greatly increase the

flexibility of wages, since for many workers ( probably around half ) benefits would vary proportionally with wages.

We also propose the introduction of a jobs pool, consisting of all available vacancies and other community work especially organised, in each area ( as in the US 'Workfare' scheme), together with tighter procedures for denying benefit. Benefits should be conditional on acceptance of a job from the pool, after three months for workers under 25; for other workers, after 6 months. This proposal would reinforce the pressures for jobs to be taken at lower wages; it would also be regarded politically as a 'positive' effort to provide jobs for those unemployed people willing to work for benefits only.

b) Tax and the Support of Work Income

The introduction of measures in a) will increase work incentives substantially for those in low paid occupations. But a further contribution to reducing unemployment can be obtained by raising tax thresholds and child benefits ( to cover families with children ); this will increase incentives for those in higher paid occupations, whose benefits will not be affected by the Cap. Furthermore it will also increase the social acceptability of the Cap by raising the in-work incomes of those affected by it, so both mitigating the fall in their living standards when unemployed and implying an absolute rise in living standard if they now choose to work even at a lower wage.

Our third proposal is therefore a rise in tax thresholds by 40% and in child benefit by £2-15 per child ( bringing it to £8 per child ); the rise in tax thresholds to come in 2 phases, 25% in the 1983 budget, 15% in the 1984 budget. The rise in thresholds will save administrative resources by taking households out of tax; it will also carry out the Conservative manifesto pledge to cut taxes ( offsetting the 1981 fall in real thresholds and raising them a further 25%).

However, incentives to work are also damaged seriously for those in work at the lower end of the pay scale (the 'poverty trap'); because of the interaction of tax, National Insurance, Family Income Supplement (FIS), means tested benefits in kind\* and rent/rebate rebates, living standards barely rise and can actually fall as wages rise for low-paid workers. This is likely to affect work effort, training undertaken, and so productivity.

The raising of tax thresholds itself helps reduce this problem. It also gives an opportunity, because living standard, are being raised, of modifying the support system to remove the poverty trap.

Our fourth proposal is to abolish means-tested benefits in kind and replace them by a more generous FIS calculated as 2/3 of the shortfall in net income below new, higher 'poverty levels'. This administratively simple measure effectively removes the poverty

\* such as free school meals and free prescriptions; these are often called 'passported benefits' because drawing of FIS is a 'passport' to receiving them.

trap, while substantially protecting the families currently being supported. Some 80,000 families would be worse off, but mostly to a very small extent ( less than 3%); however to prevent this without restoring the poverty trap would be very costly in either revenue or administrative resources.

c) Union Power

With labour legislation currently in place, though substantial rights exist to restrain union actions through the courts, enforcement of these rights is lacking. In many cases, the public sector is involved and the government should ensure that public sector bodies enforce their rights fully. Nevertheless, private sector bodies may for various reasons, including intimidation and legal costs, be unwilling to pursue actions that it would be in the public interest to have pursued.

Furthermore, the law is by now extraordinarily complex and still fails in the original objective of eliminating labour market monopoly power; closed shop practices are still permitted and unions may still call out workers in breach of contract with their own employers with immunity from tort actions. A bolder approach which goes all out to eliminate labour monopoly power is required. This should be seen to be even handed between workers and employers; as such charges of discrimination against workers because of 'union bashing' would be turned aside.

Our proposals are simple and threefold:

- 1) to restore jurisdiction of the common law to all union actions;
- 2) to legislate a 'status' provision such that any contract contingent on the union status of the employee would be invalidated; this would render closed shop agreements, explicit or implicit, null and void.
- 3) to institute a Labour Monopolies Commission under the existing Competition Laws with independent power to investigate any apparent breaches of the public interest in labour market competition, and to bring actions under common law to obtain enforcement of the investigation's proposed remedies.

Proposal 1) would make all union strike action actionable unless expressly covered by a negotiated strike clause in a collective contract; this would give a stimulus to collective agreements provided these were permitted by the Labour Monopolies Commission. 2) would give freedom for any person to contract with any employer; evidence of employment or dismissal because of union membership or lack of it would be actionable. 3) supplies an active agent to ensure that monopoly positions are broken up, regardless of whether the parties wish it or not and regardless of whether the offence is by employer or unions. The activities of the Commission would build up a body of case law that should have over time in the labour market the same effect as the Restrictive Trade Practices Court and the Monopolies and Mergers Commission have had in the goods market under existing laws.

Up to now post war governments have acted as if labour market monopoly was in the public interest; they have done so either because of the desire for political favour with the unions or

out of fear. Labour market monopoly is not in the public interest. This government could, both because of its popular mandate to deal with the problem and because of union weakness in the current labour market, finally deal with the problem once and for all. These proposals are a means to do so.

d) We propose also;

- 1 that all remaining Wage Councils should be abolished; their activities are just like those of unions, to raise wages with a consequent rise in unemployment.
- 2 to improve mobility, council house rents should be raised to economic levels and private sector rentals should be decontrolled.
- 3 to assist the Cap proposal to reduce regional disparities in unemployment, a regional employment subsidy based on the unemployment rate of the region should be instituted using EEC regional fund finance.

#### The Economic Effects of the Proposals

We estimate that 1) the Cap and related tax proposals should reduce unemployment by around 0.9 million over a five year period; 2) the labour market monopoly proposals could reduce unemployment by around 1 million, over a ten year period in view of the big build-up of case law required for it to be fully effective. 3) the costs to the Exchequer, after allowing for higher net revenues from lower unemployment and higher output, would be about £2½ billion in 1983/4 rising to a maximum of £3½ billion in 1984/5, and falling back to £2 billion within five years. These costs would appear to be within reach without jeopardising the PSBR targets set out within the Medium Term Financial Strategy, though clearly this judgement is a tentative one at this time and will have to be reviewed closer to the Budget.

I THE CAUSES OF UNEMPLOYMENT IN THE UK

The Analysis of UK Unemployment

The facts of the 'unemployment trap' described below show how close to benefit levels wages are for very large numbers of workers with incomes less than the average. The implications of this situation are serious and twofold; first, falls in real wages will be hard to achieve (this is sometimes described as 'downward wage rigidity') and secondly, and as a result, adverse shocks to employment either from the supply of the demand side will have their effects on jobs rather than real wages.

Nevertheless, this is not the only factor in the situation (nor can unemployment be explained or predicted in the UK just by looking at the benefit/wage ratio). To obtain estimates of the likely trends in unemployment and the effects of different policy measures, we have endeavoured to set out a theory of unemployment which embraces the main relevant factors, and to obtain estimates of the relevant relationships for the UK in the postwar period.

The theory that is currently most popular among labour economists is 'search' theory. Suppose that a man has been made redundant or otherwise is out of work. He then searches for a new job for his particular skill. Extra time spent searching costs him extra; this cost includes the outlays on search net of an utility derived from leisure (which of course could be negative). He

gets job offers at intervals with a wage attached to it which is taken randomly from a distribution (which he knows) of potential wages for the job type. He accepts an offer when it is equal to or greater than the expected wage from the next offer minus the extra cost of search involved in waiting for another period.

This theory is undoubtedly suitable for individuals in certain labour markets; notably, where the individual has a clearly defined job preference and jobs of that type become available periodically, and have a wage distribution attached to them. For example, professional people, such as an economics lecturer, may be well described by it. However, the vast mass of jobs are manual or semi-skilled non-manual; within these jobs, some are restricted by union entry conditions, others are in industries with little union intervention. There would seem to be for such jobs a 'going rate', one in the union sector where jobs are rationed, and one in the non-union sector (if there is one for that job type) where jobs are freely available at the rate. Take taxi-drivers, for example; there are areas such as Newcastle where there is close regulation of rates and attempted control of entry, and areas such as Liverpool which are effectively deregulated. An unskilled man could become a taxi-driver in Liverpool at will; or he could try to get a more profitable regulated job in Newcastle. But it is by no means clear that he will 'search' and remain unemployed. Rather, he may well decide whether it is worth his while to do either; if he



concludes that the deregulated one is good enough, but the regulated one would be better if it came up, he may take the deregulated one and be ready to drop it and shift when and if the other comes up. It seems unlikely that he would remain unemployed, 'searching' the union or regulated sectors, unless he decided that the non-union rates were just not attractive at all; if he did so, he would lose income without necessarily enhancing his chances of a union job.

Such a person will furthermore be content to choose from a wide menu of jobs. Take, for example, the recent case of a Liverpool taxi-driver who had been made redundant from an engineering firm. He decided that, given the scarcity of union jobs, the taxi rate was acceptable; no doubt he is keeping engineering places under review as they come up.

These considerations suggest an alternative model of the work decision, which is 'new classical' in spirit (for details, please see Annex A). The worker has knowledge of 'going rates' in unregulated, or non-union sectors in which he has the necessary skills to work; he does not need to 'search' for this knowledge. He decides when to enter and when to withdraw from these sectors in a standard 'optimising' manner; ie. he maximizes the present value of his expected welfare, given these wage rates and other relevant prices, including benefits out of work and taxes etc. in work. Though all workers would like to have a union job, it is assumed that the chances of getting one are not affected by taking a non-union job, so

that the union wage does not affect his work decision.

It turns out in this model that the number of people willing to work at union wages is irrelevant to the determination of wages or jobs in either the union or the non-union sectors. The reason is straightforward; the union's mark-up over the non-union real wage is determined by its monopoly power interacting with technology and demand conditions; this monopoly power is precisely the power to ignore the desires of non-union members for the better wages within the controlled sector. In practice, of course, this ability would be eroded substantially, the larger the non-union sector; but this erosion depends not so much on the non-union members' frustration as on the enhanced ability of firms to hire non-union members beyond the reach of the union (as in the USA, with firms hiring in the South rather than the unionised North East).

The model therefore implies that the total supply of labour will be dependent on the level of current real wages in the non-union sector ('free market wages'), net of tax and expenses, relative to on the one hand net out of work benefits and on the other expected future net real non-union wages. In other words, the people who are 'on the margin' of supply in the labour market are in the non-union sector (in 'unprotected jobs'), typically on low wages and 'unattractive' jobs; hence the importance in labour supply of replacement ratios<sup>\*</sup> for low income households, for these are the ones most likely to

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\* The ratio of benefits out of work to net in-work income.

withdraw into unemployment and swell the statistics under additional pressure.

There are various ways in which the supply of labour could contract as real wages fell. Workers could decide to quit more frequently, taking longer periods between work; for manual men, for whom explicit part time work is awkward, this would approximate to part time working over the year as a whole. Workers could take spells of work abroad, and spells on benefits at home. They could do less actual work on the factory premises so lowering productivity per hour; e.g. they could choose longer rest periods, hold meetings at work, go absent without leave or simply make less effort. Workers could decide not to work at all until real wages picked up again; for example, they could withdraw from the labour market in recessions and return in boom periods. Most drastically they could withdraw indefinitely and change their life style to one of living on benefits and casual, probably undeclared, earnings, on the assumption that real wages are never likely to be sufficiently attractive. To those accustomed to the ways of prosperous Southern areas of the country, such ideas may seem unfamiliar, even outrageous; but it has to be said that they are part of the everyday gossip and 'casual empiricism' of an area such as Liverpool.

Viewed in this way the distinctions between decisions on 'duration' of unemployment, those on 'participation in work', and those on work effort or productivity become blurred; there is

in essence a continuous decision on more or less no participation in work and work effort.

This decision is naturally viewed as taken for the fiscal year. For example, someone wanting to work half the time would be best advised to work half the year and be unemployed for the other half ( in either order); that way he uses up his tax allowances. Were he to work for one year and be unemployed for the whole of the next year, he would fail to use and subsequently lose his tax allowances in the second year under the UK tax system operating over our sample period.

In the UK we can distinguish three major groups in the bulk of our sample period, according to their benefit status as illustrated in Fig. 1. There are 'flat rate' benefits - i.e effectively the minimum paid, shown as point A. People on net incomes to the left of A\* will face a relative price of work and leisure of unity ( a replacement ratio of 100% or more ) They are likely to be in a situation where they do no work at all and be unresponsive to benefit or wage changes.

Then there was an earnings related supplement (ERS, abolished last December) which raised the benefit /wage ratio to 2/3 for those whose incomes relative to flat rate benefits put them below this ratio otherwise. Their related price of work will be somewhat more attractive therefore; they accordingly will react to changes in the replacement ratio because of a substitution effect. The group to the right of A includes these people as well as those with benefit/income ratios between 2/3 and 1.

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\* The point A is properly the wage at which the flat rate benefit level is just attractive enough to make 100% leisure preferable. This point could occur at a replacement ratio lower than 100% ( for some possibly higher ).

Finally, there was a ceiling on ERS, i.e. an income above which ERS became a flat rate supplement, shown as point B. Those to the right of B will have benefit/wage ratios progressively less than 2/3 as income rises; their substitution effect may therefore be smaller than those between A and B. ( At very high incomes the relative price of work becomes lower again with the higher rate of tax; however this is not of much concern for unemployment ).

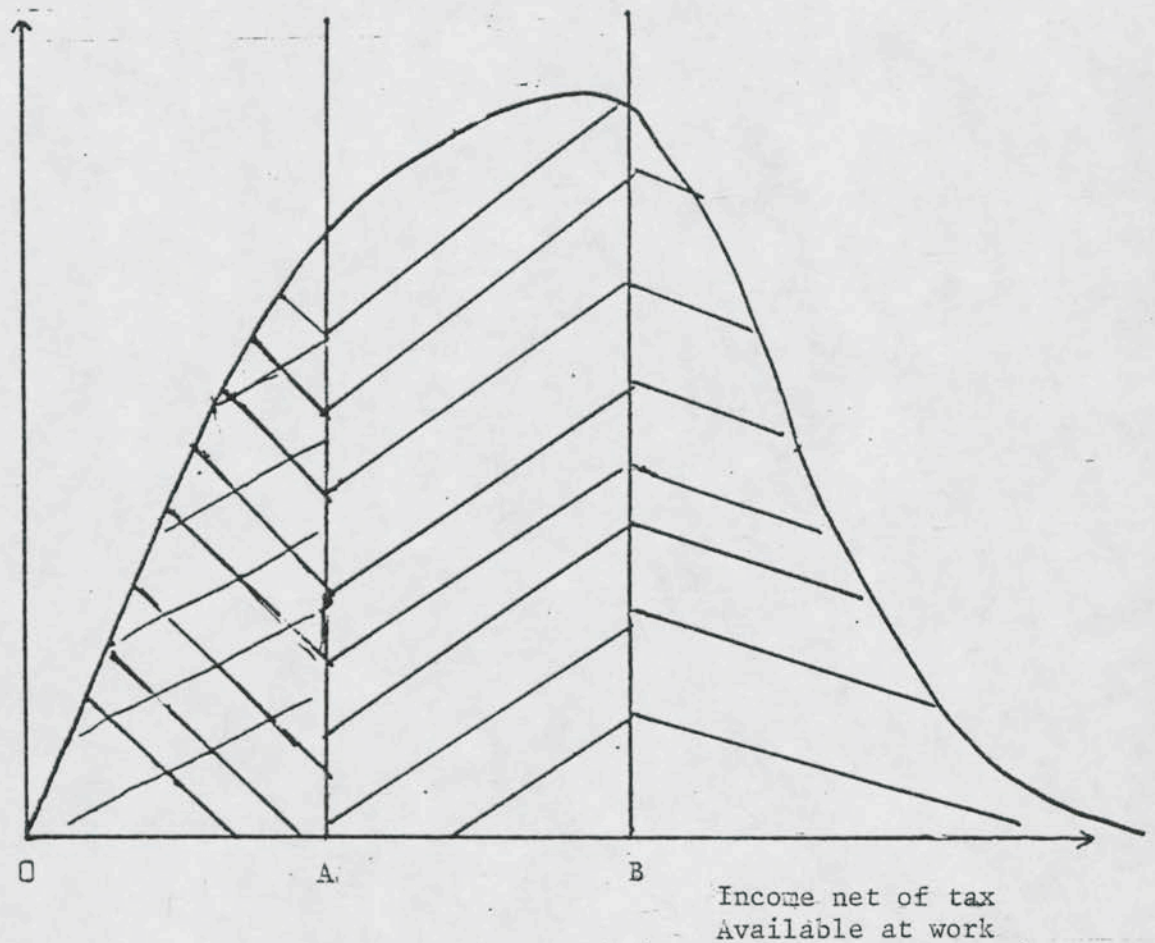


FIGURE 1

Distribution of Income and Benefit Status for a Typical Household  
Type

- A = Flat Rate Benefit 'Cut Off' point )
- B = Earnings Related Benefit 'Cut Off' point ) see text

Most importantly, as flat rate benefits rise, more people will be drawn into the area to the left of A where they may decide not to work at all. Since someone who does not work at all will be unemployed 12 times as long as someone who takes a 2 month spell every two years, these people dominate the unemployment stock. In a time series analysis, we may expect the elasticity of unemployment ( under the UK system ) to the benefit/income ratio to be very low for a low aggregate ratio ( e.g. around .5 ), to rise as the ratio rises, reaching a peak and dropping again towards zero as the population becomes concentrated around or to the left of A.

This illustrates the important general point that while the cross-section studies of populations are undoubtedly of great value, they do not necessarily provide ready answers to questions about reaction of population over time. In this case to translate cross-section findings into time-series predictions of the effect of benefit changes one requires to know the income distribution, the location of points A and B, the reservation wage levels and the elasticity between A and B. Such a translation is likely to be hazardous at best; a time-series relationship, for all its faults, provides a useful direct estimate of the reactions under investigation.

While labour supply and unemployment depend on non-union real wages in this way, non-union real wages in turn are determined

at the level which set supply equal to demand in the non-union labour market. This market is like the free market in 'two-tier' markets where one market is controlled, one is free and unrestricted ( e.g. the financial Belgian Franc or any Black Market ); it reacts sensitively to demand and supply factors in both markets. For example, a rise in union monopoly power which raises the union mark-up over non-union wages, will raise union wages, non-union wages constant, and reduce demand for union labour; those who lose their union jobs will be available for work in the non-union sector and depress wage levels there. As this non-union wage falls, so total labour supply contracts and unemployment rises.

As another example, suppose UK real costs of imported inputs rise, worsening the terms of trade. This has a substitution effect which raises the demand for labour, but an income ( terms of trade ) effect which lowers the demand for labour in conditions of external current account balance. Suppose as is likely , the latter effect dominates; then labour demand falls, probably in both union and non-union sectors. At constant real non-union wages, this will fall entirely on the non-union supply-demand balance; non union real wages will drop, again lowering labour supply and raising unemployment.

Empirical Work on the UK Labour Market - An Account of The  
Estimating Model

Our analysis is concerned primarily with the long run determination of employment, unemployment and real wages and we assume that in the long run there is no excess supply or demand for labour or goods. Our long run assumptions are captured in Figure 1. It shows, first, a supply curve of labour to the UK economy associated with the average real non-union wage,  $W_c/P$  on the vertical axis; the quantity of labour is on the horizontal axis. The supply curve is drawn flat at low wages because the ratio of real benefits ( shown as  $B/P$ ) to real wages becomes critically high for a large section of the population, but at high wages the benefit/wage ratios drop to irrelevance for the vast majority so that the only effect of benefits is to raise somewhat the length of time spent between between jobs in 'search'. At these high wages the supply of labour approximates to what we may call the 'labour force' shown as  $\bar{L}$ ; those capable of working would wish to do so under appropriate terms and would mostly register as desiring work at unemployment benefit offices.

This supply curve of labour shifts to the left if real benefits rise or if income tax rates ( $T_L$ ) rise (reducing disposable wages corresponding to the gross wage shown on the vertical axis), or if the labour force is reduced. We must allow also for the rigidity of the housing market and the dispersion of employment opportunities; a mismatch between population



centres and opportunities will shift the SS curve to the left if mobility is obstructed by housing.

The demand side of the diagram is drawn up on the simplifying assumption that there is a constant union 'mark-up' ( the percentage by which unions raise unionised workers' wages above non-union wages ) at all levels of non-union wages and other relevant variables. The expositional advantage of this ( clear over-) simplification is that it allows union and non-union firms' demand curves for labour to be put on a single diagram. With union real wages uniquely related to non-union real wages, demand for union labour, though truly related to the non-union real wage, as shown by the  $D_u D_u$  curve. The demand for non-union labour will be related straightforwardly to the non-union real wage. We can add the two demands for labour together to obtain the total demand curve DD.

The position of these demand curves - the 'level of demand' depends on four groups of factors. First there are the international ones: World trade (WT) and our terms of trade ( $\pi$ ), which together dictate what domestic demand and output will be consistent with current account balance at given non-union real wages. An expansion in world trade, for example, would increase demand for British goods from abroad; if these are supplied at higher real wages, the additional export earnings will be available for domestic demand to increase also, raising imports

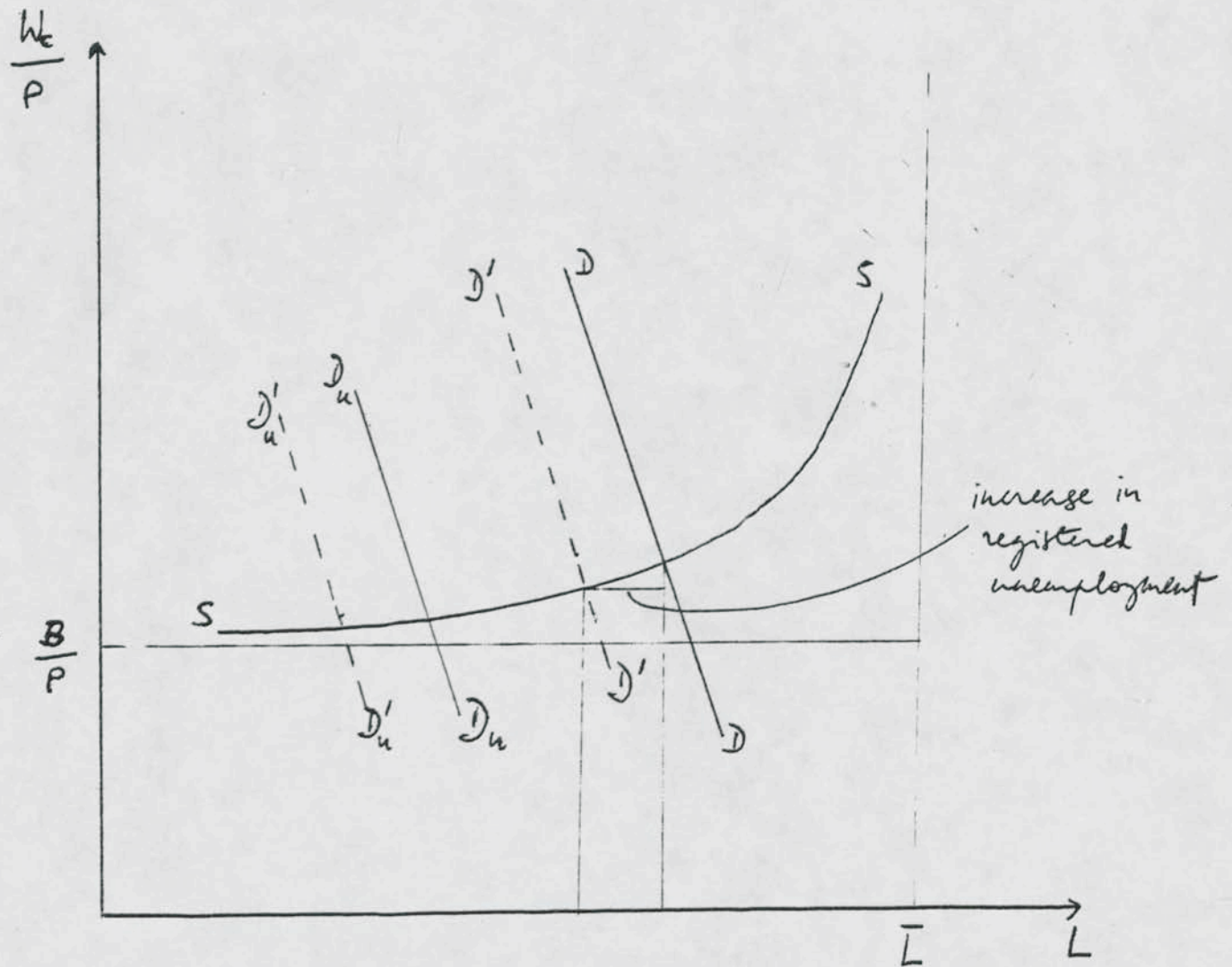


FIGURE 1

The Effects of An Increase in Union Power

(the dashed lines represent situation after rise in union mark-up)

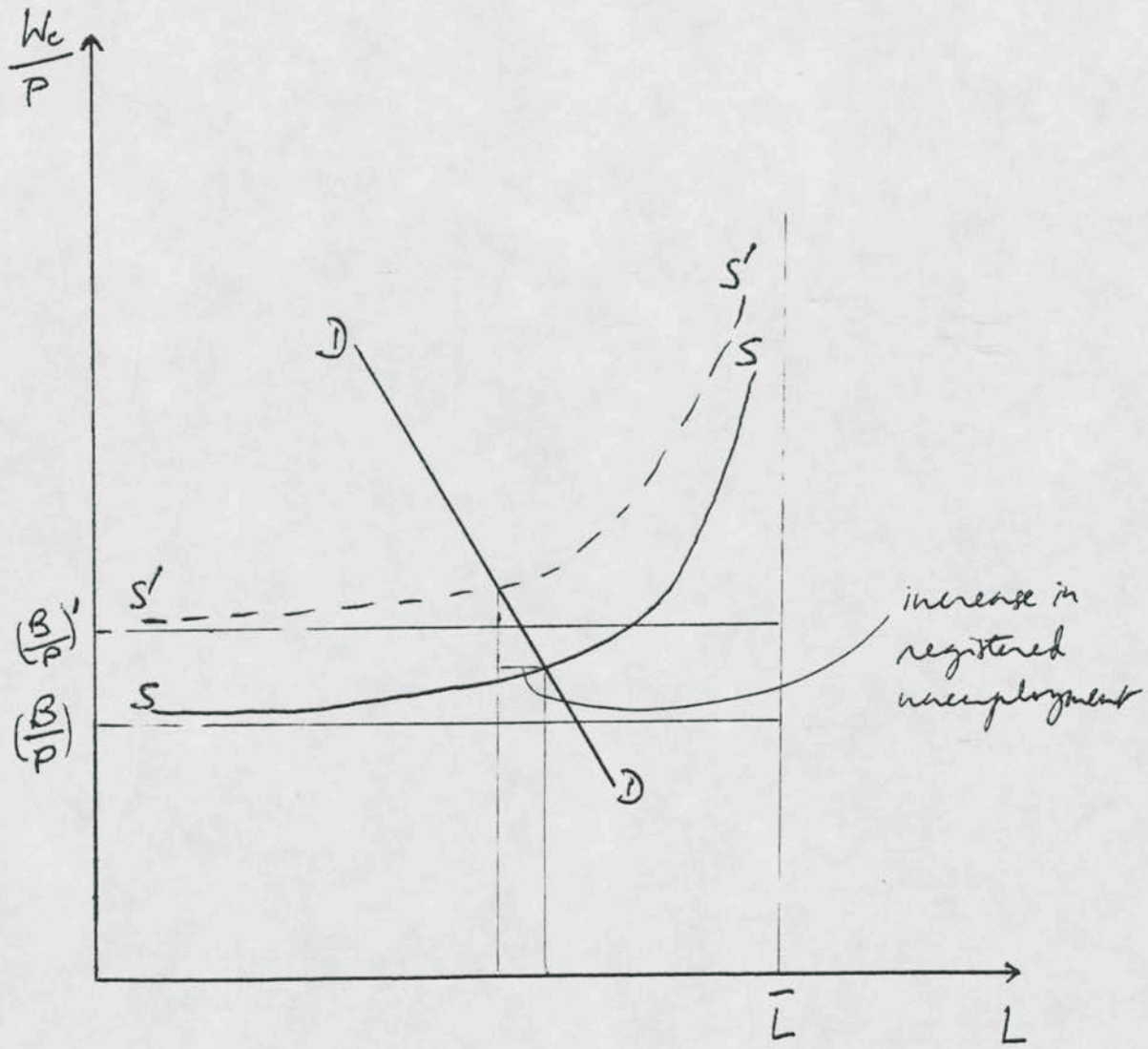


FIGURE 2

Increase in Benefits

by the same amount. Both  $D_u D_u$  and DD curves shift to the right, and real wages rise, as will labour supply and employment.

Secondly, there are the technological factors (k) which affect the productivity of labour and other costs. A rise in other costs, such as raw material or capital, both of which we assume to be set in international markets, will shift the DD curve to the left. A rise in the marginal product of labour will shift it to the right.

Thirdly, taxes on labour paid by firms and other implicit labour costs levied on employers ( such as sickness benefits and redundancy costs, ) which we denote by  $T_F$ , will shift the DD curve to the left.

Finally, we come to the union mark-up. A rise will shift the  $D_u D_u$  curve to the left, since a given non-union real wage will now correspond to a higher union real wage. The DD curve will be shifted to the left by the same amount ( there will be no change in non union labour demand at given real non union wages ).

What determines the union mark-up? Our analysis is straightforward enough; each union is a maximising monopoly which faces the problem of working out an optimal time-path of real wages for its members, given that actions it takes today will have effects far into the future. In principle, therefore, all the factors determining the demand for labour in both sectors

and the total supply of labour will come indirectly into each union's analysis. Complicated as this problem is, the essentials of the solution are clear enough; in particular, the mark up will rise the less easy the employer finds it to substitute other factors of production including non union labour for union labour. ' Union power' is measured in principle by the difficulty of this substitution, but this is not helpful in practice since this difficulty is unobservable. In practice, we resort to the only available index of union power, the proportion of the labour force which is unionised and suppose that it is likely to bear some rough relationship to the true measure.

We can put this whole framework together easily enough, Employment and real non union wages are determined in the long run at the intersection of the supply curve, SS and the demand curve, DD. Unemployment is the difference between workers who register,  $\bar{L}$ , and those who are employed. This again is an over simplification because not all in the labour force register for a variety of reasons - especially lack of eligibility and dislike of the unemployment status. But registered unemployment will be highly correlated with the difference between  $\bar{L}$  and employment.

#### The Mechanics of Estimation

In the short run the economy will not jump quickly to any new long-run equilibrium, for the traditional reason that there are costs of adjusting labour demands ( and possibly also labour supplies, though we do not find them important ). These costs of

adjustment cause both employment and union real wages ( so also average real wages ) to move relatively sluggishly; our estimates suggest that adjustment takes about 5 years for 90% to come through.

It is convenient for us to assume that in the non-union sector, day-to-day ( as opposed to long run) supply is always equal to day to day demand, hence our model assumes continuous labour market equilibrium in the sense that this residual market always clears and there is no excess supply. However, this is less important than it seems. Our analysis still has the conventional characteristic; that it takes time to get to the long run. Other analyses which would share our long run framework but assumed short run disequilibrium ( excess supply or demand ) could well produce similar results. So our analysis does not appear to rest crucially on the assumption of continuous market equilibrium.

What our analysis gives us is two basic equations and one group of equations:

- 1) An equation for total average wages ( union and non-union ) which, using real wages as the supply price of labour, says it depends on the volume of unemployment, real benefits grossed up for direct taxes, the size of the labour force and the unionisation rate. To allow for one year nominal wage contracts over a proportion of employees, the size of inflation forecasting errors

also enters the calculations; unexpected inflation causes workers who contracted in advance to suffer an unexpected drop in real wages. Finally, the last period's real wages enter because of the adjustment costs noted earlier. This is the 'supply equation' in the analysis.\*

2) An equation for unemployment, regarded as depending on the demand for labour; this is the demand equation in the analysis. Unemployment is related consequently to real wages grossed up for labour taxes on the employer, technological progress, the volume of output, and lagged unemployment.

3) A group of equations determining the level of output. These are the equations of the Liverpool macroeconomic model. They have the property that in the longrun output must be such that there is current account balance; hence long run output ( and so employment ) will depend, as in the diagram, on world trade and the terms of trade, as well as the other factors entering the SS and DD curves. Output in the short run depends on the fiscal, monetary and international shocks hitting the economy which cause fluctuations around the long run equilibrium ( discussed in our other reports and not important here ).

#### The Empirical Results - A Brief Account

In all, we have 'fitted' the model described here to over 1100 pieces of data, a very large set indeed. Our primary work

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\* The unionisation rate ( and so the union mark up) enters the supply equation though it entered the demand curves in the diagram, because the diagram is in terms of the non union wage, whereas the estimation is in terms of the ( observable ) total wage over all sectors.

since it is directly relevant to estimates of UK policy effects, concerns wages and unemployment in the economy as a whole. But we have supplemented this with disaggregated work on 17 industries' wages and unemployment, and also with work on the regional behaviour of wages, unemployment and working days lost. For full details of these results please turn to Annex A.

This body of work strongly supports the view that the level of benefits, direct tax rates, both paid by the employee and by the employer, and union power have major effects on the level of unemployment. These effects are substantial. We find that a 10% rise in real benefits would at current unemployment levels, raise unemployment by nearly  $\frac{1}{2}$  million; a rise in the fraction of labour force unionised by one percentage point would raise it  $\frac{1}{4}$  million; a rise in employer national insurance contributions by 1 percentage point would raise it by 0.2 million; a rise in the standard rate by 1 percentage point would raise it by 0.1 million. The Table below summarises the principal results from each of our studies.

% change unemployment respect to +	* of with	% change in benefits	Percentage point changes in:		
			Unionisation rate	Personal tax rates	Employer tax rates
From aggregate model		2 $\frac{1}{2}$	9	2 $\frac{1}{2}$	5
From average of industry models		4	9	4	9
From Regional cross- section		n.a	men 3 (union coverage) women 4	n.a	n.a

\* Not percentage point change

+ Full effect, i.e. after all indirect effects ( on output, real wages etc) have occurred.



Comparison with Previous Work on UK

Unfortunately, it is impossible to compare these findings directly with previous work. The reason is that previous work has all been microeconomic in nature, and hence 'partial equilibrium'; that is to say, no estimates have been derived, or for that matter were derivable, for total effects.

Nevertheless, we may compare to some extent the estimates of partial relationships embodied here with those found by others.

On benefits, our supply (wage) equation gives an implicit partial long run elasticity of unemployment to the replacement ratio of  $4\frac{1}{2}$ ; Nickell(1979), Lancaster (1979) and Mackay and Reid ( 1972) have found elasticities of unemployment duration to the replacement ratio of around 0.6, in cross section studies of samples of the unemployed. Lancaster went as far as to conclude that an 'elasticity of this order could now be regarded as established beyond reasonable doubt'.

A detailed critique of all these studies cannot be undertaken here. The Mackay and Reid study is in any case somewhat dated and uses less powerful methods than those of Lancaster and Nickell. Nevertheless, there is one major issue to be raised with all these studies. They all assume, within a search model framework, that intended ( or desired) duration is never long term ( or 'infinite'), or in terms of the search model that the offer - acceptance rate never tends to zero. We have suggested above that a person's optimal level of

unemployment per fiscal year will depend sensitively on the relative price of work and leisure ( as roughly measured by the replacement ratio). For high ratios he may decide to work not at all, or for only brief spells when market wages are exceptionally favourable. Such people are likely to exhibit a very low elasticity to changes in the ratio; this is Nickell's finding for those with long durations ( six months or more ). Yet the implication, if our suggestion is correct, is precisely the opposite to that which he draws ( that there is little effect of the ratio on long term unemployment ); it is that at some ratio these people would cease to have a corner solution and would participate 'properly' again in employment, having therefore at this ratio a very high ('switching') elasticity to it.

Furthermore, the total effect of the average replacement ratio on average duration across the sample would correspondingly be enormously higher. For suppose there were 2 equal groups, those with 'normal' duration of 8 weeks at a ratio of 0.5 and those with 'medium' duration of 20 weeks at a ratio of 0.8; their average duration and ratio would be 14 weeks and 0.65 respectively. Now suppose the ratios rise to 0.6 and 0.9; the first group, with an elasticity of 0.6, raises duration to 9 weeks, the second responds by planning 'indefinite' duration, say 2 years ( 104 weeks ) to allow for an occasional sampling of work. Average duration will eventually settle at  $56\frac{1}{2}$  weeks, while the average replacement ratio will have only risen to 0.75; unemployment will have quadrupled in response to a 15% (10 percentage point)rise in the average replacement ratio.

There are a number of potentially small points to be made, which may cummulativey add up to a severe problem for these studies. Nickell assumes that inflow rates on to the unemployment register are independent of replacement ratios; this is required both in his econometric procedure and in his conclusion that the duration elasticity to the ratio can be equated with the unemployment elasticity. He produces no evidence for this, other than that male inflow rate has 'hardly changed since 1967'; this is suggestive at best since offsetting effects could be occurring. It certainly does not apply to the female inflows rate (outside his sample but important in total unemployment) which has risen from around 80,000 per month in the late 60s to 118,000 in early 1982.

The specification of alternative earnings is important. Nickell uses an occupational earnings function estimated by Stewart (1976) to provide estimates of these. Lancaster uses actual reported earnings, which is surely an improvement. Neither however takes account of the union factor discussed above; jobs in the union sector are rationed, those in the non-union sector are not. A person may hope for a unionised job 'wage offer', which may have the distribution characteristics posited by Lancaster and Nickell; but non-union jobs require alternative treatment. Earnings on these are likely to be a lot lower than union wages. In particular, these authors might have investigated the possibility of duration-dependence in the relevant earnings faced; thus, a man made redundant from union employment may spend some weeks initially searching for union jobs at the higher wage to which he is accustomed, and then switch his attention to the lower wage non-union sector.

Details, such as the treatment of wife's income and of tax liability, can also be criticised in Nickell's study. Tax liability on potential work income varies with duration during any given fiscal year; this is ignored by Nickell. Wife's income is included in both work income and benefit income; yet the marginal tax rates on wives of unemployed men are both high and increase with his unemployment duration (since as he loses ERS and becomes increasingly dependent on supplementary benefit, her income risks loss of benefit).

Finally, we may note a general problem which judging from an interesting recent paper by Lancaster and Chesher (1982) appears to be of increasing concern to Lancaster himself. This is that a large number of statistical assumptions are required to estimate these search models of duration; sensitivity of the results to variations in these assumptions is largely unknown. Illustrating this, Lancaster and Chesher's paper uses an alternative technique on Lancaster's original sample. It is based on the reservation wage mentioned by the respondents. Using this and a variety of assumptions about the form of the wage offer distribution and the respondents' risk-aversion, leisure-valuation, etc. Lancaster and Chesher are able to show that:

- (1) the data are consistent with a rising elasticity of duration to the replacement ratio.
- (2) risk-aversion raises this elasticity.
- (3) leisure-preference also raises it - possibly very substantially.
- (4) substitution of the log normal for a Pareto distribution of wage offers lowers it.

We may also note that 'reservation wages' are close to (ie. in the same frequency class of approx.15% width)'expected earnings in a new job' for 46% of their sample; for  $\frac{1}{2}$ % they were actually greater than expected earnings. Hence, a significant percentage are close to, at, or beyond the point where planned duration would become infinite. These final considerations point at the very least to great caution in interpreting the results from the earlier cross-section studies as a guide to the time-series response to changes in policy regime.

Maki and Spindler (1975) in a time-series analysis of the UK in the postwar period found a partial elasticity of unemployment to the replacement ratio of 0.6. This estimate is flawed by the use of the ERS benefit ratio, which only applied to a minority of unemployed, and by the ambiguous status of the estimating equation, which is neither a structural equation nor a reduced form. Also, the most recent re-working by their data by Junankar (1982) shows too that the equation is fairly vulnerable to shifts in estimation period. Holden and Peel (1981) have estimated reduced form equations on UK postwar time series using benefits paid to a married man on average earnings with 2 children which find an elasticity of around 0.4 to the replacement ratio; however since other exogenous variables, such as world trade and unionisation, have been omitted and rolled into the error process, the coefficient estimate may be biased. Similar problems and comments arise in the context of the work on

inter-war by Benjamin and Kochin (1979) and others (see Benjamin and Kochin et al 1982). This type of time-series work has been stimulating and suggestive, but it would appear that it has established only that benefits probably matter for unemployment but to an undetermined degree.

Hence, the work reported here is for better or worse rather different from any of these studies, time-series or cross-section. Of the time series studies none have been based on a detailed market model as used here, while the cross-section studies appear to have paid inadequate attention to the problem of non-participation which could well account for the high benefit elasticity we have found.

Whatever is true of benefits is also true of personal direct taxes, since these are included in the replacement ratios.

On unionisation, the previous literature has estimated union mark-ups. These estimates have varied substantially, and have given rise to substantial controversy. Most recently, Treble (1982) has pointed out the tenuous basis for the majority of these estimates which use a methodology originated by Lewis (1963). If one averages available estimates of this type for the UK mark-up (Parsley (1980), it comes out around 25%, with a high variance. In so far as any tentative estimate of this union mark-up emerges from our work, it is of the order of 70%.

Treble ( 1982) reworked using a sounder method, the data of Mulvey, who obtained estimates for the UK around 30%, and obtained an estimate of about 40%. This is closer to our implicit figure, however there is still reason to believe it is downward biased. This is because both the union mark-up and the level of non union wages are likely to vary with the density of unionisation. This variation would reduce the estimated coefficient in Treble's work. A proper treatment of the data used by Treble and Mulvey would require an additional equation to be estimated in order to disentangle this effect from the true union mark up estimate.

At this stage, we must regard estimates derived by methods such as Mulvey's ( ie. all those for the UK, as cited in Parsley, 1980) and even Treble's as inadequate and downward biased, pending a reworking with a full model. Our own time-series work here is based on the use of a full model, and there is no reason to believe the results are biased: they do not appear to be challenged by these previous estimates.

Lastly, on employer labour taxes there appears to be no directly comparable work for the UK postwar period. However, there appears to be little controversy over the employment effects of cuts in the National Insurance Contributions.

We can use the estimated annual relationships within the Liverpool Model to compute the effects on the natural rate of unemployment, real wages and output of various permanent changes in taxation, benefits and unionisation - shown in the table below. (All tax and benefit changes are offset notionally by lump sum transfers, leaving net government revenues unchanged; these, which include the effect of changes in output, are noted in Column 5).

It can be seen that per unit of revenue cost cuts in National Insurance charges paid by firms are more effective in reducing unemployment than cuts in the standard rate while to equal the effect on unemployment of a 10% cut in real benefits it would require cuts in N.I. charges costing the Exchequer a net £5 billion p.a. more. However, the effectiveness of a cut in taxes on employees in reducing unemployment would presumably be increased the more it was concentrated on the lower paid; one may presume that if totally concentrated on those at the bottom end each £ of tax cut would have an effect on unemployment comparable with that of a £ of benefit cut. At present most of those in the 'unemployment trap' would pay significant tax if they were working (Howell 1981).



Effects of Regime Changes +

Fall of	Unemployment* ( '000)	Real (%) Wages	Output(%)	Available for lump sum transfers (£billion p.a 1982 prices)
10% in in benefits	-700	-1.2	+1.5	+2.3
.01 in $T_F$	-150	+0.6	+0.5	-0.6
.01 in $T_L$	- 60	-0.2	+0.2	-0.9
.01 in UNR	-260	-1.3	+0.85	+0.9

\* Computed at  $U = .2.8$  million

\*\*Includes extra revenue from rise in output. Negative figure denotes net drain on Exchequer. Assumes marginal overall tax rate of 0.4.

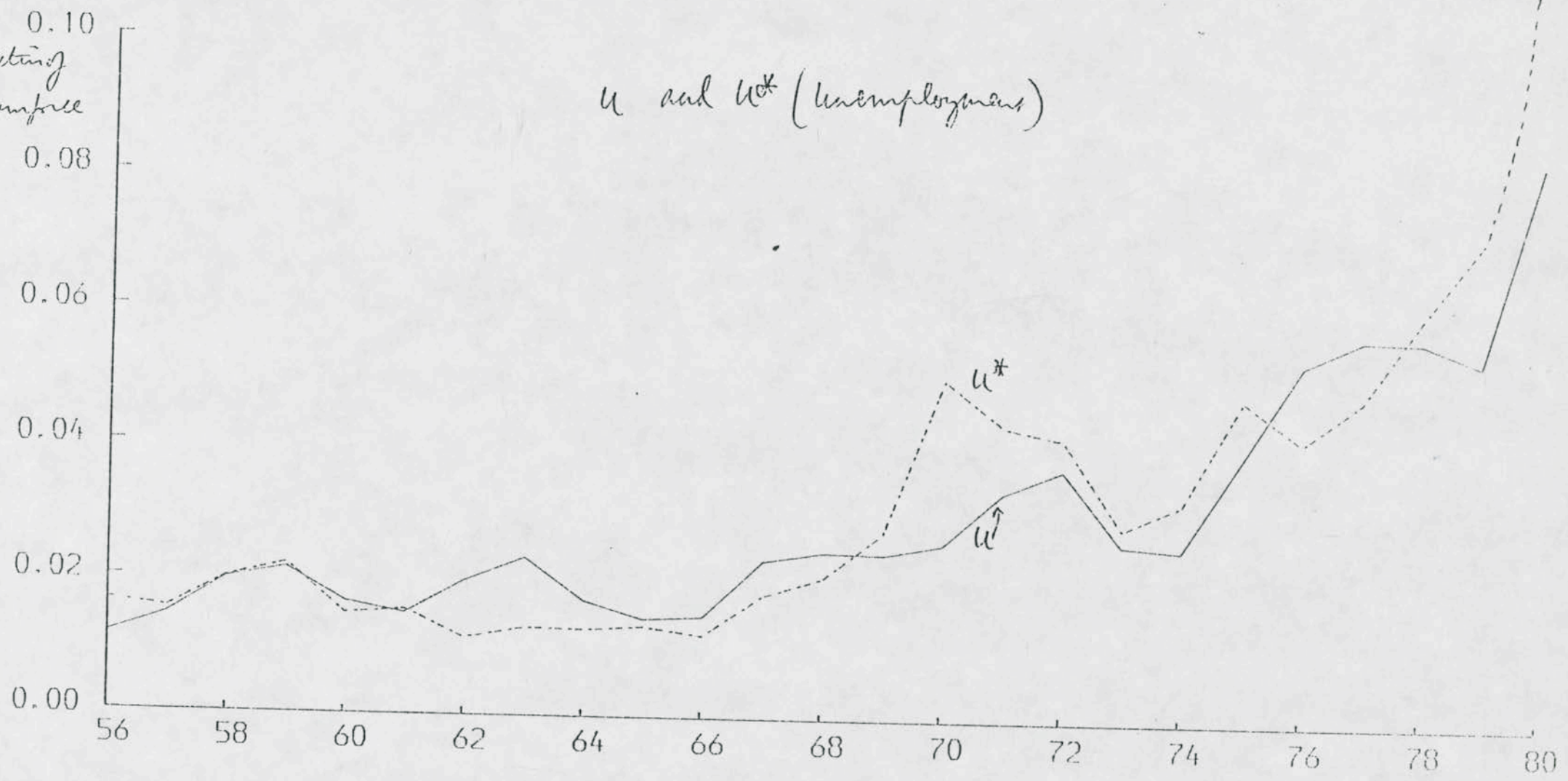
+ Source: Annex A.

Finally, we may use these equations to compute the natural rate of unemployment. The Chart that follows shows the models 'prediction' for this from 1956-79, as well as the behaviour of the 5 key determining variables. The natural rate of unemployment in particular is set at 7½% in 1979 (about 1½ million ). The date at which it began its dizzying rise can be set fairly precisely at 1965, i.e. the beginning of Labour government after 13 years of Conservative government. This led to a sharp rise in union power, in benefits and taxation. In 1970-73 taxes were cut and the rise in real benefits halted, by Mr.Heath's Conservative government; however, the cut in taxes was unsustainable because it led to very large budget deficits and has subsequently been more than reversed, while real benefits began to climb again in the mid-1970s as Labour rule resumed. Union power rose steadily during the 1970s and finally, world trade growth collapsed in the second half of the 1970s. So the upward trend was resumed from 1973.

fraction of  
labour force

$u$  and  $u^*$  (unemployment)

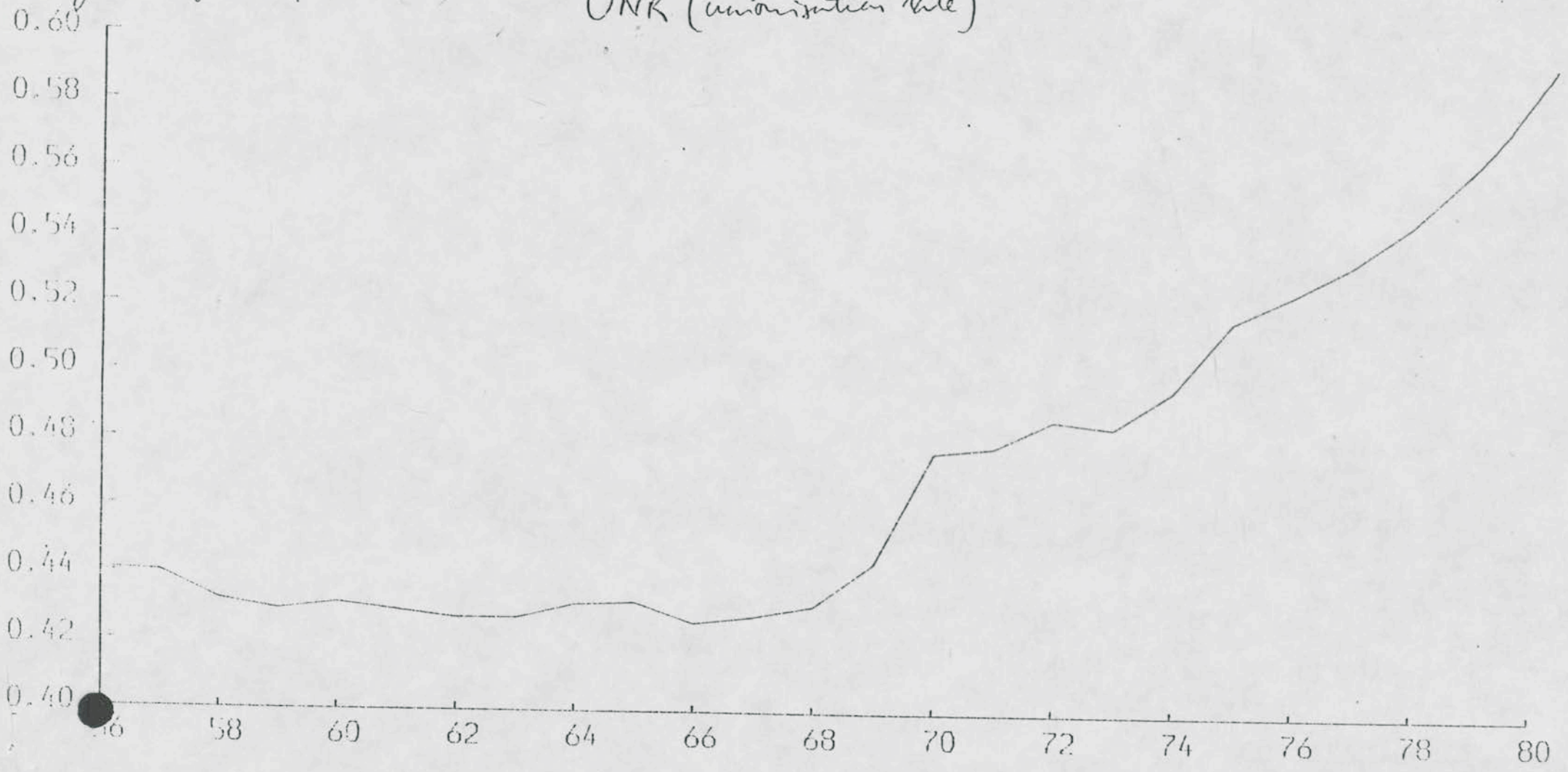
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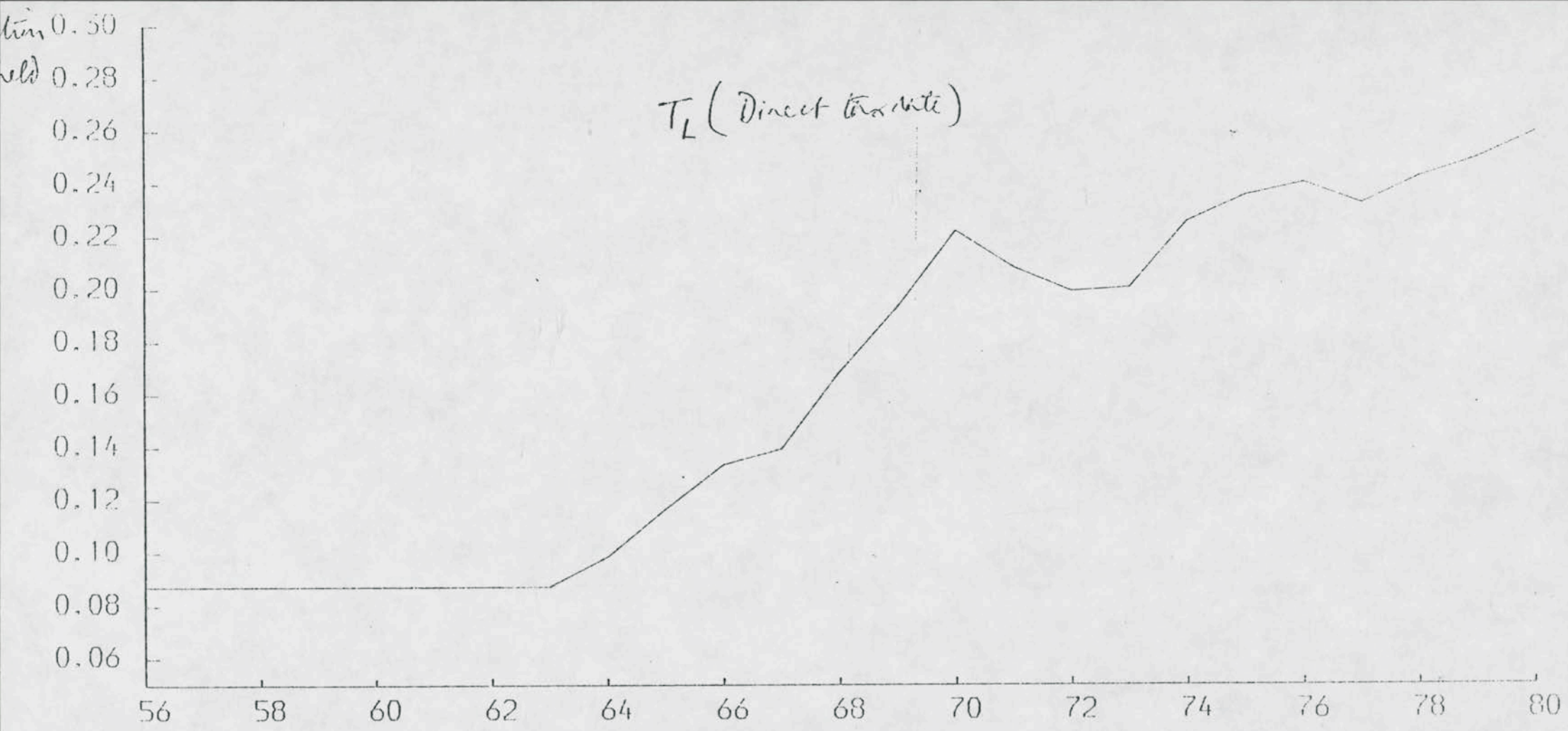


4

active labour force

UNR (unionisation rate)

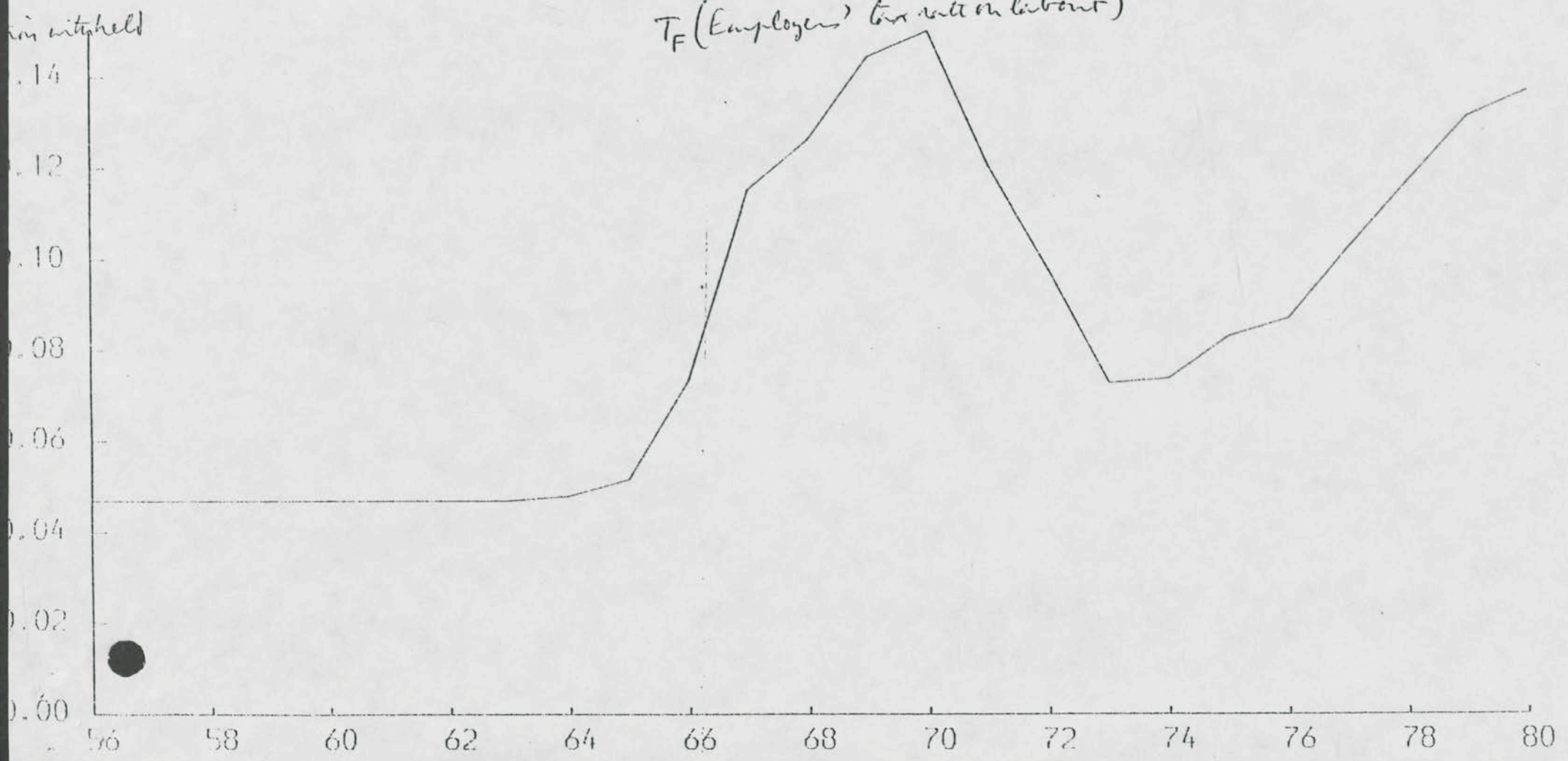




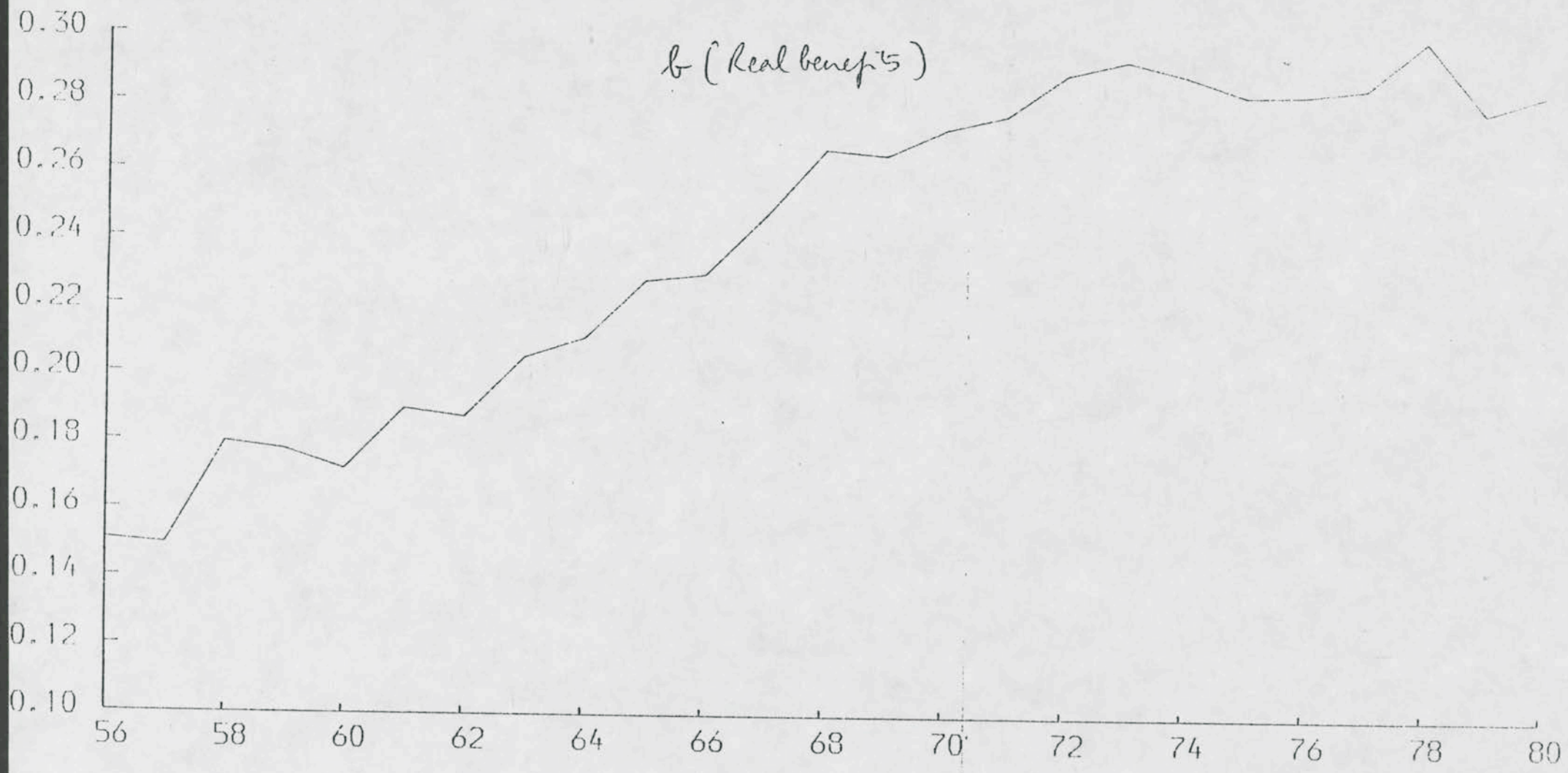
42

M  
J

$T_F$  (Employers' tax rate on labour)

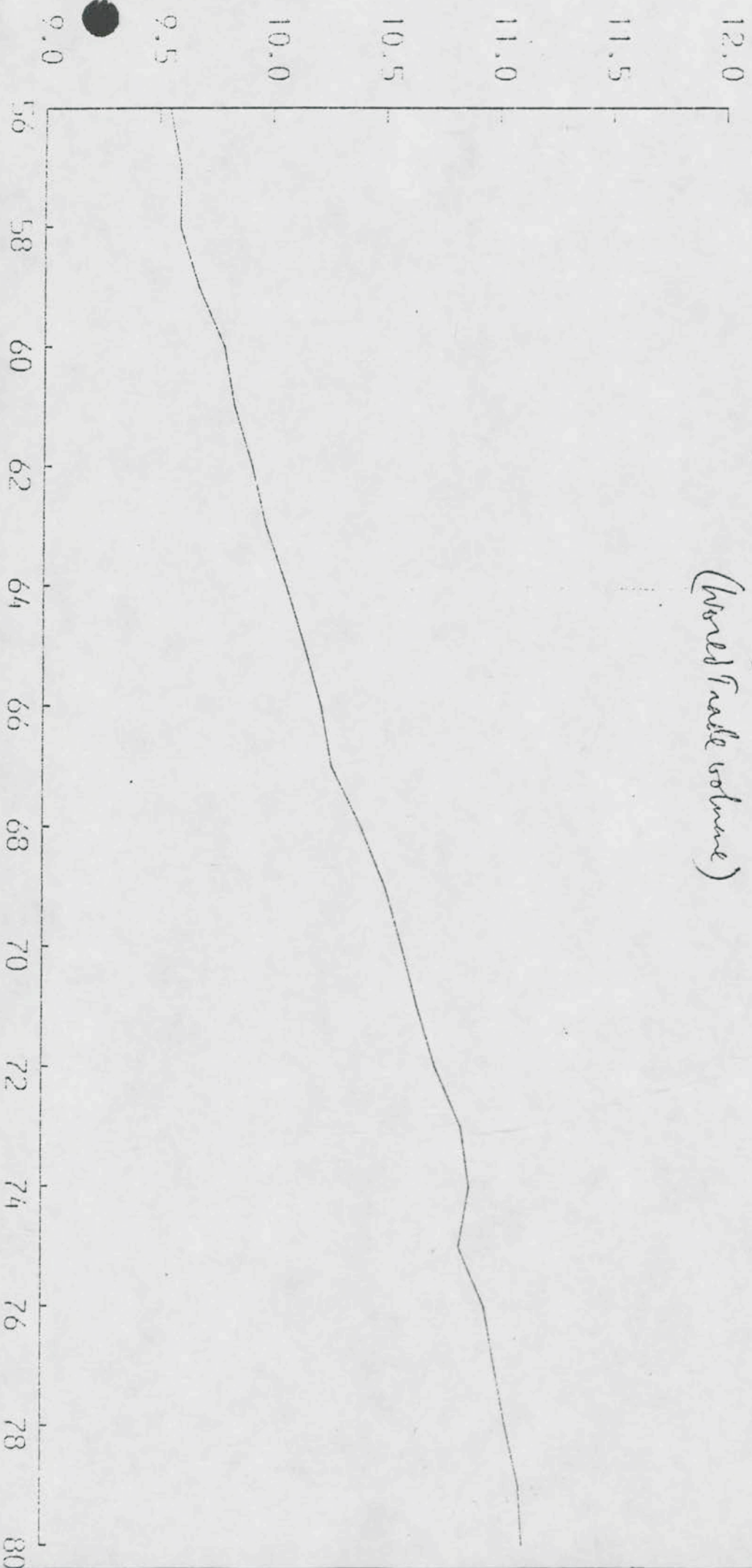


$b$  (Real benefits)



4  
4

45



dog WT  
(World Trade volume)



## Conclusions

We have set out above a theory of the 'natural rate' of unemployment for the UK, and described our results based on over 1100 postwar observations of British economic behaviour.

Naturally, we would expect that future research will be able to refine these estimates and modify them perhaps in *many* details. Nevertheless, these future changes seem unlikely to alter the major thrust of our findings, judging from the similarity of the results we have obtained from the different parts of our study - the whole economy ( quarterly and annual data ), industrial data and regional data.

These findings were that there is a significant and powerful total elasticity of real benefits on unemployment (operating through higher real wages ) of the order of  $2\frac{1}{4}$  ; this is substantially higher than other post war estimates in so far as these are comparable. Tax rates on employers and employees have analogous impacts, though the elasticities are much lower. Finally, and perhaps most strikingly, we find that in the past two decades union monopoly power has increased significantly and caused a substantial rise in real wages, with corresponding unemployment. The total elasticity of unemployment to the unionisation rate ( our index of union monopoly power ) is no less than  $4\frac{1}{2}$ .

The natural rate of unemployment in the UK in 1979 is estimated to be of the order of 7¼% or around 1¼ million. Since then it has probably risen to the range 2-2½ million owing to a further rise in unionisation ( job losses have been higher among non-unionised than unionised members, the statistics for 1980 indicate ), to the fall in real tax thresholds, and to the rise in real supplementary benefits to compensate for rising rates and council house rents. Our analysis suggests that it can be lowered substantially by measures to reduce real benefits, labour tax rates and union monopoly power.

In the sections that follow we go in detail into the facts relating to each of these major policy areas and suggest policy proposals to remedy the problems.

REFERENCES

Ashenfelter O.	1978	'Unemployment as a Constraint on Labour Market Behaviour', in <u>Contemporary Economic Analysis</u> (M.J.Artis and A.R.Nobay eds) London, Croom Helm.
Aukrust O.	1970	'Prim 1: A Model of The Price and Income Distribution of an Open Economy' Review of Income and Wealth. Vol.16
Bain G and Price R.	1980	<u>Profiles of Union Growth: A Comparative Statistical Portrait of 8 Countries</u> . Oxford:Blackwell
Batchelor R.A. and Sheriff T.D.	1980	'Unemployment and Unanticipated Inflation in Post War Britain'. <u>Economica</u> ,47
Benjamin D and Kochin L.	1979	'Searching For an Explanation of Unemployment in Inter War Britain' <u>JPE</u> 87, No.3 441-470
Benjamin D and L.Kochin and Critics	1982	'Unemployment and Unemployment Benefits in Twentieth Century Britain': A reply to Our Critics' And Preceding Critics' comments <u>Journal of Political Economy</u> ,90.
Edgren G.K.O,Faxen and G.E.Ohdner	1969	'Wages Growth and Distribution of Income'. <u>Swedish Journal of Economics</u> , 71(3). Sept. pp 133-16
Godfrey L.G.	1978	'Testing Against General AR and MA Error Models when the Regressions include Lagged Dependent Variable' <u>Econometrica</u> Vol.46 No.6
Holden K and D.A.Peel	1979	'The Determinants of The Unemployment Rate: Some Empirical Evidence' <u>The Statistician</u> Vol.20 No.2.
Holden K and D.A.Peel	1981	'Unemployment and The Replacement Ratio - Some Induced Form Estimates For the UK.' <u>Economics Letters</u> , 8, 349-354

- Well R. 1981 Why Work? A Radical Solution,  
Conservative Political Centre
- Junankar P.N. 1981 'An Econometric Analysis of  
Unemployment in Great Britain,  
1952-75,' Oxford Economic Papers  
33, 387-400.
- Lancaster T 1979 'Econometric Methods For the  
Duration of Unemployment'  
Econometrica,47, 939-956.
- Lancaster T and A.Chesher 1980 'An Econometric Analysis Of  
Reservation Wages', Hull Economic  
Research Paper, No.71 (revised)  
University of Hull, October.
- Layard R, D.Metcalf, and  
S.Nickell 1978 'The Effect of Collective  
Bargaining on Relative and  
Absolute Wages', British Journal  
of Industrial Relations, November.
- Lewis H.G. 1963 Unionism and Relative Wages In  
The United States , University  
of Chicago Press.
- Lucas R.E. and L.S.Rapping 1969 'Real Wages, Employment and  
Inflation', Journal of Political  
Economy, 77.
- Maki D and A.Spindler 1975 'The Effect of Unemployment  
Compensation on the Rate of  
Unemployment in Great Britain'  
Oxford Economic Papers 27,3
- MacKay D.I. and G.L.Reid 1972 'Redundancy, Unemployment and  
Manpower Policy' Economic  
Journal,82,1256-72
- Minford A.P.L. and  
G.Hilliard 1978 'The Cost of Variable Inflation'  
in Contemporary Economic Analysis  
(M.J.Artis and A.R. Nobay eds)  
London Croom Helm.

- Minford A.P.L. 1980 'A Rational Expectations Model of The UK under Fixed and Floating Exchange Rates' in The State of Macroeconomics, Carnegie Rochester Conference Series on Public Policy 12, 293-355.
- Mulvey C. 1976 'Collective Agreements and Relative Earnings in UK Manufacturing in 1973', Economica, 43 (172) 419-27 November.
- Muth J.F. 1961 'Rational Expectations and The Theory of Price Movements' Econometrica 38,1 315-35.
- Nickell S 1981 'The Demand for Labour Function in UK Manufacturing'. Paper presented to Treasury Academic Panel, Centre for Labour Economics LSE.
- Nickell S 1979 'The Effects of Unemployment and Related Benefits on The Duration of Unemployment'. Economic Journal, 89, March
- Nickell S 1979 'Estimating the Probability of Leaving Unemployment' Econometrica 47, 1249-1266.
- Parsley C.J. 1980 'Labour, Union and Wages: A Survey' Journal of Economic Literature, 18 pp 1-31.
- Pencavel J.H. 1974 'Relative Wages and Trade Unions In The United Kingdom' Economica, 41 194-210.
- Sargent Thomas J 1970 Macroeconomic Theory, Academic Press

- Smith R. 1982 'A Note On Likelihood Ratio Tests For the Independence Between a Subset of Stochastic Regressors and Disturbances', Discussion Paper in Econometrics, No.ES 118, University of Manchester, February.
- Stewart M. 1976 'The Determinants of Earnings in Britain; An Occupation Specific Approach', Centre for Labour Economics, Discussion Paper No.4, LSE.
- Treble J.G. 1982 'Does The Union/Non-Union Wage Differential Exist?' Paper given to 1982 AUTE Conference at Surrey University, mimeo, University of Hull.

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A. THE TAX AND BENEFIT SYSTEM

The 'Unemployment Trap' -

Estimates of Replacement Ratios as of November 1982

The calculation of replacement ratios is bedevilled by the problem of non-take-up. Non-take-up of benefit entitlements may occur for a variety of reasons, including stigma effects, ignorance, and the transactions costs of take-up. However, it seems wrong to allow for non-take-up by simply recording benefits actually taken on average. The reason is that economic analysis is concerned with decisions by people on the margin - i.e. weighing benefit and costs which are finely balanced. It seems likely that such substitution effects as we observe - i.e. actions by those on the margin- will be carried out by people conscious of the marginal choices confronting them; for if they are not conscious of them, why should they move at all?

It seems better to calculate entitlements, as if everyone is rational and well informed, and then to allow the data to determine, through the estimated elasticities of response, how far these entitlements affect decisions. This has the advantage of consistency with the assumptions of the economic models typically used, based on maximising behaviour. Take up rates can then be regarded as reflecting people's decisions, given their tastes and attitudes, just as their unemployment duration and labour force participation reflects those decisions.

On the basis, then, of full entitlements we have calculated the November 1982 replacement ratios for single persons and for married men with non-working wives, by size of family and income. We present two calculations.

The first is 'short term', assuming the person or married man is unemployed only for six months of the tax year ( and is employed at the stated work income for the rest). The ratio shows additional benefits net of extra tax liability if unemployed divided by additional earnings net of extra tax liability if employed. Tax is computed on a marginal basis, i.e. the year's allowances are counted as 'used up' by the six months of work income, and the residual allowances only are credited to the six months of unemployment. Work expenses of £8-25p. per week are deducted from, and FIS with rent/rate rebates ( based on £12 per week rent, £3 rates ) added to, work income. Since supplementary benefit rates exceed unemployment benefit rates, the former are used to evaluate benefit entitlements; other 'passport' benefits are added as applicable.

There are elements in this calculation which are somewhat arbitrary. On work expenses, the DHSS cohort study of 1978 unemployed indicates a weighted average of about £1.90 per week on travel to work costs related to the period of work ( i.e. 1977). However, this includes 2% who 'paid less than 50p per week', an incredibly low figure which presumably largely relates to young workers living with their parents and in many cases getting a lift from them; if so it is hardly to be regarded as an economic cost of travel. Disregarding these the weighted average figure is about £3.20 but something must be deducted for the 14%



with free travel provided by their employer. In the five years from late 1977 to November 1982, the transport price index will have risen around 90%. Hence for travel costs, something of the order of £5-6 seems reasonable. We have also allowed £2-3 for other work costs; additional expenditure on clothing and on food taken outside the home. This may well err on the low side but there is no firm information. A notional allowance is made in these figures for fringe benefits. Subsidised canteen meals are frequently provided by an employer (15% of the DHSS study obtained them); this is reflected in our low cost of food outside the home. Free travel provided by the employer to 14% has also been mentioned.

Notes on the other elements are to be found in Annex B

The second calculation presented is long term. This assumes the person has been unemployed for all or part of the preceeding year. The ratio compares his net benefits should he remain unemployed for the whole of the current tax year with his net income should he work for the whole tax year at the stated wage.

The picture presented by these calculations is a grim one from the point of view of incentives to participate in employment. The replacement ratios are such that should a person 'work the system', incentives to have a job are on the whole

rather small for the family man. Even for the single person, the replacement ratio reaches 0.8 at just under 60% of average earnings; since the bulk of single persons are young (45% of single person householders were under 25 in 1979 according to GHS, Table 2.5) and so have earnings well below the average, this is more damaging than it might sound.

It is difficult to estimate how many workers are affected by high replacement ratios, since so many different factors interact. However, we can use the FES1980 to obtain an estimate of the distribution of gross weekly income across each (non-

56  
TABLE 1<sup>1</sup>

% of workers by household type with replacement  
ratios higher than those shown in Nov.1982

A. Long term ratios:

Replacement ratio	Single Men and Women <sup>2</sup>	Married Men <sup>3</sup>				Weighted Average	
		M	M+1	M+2	M+3		
.5	62	51	n.a.	n.a.	n.a.	n.a.	
.6	(52)	41	n.a.	71	n.a.	n.a.	
.7	42	29	48	(55)	69	44	
.8	(32)	20	30	39	(58)	31	
.9	22	11	(23)	(30)	(48)	22.5	
1.0	(10)	(5)	16 <sup>4</sup>	21	38 <sup>4</sup>	14	
% of working households shown in each category		14.5	35.0	17.6	24.5	8.4	100

B. Short term ratios:<sup>5</sup>

.5	41	51	n.a.	n.a.	n.a.	n.a.
.6	(31)	41	n.a.	71	n.a.	n.a.
.7	22	29	48	(60)	n.a.	n.a.
.8	(10)	20	30	(49)	69	31.5
.9	n.a.	11	(23)	39	(53)	22 <sup>6</sup>
1.0	n.a.	(5)	16	21	38	13 <sup>6</sup>

Source: FES, 1980 (for non-retired households) and Liverpool calculations of replacement ratios (Annex A).

<sup>1</sup> Interpolated figures shown in brackets.

<sup>2</sup> Average earnings assumed to be £110 in 1979. Single person households had income of £91 approx. (.83 of average). Average single person's earnings in Nov.1982 set at 0.83 x £140 = £116.

<sup>3</sup> Average weekly earnings of married men in Nov.1982 set at £160, ie. approx. average earnings of all full-time male employees aged 21 years or over (excluding the effects of absence). Wife assumed not to be working.

<sup>4</sup> Percentage with replacement ratio in range 95-100%.

<sup>5</sup> Assumes unemployed for second six months of tax year only.

<sup>6</sup> Assumes 0 for single households.

retired) household type. Assuming that the distribution of household head's earnings in each category matches that of household incomes, we reach the calculations shown in Table 1. Using the FES shares for these households, the proportion of workers whose long term replacement ratio is around unity or above is 14%, while over 30% have a ratio of more than 0.8. This must be only a rough approximation; however it indicates that there is a substantial proportion of the workforce with high replacement ratios. This picture is not on balance altered much if one looks at the short term replacement ratios; it is somewhat worse for family households and somewhat better for single households.

(b) The position of married women

The picture presented above assumes that in family households married women do not work. However, in 1979 (GHS) 27% of wives of working men had full-time jobs, and another 34% had part-time jobs; far fewer wives of unemployed men had jobs (only 14% full-time, 18% part-time).

The optimising problem faced by the household is clearly a complex one, involving the work/home time preferences of each partner and total household income at each combination of full and part-time work by each. Nevertheless, it may be reasonable to divide the problem into two separate stages: the husband's decision to work, assuming his wife does not work, and secondly, the wife's decision to work, full or part-time, given the husband's decision. The justification would be

that the wife is likely to move in and out of the labour market at different times in her life-cycle; a typical pattern would be full-time when just married, not at all when the children are young, part-time when they are at school, and finally full-time again when they leave home. The husband has to take a decision about participation on a full-time job for a long period of time; therefore the household's average life-time income is likely to be dominated by the husband's earnings.

On this basis, the replacement ratios for married men used in Table 1 would not be seriously misleading.

We now turn to the choices facing married women, the remaining section of the potential labour force. Table 2 documents the retention ratios they face - ie. the proportion of extra gross income retained by wives. The top half deals with the situation when the husband is working. The retention ratios for full time work are around 50% with dependent children, but rise to around 60% without children. In the calculations, we have made a notional allowance for child-minding of £5 per week for each child under 5 when both parents are working full time; this may be on the low side. But most importantly, we cannot know what premium households place on wives' home time when there are dependent children. It seems quite possible that these ratios provide insufficient incentive for wives with children, especially those with low incomes. According to GHS, they push wives with children

mainly into part-time work where retention ratios are higher (because of no expenses for child minding); 37% of these wives had part-time work in 1979, only 14% had full time work, leaving 47% who did not work at all. Working wives are most common as one would expect, among families with no dependent children, where 40% worked full time, 26.7% part-time, leaving only 30% who did not work at all.

The bottom half of Table 2 shows how the retention ratios fall dramatically when the husband is unemployed; the reason lies in the loss of the husband's supplementary benefit. Consistently with this, we saw earlier that 67% of unemployed men's wives did not work in 1979.

TABLE 2 - Retention ratios\* of married women Nov.1982

<u>Husband working</u>	Number of children				
	0	1	2	3	4
Husband & wife <sup>1</sup> both on average manual earnings, full time	62.2	56.3	56.3	56.3	56.3
Both on 75% of average manual earnings, full time	60.3	51.0	49.6	49.3	20.7
Husband on aver- age earnings wife part-time £50p.w.	74.5	64.5	64.5	64.5	42.1
<u>Husband unemployed</u>					
Wife on average manual earnings £85p.w.	15.3	5.6	10.0	10.8	6.4
Wife on 75% of average earnings £64p.w.	2.6	11.9	7.9	8.7	2.5

\* Additional income kept by wife as a result of working; long term, ie. compares net income with net benefits after one year.

Source: Liverpool calculations - Annex A.

<sup>1</sup> Average weekly manual earnings: male £140, female £85.



Policy Proposals - The Unemployment Trap

There are two aspects to the policy debate over benefits. There is on the one hand the understandable and widespread desire to provide an income 'safety net' for the least well off in society. On the other hand, there is the objective of maintaining incentives to work, so that society should not unnecessarily support those who could support themselves.

As economists, we restrict ourselves to comments on efficiency in meeting these potentially conflicting objectives. The obvious point is that income support can be given to both employed and unemployed, with a minimum differential in favour of income in work. For example, higher benefits to ( or lower taxes on ) the lower paid can be achieved, at some cost to those on average earnings and above by changes in tax structure, without cutting benefits to the unemployed. The question is whether people will vote for the higher tax burden to do this.

It would seem therefore right to separate two issues very clearly:

- 1 minimum support levels
- 2 appropriate minimum differentials between in and out of work income.

If one could obtain agreement that as a matter of principle on efficiency grounds, the benefit ratio to net work income should for no individual exceed say 68% ( as in West Germany) or some such figure, it would then be possible to have a rational discussion of appropriate tax and support levels, trading off the welfare of the less well off (including those likely to remain unemployed) against that of the average and better paid. One would visualise this as a running discussion, with support levels altering according to general social welfare.

The crucial policy point to make is that the current system of unemployment support is dangerously inefficient because it does not limit replacement ratios as work incomes fall. The minimum reform to it that we would wish to see is the introduction of a 'maximum replacement ratio' override ( a benefit ratio ceiling) on the level of total net benefits paid out (similar to, but we would hope administratively simpler than, the old 'wage stop'). This could in principle be combined , if people wish it, with a more generous provision for the low paid in work which enables the living standards of the unemployed not to be seriously damaged.

The use of benefit ratio ceilings, our central proposal, is widespread in Europe. In Germany, the replacement ratio is universally fixed at 68% for the first year out of work, dropping to 58% thereafter. In Denmark, there is a standard replacement ratio of 90%, as well as a maximum absolute amount ( roughly equal to 90% of average earnings); this ratio last for three

years, but it is effectively renewable indefinitely, by arranging short spells of re-employment. In Italy, the replacement ratio is 2/3rds indefinitely.

The closest parallel to Britain is Belgium where the unemployed can obtain 60% of gross income with a set minimum absolute amount; as taxes on persons have risen, so the replacement ratio has risen with no upper bound set on low income families. It is perhaps instructive that the two countries without ratio ceilings have had the worst unemployment experience in the past decade.

Simulations of the effects of a benefit ratio ceiling or 'cap'

The introduction of a 'cap' on the benefit ratio would change the operation of benefits on the labour market quite fundamentally. The effect is illustrated in charts 1 and 20.

Under the flat rate regime (chart 1), the supply curve of labour is flattened substantially (or 'truncated ') as wages fall towards the flat rate benefit level, b. Hence as demand falls for the economy ('demand' being defined as the output sales the economy can sustain without going into external current account deficit), so unemployment rises and wages fall little.

Under the capped regime (Chart 2), the supply curve shifts to the left of the no-benefit supply because workers now receive some ratio of benefits to wages which induces them to work less; as wages fall, a higher proportion of workers receive the margin ratio and so the leftward displacement becomes greater. But the displacement never becomes a truncation as in Chart 1, because wages fall, so benefits fall too (if not, in the aggregate, quite in proportion). Hence the downward pressure on wages as demand falls

encounters very much less resistance from benefit levels than in the flat rate case, and there is correspondingly very much less effect on employment and unemployment.

Our estimates for the UK are derived for a flat-rate regime and are unlikely to be fully appropriate for a capped regime. Nevertheless, we may get some notion of the orders of magnitude by using them, provided that we treat them cautiously. The Table below shows estimated total long run effects on unemployment, real wages and output ( using the quarterly equations shown above together with the Liverpool macroeconomic model as a basis ).

<u>Maximum benefit ratio or 'cap' set at:</u>	<u>Long Run Effect compared with present situation, on:</u>			
	<u>Unemployment ('000)</u>	<u>Real Wages %</u>	<u>Output %</u>	<u>PSBR* (fb., 82price)</u>
0.7	-700	-2.0	+2.4	3.8 (1.2)
0.8	-375	-1.1	+1.3	2.1 (0.7)
0.9	-140	-0.4	+0.5	0.8 (0.2)

\* The effect on the PSBR is assumed to be eliminated by lump sum transfers back to the taxpayers; the column shows the 'tax cuts' made possible and assumed to take place. The bracketed figures are the direct saving on benefit payments.

These are long run effects, and it can be seen that a Cap at 0.7 has a sizeable effect, reducing unemployment by nearly 1 million and contributing nearly £4 billion to the PSBR, money available for tax cuts to ameliorate the distributional consequences of this measure.

The time for these effects to come through on unemployment would be, taking the model at face value, as follows:

% of effects on unemployment comes through:

<u>within</u>	<u>(%)</u>
1 year	20
2 years	50
3 years	70
5 years	90

Hence for example a 0.7 Cap if instituted in November 1982 would bring unemployment down by  $\frac{1}{2}$  million by March 1984 and 0.6 million by November 1986. These lags arise within the model entirely because of firms' adjustment costs in taking on extra labour. There seems no particular reason to believe these costs would alter significantly when the benefit regime changed or to alter these lag estimates therefore.

We defer consideration of distributional consequences until we have considered all the policy measures which may be necessary. At that stage we evaluate how it may be necessary to handle distributional aspects in this overall package.

A BENEFIT RATIO CEILING ( OR CAP) ON BENEFITS -  
ADMINISTRATIVE ASPECTS

The proposals is made here to limit total individual social security benefits so that in all cases out of work net income would be noticeably below in work net income. In the past such schemes became known as 'wage stops'.

In the past schemes relating one form of income, such as for example out of work or a social security based one, to another, such as past earned income, have existed. All have now been terminated except one aspect of one scheme which continues today. The National Assistance and Supplementary Benefit schemes contained a wage stop and these were abolished in 1975. Unemployment Benefit ( UB) did have an earnings related supplement which augmented UB in the short term for middle and higher income earners, but this scheme terminated in 1981. The present Family Income Supplement (FIS), which is an addition paid to earned income for low wage workers is set for a year on a previous month's earnings, and so relates one set of earnings with another. Rent and rate rebates have somewhat similar linkages. There are, of course, difficulties and objections to such schemes, but many of these arise because of the complications built into them. If the proposal is kept simple and fair many difficulties disappear. The concept under review here is quite simply a proposal to limit total net social security benefits to 70% of previous net earned income. A similar and successful, system has existed in Denmark for some years now as well as Germany, Italy and France.

The proposed scheme would be to place a ceiling on the total net unemployment benefits package so that it did not exceed 70% of recent in work net income. Recent acceptable evidence of pay slips would be combined, if relevant, with other benefits, eg FIS, rent rebate, rate rebate, child benefits and other FIS 'passport' benefits, so as to arrive at a net in work income figure; mandatory tables similar to those for PAYE or a set tariff would assist here in establishing the FIS and other potential additions and also in relating to the out of work income, starting with UB and Child Benefit (CB), and if appropriate SB and other 'passport' benefits, as well as a credit for not having work expenses. These would then be established on a tax paid basis so as to reach a net out of work income figure, which would be subject to a 70% maximum of the relevant in work income level. This maximum would then be indexed to the RPI with annual upratings as for other social payments.

Those unemployed at the time the cap came into force would have their work income computed as follows. Previous pay slips would be produced to establish previous gross income. This would be uprated to the present by the RPI, and also adjusted for current tax rates, work expenses etc. This would then be used to set the 70% ceiling.

Some workers currently unemployed, particularly those long term unemployed, would probably be unable or unwilling to produce acceptable evidence of previous pay (eg payslip, letter from

previous employer, evidence of occupation and colleagues' earnings). In these cases, some simple fall back procedure is required; we suggest that net previous wages be deemed equal to current benefits plus 10% ( corresponding to the approximate effect of the tax cuts). Benefits for these people could thus drop 20%, creating an incentive to produce acceptable evidence.

Wives' earnings, if any, would be disregarded in the calculation of the husbands' in and out of work income, and the cap amount. The wife's benefits would similarly be subject to the cap disregarding the husband's earnings or benefits. This will ensure that the incentive for each partner to work is maintained, in general .The only exception could be where the man is unemployed and loses supplementary benefit when his wife works; in this case, even though the wife's benefits out of work may be low, the loss of household income when she gives up work may be small ; i.e. her 'retention ratio' is low. The incidence of this case however should be substantially reduced by the Cap since many unemployed men will receive less supplementary benefit than they do now, so the loss of it caused by the wife working will be correspondingly lower for them.

Young people and others joining the labour force will not be subject to the Cap, since they have no previous earnings. However as argued below under the 'Workfare' and denial of benefit scheme, they should be subject to tougher conditions for benefit receipt after a short period of say 3 months on the dole; for their benefit at this point should be conditional on taking a workfare job.



The administrative advantages of such a scheme would be;

- a it would be fair, plain and simple
- b it would relate to an individual's own circumstances; the individual's incentive to rejoin the active workforce would rise;
- c in work benefits, some of which relate to family size and circumstances, would continue to exercise a significant influence on income received;
- d there would be no undue discrimination against those with large families or high housing costs;
- e the use of the most recent work income figures would avoid some major disadvantages in past Wage-Stop schemes, eg relationship to an individual's potential earning capacity, its high error rate, forecasting future income etc.
- f. there would be little scope for dispute as to figures etc and therefore no need for any burdensome appeal procedure, etc.

Possible administrative disadvantages would be:

- a the scheme fails to cope with any particular hardship, physical or mental handicap problems or any exceptional needs;
- b for the unemployed without evidence of pay the relevant base income is arbitrary;
- c it could increase Civil Service staff numbers and costs;
- d it would arouse some controversy as Wage Stop did for a decade (1965/75) and activate or divert pressure groups to fight the scheme.

The Danish scheme limits unemployment benefit, which is taxable, to the lower of either 90% of previous gross earnings or 90% of average wages. It is index linked to their retail price index and adjusted twice yearly. It lasts for 2½ years (now reduced notionally to 1½ years) and then anyone still unemployed is transferred to supplementary benefit rates which are lower. However in practice it is possible to arrange an 'employment spell', so that receipt continues indefinitely. The scheme is reckoned to be most generous (in our view excessively so) and a major contributory factor to Denmark's rapidly rising PSBR- 10% of GDP in 1981; many of the beneficiaries have been reputedly housewives.

The benefit system of Germany, France, and Italy are described elsewhere in this Report. Each of these countries computes either all or the major part of benefits as a ratio to past earnings.

Previous Wage Stop schemes have been terminated for various reasons but the climate may now be judged right for the introduction of a similar measure, namely a ceiling on benefits. There are considerable economic advantages in terms of the labour market and public expenditure. There are administrative advantages and disadvantages of such a proposal but the balance here clearly lies in favour.

A 'Workfare Scheme' and The Procedures for Denial of Benefit

The placing of a cap on benefit ratios is designed to exert market pressure on unemployment by making people willing to take jobs at lower pay, hence it has its effect via the general level of wages ( or equivalently of productivity and work practices input by workers for the same wage). The only way to bring unemployment down is to alter the general market situation in some such way.

There is a case however for strengthening these pressures by tightening up the procedures for obtaining benefits and in particular making benefits contingent on accepting, if no other is offered, a job designated by the State ( from a 'workfare' pool of community and other jobs ). In principle the state should only provide benefits where the unemployed can get no job, however unpleasant or low paid. The practice however appears to be very different; this difference has been especially marked since the separation of job centres from benefit offices. The worker 'shops' for a job in the 'job centre'; if he cannot find one he likes, he claims benefits and typically gets them ( the rate of denial is extremely low; in 1980 about 1/2% of the unemployed).

It has been suggested that the state sets up 'Community Work Schemes' and that the unemployed be offered places on such schemes, benefit being conditional on acceptance of such places if offered. The problem with such ideas is that they are expensive to the state - involving supervision, equipment and other costs - and that the jobs involved have a very low value to society ( otherwise they

would already have been undertaken ). However, as a last resort component in a pool of jobs which must be accepted as a condition of benefit, they are of some use.

Let us designate such a pool of jobs ' Workfare' jobs. It would then seem useful to include all existing jobs notified to Job Centres ( often private sector but also public sector, witness the perennial London traffic wardens vacancies ) in this pool; the 'community' jobs would then be there as a last resort, in the total absence of normal jobs.

The denial procedures in each area of the country could become tougher the longer the individual's period of unemployment; beyond six months it could become sufficient for benefit denial to refuse any job offered by workfare. Furthermore, repeat spells if unemployment however short could also attract such criteria. Finally, there could be the differentiation of these criteria by age - for workers below 25, acceptance of a workfare job after 3 months of unemployment could be a condition of further benefit. There would be a demonstration effect on low-wage vacancies; as firms got to hear of people filling them, more would come on to the market. At present it is a pointless expense to advertise jobs at low wages which are marginally competitive with benefits.

In general, new instructions should be given to benefit officers to keep close liaison with MSC job centres and evolve from their experience operating procedures which implement these tougher denial provisions. The objective should be to open up the low-wage non-union employment sector, so reinforcing the downward pressures on real wage costs.

Administratively, such a workfare/denial procedure will require the re-integration of MSC job centres ( where the workfare pool of jobs will be primarily located ) and unemployment benefit offices. Their separation now is clearly seen as an error. The simplest way to do this would be to place DHSS officials currently dealing with unemployment ( and supplementary ) benefits in the MSC job centres. The unemployed must attend regularly at this MSC job centre as well as whenever required by the Workfare scheme - ie to be presented with a selection of jobs, acceptance of which is a condition of further benefit.

The Poverty Trap:

Effects: Strictly speaking, it is possible to consider the poverty trap ie. the very high marginal tax rates (MRTS) on low paid workers - as an issue with no bearing on unemployment. For the poverty trap only affects those already working.

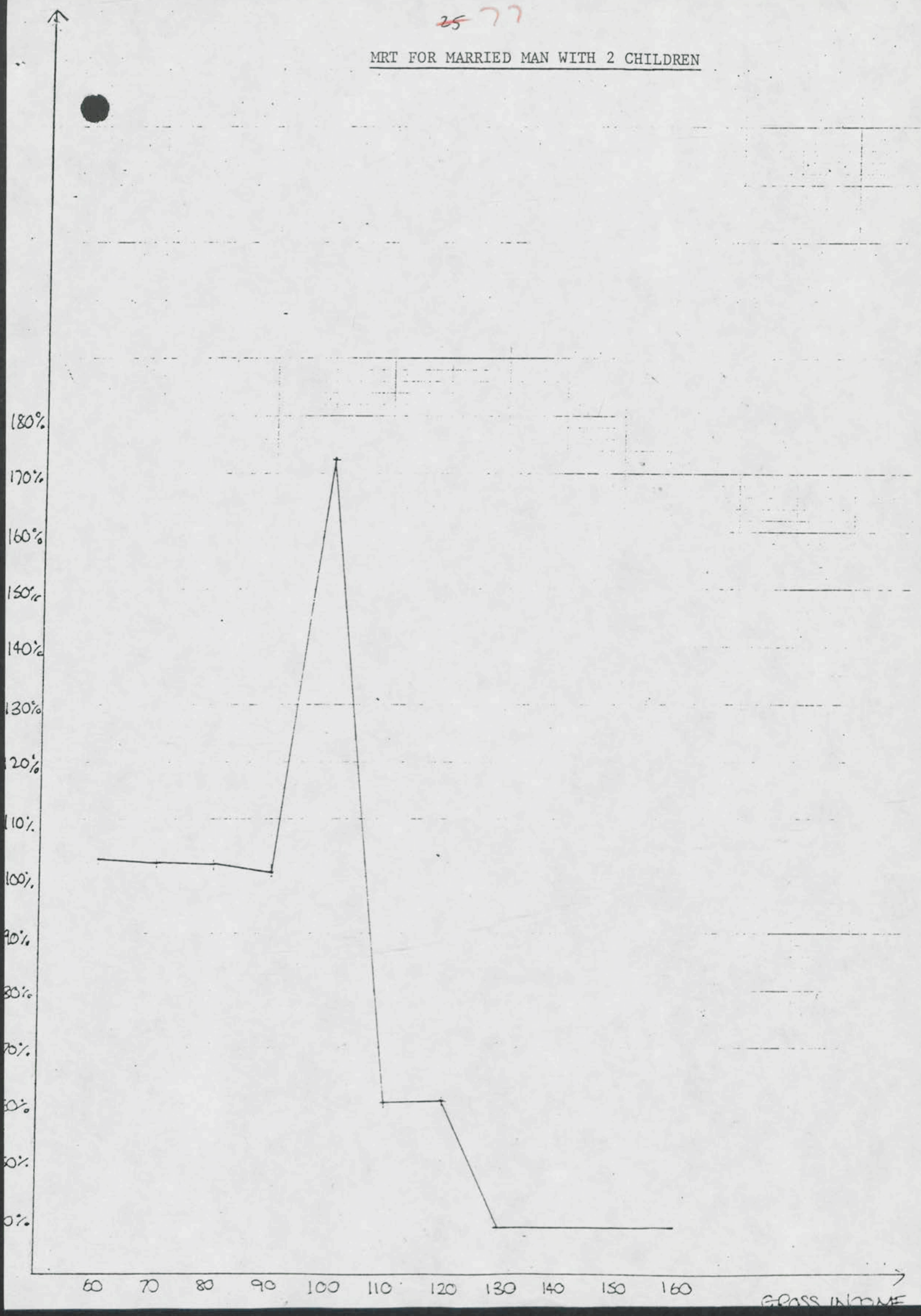
However, this is too narrow a view for several reasons. First, such high MRTs may well affect the supply of hours and so the level of underemployment. Second, they may affect the quality of the labour supply by discouraging training which would raise earnings. Third, they will tend to hold people at lower income levels, where they will have higher replacement ratios than otherwise; so more people than otherwise may elect to remain unemployed, for any given benefit system, because the population is more skewed towards those with higher ratios. In practice, therefore, there is a high coincidence between those 'at risk' from the two traps.

Estimates of the effects of the poverty trap on labour supply are however hard to come by. We survey the evidence briefly in Annex C; there we find that there is evidence of incentive effects among workers facing high MRTs but that the elasticities to marginal real wages are typically quite small (0.1-0.3), in our view quite implausibly so; in the context of MRTs between 80 and 200% as occur in the Poverty Trap, they are virtually useless.

Few people, in any case, regardless of political views would disagree that these MRTs must be reduced; disagreement

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MRT FOR MARRIED MAN WITH 2 CHILDREN





only arises as to the distributional effects that should be accepted as a consequence of reduction.

Facts about the UK trap:

In Annex B we set out the MRTs for single persons and married men with non-working wives. The problem is most acute for married men with children. The Chart below shows the MRT for a married man with two children. Net income remains static between £50 and £90p.w. and then dips before starting finally to rise above this level at £120p.w. Here the MRT falls at last to 38.8% (standard rate plus N.I.) having reached 170% at £100p.w.

The problem arises because of the interaction of FIS (with 'passported' benefits), rent/rate rebates, and the tax system. Each of these is 'means-tested' in a different way; and it is the unintended overlap of the three means tests that creates the problem. The table below shows this summarily:

TABLE

Certain sources of income of married men with 2 children, wife not working (£ per week)

<u>Wages</u>	<u>FIS and passported benefits</u>	<u>Rent/rate rebates</u>	<u>Taxes &amp; N.I.</u>
80	16-30	7-72	16-91
100	-	4-36	24-66
120	-	-	32-41

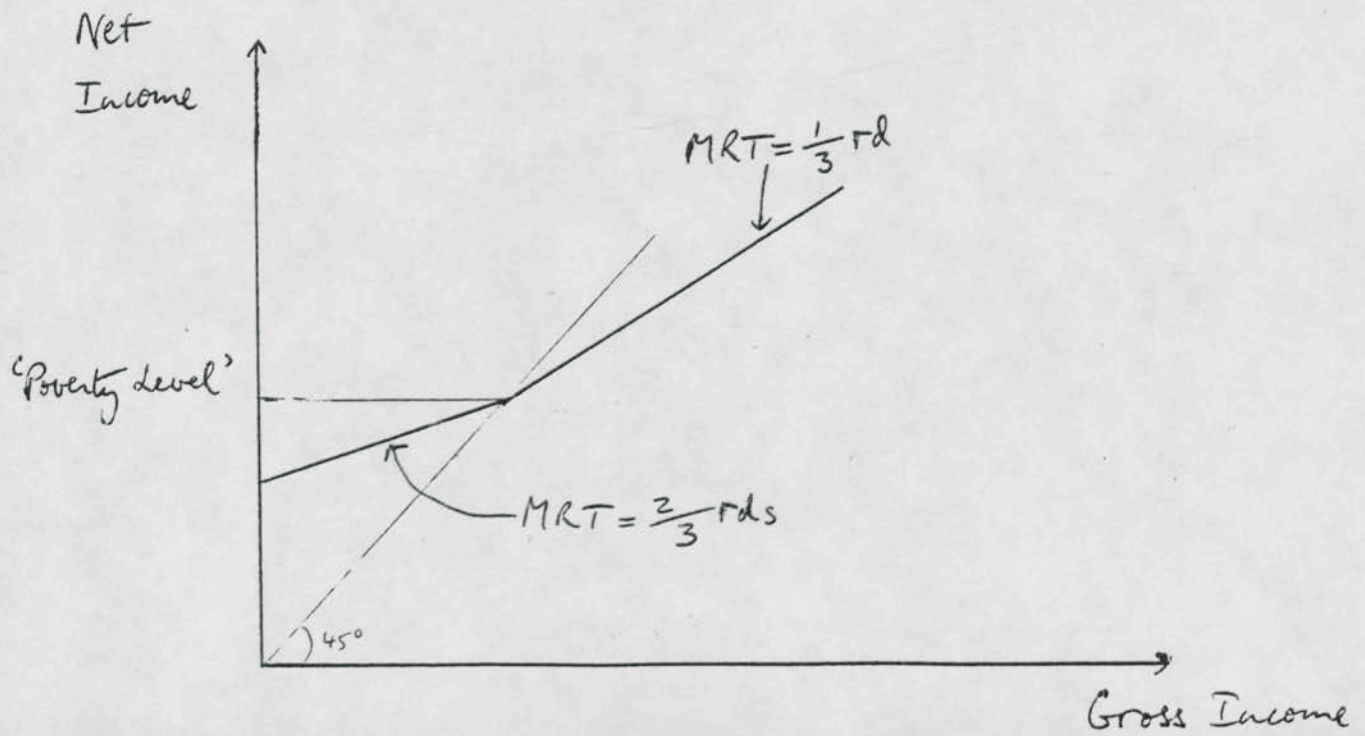
Married women do not face such problems, provided their husbands work and joint income exceeds the FIS level; in this

case, they will face a 38.8% MRT. However, if the husband is unemployed, then the wife's MRTs are similar to those just seen as the wife's MRTs are similar to those just to forfeit first FIS, then rent/rate rebates; of course, it is as we saw unusual for wives of unemployed men to work at all, because of the very low retention ratios they face though the loss of their husband's supplementary benefit.

Policy Proposals for the Poverty Trap: The major proposal for eliminating the Poverty Trap is the Negative Income Tax (espoused among others by Milton Friedman), according to which work income would be substantially supplemented by some percentage (the marginal tax rate) of its shortfall below a defined 'poverty level'. This percentage is not typically proposed to be the same as the marginal tax rate on income about the poverty level.

NIT abolishes the high MRTs while retaining acceptable distributional effects. Chart illustrates one such case where the NIT is 66% below, 33% above this level.

CHART : Negative Income Tax Illustrated



Objections have been of two sorts. First, some people have a preference for transfers in kind rather than in cash to the poor, to ensure consumption patterns are constrained in a 'desirable' way. Secondly, NIT has been argued to be administratively impossible before the tax system is computerised; the last Conservative administration abandoned it for this reason.

In practice, FIS and rent/rate rebates which are both cash transfers dominate the current UK system; passported benefits are significant but have low take-up rates. Even if they were retained on the grounds that money for prescriptions, dental work etc should be tied to these things, the replacement of FIS, rent/rate rebates and tax/NIT by NIT would be a very substantial improvement.

However, the administrative objection could be still binding, the Inland Revenue now claiming computerisation cannot occur before the very late 1980's. This raises the issue of transitional measures which are administratively possible and yet approximate the NIT structure. We assume in this discussion that the benefit ratio ceiling is in place, so that the effects on replacement ratios are of second order.

What is needed in transition is to make one or more elements in the tax/transfer jigsaw act to compensate for other elements and create a smooth MRT structure. The choice of element to perform this task has clearly to be one of administrative convenience since the economic effect will be identical whichever is chosen.

Administratively, all are costly. Rent/rate rebates are administered by local authorities, which are not well placed to monitor net incomes. The Inland Revenue already claim to be stretched in tax administration. FIS is calculated by DHSS; calculations involving more declarations and checking of income would also be costly in staff.

Two simple measures should however give substantial help.

First, FIS could be calculated on (fully) net income, not gross income as at present. Such net income could be computed net of tax and rent/rate rebates and passported benefits according to a set of standard rules for each household type.

Secondly, though the spikes in the MRT due to passported benefits need to be removed, this cannot be done without abandoning the simple need to 'passport' link to FIS. Of course, these may not in practice be a serious problem because of low take-up. However, if it were politically acceptable, it would be better in any case because of this low take-up to convert these passported benefits into cash terms via the FIS mechanism. This could be done by raising the FIS poverty level.

It should be noticed we have not suggested reduced rate tax bands. The reason is partly administrative cost but partly economic. The FIS proposal has a substantial effect. This could be enhanced by reduced rate bands for those subject to FIS; however, these bands

could also lower MRTs too far ( requiring correspondingly higher MRTs on other tax bands ) for those not subject to FIS, such as single people on low incomes. An MRT of 38.8% is not unreasonable when the average tax rate is of similar order for the the population as a whole.

An Overall Tax Package Designed to Approximate NIT While Being Distributionally Acceptable

Our proposals to this point have been:

1. Introduce a Cap on benefits
2. Compute FIS on net income
3. Abolish passported benefits and replace with FIS

2 and 3 are intended as transitional measures to an eventual NIT.

However, we have not yet discussed the rates and poverty levels for FIS. Nor have we paid attention to distributional effects. Yet clearly these are of great importance.

Our proposals are completed as follows:

4. Raise tax thresholds by about 40%, i.e roughly to the supplementary benefit levels for single persons and for a man and wife shown in Annex B Table C (currently at £42.20 and £59.70 per week. respectively). Hence the MRT upwards will be .388 from this point.

5. To alleviate the position of families with children, raise child benefits by £2.15 per child.
  
6. Set the FIS MRT at  $2/3$ . Hence the MRT downwards will be, inclusive of NI, about .7.
  
7. Set the FIS poverty levels so that families currently receiving FIS are in the aggregate, after the tax cut about as well off as before. We have chosen £86 for married +1, £97 for m+2, £108 for M+3, somewhat above the current supplementary benefit levels.

Notice that 4 and 6 are roughly approximate to NIT with .388, .7 as the up and down MRTs. It should make the transition to a full NIT easy.

We now compute the effects of these changes;

- a) on the economy
- b) on the distribution of income.

Effects of Poverty Trap Proposals on Economy

We compute the effects, assuming that the capped replacement ratio regime is in place with a cap of 0.7. This assumption is important because those whose ratios are held down by the cap will only be affected in their supply behaviour by the tax change if it takes their ratio below 0.7. Hence the population affected is to a first order approximation, those with ratios already below 0.7 ; according to our earlier calculations this will be around 45% of the working population. ( We assume, for want of a better basis, that this percentage is also true of those in the non-union sector ). The effects of tax on the supply behaviour of these people will depend on how far it changes their replacement ratios.

To estimate this, we take the position of those who are in the next group above the 0.7 replacement ratio. It turns out (see below) that this group's net income in work rises about 6% ( the fall in their 'tax rate' ). The long run effects of this change are:

Unemployment - 175,000, average real wages -0.5%, output +0.6 PSBR effect ( excluding direct cost of tax cut) + £0.6 bill. (1982 prices). The rate at which these effects come through is as above: 20% (year 1), 50% (by year 2), 70% (year 3), with virtually all through by year 5.

It is clear that taken on top of the Cap these proposals do not reduce unemployment much further. They have importance because:

- a) they reduce the MRT below 100% at all points of the income scale (see table below); we are unable to quantify the effect of this, but we can be sure it is worthwhile.
  
- b) they distribute a larger proportion of the surplus generated through higher output towards the bulk of those in the bottom half of the income scale provided they are working. This distributional impact is of immense social and political importance, for it becomes possible to say that, while the rewards of unemployment have been reduced for low-income workers - in the case of the lowest paid substantially so - the rewards of employment, even should they take a less well paid job, are generally raised, significantly in most cases. To this impact we now turn.

The Distributional Impact of the Cap (0.7) Together with Poverty Trap Proposals - The 'Package'

The Table below shows the position of households before and after the package, based on the FES 1980, and our simulated effects on real wages (-2½% overall).

For those in work on low incomes, (but not exceptionally low ones), real disposable income improves by up to 14% with a typical range of 3 to 7%.



TABLE : EFFECTS ON HOUSEHOLD INCOME OF PACKAGE FOR LOW INCOMES BY HOUSEHOLD TYPE (non-retired only, £ per week )

37  
86

Gross Income of household	1. Net Income before package	Change in Tax and child Benefits	Change in FIS and passport Benefits	Net Income corresponding to gross income after package	3. η	2. % Total Effect on real net income of household	4. Est. No. ('000) of households with net incomes less than shown (cumulative)
<u>Single</u>							
50	41.1	3.7	-	44.8	.46	6.9	n.a.
64	46.3	3.7	-	50.0	.53	5.7	650
96	59.9	3.7	-	63.6	.85	3.1	1200
130	80.4	3.7	-	84.1	.99	1.1	1750
Total Households:							<u>2900</u>
<u>Married: 5</u>							
100	69.5	5.7	-	75.2	.63	5.6	400
130	85.5	5.7	-	91.2	.93	3.4	700

Total Households

3600

TABLE : EFFECTS ON HOUSEHOLD INCOME OF PACKAGE FOR LOW INCOMES BY HOUSEHOLD TYPE (non-retired only, £ per week )

35 8

	1.				3.	2.	4.
Gross Income of household	Net Income before package	Change in Tax and child Benefits	Change in FIS and passport Benefits	Net Income corresponding to gross income after package	$\eta$	% Total Effect on real net income of household	Est. No. ('000) of households with net incomes less than shown (cumulative)
<u>Married +1<sup>11</sup></u>							
50	78.1	3.1	-4.8	76.5	.19	3.5	4
66	77.3	7.85	-4.6	80.6	.17	2.9	20
80	77.2	7.85	-2.3	82.8	.21	5.8	41
100	76.3	7.85	-	84.1	.55	7.9	n.a.
130 <sup>6</sup>	91.3	7.85	-	99.1	.87	5.4	390
160 <sup>6</sup>	105.5	7.85	-	113.3	.93	4.1	720
Total households:							2400
<u>Married +2<sup>11</sup></u>							
50	91.4	5.2	-9.7	86.9	.16	6.3	5
66	90.9	10.0	-10.9	90.0	.14	-2.4	14
80	90.6	10.0	-7.9	92.7	.18	-0.6	41
110	87.1	10.0	-	97.1	.50	9.3	50
130 <sup>7</sup>	92.9	10.0	-	102.9	.86	7.6	310
160 <sup>7</sup>	111.3	10.0	-	121.3	.88	5.3	710

TABLE : EFFECTS ON HOUSEHOLD INCOME OF PACKAGE FOR LOW INCOMES BY HOUSEHOLD TYPE (non-retired only, £ per week )

36 88

Gross Income of household	1. Net Income before package	Change in Tax and child Benefits	Change in FIS and passport Benefits	Net Income corresponding to gross income after package	3. n	2. % Total Effect on real net income of household	4. Est. No.('000) of households with net incomes less than shown (cumulative)
<u>Married +3<sup>11</sup></u>							
50	103.3	7.35	-14.8	95.9	.10	8.4	4
66	103.2	12.15	-15.6	99.8	.13	4.8	11
80	102.9	12.15	-12.7	102.4	.15	-2.0	22
110	93.0	12.15	.2	107.2	.24	13.4	30
130	103.0	12.15	-	115.2	.77	8.9	n.a.
190 <sup>8</sup>	135.5	12.15	-	147.7	.86	7.9	460

Total Households:

1200

NOTES

1. Assuming non-working wife where applicable, unless otherwise specified. Figures from Annex A; interpolated for incomes between £10 points.
2. Assuming a) fall in gross real wages of all workers = 4%, and applying elasticities of net to gross income,  $( \frac{1-MRT}{1-ART} )$  from Table A in Annex A; b) a rise in general expenditure tax of 1%, lowering net post tax real wages by 1% also.
3. Elasticities of net to gross income: See 2
4. Source FES 1980; incomes uprated by rise in average earnings index ( whole economy ) to November 1982 basis, i.e. by 28%.
5. FES 1980 gives as average people working per household, 0.89 for incomes <£100 and 1.15 for incomes £100-£130 (Nov. 1982 basis) hence assumption of non-working wife reasonable here.
6. Average persons working 1.236 per household (FES 1980) for those with income under £130, 1.525 for £130-£160. In the latter case, allowance is made for working wife; man assumed to earn £105, wife £55.
7. 1.42 persons working under £130, 1.58 working £130-£160. Calculations assume man earns £80, wife £50, in the first case; in second case that man earns £105, wife £55.

8. 1.46 persons working. Assumed that man earns £130, wife £60.
9. Calculations for FIS incomes based on Social Security statistics 1980, Table 32.36. Earnings there relating to October 1979 uprated to November 1982 by whole economy earnings index, rise of 47.4%. It is assumed that distribution of children per family follows distribution in Table 32.30 and is the same for each income group. Only one earner is assumed per family; tax is computed as for married man with non-working wife. Take up rate of 50% in 1978/79 assumed for FIS in calculating true population within FIS range; based on DHSS note ' The Take-Up of FIS: Note on The Estimate Derived from the Family Finances Survey ', July 6 1981.
10. Number of households from census breakdown based on FES 1980, and Social Security Statistics for FIS take-up (see 9). Multi-adult households included with single. There are estimated to be 500,000 households with 2 adults and 4 or more children.
11. FIS poverty levels assumed: M+1: 86, M+2: 97, M+3:108. FIS is paid in package as  $.66X$  ( Poverty level minus net income after all deductions including work expenses and other transfers ).

For those on very low incomes the abolition of the poverty trap does imply some worsening. However, there are very few of these households, approximately 80,000 on our estimates based on FES 1980. Of course it would be possible to retain the passported benefits, so protecting this group, but at the cost of partially restoring the poverty trap; alternatively one may raise the FIS 'poverty levels', so as to reduce the numbers of those affected, but at the cost of higher marginal tax rates for those further up the low income scale and the administrative cost of increasing coverage of the FIS scheme substantial.

We have already estimated the distribution of replacement ratios for those out of work, using the FES and DHSS Cohort Study. About 14% had replacement ratios of unity or more; another 15% of 0.9 or more; 12½% of 0.8 or more; and 13% 0.7 or more. Thus we could say that real disposable income would fall among the unemployed by around:

<u>% Fall in RDI</u>	<u>% of Unemployed</u>
21	14
18½	15
10	12½
11	13
0	45½

The % fall in RDI is due to direct effect of the cap minus the rise induced by tax cuts etc, the indirect effect of the whole package as shown earlier.

This is an inevitable feature of any scheme to get people back to work via market incentives, unless one is prepared to impose much higher tax burdens on the rest of the population in order to raise much further the incomes of those employed at the lower wages which compete with these benefit levels. It remains the case that the opportunity for work at lower gross real wages but higher net real wages than before, remains for the overwhelming majority of the unemployed.

Furthermore, it must be remembered that a ratio system is widely accepted on continental Europe as explained earlier and set out in a later section.

Long Term Exchequer Costs

The direct costs, output and wages constant, are estimated as:

	<u>£ Billion-82/83 Prices</u>
Child benefits up by £2-15 per child	1.6
Tax thresholds raised by 40%	4.2
Reduction in benefits paid to Unemployed (Cap of 0.7 )	-1.2
Changes to FIS and passported benefits to FIS employees	-
Total	<u>4.6</u>

Against this, the rise in output by 3.0% and of employment is estimated to bring in an additional £3.0 billion eventually, leaving £1.6 billion to find.

In evaluating the effects of this package, we assume that it is PSBR-neutral, in order to abstract from all 'macroeconomics' or 'demand' effects and concentrate solely on the tax structure effects. In other words we assume that some view has already been taken about the appropriate PSBR and the demand-cum-inflation effects have already occurred.

It follows that conceptually we need some 'general revenue' measure with which to compare our package: for this purpose we assume a general consumer expenditure tax ( on all such expenditure), which falls neutrally on home and foreign goods and employment and unemployment income.



In practice we suggest the package will be carried out not by raising expenditure taxes but by using resources freed by falls in the PSBR below its target path. Hence expenditure taxes would not rise; rather they would simply not fall as they would otherwise in the absence of the package.

The £1.6 billion net cost estimated above would require an offsetting rise in such an expenditure tax by about 1%, implying 1% rise in the RPI relative to factor costs. We assume this in computing the effects below and we also assume that unemployment benefits are not indexed to this change in the RPI ( so that as noted it is neutral on all incomes ).

#### The Phasing of the Package and its Effects

The package involves a substantial shift of purchasing power from the unemployed to the employed on low incomes; this is how it is proposed that unemployment be reduced via market forces. However, because the Exchequer costs are likely to occur rather earlier than the revenue benefits of increased supply, the package needs to be phased so that the net current cost to the Exchequer can be met from available budgetary savings elsewhere within the PSBR targets. Clearly, we can only indicate a plausible phasing given the present state of information about PSBR outturns. We take the current PSBR targets as a guide in this. We may allow for anticipatory effects if the programme is announced with a 'second stage', but people may be unwilling to accept the second stage as sufficiently likely until the first stage is well under way. We therefore make no allowance for such effects

An optimal phasing of the package elements needs to:

- a) maximise the response of unemployment
- b) be socially acceptable
- c) avoid the need to raise any tax rates in order to meet the existing PSBR targets.

By bringing in the Cap immediately, the effects on unemployment would begin at once. The justice of the Cap idea should we feel be readily apparent to the population, though naturally there will be an outcry from those directly affected and their representatives; such an idea is widely accepted on the Continent and has a long history in this country ( going back at least to the Poor Law Amendment Act in the '1830s)

The change in FIS and the abolition of passported benefits can be brought into operation with some delay ( perhaps 12-18 months in order to cushion the impact on the very poorest families in employment; the incentive effects would begin to operate at once, so there would be no loss in effectiveness.

In order to maximise the impact of the package, all of it should be announced at the same time, together with details of the phasing.

The major elements using exchequer resources are the 40% rise in thresholds and the £2-15 on child benefit . Because families with children are most highly represented in the unemployment trap and so likely to suffer most from the Cap, the

child benefit element should come in at once, since it will most alleviate the impact on their standard of living from the Cap. This leaves the rise in thresholds as the element to be phased to fit the PSBR profile. If we assume arbitrarily that resources available for tax cuts ( the 'fiscal adjustment' built into PSBR targeting ) will be £2½ billion in 1983/4, and a further £½ billion in 1984/5, then a possible phasing is a 25% rise in thresholds in 1983/4 followed by a further 15% rise in 1984/5. The table below shows the summary effects.

Phasing of Programme: Effects on Exchequer Resources

(+ is loss of net revenue; 1982/83 prices; £ billion)

Fiscal Years	<u>1983/4</u>	<u>1984/5</u>	<u>1985/6</u>	<u>1986/7</u>	<u>1987/8</u>
Child benefits	1.6	1.6	1.6	1.6	1.6
Tax thresholds	2.6	4.3	4.4	4.4	4.5
Cap reduction in benefits	-1.2	-1.2	-1.2	-1.2	-1.2
Gain in revenue from higher supply	-0.6	-1.5	-2.1	-2.6	-3.2
Cumulative effects on PSBR net	2.4	3.2	2.7	2.2	1.7
Available resources within PSBR target	2.5	3.0	3.0	3.0	3.0
Adjustment in other taxes (- is tax cuts)	-0.1	+0.2	-0.3	-0.8	-1.3

This illustrative programme implies that the package would more or less absorb available resources in 1983/4 and 1984/5 but leave room for further tax cuts - of a form to be decided - subsequently. It is of course only illustrative.

The Problem of Union Power

The Argument Recapitulated

It is not original to suggest that unions create unemployment. It has been a widespread claim by those economists who have urged more freedom for market forces. What they have generally had in mind was that unions raise wages for unionised workers, some of whom as a consequence will lose their jobs (or equivalently other non-unionised workers will fail to get jobs in unionised industries). The workers displaced will find it hard to gain employment in the non-union sectors because of the limited opportunities there and will for the most part be unemployed.

Two elements have been lacking in this argument. First, there has been some vagueness about why workers would not find jobs in the non-union sector, since they would drive non-union wages down there until there was full employment. Second, the order of magnitude of the unemployment which could result from union power has not been indicated; this is obviously very important because if the magnitudes are trivial, the ordeal by fire required to reduce union power would not be politically attractive.

The findings of this report are two-fold. First the operation of tax and benefit system prevents wages in the non-union sector from dropping much, because benefits are 'flat rate' (i.e., regardless of previous earnings) after six months, and for low-

income jobs they may be so close to net earnings that the jobs would become unviable and unattractive for workers if wages fell very far. Hence the non-union sector has only a small ability to absorb workers displaced by the union sector. Secondly upon estimating relationships which incorporate the role of the tax and benefits system, we have found that the substantial rise in union power since the early 1960s has raised unemployment by about one million. This is a round number probably at the upper end of what politicians and practical men may have suspected, but, if correct, it must weigh heavily in the political scales against the fuss involved in reducing union power.

This work is bound to be controversial at this stage because it challenges much wishful thinking. But it will be a long time before all the additional evidence has been sifted - particularly the immense amount of potential information in the Family Expenditure Survey - which may settle all the interlocking issues involved. But by the time such research has been done, it may be too late to take the necessary action. Already the tide of union power has swept in irresistibly. Some recent events have suggested it may be receding. But who can tell what access of strength it may gain in the next economic upturn and beyond? Now may be the last major opportunity available to politicians to push the tide out once and for all. To lose such an opportunity on the chance that our estimate of the effect of union power may be much too high would be a dangerous gamble. Compared with it, the risk that the highly unpopular union movement will be able to resist successfully and damagingly the necessary legislation to cut their powers seems

a risk substantially less to be feared.

The basic ideas related to the effect of union power have been described above. But it seems worth while briefly to recap on this point.

A union exists to raise the wages of its members to an 'optimal' amount, given, first, that higher union wages means fewer union jobs, and, second, the wages their members could get in the non-union sector. The union typically determines an optimal union wage which is some way above the non-union wage. A monopolist raises his price to the point at which his profits are maximised; this point will be above that which would have been set by free competition and will reduce the size of the market. So with a union monopoly.

Workers who lose their jobs as a result of their monopoly power will then seek jobs in the non-union sector. These additional supplies of labour force wages down there, until supply is equal to demand. But at this point we note that the social security system guarantees a minimum income regardless of work and that taxes apply to workers with very low incomes. As wages in the non-union sector fall, they become progressively less attractive (after tax) to workers forced out of the union sector; some, perhaps many, will not be prepared to take the jobs on offer for such rewards. They will go on the dole. The major way in which supply is equated to demand in the non union sector by falling wages is through the contraction of supply. Demand rises as wages fall, but the tax and social security system imparts a 'floor' to wages, which causes major

withdrawals from the labour market as wages get too close to this critical level. Consequently wages cannot fall enough to create much additional demand.

This analysis is sometimes criticised on the grounds that the resulting unemployment is labelled 'voluntary'. Many people feel, rightly, that unemployment is a tragic misfortune and cannot be regarded in any meaningful sense as voluntary. Consequently they feel inclined to dismiss the analysis.

But such a feeling is inspired by a complete misconception. There is nothing in the analysis to suggest otherwise than that unemployment is unpleasant and degrading. The point of the analysis is that the alternatives to unemployment, non union jobs at non union wages are even less attractive. What is more, workers who take jobs in the non union sector would, of course, prefer to work in the better paid union sector. It is a technical convention in economics to call the decisions of these people 'voluntary', because they are doing their best even in poor circumstances, but they could just as well be described as involuntarily forced out of the union sector.

No amount of re-labelling however will avoid the basic problem society faces: how to create permanent jobs for pay that people will accept. The analysis clearly indicates that one major way to do this is to reduce the power of unions to raise union wages. As union wages fall, the demand for union labour rises, people are



withdrawn from the non union sector, non union wages rise and more people are prepared to work in it.

### A Policy Framework

Monopoly power in the labour market from the union side now rates as a major allocational issue. Monopoly power in goods markets was the major allocational issue in the post war period, resulting in important legislation such as the Restrictive Trade Practices Act of 1956, new institutions such as the Monopolies Commission and tax changes like the successive tariff-cutting 'rounds'.

In British History the trade unions have been the instigator of major social reforms. Once they were a 'countervailing force' in an economy where major employers held the whip hand in negotiations. But their historical role as social reformer is no longer relevant. The need for countervailing force has disappeared in an economy where employers' monopoly power has been heavily curtailed by the stronger competition in goods markets and the emergence of industrial relations institutions such as the industrial courts. It is hard to escape the conclusion that the public interest requires measures to deal with labour market monopoly power in an analogous way to goods market monopoly power. A corollary is that, since the power is vested in the unions by exceptionally favourable laws, it is no use hoping that non-legal measures - such as incomes policies, 'confrontations' or

exhortations will have any effect on the problem. Only changes in laws and institutions which take away union power will remove its effects on unemployment, output and the interests of non unionised workers.

The Present Situation

A fairly full account of the history and present state of union legislation is attached as Annex D. What emerges from this account as the 'present state of play' is:

- a) Ministers have been unwilling to abolish civil immunities or the closed shop, preferring rather to restrict them and to ensure that they are used in a 'responsible' way. This attitude may however be changing.
- b) Powers now exist to take legal action against uses of pickets and secondary action, which are not being used, either by the private sector or most surprisingly by government departments.
- c) Powers to be conferred by the 1982 Bill, which further restrict the scope of industrial action and make the closed shop inoperative when it has not been sanctioned by an 80% majority of the work force, may also (if (b) is a guide), not be used. In fact, some employers have already said they will not do so. Some unions ( e.g. NUM) have said they will openly defy this and previous legislation.

There may be a number of factors impeding progress. First, the emotive power of 'union rights' is less than it was ten or fifty years ago, but some people fear that it might flare up, if bold and tactless moves were made; martyrs could be created, etc. Secondly, the law is now immensely complicated, and at this stage quite untested in a large number of respects; setting legal precedents now could be very costly, whether to a private employer or to a government department ( subject to cash limits and so properly conscious at last of budgetary control).

Thirdly and perhaps most important of all, there is what one might call the 'protection racket syndrome'; a union, which has strength in the workplace, can wreak financial havoc, even though it could ultimately lose a legal action and pay large damages. The employer is likely to be unwilling to risk this, much as a club owner will fear to take the local Mafia to court.

It is clear that independently of the adoption of the proposals we detail below, there is an immediate need to catch up in the enforcement of existing laws.\*

Turning to the enforcement issue in respect of criminal law, there is in principle no problem. The police under the direction of the Home Secretary in conjunction with the local police authorities, can be ordered and given the necessary support to implement the law. We have in fact seen this happen with the much tighter regulation of pickets since 1979 and the effective disappearance, as a result, of the strictly criminal mass picket.

In the civil law as it affects the public sector employers, there is also in principle no problem of enforcement. All government departments can take civil action to enforce their rights; the budgetary implications of this should be recognised in framing their cash allocations. But clearly they can be ordered by the Prime Minister and the Cabinet to take the necessary action.

\* There is also scope for detailed extensions, clarification and tightening up, such as compulsory secret ballots for union elections and strike calls; these details will become apparent as experience of enforcement accumulates.

However, in the Civil Law as it affects the private sector there is a serious problem of enforcement in principle. This is that it may well be in nobody's individual interest to take legal action that is in the public interest.

This has been recognised in the law governing monopolies and restrictive practices - i.e. by firms in the goods market. In civil law, it is not possible for consumers of a product to take the supplier(s) to court for damages from monopoly practice. We therefore do not rely on such private actions to curb monopolies and restrictive practices. Instead we have a Monopolies Commission whose job is to report on practices that are referred to it by the Minister for Trade as being potentially damaging to the public interest. In the light of that report, the Minister may bring an order in Parliament regulating or forbidding these practices and ordering whatever other action is necessary. From this point disobedience becomes a criminal matter, for the Attorney-General.

It is natural to think of extending this mode of action to monopolies and restrictive practices in the labour market; incidentally by extending it in this way it embraces actions and situations not involving unions. The Monopolies Commission is at present empowered to investigate labour markets; but no labour market situations have ever been referred to it by the Secretary of State for Trade. We take up this point below as part of our innovative proposals for strengthening and simplifying the legal framework regulating labour market competition.

Proposals for Reform

The immense power wielded by unions in the British economy is plain for all to see. As a result of that power, the thinking of policy makers has been conditioned to accept labour market monopoly; such acceptance has led most people involved in policy discussion not to question the basis of such things as union immunities under the common law. This acceptance is highly dangerous to constructive reform, and has bedevilled all earlier proposals.

We begin from the basic conception that the labour market should be free of all restraints on competition, except those for which a positive case based on the public interest can be sustained. Any action which causes workers to act in combination in order to fix the terms of their employment is a restraint of competition. Such actions include the calling of strikes, the denial of work to non union workers ( the pre-entry Closed Shop ), and the enforcement of union membership on all workers in an industry ( the post-entry Closed Shop ). Similarly, any action which causes employers to act in combination for the same purpose is a restraint of competition. This includes most conspicuously concerted bargaining by employers' associations.

It may be said that such a conception is Utopian and has no hope of implementation. It would certainly be opposed by a variety of groups with vested interests; the unions of course, and some employers who would fear transitional disruption. We would certainly accept that full implementation of free

competition in the labour market could not occur rapidly and might never come; our point is however that it should be the ultimate aim of all actions taken in this area. The rate of progress will depend on a variety of pressures, but the aim must be clear for any progress to occur. With that aim we do not believe rational men can disagree, in the light of the damage to the British economy inflicted by labour market imperfection.

With this aim in mind, we make 3 sets of proposals, for implementation at the earliest possible moment in whatever order is most expedient.

1. The actions of unions should be subject to the common law without exception, i.e. all union immunities under common law be repealed. The common law upholds contracts between employer and employee and recognises the 'tort' of inducement to breach of contract. Union immunities from such tort cases allow them to call strikes without fear of action for damages. Strike calls are a prima facie restraint of trade and should not therefore be given immunity by society since society's interest lies in competition. If unions and employers wish to sign contracts with clauses explicitly permitting strike calls under specified circumstances, then this could freely be done, the lack of immunities would not prevent it and would in fact stimulate the bringing of industrial action within the framework of the contracts. Any such contracts however would be potentially

subject to investigation by the Labour Monopolies Commission proposed as (3) below.

2. A 'status provision' should be legislated which would invalidate any contract between employer and worker contingent on the union status of the worker. Such a provision - analogous to a variety of similar provisions already in existence under common law - would render null and void any closed shop agreements, explicit or implicit.

3. A Labour Monopolies Commission should be set up under an extension of existing competition legislation, which would enunciate the 'public interest' in labour market competition. This Commission would be an independent body with power to investigate any apparent breach of the public interest, to publish a report about it, and to bring a case, based on its report, to the Common Law courts requesting that remedies to uphold the public interest as suggested by the report be mandated by the courts. The Commission's independence would ensure, as with Anti-Trust actions in the USA, that no political intervention is necessary, or for that matter possible on the part of any future government hostile to competition. Its power would cover breaches by both sides of the labour market, so that the proposals overall are seen to be completely even handed between employers and workers. The powers are sweeping and would institute over a decade a body of case law with substantial impact on labour practices.



The combination of these three proposals would require modest legislation which would incidentally simplify in a major way the present tangle of labour law returning it to the framework of the original common law. The proposals combine the withdrawal of legal protection currently given explicitly or implicitly-a negative act which alone might not be sufficient to curb union power because of custom, practice and intimidation-with the invention of a weapon for positively changing labour practices regardless of employers', employees', and unions' own narrow interests which may alone be insufficient to prosecute the public interest and may even interfere with it. This combination of negative and positive changes should be sufficient to introduce a very substantial degree of competition into the UK labour market over the next decade.

Legal details of these proposals with drafting suggestions etc., are now appended in some depth.

An Alternative System of Industrial Relations

Since the beginning of this century Trade Unions have held unique privileges in law and occupied an unrivalled position in the courts with the sole exception of the Crown itself. The immunities from legal process have already been considered in Annex D and need not be re-iterated here; the general impression is that these immunities are unnecessarily wide, and have been used by unions to acquire and secure inequitably powerful advantages over others with whom they deal. We therefore call for the restitution of the rule of law and equality of treatment before the courts so as to provide a more balanced position for those who are parties to Collective Agreements, and to permit Unions to represent their membership interests in a more efficient and responsible way. It is our opinion that the only way in which the necessary changes can be effected is by the abolition of all legal privileges conferred upon trade unions and by the restoration of the common law to situations in which Unions are a party. By abrogating the unique privileges presently conferred by statute, such bodies would still be powerful enough to represent their members interest effectively, but not irresponsibly. The acceptance of common law principles represents the acceptance of common sense in an area which seems so sadly neglected by such considerations. Given this constitutional claim, we shall now consider the likely impact of such a change upon the face of industrial relations and then detail its likely effects.

The Common Law Basis

It should be made clear at the outset that our proposed adoption of a common law basis in no way affects the existing legal provisions as between employer and employee as detailed in Annex D; its only effect is upon the position of Trade Unions, their officials and related persons. In particular it is worth emphasizing that cases of unfair or wrongful dismissal would not, per se, be affected by the proposed change, nor would the rights of employers to sue individual employees for strikes or other breaches of their contract of employment.

The main effect of adopting the common law basis would be to make the Union and its officials liable to common law actions such as attempted or actual inducement to breach of contract of employment. Clearly the proposals would expose unions to an extensive range of legal liabilities and it is our view that one way in which the Union may seek to restrict this exposure is by entering into legally binding collective agreements with employers and their associations. The idea of collective contracts is not particularly radical since it has been widely adopted in a number of overseas countries (for example, France, Germany and the United States) and indeed it was an assumed situation under the Industrial Relations Act 1971.

The coupling of a contractual basis with the abrogation of immunities, which is our preferred framework, can be seen as conferring a number of advantages over the existing scheme of industrial relations. First, it provides a fairer and more responsible basis for industrial bargaining by removing the rights of unions to unilaterally break agreements with impunity; more equitable also for employers who formerly encountered difficulties in bringing actions against individual workers, rather than the more powerful and wealthy unions who frequently inspired or induced such breaches. Secondly, whilst some would argue that the alternative basis of industrial relations would be met by the same vituperative actions and malignant reactions as those encountered by the former Conservative Administration, we would point out that our proposals are in no way coercive or paternalistic; for if unions do not wish to contract they are in no way required to do so, they are simply open to the common law remedies if for example, they attempt to induce a breach in the contract of employment between the employer and the employees. Viewed in this light unions may recognise the advantages of a contractual basis, since it affords rights as well as responsibilities.

Assuming such a basis were adopted, the significance of the proposals can best be seen by considering their likely affect upon strikes and other forms of industrial conflict. Clearly unions would be liable for any breach of the collective contract and could be sued by the employer, or any other third party not too

remote from damage. Strikes, including political strikes and other forms of industrial action would be taken, subject to de minimis rule, to represent a fundamental breach of the contract giving the employer the normal common law remedies.

It may be argued that this adds little to existing, proposed and contemplated legislation, but this misses the point that whereas successive governments have adhered to the central theme of immunity, attempts have been made to whittle away a number of specific immunities. By adopting such a course there have been a succession of harmful confrontations between the protagonists which we feel is best resolved by a once and for all change in the legal environment pervading the industrial relations scene. Moreover by adopting the new comprehensive legal regime all union nominated officers as well as unofficial or even disruptive representatives are put on the same liability basis, since legal actions may now be instituted against these "third parties". By contrast the existing and contemplated legislation fails adequately to get to grips with these fundamentals and will produce piecemeal and partial legislative solutions as confusing as they are confused.

However by far the most important advantage of our proposals over any form of legislative provision (whether providing extended or restricted immunities) is that by removing externally imposed restraints and privileges the parties to collective bargaining are more able freely to

negotiate their own terms as to the price and conditions of labour supply, without the distortionary impact of one party having a statutorily indemnified unilateral right of repudiation. Lest it be argued that the ending of legal protectionism will result in all trade union and other industrial action becoming unlawful, it is to be noted that the ending of legislative immunities does not necessarily preclude the possibility of collusive de facto immunities being established between employers and trade unions, nor does it prevent the negotiation of contracted immunities which we would regard as providing flexibility in the new scheme as well as forming central issues in the negotiations as to the price and conditions of labour supply. The negotiation of contractual immunities can be viewed in both positive and negative terms - indeed at the present time it is possible for employers to negotiate "non strike" clauses and for this employers invariably make compensatory finance available; however under the new scheme strikes and other forms of industrial action will prima facie give rise to contractual and/or tortious liability, unless the contracting parties permit such actions as part of the collective contract. A period of more active negotiation and contract drafting is therefore envisaged in which such issues as defining the permitted rights, for exercise in the defined circumstances, after exhausting prescribed procedures (eg 30 days notice of strike or cooling off period or balloting of plant membership, arbitration etc) become part of the price determination process itself. The central difference between the proposed legal framework and the existing one is that by removing the unfair privileges currently enjoyed by unions and

making them responsible for their agreements the commitments which are made will be more likely to reflect the true economic value of labour services, undistorted by legislative regulation.

On a more practical level we envisage the provision of such a framework as reducing the need for industrial conflict rather than permitting it. As indicated earlier, not every employer will bring an action for every breach. Forebearances on the right to bring actions will lead to de facto immunities being established and the development of these and similar understandings will lubricate the workings of the new system as they do at present in relation to most breaches of contract by individual employees. Indeed we expect most employers to be at least as reluctant to bring legal actions against the unions under the new scheme, as they have been in the past to bring actions against individual employees in breach of their contract of employment. The main reason for this reticence being that good employers want good industrial relations and this cannot be brought about by suing unions for every single breach, indeed to attempt to do so would be prohibitively expensive. However by adopting the alternative legal framework, unions would be bound so that actions could be brought for breach, thereby providing employers with a back-up position which is not available to them under the existing scheme. Moreover such agreements will provide an agreed objective guideline having a restraining influence upon trade unions in exercising their de facto power and at the same time providing them

with a shield against irresponsible and unrepresentative elements within the union who may otherwise have sought to break the undertakings with employers.

The contractual unprivileged basis would also require reasonableness by the latter, as well as the former for if contracts were enforced with undue rigidity then either employers or unions would be forced into financial difficulties. Taking the extreme example of a firm which after a number of breach actions against the union was able to bankrupt it, the union would have little to lose by subsequent actions and may reciprocate by encouraging disruptive action eventually leading to the firm's liquidation. By this somewhat extreme example we can clearly see how our framework actually deters legal involvement yet provides a useful shield behind which both the parties can extract compliance with the terms of their agreement. The removal of immunities and restoration of a fairer basis to collective bargaining will ensure the necessary background for the development of good industrial relations with the minimum reliance on the law and its current immunities.

To ensure the successful implementation of our proposals a number of potentially difficult areas must be isolated and dealt with. Clearly, if employees do not wish to accept the terms of employment offered them by a specific employer they may leave that firm and seek employment elsewhere. However in the case of monopoly employer attempts may be made to force workers to accept "unfair" wages; in such a situation we see the Union and employees bringing this matter to the attention of the



Labour Monopolies Commission (L.M.C.) which will investigate and report on the contract and determine whether or not its terms are such that only a monopolist employer could have imposed them; an affirmative declaration by the Commission would then require the parties to re-negotiate the relevant terms by reference to comparable market conditions. Conversely, if a collusive agreement were entered into by the parties, one or both of whom had monopolistic powers then the terms of the agreement could also be examined by the Commission to determine whether that agreement was contrary to the public interest. Similarly, if the terms of any collective agreement were to attempt to over-ride the rights granted by employers in individual contracts of employment with their workers, the L.M.C. would have powers to intervene. Before considering the role of the Commission in detail, let us consider the likely impact of the substantive reforms on actions pursuant to strikes, such as picketing.

The new legal framework would not permit such action during the currency of any existing contract. Even under the existing law such may constitute breach of contract and this, as we have noted, would not be affected by our proposals. As for Trade Unions or other persons engaged in picketing this would now give rise in all cases to actions for inducing a breach or conspiracy or intimidation. Picketing or other forms of industrial pressure could be brought after the expiration of the current contract, and before re-negotiation of the new contract; such picketing would be subject to such common law actions as

intimidation, breach of the peace, obstruction and attempt, etc. Moreover if individual workers, whether or not members of the union, were to accept management's offer by being prepared to work, the pickets would be liable for inducement to breach of contract, or collectively for conspiracy if they attempted to prevent those persons from working. In the case of a Union concerting such action, it too would be liable. It is remarkable that whilst our proposals appear radical many of the law reforms in this and other countries are simply retractions of earlier immunities which are now realised as unnecessary incumbrances upon the freedom of collective bargaining.

#### The Closed Shop and Status Provisions

In addition to the effects upon strikes and other industrial disputes, the proposed framework may also have significant implications for the closed shop. Under the new framework, employees and Trade Unions would contract with employers, and although Unions could impose closed shop conditions on employers and they in turn impose it as a pre or post entry qualification for workers, it should be legislatively provided that the personal contract between employer and employee is not subject to any "status" qualifications,

(other than that required by statute eg Race or Sex legislation). As such the employer will not be empowered to ask any questions which directly or indirectly touch upon trade union status (this works for the benefit of unionists as well as non-unionists) and any terms in a collective agreement which provide otherwise shall be null and void. In the case of breach of this provision,

the prospective employee may bring an action for loss of prospective earnings which he may otherwise have enjoyed had the contract been offered to him. The mechanisms of obtaining a declaration of prevention of free entry will be considered shortly, as will the case where an existing employee has been dismissed as a result of non-union membership. Where such a person can show that the employing firm has (either of its own accord or as a result of union pressure) dismissed him as a result of a de facto status provision, then he may obtain a declaration of enforced dismissal.

The Labour Monopolies Commission

The second major reform which we see as complementing our first proposal involves the establishment of a Labour Monopolies Commission which would be an independent statutory body with administrative functions and quasi-legal powers to investigate, report and direct upon monopoly powers which appear to exist within labour markets. Its primary administrative function would be similar to that exercised by the Monopolies and Mergers Commission (MMC) under the various competition legislations, but confined solely to matters relating to labour monopolies. The position, powers and effects of Trade Unions on labour markets would certainly be one of the main areas of concern but as indicated in our earlier reform proposals monopolistic employer and union forms of "unfair labour practices" (eg pre-entry closed shops and enforced dismissals) would also be within its purview. Indeed the Commission would be actively engaged in investigating and reporting on any situation or practice which could be considered as uncompetitive or restricting market responsiveness. Whilst the general tenor of the proposal is to carry over the product monopolies legislation into labour market situations there are a number of important differences between the two markets and this leads us to advocate the need for an independent commission separate from the MMC with quite different procedures and enforcement powers.

The first difference concerns what criteria should be used in determining whether or not a labour monopoly exists. Clearly the definition of monopoly for product markets (e.g the 25

per cent rate) would be too restrictive: indeed it is our opinion that any per cent rate will be similarly unsatisfactory, although such a basis may be useful back up if expressed in terms of occupation and/or industry. Our own preference is for an activity definition of the labour market expressed in terms of the "public interest", where the latter term is defined so as to embrace all potential situations. A consolidating definition embracing S. 84 F.T.A. 1973 and SS. 10 and 19 R.T.A. 1976 as suitably amended could be employed as an "initial" basis for jurisdiction; although drafting along the lines of S2 of the Companies Act 1980 and S79 (5) v. F.T.A. would be more appropriate for giving the Commission powers to investigate the unfair labour practices discussed earlier. In any event these are drafting details which need not detain us here; what is important to note is that the scope of the Restrictive Trade Practices legislation and the anti monopolies and competition legislation (under section 62) are too narrow and isolated to have any real impact on labour market monopolies.

Whilst we feel that this central economic objective in itself establishes the need for an independent Commission there are a number of procedural difficulties which would be encountered if the MMC were given extended jurisdiction to carry out the terms of our second reform proposal. For

example, under existing provisions the method of referrals to the Monopolies and Mergers Commission seems particularly passive and ineffective, and its procedure for enforcement appears singularly inappropriate. As detailed in Annex D the investigative function is initiated not by the body itself but by the Director of Fair Trading (a government appointment) or the Secretary of State for Industry and this basis of referrals seems unsatisfactory for the purposes we have in mind; it is essential for the labour Commission to be able to initiate investigations of its own accord without referrals or reference to third parties, especially those persons who may be seen as "political" reference sources. Similarly, it has been seen that the MMC has no effective enforcing powers itself. If a monopoly is found to exist the report will be enforced by the Secretary of State, after Parliamentary scrutiny in the Courts. We would once again seek to avoid any apparent political involvement in the more sensitive area of trade union and other labour monopoly practices and at the same time prefer to see the labour commission's report and recommendation in effect operating on the plaintiff's case for consideration before the Common Law Courts. If this procedure were adopted it would then be incumbent upon the monopolist defendant to consider whether or not to challenge the evidence, and whilst this may lead to a certain degree of duplication of the earlier investigation, it does afford a certain "safeguard" to defendants; whilst the sanction of heavy legal costs will at least inhibit spurious and "political" defences becoming the established practice. Alternative enforcement procedures are of course available such as the LMC having its own powers

of enforcement; indeed this may very well be the best method of dealing with at least some of the unfair industrial practices referred to earlier. After an extensive examination of those alternatives we feel that the above procedure is not only the most acceptable but also the least controversial, and if the first proposal considered earlier were adopted an integrated scheme of competitive industrial relations would be established and collectively they would be enforced by the ordinary courts of the land.

Although our preference is for an independent Labour Monopolies Commission, quite distinct in function, procedure and enforcement from the MMC, we do see it as having similar powers of information, and requirement of witnesses as well as means of enforcing those procedures by way of contempt, just as currently enjoyed by the latter. Moreover, transfers of information and possibly joint enquiries are envisaged so as to remove the monopoly powers and practices which have plagued our industrial and commercial competitiveness and caused significant and unnecessary increases in unemployment. The programme of reducing monopolies and increasing flexibility and competitiveness which has expanded during the present administration should now be put into full effect.

C. RELATED ISSUES

A Note on Minimum Wages and Wages Councils

Effective minimum wages - i.e. those that succeed, by inspection and enforcement, in raising wages above market-clearing levels - have an effect like that of union power. They reduce jobs where wages have been raised and displace workers into other sectors not so regulated, where wages fall until supply equals demand. In essence, the government is acting as a union for the workers whose wages are then raised; in some cases, the government actually does this in response to requests from unions unable to exert enough power themselves.

It follows clearly enough that a government which wishes to create jobs by curbing union power should also act in its own 'backyard' by putting an end to Minimum wages. This is the least it can do.

The present minimum wage and related regulations in force are documented in what follows.



In 1909 Wages Councils were established with the intention of protecting workers from sweat shop conditions and low rates of pay, particularly in fragmented industries in which it was hard to organise collective bargaining; as such they were a substitute for trade unions in these areas. The number of Wages Councils grew rapidly after World War 1, but since World War 2 there has been a moderate decline. There are now 26 Wages Councils covering about 2½ million industrial workers and about 400,000 establishments in the UK. Parallel to Wages Councils is the Agricultural Wages Board which is separate but has a similar role and powers covering only agriculture.

At present under the Wages Councils Act 1979, supported by the Employment Protection Act 1975, Councils, independent of Government have the legal power to fix minimum wage rates and other conditions of employment such as holiday entitlement, hours of work, etc in certain specified industries (see appendix for full list). These awards have the power of law and employers can be subject to substantial fines for failure to comply with such awards. The Councils' members are appointed by the Employment Secretary though independent of Government; usually they consist of nominees of employers associations and trade unions, with some form of independent chairman. They are backed up by the Wages Inspectorate, an arm of the Department of Employment.

The British system of minimum wage legislation has enabled the UK to ratify the International Labour Office (ILO) Convention No. 26 of 1928; it will be possible to renew or renounce such ratification again in 1985. Other industrial countries, eg USA, France, Germany etc., have similar minimum wage laws. In the USA, the Fair Labour Standards

Acts in 1945 and 1960 have established the principle there, but there are now moves afoot to dismantle certain aspects of these Acts.

The two largest Councils in the UK, the Retail Food and Retail Non-Food, cover around 1½ million of the total 2½ million workers, and over 230,000 establishments (58% of total) whilst, at the other end of the scale, the Flax and Hemp Council covers some 2,300 workers in 12 factories and the Ostrich Feather Council embraces 28 individual plants and 1500 workers. The coverage is generally the older types of industry and trade with a large component of small firms.

Once established, however, it has proved historically somewhat difficult to abolish any Wages Council. For instance 19 years occurred between the last meeting of both the Drift Net and Fustian Cutting Councils before they were finally formally abolished. Eleven Councils were abolished in the period 1974/78 and only one - the Pin, Hook and Eye Council - has been abolished since 1979; others, however, have been merged, but continue to function as before in their new clothing. The abolition of a Council in reality entails a reference under the two relevant Acts (Employment Protection Act 1975 and Wages Councils Act, 1979) to the independent Advisory, Conciliation and Arbitration Service - ACAS - with no scope for a time limit for reporting, thus making it very difficult indeed to achieve any early or prompt abolition despite any economic damage a Wages Council may be causing. There have consequently

been no references to ACAS since 1979 for any abolition. This compares somewhat unfavourably with an equally important area of employment policy, namely industrial training, where Ministers were able to consider and act upon a Joint Departmental/Manpower Services Commission (MSC) review of Industrial Training Boards (ITB) which led to a rationalisation of ITBs so as to align with other employment policy initiatives; no such similar action has been possible over Wages Councils, although their retention is inconsistent with present employment policy.

In terms of direct public expenditure cost, Wages Council and its associate inspectorate - an arm of the DE- cost about £3½ million annually. The staff numbers involved have recently been reduced as part of the policy to reduce Civil Service numbers, but around 25,000 units are still visited annually by wages inspectors - in 1981, 13 of a total of 76 button factories (17%) were visited. Indirectly, as a result of jobs destroyed by Council awards, there will be a further revenue cost; but we have no estimate of this. Qualitative evidence however suggests that many Council awards have not reflected the individual financial or geographic aspects of the firms and industry in question; there have been cases where firms, especially small ones, have been forced to close or abandon an extension as a result. There has been little concern with the ability to pay. Often awards have been retrospective and difficult to interpret making, particularly for the small businessman, budgeting and future development planning extremely difficult. Some recent awards, particularly the latest by the Retail Food Council of about 9% plus a shorter working week and increased London weighting were clearly unwarranted by market pressures.

The contribution of Wages Councils to the relief of poverty and to assisting the socially disadvantaged has been generally adjudged negative both in the UK and USA. The record shows that Councils have not improved the relative position of the low paid nor alleviated poverty; consequently the only argument here for retaining the Councils is that the relative position of the low paid would be worse if the Councils were to be abolished - but no evidence can be found to support this. Similar arguments can be applied to youths, women and ethnic minorities - many awards have resulted in pricing these people out of jobs. The disadvantaged groups in a normal labour market situation naturally warrant a lower rate of pay and any attempt to increase it by a Council over the market rate only serves to limit their employment opportunities; this has been particularly true for young workers. Recent American research backs up British experience on this aspect. \*

In any case, financial aid to those in work on low earnings is now met nationally through FIS and various associated social security schemes and locally via rebate schemes, eg rent and rates; proposals in this Report will maintain this system but in a manner that avoids the poverty trap. Council awards are therefore unnecessary in this aspect besides causing unemployment among the very groups where help is aimed.

Wages Council awards are also inconsistent with other aspects of current employment policy, eg Young Workers Scheme (YWS), whereby lower wages for youth are encouraged and subsidised so as to stimulate employment, or the New Training Initiative (NTI) where some low allowances are paid for those participating in it.

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\* See for example Peter Linneman 'The Economic Impact of Minimum Wage Laws: A New look at an old question'. Journal of Political Economy 1982, vol 90.443-469

Abolition of the Wages Council system would, it can be confidently postulated, serve to expand employment, offer competitive wages for the socially disadvantaged, create an incentive for youth training, remove inconsistencies with other parts of present employment policy and alleviate rather than promote poverty. In short, if a Wages Councils comes to be regarded as effective, it is therefore harmful; if it is looked upon as ineffective, it is therefore otiose and useless. Both counts amount to a positive case for steps towards the removal of minimum wage legislation - namely through the eventual abolition of Wages Councils. The declaratory effects, as well as the economic ones, would be a firm signal to all concerned.

Appendix Wages Councils Act 1979

List of Wages Councils

(Unless their title indicates otherwise, all Councils cover the whole of Great Britain)

Aerated Waters Wages Council (England and Wales)  
Aerated Waters Wages Council (Scotland)  
Boot and Shoe Repairing Wages Council  
Button Manufacturing Wages Council  
Clothing Manufacturing Wages Council  
Coffin Furniture and Cerement Making Wages Council  
Cotton Waste Reclamation Wages Council  
Flax and Hemp Wages Council  
Fur Wages Council  
General Waste Material Reclamation Wages Council  
Hairdressing Undertakings Wages Council  
Hat, Cap and Millinery Wages Council  
Lace Finishing Wages Council  
Laundry Wages Council  
Licensed Non-residential Establishment Wages Council  
Licensed Residential Establishment and Licensed Restaurant Wages Council  
Linen and Cotton Handkerchief and Household Goods and Linen Piece Goods Wages Council  
Made-up Textiles Wages Council  
Ostrich and Fancy Feather and Artificial Flower Wages Council  
Perambulator and Invalid Carriage Wages Council  
Retail Bespoke Tailoring Wages Council  
Retail Food and Allied Trades Wages Council  
Retail Trades (Non-Food) Wages Council  
Rope, Twine and Net Wages Council  
Sack and Bag Wages Council  
Toy Manufacturing Wages Council  
Unlicensed Place of Refreshment Wages Council

Address of Secretary of all the Councils:

Office of Wages Councils  
12 St James's Square  
LONDON SW1Y 4LL

Mobility and The Regional Dimension

Unemployment in the UK varies widely across regions. Earlier, we examined some of the regional facts, and found a high correlation between relative unionisation and unemployment across regions. This was what one would expect, for under the present UK tax and benefit system tax and benefit rates are identical between regions; this is likely to put a national floor beneath non union wages, so that regional variations in demand and in union power will not be accomodated by falls in non union wages in the regions worst affected. These regions will therefore react with differentially increased unemployment.

The relief of high unemployment is surely to be regarded as a primary objective of regional policy, taking priority over the objective of preserving regional population. Success in relieving regional unemployment will also reduce national unemployment ( because rising real wages in the poor regions will bring more people back into work than falling real wages in the rich regions will induce not to work, owing to much larger gaps between wages and benefits in the rich region ). There are two main mechanisms that could provide relief, if we suppose that we must indeed preserve a national system of tax and benefit rates - a supposition we preserve.

Labour Mobility

The first mechanism is labour mobility from poor to rich regions. Unfortunately, the mechanism is severely clogged for those people most afflicted by unemployment, unskilled and semi-skilled workers on low incomes who live in rented council houses. For they cannot move without losing their rights to subsidised accommodation; the right is not transferable to another area, at least without a long waiting period in the queue for council houses there, during which period the family will have to pay substantially higher private sector rents, themselves artificially raised by Rent Control restrictions. Hence a man unemployed on Merseyside is the less likely to be attracted to moving to a job in the South East, in view of the additional expenses; the wage he would require in that job would price him well out of that market.

Steps have been taken by this government to improve this mechanism. Council house rents have been raised, and the council house sale programme has been pushed ahead. These policies should be continued. In particular, the aim should be to bring council house rents up to economic levels as soon as possible.

However, no action has been taken on private sector rent decontrol. We have been unable in the time available to examine



in detail what detailed action could be taken to improve incentives to rent privately. But we do strongly urge that decontrol be undertaken as soon as possible after the appropriate study of the best legal means to this end.

#### Regional Employment Incentives

The second mechanism is to depress wage costs to employers and increase work incentives for employees in the poor regions. This mechanism too has been clogged by the operation of the tax and benefit system which effectively sets a floor below regional wage costs. Regional grants and loans subsidise capital costs for a discrete period; while they will for that period make some impact on regional unemployment, their impact is limited, both in time since once the period is over the firm involved may not replace the capital stock ( a frequent occurrence) and in size since the wrong input is being subsidised, labour and jobs being the objective.

We have two policy proposals to boost this mechanism.

First, we have suggested above a 'Cap' (or ceiling) for benefit-income ratios. This has the very important implication for regions, that in a poor region benefits will be de facto lower than in a rich region; there would now be no effective floor below wages in this poor region since, as wages there fell, so benefits would fall in line. This is likely over a reasonable period to help substantially in reducing regional disparities in unemployment.

Secondly, we suggest that a regional labour subsidy be introduced, with a rate per man employed to be related to the unemployment rate in the region - somewhat along the lines of the previous Regional Employment Premium. Our investigations have revealed that the EEC regional fund might be in a position to finance a modest scheme of this sort, and we have made no explicit cost allowance for it therefore. The role of such a scheme would be to reduce the impact, on real worker incomes in the regions, of the market - induced reduction in real wages and the fall in benefits implied by the Cap Scheme, even after the general rise in tax thresholds that should accompany its introduction.

The Comparative Analysis of 4 Major European Countries

The Nature of Tax/Benefit Systems on the Continent

We studied 4 continental systems - those of Belgium, France, Germany and Italy. Before we get down to detailed analysis of each country, we can make a number of general points which are highly relevant to the UK.

There is effectively no 'poverty trap' in these countries. The major reason is that 'family assistance' is not means-tested. There is no equivalent of the means-tested FIS and passported benefits. Instead, family benefits are paid, on the same basis as child benefits here, on the basis of number of dependents, regardless of income.

This is subject to qualification for the very lowest income groups who may receive social assistance. It has proved impossible to obtain absolutely precise information about this, which is discretionary ('according to need') in all four countries. The impression given by our contacts is that this assistance is not important, except for a very small minority of workers - i.e. it is a safety net from the most extreme poverty. We have assumed in what follows that this impression is correct.

A second reason for the absence of the poverty trap is the 'tapered' tax rates on low incomes employed in all 4 countries. Instead of the standard rate applying to these each country has a set of 'tax tables' which embodies MRTs rising slowly towards the standard rate.

This means that just as there is no poverty trap, so net incomes in work are permitted to fall quite steeply as gross income falls. MRTs do not appear to exceed 40% on low incomes (above the social assistance level).

As is well known VAT is used to raise a higher proportion of taxes in these countries; especially with higher rates on luxuries, this does not alter the picture of relatively low MRTs on low incomes. Even including VAT, MRTs do not exceed 50% on low incomes, and are generally quite a lot lower than this.

Turning to unemployment compensation, the countries can be divided into two that have benefit/income ratio systems, where there is no 'unemployment trap' - Germany, France and Italy - one that has a system very like the U.K with flat rate minimum entitlements where the unemployment trap is as serious as here - Belgium, and finally one that has a 'mixed' system intermediate between these - Germany, where there is evidence of a trap though only at the very lowest income levels. This difference has proved interesting, enabling us to compare experiences. It is certainly no coincidence that Belgium shares with the UK unemployment rates substantially higher than the other three.

We now briefly describe each country's system, our primary concern being with its impact on unemployment. Annex F contains fuller details.

### BELGIUM

There is no standard rate of income tax in Belgium. Tax is levied on the basis of graduated tax tables up to 80% above average earnings; tax allowances are given for dependents. Marginal tax rates start at around 30% at  $\frac{1}{2}$  average earnings, and rise continuously up to 47 $\frac{1}{2}$ % at this point. From here, the MRT rises to 72% at 10 times average earnings. These figures include social security contributions by employees at 10.1% ( average and marginal at all incomes ). Table 1 illustrates this.

VAT is levied at 17% in Belgium (but exceptionally 6% on basic necessities; a further tax of 8% is added making 25% for 'luxuries'). Hence total MRTs for employees rise from around 42% at  $\frac{1}{2}$  average earnings, reaching a top rate of around 80% at 10 times average. These rates are much lower than in the UK at low incomes, similar at average earnings and about 10 percentage points higher for higher incomes.

Social security contributions by employers are at the rate of 38.85% of gross wages. This is very high compared with the UK's 12% , and turns out to be an important element in Belgian performance.

'Family welfare' is dealt with via child benefits only. These are however somewhat higher than rates in the UK. For example, for

2 children aged 7 and 11, child benefit in 1980 was around £13.50 per week (against £11.70 currently in the UK); for 4 children (aged 7, 11, 14, 16) it was around £40 per week (against £23.40 here currently). These benefits do not vary with income.

There is no Family Income supplement otherwise, apart from 'public assistance' administered by local authorities on a rigorous and discretionary basis. There are no benefits (such as housing cost subsidies, free school meals), related to income<sup>X</sup> levels. Public assistance is reported as being used sparingly for cases of real hardship and descends from the medieval poor-laws. It appears therefore that this is of minor significance.

Unemployment compensation which is not taxable is at the rate of 60% of gross earnings for all employees in their first year of unemployment. Thereafter heads of households only (with minor exceptions) receive this rate indefinitely, while others drop to a rate of 40% of gross earnings indefinitely. However, these ratios to gross earnings are qualified by minimum and maximum flat-rate payments (which in 1980 were BF 4910 (about £60) per week maximum for all employees and BF 3740 (£47) minimum for heads of households, BF 2900 (£36) for others).

It is these qualifications which give the system its close similarity to that of the UK's now completely flat rate system.

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X: This statement does not apply to benefits for the old or invalids or other special groups which are excluded from our analysis.

The effect is illustrated in Table 2. Replacement ratios for heads of household<sup>etc</sup> from around 90% of net income ( after work expenses ) at average earnings levels, to 124% at one half of average earnings if they have a typical family and 143% if they are single ( worse because tax hits them harder at work ). These are indefinite in duration. For others, after a year at these levels the ratios drop respectively to around 60% rising to 110%. This 'unemployment trap' is in fact more vicious than that in the UK. For the lowest income groups, income in work is not subsidised and therefore replacement ratios rise well over 100%, whereas in the UK they hover just above 100% for these families. For single persons, ratios are much higher in Belgium than in the UK at all income levels because Belgian compensation as a fraction of gross earnings does not vary with family size.

According to estimates from Eurostat, trade union membership in Belgium has risen from 62% of registered workers in 1960 to 76% in 1978. The great majority of unions are organised into 3 large confederations. The degree of power exercised by unions is likely to be considerable; the unionisation rate is 20 percentage points higher than that in the UK and centralisation appears to be greater. The rise in unionisation over the last two decades is of the same order as in the UK. Nevertheless, it has been commented that these estimates are unreliable, with conflicting estimates from other sources.

This brief description suggests that the appropriate labour market model for Belgium is the one used for the UK. The total labour

TABLE 1: Belgium Marginal and Average Rates of (Direct)Tax\* -1981

( Average Earnings = 100 )

<u>Earnings</u>	<u>Single</u>		<u>M+2 - Wife not working</u>	
	<u>MRT</u>	<u>ART</u>	<u>MRT</u>	<u>ART</u>
150	47	32.8	47	29.7
100	44.5	26.7	39.4	22.8
70	36	20.8	36	15.2
50	30	17.4	30	11.8

\* Employee Social security contributions included: the rate is 10.1% ( average and marginal ) at all income levels.



TABLE 2:                    Belgian Replacement Ratios\* - 1981  
 ( Average earnings = 100 )

For heads of households - ( ratios are for Year 1 and all successive years )

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<u>Earnings</u>	<u>M+2 - wife not working</u>	<u>Single</u>
150	65	(66)
100	89	92
70	96	101
50	124	143

For Others

(assume have taxable status as single )

	<u>Year 1</u>	<u>All subsequent years</u>
150	(66)	(66)
100	92	61
70	101	78
50	143	110

\* Assumes work expenses of FB 660 per week

TABLE 3: Estimates for Belgium on UK-Style Model of Real Wages and Unemployment

(t values bracketed)

Quarterly Data: 1962.1 - 1980.1

Dependent Variable	$\log w_t$	(Nonlinear least squares)	
			$U_t$ (millions)
Constant	-5.36 ( 1.91)	Constant	-2.1 ( 2.9)
D1	-.019 ( 4.0)	D1	-.008 (3.9)
D2	-.006 ( 1.4)	D2	-.023 (9.3)
D3	-.024 (5.2)	D3	-.025 (9.5)
$T_{Lt}$	.83 (1.6)	$\log \hat{O}_t$	-.116 (7.0)
$\log (b_t)$	.19 (.3.8)	$(\log \hat{w}_t) + T_{Ft}$	.08 (7.6)
$\log N_t$	.3 ( 1.0)	t	-.0002 (.9)
$UNR_t$	.51 (2.1)	$\log U_{t-1}$	.92 (53.8)
$\hat{U}_t$ (millions)	-.28 (3.7)	$\log N_t$	.26 (2.9)
t	.004 (4.8)		
$\log w_{t-1}$	.34 (3.5)		
$\bar{R}^2$	.998		
D.W.	2.25	$P_2$	-.36 (2.9)
$X_4^2$	8.4	$X_4^2$	2.1
		D.W.	1.72

supply curve ( i.e. that responding to non union real wages) will resemble the truncated curve for the UK. Unions will fix a mark up over non union real wages heavily influenced by real benefits grossed up for direct taxes on workers. Taxes on employers will shift the demand curve for labour in both union and non union sectors to the left.

Estimates of this model are shown in Table 3. In the real wage equation the coefficients on benefits and unemployment are very well determined. That for UNR is just significant at the 5% level, while the significance of  $T_L$  just falls short of this. Data problems may account for these less robust estimates. UNR was noted earlier as being somewhat unreliable. The  $T_L$  series is accurate only from 1970; the data prior to this was constructed from the social security contribution rate assuming the income tax rates were constant at 1970 levels. There is no evidence of autocorrelation in the equation. The unemployment equation is estimated by nonlinear least squares because of evidence of autocorrelation. The key coefficients in the equation are well determined; in particular real labour costs have a strong positive effect on unemployment.

With the necessary caveats at this stage, it is quite striking how similar the coefficients are to those for the UK. The long run values compare as follows:

L/R Coefficient on:	Real Wage Equation				Unemployment Equation	
	Real Benefits	Tax Rates	Unemployment	Union- isation	Real labour Costs	Output
Belgium	.29	1.2	.055*	.77	7.7	-11.2
U.K.	.48	.48	.10	1.96	4.1	- 8.5

The implicit long run elasticity of labour supply response to the (non union ) replacement ratio is also therefore similar, at  $5\frac{1}{4}$  against  $4\frac{3}{4}$  in the UK.

Though we have not been able to research on Belgium to the same depth as for the UK, we must regard the Belgian model as striking corroboration of our UK thesis, even to the extent of orders of magnitude. This is however not surprising in view of the close parallels in their unemployment compensation systems. The parallelism is mirrored in the unemployment trends of the two countries. Unemployment rates stand at over 16% now in Belgium, against  $12\frac{1}{2}\%$  in the UK; in 1964 they stood at 1-2% in both countries.

Though we have not yet completed work on a full model of Belgium, we would guess that simulated total effects from introducing benefit ratio ceilings in Belgium would be of similar order to those simulated earlier for the UK.

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\* Belgian effect converted to UK basis by calculating at mean unemployment on sample period, 0.13 million.

FRANCE

As in Belgium, there is no standard rate and tax is levied in a graduated way. Allowances for family size are given by a quotient system (Annex E for details). Marginal tax rates rise continuously from about 10% on the lowest incomes to a maximum of 75%. These rates include social security contribution rates of 11.9% on gross wages up to FF6590 per month (1½ times average earnings) with 5.5% as the marginal rate above this. (Table 1).

VAT is generally levied at 17.6%, with exceptions of 33.33% on 'luxuries' and 7% on food, transport, books, and other 'necessities'. Total MRTs for employees hence rise from about 25% to 80%; these rates are lower than in the UK for low incomes.

Social security contributions by employers are 30.75% of gross wages up to FF6590 per month, with a marginal rate of 8% above this.

Family welfare is again dealt with solely by child benefits. There is no benefit on the first child, but benefit rises sharply with family size. For the second, the benefit in 1980 was FF70 per week (about £7), the total amount therefore for a typical family (against £11.70 in the UK currently). For a family with 4 children (aged 7, 11, 14 and 16) total benefits were FF296 per week (about £30), against £23.40 currently in the UK. As compared with the UK larger families get more benefit, small families get somewhat less.

The system of emergency poor relief ('social aid') resembles that of Belgium as far as can be ascertained. There are

here too no tied subsidies related to income levels. Social aid is dispensed at the local level on a discretionary basis, and appears to be of negligible importance.

The tax and family welfare system therefore implies reasonable incentives and low MRTs for those in work, while setting an income 'safety net' at very low 'subsistence' levels.

The similarity with Belgium however ends as we turn to the unemployment compensation system. Virtually all employees are eligible for benefit ('special benefit') averaging about 68% of gross earnings in their first year of unemployment; the exact formula is a small flat amount plus 65% in the first quarter of unemployment falling to 50% in the fourth quarter. For the second year of unemployment, the percentage drops to around 50% ('basic benefit', consisting of the same flat amount plus 42% of gross earnings). For older workers only this rate of benefit continues for up to the 4th year of unemployment but for workers under 50 it ceases at the end of the second year. Once this basic benefit has ceased, the worker receives 'end of entitlement benefit' which in 1980 was a very small flat rate amount of FF 154 per week (around £15).

Though the percentages given relate to gross earnings, they are less distorted than in Belgium as a guide to true replacement ratios because in France alone of these 4 continental countries benefits are taxable.

TABLE 1:                    Marginal and Average Tax Rates In France

( Average Earnings = 100 )

<u>Earnings</u>	<u>Single</u>		<u>M+2</u>	
	<u>MRT</u>	<u>ART</u>	<u>MRT</u>	<u>ART</u>
140	39	26.1	22	15.1
100	33	21.9	18	12.7
70	28	18.3	12	12
60	33	15.8	12	12

TABLE 2: French Replacement Ratios - 1980 <sup>+</sup>

(Average earnings =100)

Married with 2 children\*

Wife not workingUnemployed for:

<u>Earnings</u>	<u>3 Months</u>	<u>6 Months</u>	<u>1Year</u>	<u>2 Years</u>	<u>After 2 Years</u>
50	na	na	127.8	108.8	57.2
66	100	101.4	108.9	90.3	39.9
100	98.9	96.6	96.2	77.8	27.8
200	96.6	91.7	na	na	na
<hr/>					
<u>Single</u> <sup>*</sup>					
50	na	na	132.4	110.2	50.2
66	100.7	101.4	120	97.5	36.5
100	98.9	96.6	108.5	86.1	25.4
200	96.6	92.1	na	na	na

+ Sources for 3 months and 6 months figures only:

OECD 'Unemployment Compensation Replacement Rates' 1982. These ratios do not allow for work expense

Source for other ratios: Liverpool Group estimates, including work expenses

\* Aged less than 50, dismissed for 'economic reasons'.

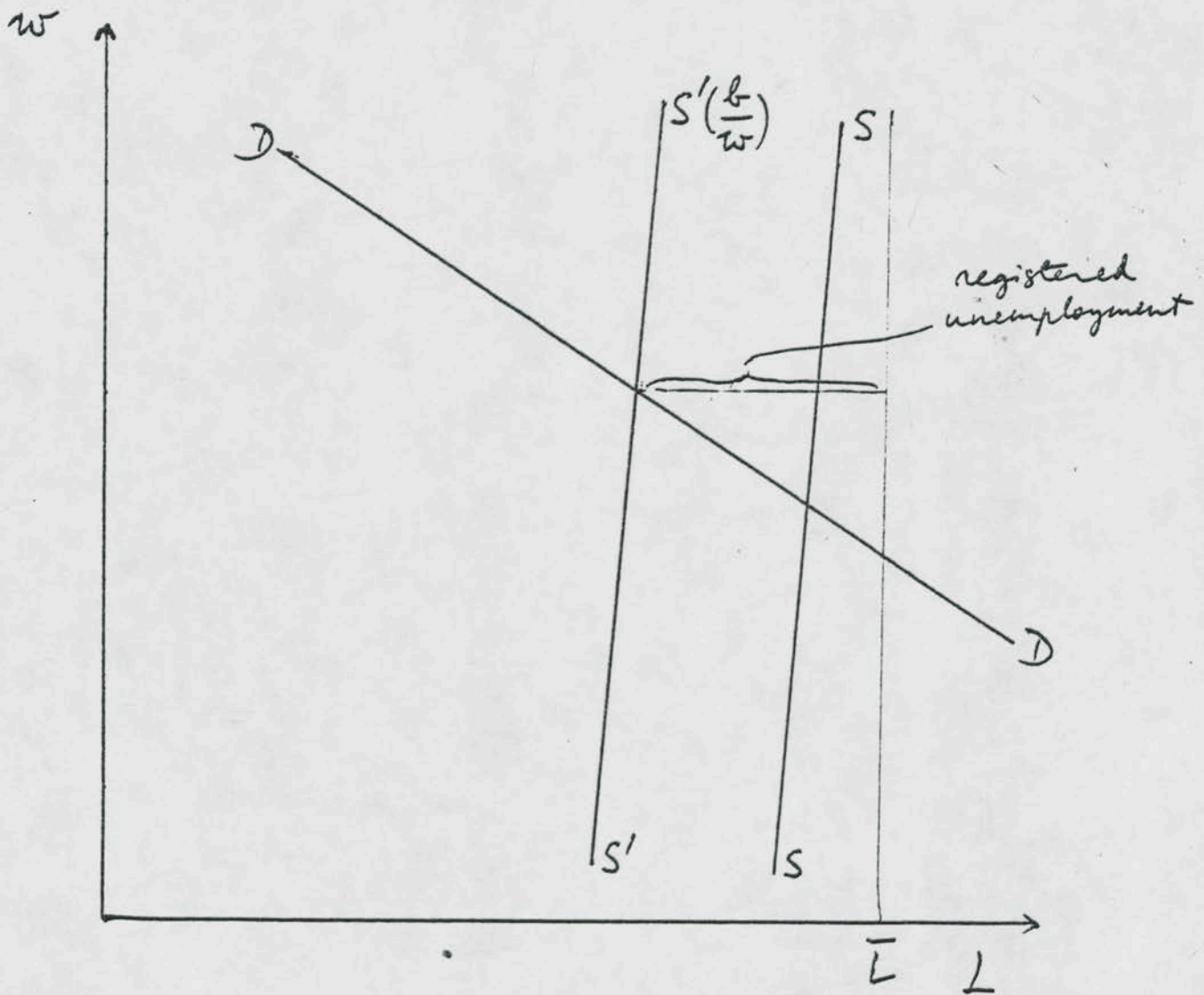


Furthermore, there are no minimum flat rate benefits in France. There is only a maximum flat rate which occurs at incomes  $4\frac{1}{2}$  times average earnings or above. The result is that replacement ratios do not rise substantially as income levels fall except the very lowest covered by social aid; at the same time they only start to drop significantly at very high income levels. Table 2 illustrates Hence the French employment system is close to a pure ratio system, i.e, one where the ratio is constant across the income scale. The ratio itself is high for the first year but then drops steeply over time. For most employees after 2 years, the system becomes flat rate but at such a low level that for only the very poorest would it afford a replacement ratio of any interest.

Because of the difference in system, our model could not be applied to France in the same form as to the UK. The chart below illustrates the nature of the French labour market. The supply curve is shifted leftwards but without any significant change in slope, as the replacement ratio is raised and then held invariant across all relevant income ranges. We may reasonably suppose that this supply curve is rather inelastic. Unemployment is measured by the distance between SS and S'S', provided that SS corresponds to those eligible for benefits.

Now our model determines unemployment as a function of the ( exogenous ) benefit ratio and (exogenous)demographic factors, with little if any impact from real wages. Real wages are then mainly determined by the interaction of the total supply of labour

## CHART: The French Labour Market Illustrated



( i.e. SS minus unemployment, already determined ) with the demand for labour. From our point of view the real wage equation is of little interest since real wages do not affect unemployment. The result of this set-up is that variables which affected unemployment in the UK and Belgium - such as employer taxes union power, personal direct taxes, world trade-barely do so here; rather they affect essentially the level and/or structure of real wages. For example, increased union power will raise real wages in the union sector, but because the total labour supply is unchanged, it will lower real wages in the non-union sector in such a way that the total demand for labour is unchanged; its effect is to raise the union/non union wage differential but to leave average real wages broadly unchanged ( this being incidentally the 'classical' effect of unions in an undistorted labour market ).

We estimated an unemployment equation for France along these lines (Table 3 ). To construct the benefit/wage ratio we used the real value of benefits paid to a married man with 2 children in the first 3 months of unemployment, and divided it by our real wage series. It is a somewhat crude measure however.

The equation, apart from seasonality, has as its main arguments this ratio and total labour force to proxy demographic factors; to maintain generality and to test our theory, we also included real wages, the tax rate and unionisation. The equation is estimated by non linear least squares because of autocorrelation. It has substantial explanatory power and no residual autocorrelation appears to remain. In particular the benefit ratio is well-determined, though the possibility of measurement error requires caution at this stage.

In confirmation of our theory, the other variables are in no case significant, though some small effects cannot be ruled out for UNR and  $T_L$ .

The elasticity of unemployment to the benefit ratio (in the units here this is 17 ) at its mean is 0.9. This is lower than both in the UK and in Belgium, but this is what one would expect because no individuals would decide under the French system to remain unemployed for long periods, let alone indefinitely. The effect of this system will be to encourage workers to take higher duration spells but to continue to participate in employment on a regular basis.

TABLE 3:

Unemployment Equation in France

Quarterly Data: 1963.1-1980.4

Nonlinear least squares; t ratio bracketed

<u>Dependent Variable</u>	<u>U<sub>t</sub> (millions )</u>
Constant	-.35 (.04)
D1	-.08 (2.1)
D2	-.15 (3.1)
D3	-.08 (2.3)
$\frac{(b)}{(w)_t}$	.007 (2.8)
$\log N_t$	-.044 (.05)
$\log \hat{w}_t$	.12 (.5)
$T_{Lt}$	.64 (1.4)
UNR	3.3 (1.3)
$U_{t-1}$	.74 (4.6)
<hr/>	
P <sub>1</sub>	.65 (2.9)
P <sub>2</sub>	-.82 (8.4)
P <sub>3</sub>	.55 (2.6)
DW	1.93
Box Pierce $\chi^2_8$ (5% critical value = 15.5)	10.4

GERMANY

The tax and welfare system is similar to that of France and Belgium. Graduated tax tables produce MRTs which rise from about 35% to a top rate of 65% inclusive of 11% social security contributions by employees. (Table 1) VAT at 13% (with a reduced rate of 6.5% on 'necessities' ) raises these MRTS to a range from 43% to 70%. Employers' social security contributions are at a rate of 20.9% of gross wages.

Family welfare again consists only of child benefits which are not means-tested. The rates in 1980 were 11.5 Dm per week (1st child), 23 Dm (2nd child), 46 Dm each subsequent child - respectively about £2.75, £5.50 and £10.75. These are lower than UK rates for average family size but higher for the largest families.

There is also 'social aid'. As in France and Belgium it is administered by the local authorities. Income has to be supplemented up to 'levels of need', but there seems to be substantial discretion. Also 'Wohngeld' is provided on a means-tested basis, i.e. housing costs are paid in full for those who fall below the statutory poverty levels. It has been possible to extract 'illustrative' details of these levels from German official sources. These are of considerable interest since they are the closest approximation to the British supplementary benefit system to be found on the Continent.

The illustrative figures are 78 Dm per week for a man, 62 Dm for his wife, 59 Dm for children over 11, 51 Dm for children 8-11, 35 Dm for younger children, 115 Dm for rent (Wohngeld).

TABLE 1: Marginal and Average Tax Rates In Germany

(Average earnings = 100 )

<u>Earnings</u>	<u>Single</u>		<u>M+2</u>	
	<u>MRT</u>	<u>ART</u>	<u>MRT</u>	<u>ART</u>
133	53.9	32.5	35.4	24.3
100	45.8 <sup>x</sup>	26.7	35.4 <sup>x</sup>	20.7
60	37.7	23.3	35.4(100)	13.5 (11.1)

<sup>x</sup> Interpolated

TABLE 2: Replacement Ratios - Germany, 1981\*

(Average earnings)

Married Man with 2  
children, wife not working

Unemployment Duration

<u>Earnings</u>	<u>3 months</u> <sup>+</sup>	<u>6 months</u> <sup>+</sup>	<u>1 year</u>	<u>Thereafter</u>
66	94.2	88.8	79 (114)	69 (114)
100	94.0	88.3	75	65 (75)
200	92.2	81.2	n.a.	n.a.
<hr/>				
<u>Single</u>				
66	93.0	86.7	77	65 (74)
100	96.3	88.5	74	63
200	92.7	84.0	n.a.	n.a.

+ 3 months and 6 months, 1978; source OECD 1982. These ratios do not allow for work expenses.

\* Figures in brackets assume 'social aid' illustrative levels set out in text.



TABLE 3: Unemployment and Real Wage Equation for Germany

Quarterly data Nonlinear least squares  
t values bracketed

Dependent variable:	$U_t$ (millions 1961.4-1980.1		$\log w_t$ 1962.1 - 1980.4
Constant	29.7 (1.0)	Constant	-.01 (.8)
D1	.15 (11.6)	D1	.0014 (0.3)
D2	-.04 (1.0)	D2	.011 (2.1)
D3	-.05 (3.7)	D3	.036 (6.5)
		t	-.0003 (1.1)
$B_t^x$	2.5 (2.3)	$T_{ft}$	-.11 (1.6)
$\log N_t$	-3.7 (1.2)	$\log \hat{O}_t$	.24 (7.9)
$UNR_t$	17.9 (2.4)		
$\log \hat{w}_t$	-.18 (.5)		
		$\hat{U}_t$	3.3 (5.2)
$U_{t-1}$	.23 (1.1)	$\log w_{t-1}$	.77 (22.9)
$P_1$	.92 (6.6)	$P_1$	-.32 (2.6)
		$P_2$	-.58 (4.6)
$P_3$	-.09 (1.1)	$P_3$	-.28 (2.2)
		$P_4$	-.24 (2.0)
D.W.	2.08	D.W.	1.93
Box Pierce-statistic ( $X_8^2$ )	7.1	$X_8^2$	13.7

X statutory replacement ratio for 1st year: (i.e. 68% currently)

Replacement ratios and MRTs using these figures are placed in brackets in Tables 1 and 2. It can be seen that, if local government officials were to stick to them closely, and the criteria became widely known, there would be both a poverty trap and an unemployment trap in Germany as in the UK.

At this stage it is probably wrong to make this assumption; it appears that local discretion is considerable, that some secrecy surrounds possible practices in each locality, and that quite possibly there are in many localities stringent tests of 'willingness to work' etc. Nevertheless, social aid payments have become significant since the mid 70s; in 1978, they were Dm.10.45 billion, and in addition Dm.2.1 billion was paid in

Unemployment compensation in principle follows a ratio system. For the first year, the worker receives 68% of his net income, thereafter 58% indefinitely. While there are no explicit minimum rates, social aid may have introduced them implicitly; a maximum rate also occurs at 1.7 times average earnings. Table 2 shows the resulting replacement ratios net of 33 Dm per week assumed work expenses.

The German labour market is therefore rather closer to the UK flat rate benefit regime than to a pure regime such as Italy or France; unlike France, too, benefit support is indefinite in duration. It can be pictured as in the Chart for France.

for a regime with a benefit ratio , only there will also be some tendency towards truncation at the lower end of the supply curve owing to social aid.. The implication is

that unemployment will depend not only on the statutory benefit ratio but also on real wages ( negatively) and on union power (positively). Such an equation is shown in Table 3 (without tax rate , since no time-series for this was available).

Nonlinear least squares was used because of autocorrelation in the residuals; no significant autocorrelation beyond that allowed for here appears to remain. The statutory benefit ratio (now 68%) in the first year was used for the replacement ratio series,  $B$ . This in fact only changed once in the period, in 1975 first quarter when it rose from 62% where it had been since 1960, to the current 68% level. Hence  $B_t$  moves like a dummy variable. The coefficient on it is nevertheless well-determined, in spite of its limited variation. The long run elasticity of unemployment to the benefit ratio at the mean is 4.2, very similar to the UK estimate. This is consistent with a sizeable impact on German unemployment ( around 0.3 million ) arising from the rise in rates enacted in 1975. A further large increase appears to have arisen from the rise in unionisation by about 4 percentage points since the mid 70s ( the long run impact of one percentage point change in UNR is 0.23 million , about the same as in the UK at current unemployment) Since then in fact German unemployment has risen by one million.

A contributory factor may also have been the increasing use of social aid, which we have not incorporated in this analysis. It should also be stressed that, unlike French benefit ratios, German ratios stay indefinitely at over 60%.

Given the 'mixed' nature of the German model, we also estimated an equation for real wages ( regarded as a 'demand price'). This equation is also shown in Table 3 and is of some interest. Rises in output ( rise in demand) and unemployment ( fall in supply ) raise real wages as expected, also rises in employer taxes ( leftward shift of demand) lower them, though the coefficient falls just below the 5% significance level.

ITALY

The Italian tax and welfare system follows the lines of the previous three. MRT's (Table 1) rise from 8% to a top rate of 82% reached at 60 times average earnings. These rates include employee social security contributions of 7.8%. Standard VAT at 15% (with 4 other rates, 2%, 8%, 18% and 35%), implies that VAT-inclusive MRTs rise from 22% to a top rate of 84%. Employers' social security contributions are at the rate of 40.25%, one of the highest in Europe.

Italy has a history of massive tax evasion culminating in the tax reforms of 1974 which brought about the current system. This has reduced evasion; nevertheless, employers are believed still to evade the very high rates of social security contribution and there is certainly general evasion. Total tax evaded was recently estimated by a former Italian Finance Minister at 30,000 billion lire ( about 7% of GDP and 25% of current tax revenue). The black economy in Italy has been variously estimated at 15-40% of GDP.

Hence the tax rates must be used carefully - and largely discounted - in any analysis.

Family welfare is dealt with by family allowances; these are flat benefits paid to each dependent provided their independent income does not exceed certain thresholds, but they do not vary with income otherwise. They are also extremely small. In 1980, a married man with 2 children and non working wife would have received 6840 lire per week ( under £4).

TABLE 1:      Marginal and Average Tax Rates - Italy 1981

( Average earnings = 100)

<u>Earnings</u>	<u>Single</u>		<u>M+2</u>	
	<u>MRT</u>	<u>ART</u>	<u>MRT</u>	<u>ART*</u>
150	26	16.3	26	16.3
100	23	12.6	23	12.6
70	16	8.4	16	8.4
50	8	8	8	8

\* excluding child benefit

TABLE 2: Replacement Ratios - Italy - 1981  
(Average earnings =100)

Married Man with 2 Children  
Wife not working

<u>Earnings</u>	<u>3 months<sup>+</sup></u>	<u>6 months<sup>+</sup></u>	<u>1 year &amp; all subsequent years</u>
50	n.a.	n.a.	90
66	77.2	59.4	83
100	85.0	61.8	79
200	79.2	57.1	76
<hr/>			
<u>Single</u>			
50	n.a.	n.a.	88
66	77.8	55.2	81
100	77.9	54.7	76
200	78.4	55.4	73

+ 3 months and 6 months 1978; source OECD, 1982. These ratios do not allow for work expenses.

TABLE 3: Unemployment Equation - Italy

Quarterly data (1962.1 -- 1980.4)  
t values bracketed.

Dependent Variable	$U_t$ (millions)
Constant	-11.1 (1.5)
D1	.083 (1.8)
D2	-.173 (3.8)
D3	.088 (1.9)
$B_t^+$	.13 (2.0)
$\log N_t$	1.15 (1.6)
$U_{t-1}$	.75 (8.6)
$\bar{R}^2$	.78
D.W.	2.00
$\chi_4^2$	25.4

+ the special benefit /income ratio: 0 to 1968; .68 thereafter.



Social aid operates in Italy at the local authority level as in the other three continental countries; it is discretionary payment of the poor law type. Little information could be obtained about the level of these payments; but the impression gained is that they are of little importance.

Unemployment compensation is on a pure ratio basis. There is a short-time scheme where workers laid off for a part of the week receive 80% of their lost pay (net); this is in practice renewable indefinitely. Such workers are not of course recorded as unemployed but as on short time, though the distinction with such indefinite support is a fine one. For those wholly unemployed, compensation is paid at the rate of 2/3 of previous net pay; it is renewable in practice indefinitely.

This 'special' benefit was started in 1968 and restricted to those made redundant. For those ineligible, 'normal' compensation is an exiguous 800 lire per day (less than 40p); this is paid indefinitely but can be ignored. There are no maximum or minimum rates set in respect of special benefit; hence it is a pure ratio system (apart from the 'normal' compensation).

We treated the Italian case as the French one estimating an unemployment equation with the benefit ratio (the 'special' one) and labour force as arguments - Table 3.

Though the coefficient on the benefit ratio is significant, significant autocorrelation of 4th order is present, indicating that our seasonal adjustment procedure is deficient; allowance for the 4th order process reduces the benefit ratio effect to insignificance.

It would appear that in Italy the problems of data, perhaps more importantly of the rival lay-off-subsidy scheme, and of the informal economy, make it hard to identify any clear effect of the formal benefit system; deeper research into Italian data and institutions is necessary..

Conclusions

While our work on these four continental countries is far from complete, there are a number of interim conclusions that emerge with relevance to UK unemployment.

First, the nature of the benefit system is crucial. Specifically, it matters much, whether it is a ratio system, preventing the ratio of benefits to earnings from rising to high levels, or a flat rate system where the unemployment trap is likely to become progressively serious as incomes fall. Flat rate systems, as in the UK, are likely to induce high unemployment. This is illustrated by Belgium which alone of the 4 countries studied had such a system, very similar to that of the UK. Belgium has a very high unemployment level, rather higher than that of the UK and substantially higher than in the other three countries.

Secondly, the formal statistical tests have shown that the ratio of benefits to wages plays an important role in the determination of unemployment in at least three out of the four countries as in the UK.

Thirdly, union power has a statistically important effect on unemployment both in the one country with a flat rate benefit system, Belgium; in a second country Germany, with a system intermediate between ratio and flat rate, union power also has a powerful effect on unemployment. In the other two as

expected, union power does not affect unemployment significantly; rather - though this was not investigated - it is likely to affect only the relative wages of union and non-union workers.

Fourthly, there is no poverty trap of real importance in these countries ( with the possible exception at very low incomes of Germany ), because income assistance is given at the local level under stringent conditions descended from 'poor laws', while family allowances and child benefits are not in general means-tested.

Finally, the evidence of these countries confirms that a ratio system of unemployment benefit ( such as is implied by the cap proposal discussed earlier in this report ) can be socially acceptable, as it is indeed accepted in France, Italy and ( with some modification ) Germany. In similar vein, less generous and more discretionary income assistance to the poor in work is socially accepted in all four countries; the proposals made earlier for improving the poverty trap rank as substantially more generous relative to average income levels than these continental systems, and should accordingly be easily capable of social acceptability.

In all, we regard this examination of continental experience and yielding substantial corroborative evidence and support for our policy proposals.

DATA SOURCESBELGIUM

1. CONSUMER PRICE INDEX - ALL ITEMS. 1960:1 TO 1981:4
2. INDUSTRIAL PRODUCTION INDEX - TOTAL. 1960:1 TO 1981:3
3. UNEMPLOYMENT - INSURED UNEMPLOYED. 1960:1 TO 1981:4
4. INDEX OF HOURLY WAGE RATES - MINING, MANUFACTURING, TRANSPORT. 1960:1 TO 1981:4
5. MONEY SUPPLY - M1. 1960:1 TO 1981:3

FROM OECD MAIN ECONOMIC INDICATORS FROM DRI DATA BANK.

6. TRADE UNIONISATION RATE. ANNUAL. 1960 TO 1980.  
(LINEARLY INTERPOLATED)

FROM CHIFFRES SIGNIFICATIFS DE L'EVOLUTION SOCIALE DANS LA COMMUNATE EUROPEENNE DE 1960 A 1980. BRUXELLES SEP. 1981.

7. CIVILIAN LABOUR FORCE. ANNUAL. 1960 TO 1980.  
(LINEARLY INTERPOLATED)

FROM EUROSTAT 'CHRONOS' COMPUTER SOEC LUXEMBOURG.

8. BENEFITS. ANNUAL 1971 TO 1980  
(LINEARLY INTERPOLATED)

FROM OFFICE NATIONAL DE L'EMPLOI RAPPORT ANNUEL 1980.

1971 FIGURE BENEFITS = .6 GROSS WAGES USED AS A BASE TO DETERMINE BENEFITS FROM 1960 TO 1970 FROM A WAGE INDEX.

9. EMPLOYER SOCIAL SECURITY CONTRIBUTIONS. 1960 TO 1980

FROM OFFICE NATIONAL DE SECURITE SOCIALE.

10. EMPLOYEE SOCIAL SECURITY CONTRIBUTIONS AND AVERAGE TAX LOSS BY MARRIED MAN PLUS TWO CHILDREN CONSTRUCTED FROM SERIES FROM BRITISH EMBASSY.

FRANCE

- |                                              |                  |
|----------------------------------------------|------------------|
| 1. CONSUMER PRICE INDEX - TOTAL,             | 1960:1 TO 1981:4 |
| 2. INDUSTRIAL PRODUCTION INDEX - TOTAL,      | 1960:1 TO 1981:3 |
| 3. UNEMPLOYMENT - TOTAL,                     | 1960:1 TO 1981:4 |
| 4. INDEX OF HOURLY EARNINGS - MANUFACTURING, | 1960:1 TO 1981:4 |
| 5. MONEY SUPPLY - M1,                        | 1960:1 TO 1981:3 |

FROM OECD MAIN ECONOMIC INDICATORS FROM DRI DATA BANK.

- |                                                                                   |                     |
|-----------------------------------------------------------------------------------|---------------------|
| 6. TRADE UNIONISATION RATE.<br>(LINEARLY INTERPOLATED)<br>SAME SOURCE AS BELGIUM. | ANNUAL 1960 TO 1980 |
|-----------------------------------------------------------------------------------|---------------------|

- |                                                                                |                     |
|--------------------------------------------------------------------------------|---------------------|
| 7. CIVILIAN LABOUR FORCE.<br>(LINEARLY INTERPOLATED)<br>SAME SOURCE AS BELGIUM | ANNUAL 1960 TO 1980 |
|--------------------------------------------------------------------------------|---------------------|

- |                                                     |              |
|-----------------------------------------------------|--------------|
| 8. BENEFITS (USED TO CONSTRUCT RATIO)<br>FROM INSEE | 1960 TO 1980 |
|-----------------------------------------------------|--------------|

- |                                             |              |
|---------------------------------------------|--------------|
| 9. EMPLOYERS' SOCIAL SECURITY CONTRIBUTIONS | 1960 TO 1981 |
|---------------------------------------------|--------------|

FROM CONSEIL NATIONAL DU PATRONAT FRANCAIS

- |                                                                                                                                                             |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 10. EMPLOYEE'S SOCIAL SECURITY CONTRIBUTIONS AND AVERAGE TAX LOSS<br>BY MARRIED MAN PLUS TWO CHILDREN CONSTRUCTED FROM SERIES FROM<br>MINISTERE DU TRAVAIL. |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

GERMANY

- |                                             |                  |
|---------------------------------------------|------------------|
| 1. CONSUMER PRICE INDEX - TOTAL             | 1960:1 to 1981:4 |
| 2. INDUSTRIAL PRODUCTION INDEX - TOTAL      | 1960:1 to 1981:4 |
| 3. UNEMPLOYMENT - TOTAL                     | 1960:1 to 1981:4 |
| 4. INDEX OF HOURLY EARNINGS - MANUFACTURING | 1960:1 to 1981:4 |
| 5. MONEY SUPPLY - M1.                       | 1960:1 to 1981:4 |

FROM OECD - SAME SOURCE AS BELGIUM.

- |                                                                                  |                     |
|----------------------------------------------------------------------------------|---------------------|
| 6. TRADE UNIONISATION RATE<br>(LINEARLY INTERPOLATED)<br>SAME SOURCE AS BELGIUM. | ANNUAL 1960 TO 1980 |
| 7. CIVILIAN LABOUR FORCE.<br>(LINEARLY INTERPOLATED)<br>SAME SOURCE AS BELGIUM   | ANNUAL 1960 TO 1980 |
| 8. BENEFITS. RATIO USED AS IN MAIN TEXT                                          |                     |
| 9. EMPLOYER SOCIAL SECURITY CONTRIBUTIONS                                        | 1960 TO 1980        |

FROM GERMAN ECONOMIC INSTITUTE.

## ● ITALY

- |                                               |                  |
|-----------------------------------------------|------------------|
| 1. CONSUMER PRICE INDEX - ALL ITEMS           | 1960:1 to 1981:4 |
| 2. INDUSTRIAL PRODUCTION INDEX - TOTAL        | 1960:1 to 1981:4 |
| 3. UNEMPLOYMENT - TOTAL                       | 1960:1 to 1981:4 |
| 4. INDEX OF HOURLY WAGE RATES - MANUFACTURING | 1960:1 to 1981:4 |
| 5. MONEY SUPPLY - M1.                         | 1960:1 to 1981:4 |

FROM OECD - SAME SOURCE AS BELGIUM.

- |                                                                                 |                      |
|---------------------------------------------------------------------------------|----------------------|
| 6. TRADE UNIONISATION RATE<br>(LINEARLY INTERPOLATED)<br>SAME SOURCE AS BELGIUM | ANNUAL, 1960 TO 1980 |
|---------------------------------------------------------------------------------|----------------------|

- |                                                     |                     |
|-----------------------------------------------------|---------------------|
| 7. CIVILIAN LABOUR FORCE<br>(LINEARLY INTERPOLATED) | ANNUAL 1960 TO 1980 |
|-----------------------------------------------------|---------------------|

8. BENEFITS . RATIO USED AS IN MAIN TEXT.

9. EMPLOYER SOCIAL SECURITY CONTRIBUTION 1960 TO 1980

FROM BRITISH EMBASSY

10. EMPLOYEE SOCIAL SECURITY CONTRIBUTIONS AND AVERAGE TAX LOSS BY  
MARRIED MAN PLUS 2 CHILDREN

FROM BRITISH EMBASSY