

ABOLISHING UNEMPLOYMENT

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Ralph Musgrave
November 1979

FOREWORD

The Economic Research Council exists to promote education in the science of economics, with particular reference to monetary practice. The Council seeks to achieve this objective by arranging lectures for members and guests; by issuing Occasional Papers for discussion; and, from time to time, by publishing papers that are judged likely to interest a wider readership. Mr. Musgrave's paper Abolishing Unemployment is one of these latter.

There are seldom easy and complete solutions to major economic problems, which are often complex and inter-related. Over the years the Economic Research Council has addressed itself to at least attempting to illuminate some of these problems if not to propose solutions. Typical of these problems are inflation, the balance of payments, international liquidity, economic growth — and unemployment.

Mr. Musgrave makes a bold claim in the title of his paper, Abolishing Unemployment. The length of this paper, if nothing else, implies that he is putting forward no glib and facile solution but rather one of some complexity appropriate to the nature of the problem itself. The social benefits alone of abolishing unemployment are a prize worth seeking; but there is a price to pay which must be weighed against these and other benefits. Few can doubt that there is any shortage of work to be done in Britain. One need do no more than contemplate the relative poverty of some of its citizens or look around at the condition of the environment to convince oneself of that. Any serious proposal, such as Mr. Musgrave's, aimed at improving living standards and at the same time relieving unemployment deserves careful consideration.

The Economic Research Council neither endorses nor refutes Mr. Musgrave's arguments and conclusions. The Council will be content if this publication helps to shed a little more light on a difficult problem, in pursuit of the Council's general aim of promoting education in the science of economics.

Economic Research Council
November 1979

INTRODUCTION AND SUMMARY

This paper claims that there are no insuperable economic problems, such as demand pull inflation or the balance of payments, in running a developed mixed economy with a negligibly low unemployment level, less than half one percent of the workforce that is. As to the optimum unemployment level, that is the level at which GNP is maximised; it is claimed that this is still below one percent of the workforce, though there is room for debate as to precisely where the optimum is.

The paper starts with a method of dealing with unemployment that does not seem to have been properly analysed nor effectively implemented: making government employer in the last resort. Various characteristics are necessary in last resort employment if it is to work; an important one is that much the same efforts must be devoted to finding normal jobs for most of those involved as if they were unemployed. Since over half of job changers in the U.S. do so with no intervening unemployment, job searching at the same time as working is clearly not difficult.

Another *sine qua non* is a reduction in the right of the unemployed to receive benefit while refusing jobs of which they are capable. The arguments for paying people if they choose to take time off work to seek (or ostensibly seek) suitable jobs do not stand inspection. Losing this right or freedom is balanced by a freedom gained by those who work: freedom from having to support able bodied persons who could perfectly well do some sort of job.

In short it is feasible to provide virtually all the unemployed with some sort of job. Last resort employment combined with the condition that people take any job of which they are capable would get rid of the temptation to be voluntarily unemployed and this in turn makes paying socially acceptable wages to the entire workforce much easier.

The paper then looks for more unemployment reducing characteristics in what is really a very obvious place. Since, as is widely accepted, there would be negligible unemployment in a perfect market, the ways in which a perfect market would deal with frictional and structural unemployment are examined. It is shown that the best characteristics of the market's cure for frictional and structural unemployment can be introduced into the real world labour market by em-

ployment subsidies (and/or taxes) which imitate the market mechanism. A market imitating subsidy for frictional unemployment turns out to be one which subsidises a person into a low net revenue product job, or keeps him in his job where revenue products falls for some reason, until a higher revenue product job appears, that is, one which requires no subsidy.

Employment of the latter sort has a characteristic in common with the above last resort type work, namely job searching at the same time as working; this characteristic thus seems to be of fundamental importance. Returning to last resort employment for a moment, the most obvious form this can take is perhaps something like the various job creation schemes. However there is a great deal wrong with these latter. Last resort employment need not be very different from normal public sector employment. If it were effected in this way and the above subsidy for frictional unemployment were also implemented the net result would be the creation of a new type of employment spanning both public and private sectors which involved either creating temporary jobs for the time during which people would otherwise be unemployed, or finding alternative jobs before the old jobs come to an end.

The market's method of dealing with structural unemployment is then examined. The measure which imitates it is simply a subsidy for the employment of the types of labour in question and/or tax on the employment of types of labour in short supply. Some of the popular objections to measures of this sort are demolished. In particular the objection to the large exchequer or public expenditure costs fails to distinguish between public expenditure costs and real costs; no net real costs need be involved in measures of this sort.

The claim that unemployment can be taken below 1% of the workforce calls for an explanation as to how this is compatible with no demand pull inflation. Part of the explanation in the case of last resort type employment is that it does not necessarily require any increase in demand. As for the subsidy for frictional unemployment, this gets at one of the fundamental causes of demand pull inflation: the rise in the marginal cost of labour per unit of output as full employment is approached.

This is rather a short paper in view of the area covered and of the fundamental changes to the employment system ad-

vocated. Thus what follows is no more than a brief sketch, but brief sketches serve a purpose.

DEFINITIONS

"Frictional unemployment" is the unemployment that results from temporary mismatches between supply and demand for different types of labour, in particular at the local level. In contrast the mismatches in the case of structural unemployment are permanent and more widespread.

The phrase "job creation" refers to the whole collection of "make work" schemes that it would seem are continuously being dreamed up. These include in the case of the U.K. the work houses of the last century, the Job Creation Programme, the Special Temporary Employment Programme, Training Workshops and so on. As to the U.S. the phrase covers for example the Works Project Administration of the 1930s and Emergency Employment Act work.

The phrase "natural level of unemployment" is used in a looser sense than in writings of monetarists who introduced the phrase. The phrase is used to refer to the level of unemployment below which demand pull inflation becomes unacceptable.

"Normal" employment refers to employment other than the last resort employment with which we start, the type of employment into which this evolves or employment assisted by the subsidy against frictional unemployment.

The expression "structural unemployment" is used here to refer to the excess of unemployment amongst certain broad types of labour, as compared to the vacancies for these types of labour. Structural unemployment thus refers to the excess of unemployment in certain regions, amongst the unskilled, amongst certain age groups, the less able, and so on.

The word "unemployment" is extremely hard to define and there are anomalies in conventional definitions as is shown a few pages hence. However it is easier to attack conventional definitions than improve on them, as others have pointed out (Brittan (1975) p31 and Garraty (1978) Ch1). The word is used in a fairly conventional sense to start with; it is used to refer to the registered unemployed plus such unregistered unemployed as are seriously looking for work. It is then advocated that various categories included in the registered unemployed should not be counted as un-

employed. The word is not used in a wholly consistent way throughout the paper any more than it is used consistently in other works on the subject. Hopefully the inconsistencies are not so serious as to significantly weaken any of the basic claims.

The phrase "unemployment benefit" is used here to mean any form of social security received through reason of being unemployed. Thus the phrase includes for example some Supplementary Benefit and compensation for short time working, i.e. for part time unemployment.

I LAST RESORT EMPLOYMENT

It is an old observation that the unemployed could be paid to do something instead of being paid to do nothing. However the macro economic problems in the last resort employment or the job creation idea do not seem to have been properly thought out. These problems may be divided into two categories: those that have to do with labour supply and secondly those that have to do with expenditure, that is with demand for labour. The latter is considered first.

One possible type of expenditure involved here is payment by the customer for the commodities produced. However, raising the numbers employed in the output of marketed goods requires an increase in demand. If there is room for additional demand then employment can be raised merely by raising demand; thus there would seem to be no place for last resort employment in dealing with demand deficient unemployment. So it is assumed, at least for the moment, that if there is a role for last resort employment it would involve the production of non-marketed commodities, that is commodities which like many existing government provided commodities are given away rather than sold. Since the work involved in a scheme of this sort is not marketed and is temporary for the individuals involved, this sort of work will be called Temporary Non Marketed work.

Where the commodities given away replace marketed commodities a movement of employment out of the supply of the relevant marketed commodities would occur. This altered pattern of supply would cause some temporary unemployment amongst the people concerned but it is reasonable to assume that the market would adjust itself after a period and that with the exception of one small qualification mentioned later, aggregate demand need not be lowered nor

need the level of normal employment be changed in consequence.

Secondly there are the labour supply effects. Mukherjee is one of the most influential advocates of last resort employment, but he fails to see the labour supply effects of last resort schemes when he repeats the popular idea that an alternative method of reducing unemployment to the above is to send the unemployed off for training (Mukherjee (1976) p 53-4). But since nearly all full time training courses last a specific period (they are likely to be inefficient if they do not) those engaged on them are not available to the normal labour market while being trained. So far as the labour market is concerned they might as well not be in the country or not exist. In effect labour supply has been reduced; that is the number of people looking for work has been reduced.

This has an important consequence: the natural level of unemployment can be reached as well by reducing labour supply as by increasing demand. This is not to imply that full time training is undesirable. The point is that it is an alternative to normal employment, not unemployment; likewise a Temporary Non Marketed scheme where those involved are not available for normal jobs is an alternative to normal employment and not unemployment. Assuming that those made unavailable for normal employment are a rough cross section of the workforce, then making a given number of people unavailable for normal employment has exactly the same effect inflation wise as raising demand by whatever amount is needed to raise employment by this given amount. Failure to take this into account will be called the "labour supply" fallacy. This is the cause of many mistakes in employment theory and policy as is shown at several points in succeeding pages.

Thus in any scheme of the above sort there is a trade off between on the one hand the availability of those involved for normal jobs and on the other the total numbers involved in the scheme or other characteristics of the scheme such as the remuneration or the amount of coercion or persuasion used to get people to work on the scheme. It seems highly unlikely that anyone knows how these trade offs work; thus it is assumed for the sake of simplicity, below, that those involved in this sort of scheme must be about as available for normal jobs as when unemployed. This might appear to rule out any such scheme because of the apparent necessity to be unemployed in order to look for work. In fact

it is neither necessary nor particularly advantageous to be unemployed for the purpose of engaging in a job search.

Time off work required for a job search: very little.

That it is unnecessary to be unemployed for the purposes of engaging in a job search is demonstrated by the fact that according to Mattila (1974) at least 50-60% of job changers in the U.S. do so with no intervening unemployment.

This statistic also casts doubt on the idea that it is **desirable** to be unemployed for the purpose of job searching. If it were particularly desirable, then presumably the large majority of job changers would job search in this way. As for empirical evidence that unemployment facilitates a job search, this is not strong. One standard text book on labour markets by Addison (1979) cites two attempts to find the relationship between the size of unemployment benefits and post-unemployment wages. One of these, Ehrenberg (1976), indicates that generous unemployment benefits do tend to result in higher post-unemployment wages but that the tendency is too weak to justify a rise in unemployment benefits on job search grounds. The second, Classen (1977), found no relationship or tendency here at all. However both these studies and others fail to test the really important question, namely whether job searching while unemployed is more effective than while working. The fact that employers prefer those with jobs to those without and secondly the fact that those with jobs are in a stronger bargaining position than those without may wipe out the above unimpressive job search benefits of unemployment altogether. Indeed even a test of the latter sort would not be sophisticated enough; it would fail to measure the extent to which the section of the workforce under test pushed others into less suitable jobs. That is to say the important question is to what extent does a given measure make job searching for the workforce as a whole more efficient. Ehrenberg and Classen missed this point as well.

Clark (1979) in one of the best and most readable papers to appear on unemployment in recent years, concludes that job searching while working is not significantly more difficult than job searching while unemployed. The job search facilitating characteristic of unemployment is supposed to be its main merit and although the empirical evidence is inadequate, this merit would seem to be a thoroughly feeble one; at least it pales by comparison to the disadvantages of

unemployment, economic and social. Certainly the amount of time the unemployed devote to job searching per week is scant justification for taking the entire week off. Gordon (1973) and Clark (1979) claim that the average time is 7.2 and 6 hours per week respectively. Moreover only a minority of this time might require time off work. Gordon divides his 7.2 hours up into 4.4 hours for newspaper and planning time and only 2.8 hours for direct job search.

It is therefore concluded that the fact of working on a Temporary Non Marketed scheme would impair a person's availability to the normal jobs market to a minimal extent, especially if time is allowed off for interviews.

Skills and remuneration.

It might seem that a Temporary Non Marketed scheme should aim to provide those involved with jobs which match their skills or experience. However there is no possibility of such a scheme doing this to any great extent and being efficient. Assuming unemployment is anywhere near the natural level there will be difficulty finding specific types of labour since at or near the natural level shortages of specific types of labour emerge. Furthermore normal employers must have first call on any specific types of labour if Temporary Non Marketed employees are to be as available for normal employment as when unemployed. To have key skilled labour disappearing without warning makes efficiency impossible. The Job Creation Programme fell into this trap to some extent, which helped explain its inefficiency; worse still it tried to circumvent this problem by drawing some of its skilled labour (and for that matter unskilled labour) from areas beyond daily travelling distance. Such labour will have been nowhere near as available for work on its home labour market as when resident there. The labour supply fallacy comes into effect.

The next two problems to be considered are the remuneration for those in a Temporary Non Marketed (TNM) scheme and secondly the amount of coercion or persuasion used to get people to work on such a scheme. If the pay is the same as unemployment benefit and no coercion is used then not very many will take part in the scheme. If pay is above unemployment benefit levels and no coercion is used, such people as regard TNM work as having greater attractions than "unemployment plus benefits" will attempt to get TNM work. Since aggregate demand is assumed to be constant,

any amount by which the TNM wage is above unemployment benefits will be at the expense of those doing normal work. Thus the effect is to make "TNM work or unemployment" more attractive vis a vis normal work than unemployment was vis a vis normal work. In consequence the "natural level of TNM work and unemployment" will be above the natural level of unemployment. That is, TNM jobs will to some extent be at the expense of normal jobs, hardly a desirable characteristic.

The conventional wisdom is that people should be allowed a period of unemployment before any sort of coercion is used; that is to say people are allowed a period of unemployment during which to look for suitable jobs after which their benefit is likely to be withdrawn unless they take any old job of which they are physically capable. While a TNM scheme could be restricted to those unemployed for more than some period, the above piece of conventional wisdom does not really stand inspection and is thus not a reason in itself for so restricting a TNM scheme.

Two weaknesses in the conventional wisdom have already been demonstrated: it is certainly not necessary nor particularly advantageous to be unemployed for the purpose of job searching. Thirdly, and on the specific question of allowing people time to seek suitable employment before requiring them to take less suitable employment, this may sound a reasonable argument, but it has a serious flaw. The flaw in the idea lies in the more or less random appearance of vacancies. The fact that red has failed to appear the last half dozen times on the roulette wheel says nothing whatsoever about the chances of it appearing on the next throw. To the extent that this analogy is valid it is no more logical to allow someone three months to look for the vacancy he requires than to allow him three months at the end of the first three month period and so on if necessary ad infinitum. It will be claimed that this analogy is not entirely valid: the chances of a particular vacancy appearing are not known with complete certainty and the mere fact of looking and failing suggests in some cases that the chances of finding the vacancy are lower than was previously thought. This is true in some cases, but expending several man months verifying what is already known with a moderate degree of certainty is surely a gross waste of scarce resources. Precisely the same information can be acquired, not by expending 40 or so

hours a week per job sought, but as indicated above, by expending about a tenth this amount.

Job search theory claims that the time spent in unemployment is an "investment", the return on which consists of having people in the right jobs. It is a phenomenally poor investment since the same return can be obtained on about a tenth the outlay. Secondly the assumption behind many variations of job search theory, namely that because someone gets an unsuitable job that he therefore keeps that job flies in the face of facts. Millions of people with what they regard as unsuitable jobs are continuously looking out for and getting what they believe to be more suitable jobs.

A fourth point here is that the authors of the Employment Protection (Consolidation) Act of 1978 did not envisage that people would have any great difficulty in seeking alternative work at the same time as holding a job. This act requires employers who have announced redundancies to allow the people concerned reasonable time off to seek alternative work or arrange re-training.

The above points make some of the grandiose mathematical models erected in the name of job search theory seem of dubious relevance to the real world. Tobin (1972) makes some similar observations. It is therefore concluded that an effective job search combined with full time work is feasible for virtually all job changers, especially if time is allowed off for interviews, and thus that requiring people to take jobs to which they are not ideally suited pending more suitable vacancies is perfectly justified.

This conclusion has implications which go beyond TNM work: if there is justification in requiring someone to take a temporary not ideally suitable job in the form of TNM work, then there is equal justification in requiring him to take a not ideally suitable normal job pending the appearance of a more suitable vacancy. The mere fact of requiring the unemployed to take any normal job of which they are physically capable immediately or fairly soon after becoming unemployed would lower the natural level of unemployment. However it must be born in mind that about half of those whose benefits are cut fail to find even simple unskilled work (see Meacher (1974)). It is precisely this gap that last resort type employment can fill. Indeed it fits the niche very nicely indeed. It was shown above that last resort or job creation type employment without coercion will create jobs which are without doubt at the expense of normal jobs to

some extent. On the other hand if "unemployment benefit" is conditional on doing TNM work, then a TNM scheme would undoubtedly be a net creator of jobs. The gap TNM work can fill is to provide jobs where a person cannot find any simple unskilled job in the normal labour market. This all amounts to presenting the unemployed with a "no work no pay" condition.

This no work no pay condition may sound harsh, but it is one that applies to normal jobs: absentees from most normal jobs do not get paid for the time they are absent, so the proposition made here is not so very revolutionary. Furthermore it is hard to see why people who go out to work should be coerced into paying taxes to keep others in leisure if there is a job the latter can do, or to which they can at least make some sort of contribution. It is also not clear as to why the half of the workforce which does its job searching at the same time as working should have to finance holidays for the other half.

There might appear to be something distasteful about highly qualified people having to handle brooms or spades from time to time. One answer to this is that a particular group of highly qualified individuals, professors of economics, have been sermonising on the virtues of labour mobility for decades. If they practiced what they preached, i.e. swept the occasional street, their sermons would be more honest. It is very hard to see what harm a few weeks exercise would do to those in sedentary occupations; nor can there be any harm in one portion of the workforce finding out by first hand experience how the other half lives and works.

If it is the possible presence of dirt on the hands of people who normally have clean hands at work which is so horrific, one must ask why this dirt is so acceptable when these individuals work in the gardens of their suburban houses or second homes. In short the idea that the better qualified cannot be asked to do the occasional spell of unskilled work is an outdated social nicety.

In using the phrase Temporary Non Marketed work from now on, it is assumed that a virtual no work no pay condition applies.

The benefits of TNM work: abolishing both poverty and scrounging.

The problems with raising unemployment benefits under the existing system with a view to getting rid of the poverty

that results from unemployment are first the disincentive effect and secondly the increased tendency for those who would be taking time off anyway to turn up at the unemployment benefit office and get counted as unemployed. The outstanding social benefit of TNM work is that it enables much higher "benefits" or wages to be paid to those who do not have normal jobs and this can be done without the above undesirable effects. The attractions of the additional pay are counteracted by the requirement that the pay, and all of it, be earned.

A second benefit is a purely economic one: TNM work results in more people being productively employed. Thus unless it is extremely badly organised it will result in a rise in GNP and thus living standards.

Thirdly TNM work is much the most potent remedy for voluntary unemployment. In other words if the TNM alone were used to get rid of unemployment the numbers required to do TNM work to achieve this would **not** be equal to the numbers unemployed or more precisely the natural number of unemployed. The mere fact of TNM work would persuade considerable numbers to take normal jobs rather than do TNM work.

There is a trade off between the first and third benefits. To illustrate, if the pay of the would be unemployed is raised sufficiently this would make the net attractions of TNM work equal to the attractions of unemployment plus benefits; as a result the would be voluntarily unemployed would be attracted as much by the former as the latter. However it is impossible to avoid both benefits at once, and it should not be difficult to arrange things so as to gain a bit of both.

As to the extent of voluntary unemployment, this would seem to be quite widespread, particularly if we judge the unemployed by what they do rather than what they say. Firstly there are the above mentioned figures for the average time spent job searching; these figures are, to repeat, averages, which means that a significant proportion of the unemployed are devoting much less than 6 or 7 hours a week to job searching. It is hard to know just what the optimum amount of time to devote to job searching is; perhaps 6 or 7 hours is about the optimum. But it seems safe enough to suggest that when the time devoted to job searching sinks much below 2 or 3 hours a week, the job search is no longer a

very serious one, and that the unemployment is becoming essentially voluntary.

Secondly, the number of job applications the unemployed make are very much in line with the above figures. It would seem from Daniel (1974) p 28 & 124 that about 11% of the registered unemployed at any point in time do not even claim to be looking for work. Of the remainder, just under half would seem to be making less than one job application per month, and less than a quarter make more than one job application per week. Page 70 (Daniel (1974)) indicates that about a quarter of the registered unemployed do not start their job search until a month or more after losing their previous jobs. Moreover the relevant survey was done in September 1973 when unemployment was at its lowest for the 1970s; that is there must have been a relative abundance of jobs to apply for.

Even where an unemployed person does make a reasonable number of job applications and finds work within two or three weeks his unemployment is still not necessarily involuntary. Two or three weeks is quite a popular period for a holiday.

To revert to the U.S., it would seem from Feldstein (1976 & 78) that about 40% of the so called unemployed in the U.S. are making no significant attempt to find work. This appears to be to a large extent because of the very large proportion, in manufacturing industry at least, who are reasonably sure of being re-hired by their original firm — over half are re-hired. The unemployment insurance system in the U.S. almost seems to be degenerating into a system whereby employers can hoard labour without paying for it and employees can obtain paid holidays at the taxpayers' expense. Tacit agreements between unions and employers as to who gets how much "unemployment" (in other words holiday) are not uncommon. Feldstein concludes rightly that there is something wrong with the system. There are two ways of dealing with this problem. Firstly the attractions for employees of posing as involuntarily unemployed can be destroyed by TNM work. Secondly the attractions of temporary unemployment for the employer could be destroyed by making him pay for the benefits of those he re-hires after a short spell, as Feldstein suggests.

Further evidence of the extent of voluntary unemployment in Britain is provided by what happens when those who have been unemployed for too long are called for an in-

terview to discuss their benefit being stopped. About half do not bother turning up for the interview; they find a job with remarkable alacrity. In view of the dramatic reduction in numbers having their benefit stopped (see R Layard, *The Guardian* 5.11.79 p 22) this indicator of the extent of voluntary unemployment will probably have become more serious in recent years.

Yet more evidence is provided by the proportion of the unemployed who have left their previous job of their own accord: 47% in the case of Daniel's sample (Daniel (1974) p 54). It must be admitted that half of these claimed ill health or injury as the reason for leaving of their own accord; but this is strange. If someone is genuinely in such bad health or so injured that he cannot reasonably be expected to do his job then a doctor would verify the fact and the person concerned should be on sickness benefit, not unemployment benefit. On the other hand if both doctor and employer declare a person fit for work then there is a strong suggestion that such a person's unemployment is voluntary if he leaves his job of his own accord.

At a politically more sensitive level, it is perhaps worth noting that the strike is a form of voluntary unemployment essentially no different from that dealt with above. Instead of individuals deciding to be voluntarily unemployed, people do it in groups in the case of a strike. TNM work could be used to make the strike a less attractive proposition. However unemployment causes about thirty times as many days work lost as strikes, so if this basis of comparison is valid, strikes are a relatively minor problem.

The test of who wants work.

If a TNM scheme were introduced along the above lines some unregistered unemployed would turn up and some would not; some registered unemployed would turn up and some would be induced to take normal jobs or to admit the voluntary element in their unemployment and take time off without pay. Thus the main test adopted here of whether someone wants to work is whether he actually turns up for a job, assuming it can be arranged, which he is physically and mentally capable of doing and for a wage which is equal to or above whatever is considered the minimum desirable on social grounds. It is very hard to see any other natural dividing line between voluntary and involuntary unemployment. The dividing lines in the case of conventional defin-

itions of the word "unemployment" are arbitrary lines rather than natural dividing lines: for example one of the conditions for counting a person as unemployed in the U.S. is the fact of his having made at least one positive attempt to find a job in the four weeks prior to the date from which unemployment is being measured. This begs the question as to what is so significant about the four week period. One could with equal justification make it two weeks or two months.

Another anomaly in conventional definitions of unemployment arises from counting as unemployed those who refuse jobs of which they are capable, pending more suitable vacancies. For reasons given below it is impossible to provide the entire workforce with work to which they are ideally suited, so it is to some extent illogical to moan about the unemployment of such people. Furthermore if such people are counted as unemployed, then presumably one should count those in jobs to which they are not suited as unemployed, and there is no limit to the number of people who could be put in this category; the number depends on what one means by being suited to a job.

If the above tests as to who wants to work were adopted, it could be argued that some unemployment would still remain in the form of those who intended doing so much job searching that they refused to do TNM work, or in the form of those who took a large amount of time off TNM work to attend a large number of interviews. The first answer to this is that if these people are counted as unemployed they consist of very few people; the proportion of the unemployed making more than three job applications a week is about ten percent. Secondly a person who is actively seeking work is not unemployed; he is engaged in an economically useful activity. It will be said in response to this that such people are counted as unemployed under conventional definitions. Thus the above test of who wants work is to some extent merely defining the unemployment problem away. The "counter-counter-argument" here is that as has already been pointed out the majority of job changes take place with no intervening unemployment, so possibly the majority of job searchers are not included in the conventional unemployment figures. Thus if the above test of who wants work results in defining part of the unemployment problem away, that is because the part defined away is a thoroughly anomalous constituent of conventional definitions and deserves

to be excluded from any definition of the word "unemployment".

99% employment levels would not cause inflation.

There are various reasons why inflation, demand pull inflation in particular, tends to arise near full employment under conventional policies, but such reasons would not operate under TNM work.

First there is no extra demand, thus no additional demand pull inflation. Under conditions of heavy demand it is partially the abundance of alternative well paid jobs that induces labour to up its wage demands. TNM work would not involve particularly high wages.

Secondly it has been alleged that it is fear of unemployment that induces labour to moderate its wage demands at times of high unemployment and conversely removal of this fear that induces labour to up its demands when unemployment recedes. Unemployment benefits have greatly reduced the force of this argument. If there were anything still in it, then because TNM work would not be greatly more or less attractive than unemployment, "fear of unemployment" would be replaced by "fear of TNM work"; the net effect on wage demands should be about nil.

Thirdly in that unions are monopolies and exploit their powers as such to get wage increases, the form of inflation that results is cost push not demand pull. This is a political, not an economic problem. The objective here is to advocate measures for dealing with unemployment which will work given responsible trade unions. Given this condition it is concluded that there are no macro economic reasons for a TNM scheme of the above sort not virtually abolishing unemployment without exacerbating inflation.

Those who refuse to work.

In any system individuals who refuse to work pose a slight problem. Since their leisure is undoubtedly voluntary, this is not unemployment according to any normal definition. If such individuals are forced to work they will not do much; thus their so called unemployment is not a serious economic problem. For these two reasons the question as to what benefits such people should get is not considered here; (Brittan (1979) p 113 gives it brief consideration).

Very short term TNM work would not be a waste of time.

The large majority of the unemployed are in this state for several weeks or months; only about 15% at any point in time are destined to find work within two weeks or so. However relatively large numbers are involved in the "rapid turnover" section of the dole queue. About 50% of those who register on any one day find work within two weeks (Department of Employment Gazette May '74). It might be said in objection to TNM work that organising the rather large number of very short term jobs would be a waste of resources.

One possibility would be to allow people some short period of unemployment before requiring them to take a temporary not ideally suitable job, TNM or other. Were this done the unemployment resulting would be negligible by the standards of the 1970s. In other words assuming an unemployment level of around 5% in the absence of TNM work, then the introduction of the "take any job you can do" requirement backed by TNM for all those who could not find a job after say two weeks unemployment would mean an unemployment level of less than one percent.

A better alternative would be to ensure that employer or employee give two or three weeks notice in the case of the bulk job cessations. The Employment Protection (Consolidation) Act of 1978 fills this gap to some extent but leaves a large amount of room for improvement. Section 49 requires employers and employees to give one week's notice where the job has lasted between four weeks and two years. Since the average job only lasts between two and three years, a very significant proportion of additional job changers would be able to find alternative jobs before leaving their old job if just one or two weeks were added to these periods of notice. Those who regard this section of the act as an unjustifiable burden on employers should note that without reasonable periods of notice employers and employees will shift the burden onto society at large, that is, impose an externality on society. The extent of this phenomenon has, as noted above, reached quite unjustifiable proportions in the U.S.

Employers do have a valid complaint when they point out that employers are worth suing whereas employees are frequently not worth suing. The solution is surely to make any claims to unemployment benefit conditional on having given the appropriate government department two or three week's notice, except in the relatively few cases where the

employee has absolutely no option but to quit at short notice. Were this done, government employment agencies could start seeking alternative vacancies for the person concerned before his old job came to an end and the employer could be informed of the employee's intention to quit.

If none of the above possibilities were implemented, that is to say if the unemployed were required to take any job of which they were physically capable immediately they became unemployed, it is far from clear that the costs of the large number of short term TNM jobs that would result would exceed the benefits. It would appear from the experience of various employment agencies and similar private organisations which specialise in providing temporary labour for other firms that "one week" jobs are organisationally feasible and indeed a commercial proposition. Moreover the very short term jobs that the private sector arranges are heterogeneous; it should certainly be easier to do this where the jobs are much more homogeneous, that is all or nearly all unskilled.

Secondly, as mentioned above, the fact of someone's unemployment being short term is no proof that it is involuntary. Thus some of the would be short term unemployed would be induced by this system to go straight from their old job to their new long term normal job. If for the sake of argument the administrative costs of short term TNM work exactly equalled the benefits flowing from the commodities this sort of work produced, then the rise in numbers going straight from one normal long term job to the next might tip the balance in favour of this system.

Conclusion.

Last resort employment in the form of TNM work could be a very potent method of dealing with unemployment. While it could deal with virtually all unemployment regardless of the type involved, it is clearly desirable to have remedies more appropriate to the types of unemployment involved where possible. So before specifying the precise form that TNM work should take, we examine the perfect market and the way in which it deals with frictional unemployment. A second reason for doing this is that the sort of job the market creates in dealing with frictional unemployment has characteristics in common with TNM work. These characteristics are best discussed after both forms of employment have been introduced.

II A TEMPORARY JOBS SUBSIDY FOR FRICTIONAL UNEMPLOYMENT

It is generally held that there would be negligible unemployment in a perfect market. It would therefore seem productive to examine the perfect market's methods of dealing with various types of unemployment with a view to introducing some of the perfect market's characteristics into the real world. Frictional unemployment is considered first.

Frictional unemployment arises out of the short term mismatches between supply and demand for different types of labour which are continually arising in the labour market, in particular in local labour markets. A frictionally unemployed person is thus one who temporarily cannot find a suitable vacancy, that is a vacancy which suits his skills and experience and pays the going rate for the job or the rate the person concerned requires.

In a perfect market there would be no unemployment benefit; put another way, unemployment benefit is not a market phenomenon. Under these conditions there would be a greater tendency for people who could not immediately find a suitable vacancy to take a less suitable vacancy until the right one appeared. The remuneration of the less suitable job would tend to be low for three reasons. The person concerned would tend not to be ideally suited to the job; he might be insufficiently skilled or alternatively he might be too skilled. (The latter can be a cause of being unsuitable for a job: graduates do not always make as good labourers as those accustomed to unskilled work.) Secondly the mere fact of being available on a temporary basis would tend to lower the remuneration. Thirdly the person might be perfectly suited to the job, but the commodity produced might be temporarily not in demand; thus employers would tend to offer relatively low wages.

Another mechanism which would operate in a perfect market is one that would prevent frictional unemployment happening at all. Where demand for the services of a particular firm dropped, the wages paid by that firm would also drop which in the absence of some very extraordinary values for the elasticity of demand for the commodity concerned, would help maintain employment in the firm. The employees would doubtless raise their efforts to find better employment, that is they would job search at the same time as working.

These mechanisms work to some extent in the real world, but there are a host of obstructions: minimum wage rules, union wage rules, and the fact that where it is feasible to pay relatively low wages for temporary jobs the potential holder of the job finds unemployment benefit more attractive. These obstructions could be counterbalanced, or put another way the above market mechanisms for dealing with frictional unemployment could be imitated by a Temporary Jobs Subsidy: i.e. one which subsidises a person in or into a low net revenue product job pending the appearance of a more productive job. The price paid by an employer who accepted this subsidy would be the fact of the relevant employee leaving at some unpredictable interval, that is when the employee found or was found a more suitable job, which required no subsidy.

It was shown above when introducing the TNM idea that there is every justification for requiring the unemployed to take jobs to which they are not ideally suited pending the appearance of more suitable vacancies. This point is now reinforced by the fact that this is precisely one of the ways in which the perfect market deals with frictional unemployment and indeed that the process of taking temporary not ideally suitable jobs ought to be positively subsidised.

Under conventional policies a person is usually unemployed when no job can be found where his net revenue product covers his wage. But this is an illogical arrangement in that even if his net revenue product is only half his wage it is better that he does the job concerned than does nothing, assuming no better job can be found. A Temporary Jobs Subsidy would enable the person concerned to do a low net revenue product job until a more suitable or higher net revenue product job appeared.

In businessman's language the subsidy would apply to any employee actual or potential who "did not pay for himself" or who was "liable to be made redundant because of lack of orders" and so on. Various conditions, the nature of which have been intimated above, would be attached to the subsidy. The employee would be required to make some sort of effort to find a non subsidised job and/or government employment agencies would do the job search for him. If an employee refused too many suitable and non subsidised jobs the relevant government agency would have to start using a

little coercion, as it does in the case of such unemployed as refuse suitable jobs.

It will be apparent that there are a number of ways in which the market deals with frictional unemployment and any number of degrees of sophistication in a Temporary Jobs Subsidy (TJS). The form advocated for it here is the one the author believes to be the best, but it is not the only possibility.

TJS would get at the fundamental cause of the problems which arise near full employment. As full employment (of labour) is approached, the factor of production which runs into short supply is **labour**, a point which is not as widely appreciated as it should be. That is to say the unemployed become increasingly unsuitable for the available vacancies or for such vacancies as they can find. This is not a new proposition—see Keynes (1936) p 42. But it is important to distinguish between this deterioration in the suitability of the unemployed in the aggregate and on the other hand the unsuitability of individuals. Apart from structural considerations, the unsuitability of an unemployed person for any vacancy is a **temporary** affair. A vacancy for which he is suited appears sooner or later. If it is desired to counteract this phenomenon then something like the **Temporary Jobs Subsidy** must surely be the answer.

As full employment is approached the unemployed become increasingly uncompetitive with domestic employed labour and with foreign labour. It is this that induces employers to bid up the price of domestic employed labour, or give in more easily to union demands, and partially explains the rise in the marginal propensity to import that occurs near full employment. TJS thus gets at the root of the frictional factors which contribute to demand pull inflation and rising imports near full employment.

Under this system, if a TNM scheme were also in operation, the Department of Employment could keep a register not of the unemployed, but of those doing TNM and TJS work, and could devote the same efforts to finding the people involved normal or unsubsidised jobs. If there were still some unemployed or if TNM were not in operation then the register would consist partly of unemployed, partly of TNM and partly TJS workers. Something along these lines already exists in that approaching 10% of job seekers making enquiries at Job Centres are already employed (see

"The Employment Service in the 1980s", Manpower Services Commission, p 10.)

Indeed, other aspects of TJS have been in operation for a long time; people in low productivity and low wage jobs are continually being attracted to higher productivity and higher wage jobs. However the compression of differentials, demands for parity and minimum wage laws of recent years may well have interfered with the market's method of indicating which is which, a point with which Samuel Brittan would seem to concur — Financial Times, 21st July 1975. TJS ought to clarify the market's signals.

The idea that a greater range of relative wages, or labour costs to the employer, would reduce unemployment is not new (e.g. see Flemming (1976) Ch V p 47)) but the precise way in which the idea is exploited in this paper is perhaps new. (Flemming in this passage also questions the notion that any time is necessary between jobs.)

Many unemployed are forced to take temporary unsuitable jobs anyway.

To the extent that TJS resulted in people taking unsuitable jobs this would not be a radical departure from the existing employment system.

Having to do a job at a different skill level or a job which in other respects is not the normal job for the person concerned would not be a new experience for the unemployed. Daniel (1974) p 95, 99 & 100 indicates that this is the case for about a third of jobs prior to unemployment and subsequent to unemployment. TJS might even make things fairer for some people in jobs to which they are not suited. Certainly the position of someone forced into an unsuitable job because his unemployment benefit has been cut is not to be envied; TJS might make things fairer for such individuals because given the subsidy, the employer would not demand so much of the individual concerned.

In contrast to allocating labour to an employer to do a temporary job to which the person concerned is not ideally suited, labour is often allocated **within** an organisation for this purpose, where trade unions do not obstruct this sort of thing. For example it is common practice in Skill Centres when there is no teacher available with the relevant skills or experience for someone to take over a class, sometimes for weeks on end, even though he does not possess the skills he is supposed to be imparting! The standard of teaching drops,

of course, but so long as the curriculum and practical work are set out in advance, the unqualified teacher's presence is no totally futile.

Even before social security staff threaten to cut unemployment benefits, the unemployed are prepared to consider a wide range of jobs (Daniel (1974) p 73 & 7). This suggests that the unemployed would not refuse the somewhat unusual jobs involved in TNM and TJS work because of the actual nature of the work. Note that this is not the same thing as saying that the unemployed are actually applying for a large number of and wide range of jobs. As noted above, about half cannot be said to be engaged in a serious job search under the existing system.

Temporary jobs would not be something new to the unemployed either. Daniel (1974) p 17 showed that nearly half the unemployed held a job immediately prior to unemployment which lasted a year or less.

It is also worth noting that when a person works in an area of the economy other than his normal one he learns something about the former. A person acquainted with areas of the economy other than the one he normally works in is more productive than one who is not so acquainted, other things being equal.

There are precedents for TJS and TNM work in the planned economies.

There is no unemployment benefit in most East European planned economies. People have a somewhat better guarantee of being able to find work than in most Western economies, but there is no guarantee in planned economies that the job will suit the skills of the applicant or that he will find the work congenial. There is no guarantee that the work will be particularly productive and so long as the people concerned get a decent wage, any lack of productivity does not cost them nights of sleep. Thus if the unemployed in a mixed economy were offered TJS or TNM work instead of being offered money for doing nothing the situation would have similarities to the present day East European planned economies.

For those who see something sinister in this similarity, there is a clear distinction between the above economies on the one hand and East European economies of Stalin's day or China in the mid/late 1970s on the other. Direction of labour, that is the allocation of specific people to specific

jobs for years at a time was a feature of the latter economies. Nowadays in East European countries at any rate, in existing Western economies and in the sort of economy advocated here a small proportion of people get allocated to jobs to which they are not ideally suited but these people and others are free to apply for alternative jobs.

The marginal and average aspects of TJS, and "disparities".

A marginal employment subsidy is defined here as one which applies to only certain members of a particular type of labour — those that have recently been unemployed or are in danger of being unemployed. The Temporary Employment Subsidy (TES) and the Small Firms Employment Subsidy are examples. An average subsidy is one that applies to all members of a particular type of labour. Regional Employment Premium was an example.

There is a problem with marginal subsidies, namely that they give rise to a difference in labour cost per unit of output as between subsidised and non subsidised labour. The larger this difference, (which will henceforth be called the "disparity") the greater the temptation for employers to replace unsubsidised labour with subsidised labour or attempt some similar undesirable practice.

In that TJS subsidises people into unsuitable jobs there should be little disparity. On the other hand where an employer is attracted to the subsidy because of a decline in demand for his goods, this disparity is likely to be greater because although employers inevitably tend to sack their less suitable employees first, the employees sacked in the case of a decline in demand are not **particularly** unsuited to their jobs. They would be unlikely to have ever held the jobs if they were. But even where a disparity was the same size under TJS as under TES it ought to be less of a problem under the former. Where two employees are of similar ability and quite capable of doing their job, their employer is unlikely to be keen to see one of them go unless he is certain that demand for his product really has declined.

TJS deals with some structural unemployment.

TJS would tend to be paid in respect of the less useful members of the workforce and these include those liable to structural unemployment — the unskilled, youths and so on. TJS would thus automatically deal with some structural un-

employment, but not enough is known about labour markets to predict to what extent the subsidy would do this.

If it did not do this to a large extent there would seem to be nothing wrong with having a different rate of subsidy for the groups of labour concerned with a view to getting TJS to deal with more structural unemployment. To put it another way it might be desirable to have disparities in the case of youths, regional workers and perhaps some other groups. The advantage of countering structural unemployment with a marginal subsidy, TJS or any other, is that exchequer costs are lower than in the case of average subsidies. This is not a particularly important advantage because exchequer costs do not equal real costs, and more about that later. But if the advantage can be had for the asking, it might as well be taken.

Another advantage is that, as Davies (1967) and Lazar (1977) make clear in the case of regional unemployment, much of what we believe to be structural unemployment may derive from the natural level of unemployment being particularly high amongst the relevant types of labour. That is much of such unemployment may in reality be frictional and if this is the case, then TJS would be a more appropriate weapon than structural measures.

If TJS were used as a marginal subsidy for types of structural unemployment, an unnecessarily large amount of job searching might appear to result. But the larger the proportion of the workforce that attempts to find more productive jobs than those it currently holds, the better, other things being equal. It is far from clear as to what the optimum amount of job searching is; thus this additional job searching would not necessarily be a waste.

The question as to how selective the "structural" aspect of TJS should become depends on when the benefits less costs, administrative and other, start to fall below the benefits less costs of the alternative, namely TNM work. In the author's judgement, finding out where someone lives and works and how old he is would not cost much. Thus if TJS took the form of a flat weekly amount, then having a somewhat larger flat amount in the case of those in certain regions and above or below certain ages, should be feasible.

There is really no end to the possible variations on the basic TJS theme. This arises because a perfect market is almost infinitely complex; in other words there are about as many wage rates in a perfect market as there are members of

the workforce. For TJS to be a near perfect imitation of the perfect market would amongst other things involve the relevant government agency bargaining with an employer as to the amount of subsidy to be paid for a particular employee, a system which would probably be administratively too complex and/or too open to abuse. However, some other small moves in this direction might be worthwhile: for example one could have two basic TJS rates, one for the very hard to place and one for the not so hard to place.

The proposition that those who "temporarily cannot find a suitable vacancy", that is the frictionally unemployed, could all be found work if offered to employers at a low enough price is perhaps compatible with the view of unemployment expounded by Alchain (1974) Ch 25. This tends towards the opinion that there are an infinite number of jobs to be done and that anyone can find a job if he pitches his price low enough.

III SOME APPARENT PROBLEMS FOR TJS

This section of the paper attempts to forestall various possible criticisms of TJS. It can be skipped without losing the thread of the argument.

Costs.

The most fundamental kind of cost recognised in economics is opportunity cost, the value of the alternative foregone in order to achieve something. The opportunity costs of unemployment are certainly large. There is unquestionably a better alternative to being unemployed (i.e. doing nothing apart from a very occasional bit of job searching) and that is to do some sort of job even if it is not the most productive job in the world. TJS brings this better alternative into being, so the opportunity costs of TJS are lower than the opportunity costs of unemployment. This is not to say TJS has no opportunity costs; in other words there may be even better alternatives than TJS. But at least TJS improves on the existing system.

The opportunity costs of TJS are also much lower than those of other employment subsidies. The aim of TJS is to

subsidise a person into a not ideally suitable job, so long as there is no better alternative. In contrast, other employment subsidies will have resulted in people being subsidised into low net revenue product jobs despite the existence of better alternatives.

As for the public expenditure or exchequer costs involved in an employment subsidy, these can in no way be equated with any sort of real cost to the community, and a properly designed employment subsidy involves no net real costs at all. It results only in net benefits in the form of more employment and a higher real GNP. However the distinction between exchequer and real costs is clarified under "Structural Unemployment" below and is thus not considered here. The administrative costs of TJS are considered here.

Many of the administrative costs involved in TJS are costs already been borne in the case of unemployment. Government agencies already ascertain from each unemployed person what his skills and work record are, look for suitable vacancies and in the case of those who have been unemployed too long, decide which is the most suitable job for them.

Job Centres spent £21 per head placing people in jobs for the year ended 31.3.76 at 1976 prices according to the Manpower Services Commission (1978) para 3.7. If the administrative cost of placing people in TJS jobs is two or three times this it ought still be covered by the benefits of an additional say man month of work. (The average time men currently spend unemployed is a matter of months rather than weeks.)

For the following reasons it is probably no use balking at the administrative costs even if they are high. There are only two main ways of allocating economic resources, with a possible third category in between. The two main ways are the market and administrative allocation; the one in between is an administered price system of which the measures advocated here are to some extent an example. Unemployment, frictional and other, exists partially because of the obstructions that have been put in the way of market mechanisms — minimum wage laws, union imposed wage rates, custom, and so on. If the market mechanism is not permitted to operate then either some alternative bureaucratic system must replace it or the economic system starts to crumble. The bureaucratic system whether it aims to imitate the market or not is almost inevitably administratively expensive when it comes to allocating labour, because there

are a huge number of heterogeneous units to be allocated to heterogeneous jobs. So if costs of the measures advocated here were to exceed the benefits in the form of more employment, that might prove the futility of not allowing market forces to allocate labour rather than that these measures are not the best bureaucratic methods of allocating labour.

In adhering to the Tinbergen principle, or a variation of it, namely that there should be one employment subsidy for each type of unemployment, it is even possible that the systems advocated here will result in net administrative savings as compared with the existing systems. In the case of some types of unemployment the number of organisations and schemes for dealing with the type of unemployment concerned has become totally absurd (regional unemployment in Britain is the classic example). TJS is quite the opposite; it deals with both frictional and at least to some extent with structural unemployment.

It is debatable as to how far many existing labour market measures can be justified on "GNP increasing" grounds. To illustrate, Job Centres look very attractive, but certainly do not pay for themselves. A six month Skill Centre course costs around £3,000 at 1978 prices, yet about half the trainees six months after completing their courses are either unemployed or in a job which does not use the skill they have learned (see Manpower Services Commission (1978) p 24 and Berthoud (1978)). So if the administrative costs of the measures advocated here seem on the high side, this must be seen in the light of various existing employment measures where arguably marginal benefits just do not exceed marginal costs.

Abuse.

Wherever taxpayers' money is handed out, some goes astray, and this would apply to TJS to some extent. But the important question is whether any particularly large amounts would go astray.

In that the likelihood of abuse varies inversely with the number of parties who must collude in order to bring the abuse about, TJS ought to give rise to less abuse than the unemployment benefit system. The people for whom unemployed persons do odd jobs do not always need to know that those they employ are on the dole. That is, no collusion at all is required.

Indeed this particular abuse, working while in receipt of unemployment benefit, is in effect an unofficial form of TJS. The job is temporary, usually not very skilled and the cost to the employer is less than the normal wage for the job. In a sense, this part of the paper proposes that this practice be legalised and properly organised.

Whatever the abuse, its extent would be limited by the fact that TJS would be cut after some period. This could call the bluff of employer and/or employee.

A number of other abuse preventing rules would be necessary with TJS, just as they are necessary wherever taxpayers' money is handed out; and as is the case with the latter, there would be bound to be instances of rough justice. One obvious abuse, in the absence of any rule preventing it, would be for a firm to claim TJS in respect of an existing employee, and then as soon as alternative employment was found for the employee, claim that the employee's net revenue product had suddenly risen with a view to cancelling the subsidy and keeping the employee. The equally obvious rule to prevent this is one that disallows a firm from keeping an employee subsidised by TJS once the employee or government agencies have found the employee a normal job. Alternatively such an employer might be allowed to keep the employee on condition that he paid back the amount of subsidy received (possibly plus administration expenses).

The likely extent of abuse under the systems advocated here can perhaps best be put in perspective by imagining that such systems are in fact in operation and that someone proposes that people receive a payment in exchange for claiming that they cannot find a suitable job (commonly known as unemployment benefit).

Are temporary low revenue product jobs worthwhile?

In view of the thriving market in temporary office staff, particularly in London, the sort of temporary jobs advocated here ought to be worthwhile. The time that people spend "temporarily" unemployed is not all that temporary; it averages a matter of months for men at the time of writing, and assuming the temporary jobs advocated here lasted the same time then they also would average a matter of months. In contrast there are plenty of normal jobs where the employee quits or is sacked within weeks.

Those who think that conventional reflation is preferable to raising employment with temporary jobs should note that

labour turnover varies with employment levels; in other words the jobs created by conventional reflation are in effect short term, though clearly it is impossible to identify the actual jobs created when an economy expands under conventional policies.

Many of the employment schemes which have arisen in the 1970s — the Job Creation Programme, Work Experience and so on — offer employment on a strictly temporary basis. The maximum time allowed for a person on the Job Creation Programme was one year. Thus if temporary jobs are not worthwhile the charge is not unique to TJS.

Nor can it be said that there is a lack of demand for temporary jobs. It would seem from the Department of Employment Gazette, June 1977 pp 559-74 that about 10% of the unemployed had poor prospects of finding work because they were seeking short term work only. In other words the lack of temporary jobs may well be a significant cause of unemployment, a cause which TJS would counteract.

As for low revenue productivity, according to Makeham (1978) the net revenue product in sheltered employment varies between plus and minus about 1/20th the national average wage. If employment is worthwhile for these individuals then it should be worthwhile for TJS people. Furthermore while the low revenue productivity of disabled people is a direct reflection of their low physical productivity, this would not be the case with such TJS people as are subsidised into low revenue product **suitable** jobs — jobs which they can do perfectly well but which have a low revenue product because of lack of demand for the commodities in question.

It is facile to object to TJS or for that matter to TNM on the grounds that having people in jobs to which they are ideally suited is better than having them in jobs to which they are not ideally suited. Given that the total number of jobs plus vacancies is nearly the same as total numbers in the workforce, given that technology is constantly changing, given that the pattern of demand and supply are constantly changing, given that people have the right to quit their jobs usually without giving their employer any significant notice, it is a mathematical certainty that vacancies and available skills will not tie up exactly in every local labour market. This applies as much to communist as to capitalist economies. Those faced with a temporary mismatch either do a job for which they are not ideally suited or they sit around doing

nothing until a good match appears. The former is surely the less of two evils.

Objections from Europe.

Other EEC members objected to the Temporary Employment Subsidy amongst other things because of the mere fact of it being a subsidy. This charge would not stick to nearly the same extent in the case of TJS. A subsidy is a payment made normally by government which would not be made under free market conditions. TJS far from being a movement away from free market conditions is an attempt to imitate the free market. It is true that TES had some of the characteristics of the free market; where demand for a firm's product declines the price of the labour employed by the firm would also decline, and TES effected an imitation of this process to some extent. However it gave the employer the advantage of a free market without exposing him to its penalties. The employer who lowers his employees' wages is liable to lose his employees and TJS ensures that this happens.

TJS would not lower productivity in existing jobs.

TJS aims to create low revenue productivity jobs where no better alternative is available. It could be argued that employers and or employees would be tempted to get the subsidy for jobs which did not really require it with the result that this featherbedding would lead to low physical productivity in such jobs. But this is hardly an accusation that advocates of the status quo can make; unemployment benefit encourages nil productivity jobs, living on unemployment benefit, that is. So even if TJS did have the above undesirable effect to a small extent, it would still be an improvement on the existing system.

If employment subsidies make life easier for an employer and lead to low productivity, then presumably employment taxes have the opposite effect, namely raising productivity. Both propositions are dubious, but if it keeps the "subsidies cause low productivity" brigade happy, TJS could perfectly well be financed wholly or partly out of an employment tax. The net effect on productivity, according to this dubious economic theory, should then be approximately zero.

Furthermore the necessity for TJS and for the employment taxes and subsidies advocated later arises out of a political

decision: the decision that there is a level below which wages should not be allowed to fall. To the extent that people decide not to work hard because they know it may have little effect on their wages, that is not the fault of TJS, or of any other employment subsidy. It is an inevitable consequence of the above political or social decision.

Objections from trade unions.

Some unions might object to private employers being subsidised. On the other hand the trade union movement as a whole accepts, indeed advocates employment subsidies of one sort or another.

Some union branches would object to being "diluted" that is working alongside temporary non-apprenticed or otherwise not adequately qualified labour. On the other hand the majority of TJS people would be unskilled and it is the skilled jobs where unions erect the most serious barriers to entry.

Finally the fact of trade union obstruction is a weak reason for not trying to overcome the obstruction. Some trade unions prevent new technology and new trainees entering their places of work; that is no reason for abandoning new technology or ceasing to train people.

Employment protection.

It might be claimed that the Employment Protection Act (EPA) would make things difficult for TJS and TNM since both require people to leave their temporary jobs when more suitable ones appear. There are several answers to this.

First the EPA did not prevent Job Creation Programme people being sacked. Secondly most of the relevant provisions of EPA do not apply until after six months' employment. Most TJS jobs would not last this long. Thirdly TJS is hardly against the spirit of EPA. The latter is supposed to prevent people being put on the dole amongst other things. People quitting TJS jobs would move not to the dole queues but to more suitable jobs. Fourth the mere fact of a person doing a TJS job would be proof that he was not entirely suited to it. EPA is supposed inter alia to prevent unfair dismissal, that is the dismissal of people who do their jobs perfectly adequately.

If EPA does conflict with any of the proposals here, TJS included, then that is probably more a reason for abolishing the relevant sections of EPA than a reason for rejecting the proposals made here. To put it more politely, a big reduction

in unemployment would make some provisions in EPA rather obsolete.

TJS is not based on the same arguments as other employment subsidies.

Employment subsidies have acquired something of a bad name over recent years because of some of the facile arguments behind them. Burton (1979) demolishes some of these. There are two points worth adding to those made by Burton. The first concerns an argument for employment subsidies which Burton attacks, but which is even weaker than Burton supposes.

This argument is that certain employment subsidies involve lower exchequer costs, or less budget deficit, per job created than conventional reflation. Hence it is argued more jobs can be created for a given amount of inflationary pressure.

The fundamental mistake here is the assumption that it is expenditure per se or demand per se which is the cause of demand pull inflation. It is rather the attempt to use demand to take unemployment below the natural level which causes demand pull inflation. To create jobs where labour is not seeking alternative work is to reduce labour supply, and when the supply gets low enough, that is when the natural level of unemployment is reached, demand pull inflation becomes unacceptable. The amount of expenditure needed to reach this point is irrelevant.

The second point is that there is an argument for labour subsidies specifically not adduced here in support of TJS, which Burton did not consider. It is the factor substitution argument and is used for example by Kopits (1978). This argument is that if labour is subsidised, more labour and possibly less capital equipment or materials will get used. This is obviously true at the micro economic level but to deduce that it is also true at the macro economic level, that is that labour subsidies raise the employment level of the economy as a whole, is just a classic case of one of the most popular mistakes in economics: generalising from the micro to the macro. It is the **relative** attractions of suitable vis a vis unsuitable labour that induces employers to bid up the price of the former and/or the commodities they produce, rather than hire unsuitable labour near full employment. Subsidising all types of labour — those liable to structural unemployment, those not so liable, the suitable and the un-

suitable — has no significant effect on relative labour prices and thus no effect on the unemployment/inflation trade off.

IV THE RELATIONSHIP BETWEEN LAST RESORT EMPLOYMENT AND TJS

The best form of TNM work: TJS in the existing non marketed sector.

The first and perhaps most obvious form that a TNM scheme can take is something along the lines of the Job Creation Programme. However, there are strict limits to how productive work can be made if it takes the form of a "firm" or organisation separate from the normal economy.

First, assuming unemployment is at its natural level, a significant number of types of labour will be in short supply in local labour markets, i.e. barely represented at all in the dole queues. Thus any such scheme is likely to find itself with a highly unrepresentative cross section of the workforce.

A second cause of low productivity is high labour turnover. If those engaged in job creation schemes are as available for normal jobs as when unemployed, then turnover will be the same as for the unemployed — about 30% a month vis a vis about 3% a month for manufacturing industry (see D.E. Gazette Nov '78, p 1289). Alternatively if they are not as available for normal jobs as when unemployed, then the labour supply fallacy comes into play; that is the job creation employment will tend to be at the expense of, not in addition to, normal employment.

Another undesirable characteristic of this sort of employment is that any commodity we deem desirable to distribute free, rather than market, will already be distributed by some government agency. If a job creation type scheme supplies the same commodities the question arises as to why two different types of organisation are doing the same job. One must be better at it than the other, and it is pretty obvious the job creation type scheme is not the more efficient.

It is thus very hard to see the natural slot for this sort of scheme in any efficient employment system, or to put it another way, what function it performs that cannot be performed better by other or existing institutions.

However if TJS were implemented a form of TNM work which avoided these deficiencies would automatically arise, namely TJS work in the existing non marketed sector — police, armed services, health, education and so on. It is possible, given that the measures advocated below dealt with all structural unemployment and that TJS in the marketed sector dealt with the majority of frictional unemployment, that TJS in the non marketed sector could deal with virtually all remaining unemployment without having an inordinately large proportion of non marketed employees as temporary employees. Even if this proportion were higher in the non marketed sector the main problem in having too many TJS people in the marketed sector, namely the disparity problem, should not arise in the non marketed sector.

This problem arises in the private/marketed sector because employers have a motive to cut costs; thus they are tempted to sack existing non subsidised labour and replace it with subsidised labour where the subsidy is above a certain level and special measures are not taken against this temptation. In contrast the non marketed sector operates under the influence of various rules and regulations rather than under the influence of cost cutting or profit maximising motives. Thus if virtually all remaining unemployed people were absorbed into the existing non marketed sector, some of the problems that would arise were this attempted in the marketed sector would not arise. In that it involved people working in existing public sector organisations, TNM work of this sort would be similar to "Archive" work in Sweden or Public Employment Program work in the U.S. or Emergency Employment Act work in the U.S. For brief descriptions of these see Mukherjee (1972) Ch VII for the first and Levitan (1973) p 111-3 for the third. It cannot be said that this sort of work is not administratively feasible.

However TJS in the existing non marketed sector is not the only form TNM could take. Any system which tended towards the characteristics of existing non marketed work rather than towards those of the Job Creation Programme would do. Much the most important characteristic is having a sufficiently large proportion of skilled and permanent employees in such a system to avoid the above mentioned disadvantages of JCP.

The fact of taking skilled people from normal jobs to organise TNM work might mean a reduction in output from

the normal sector of the economy. However it is highly unlikely that the marginal physical product of unskilled labour in the economy as a whole need be anywhere near zero; thus the above reduction in output would not mean reduced output for the economy as a whole.

Yet another reason for supposing TNM work of the sort advocated here would be more efficient than the job creation schemes is that the latter were for the most part set up in a hurry and not designed to last for more than a limited period. This inevitably makes for inefficiency; the learning curve barely gets off the ground, so to speak. TNM in the form advocated here would in contrast be a permanent part of the employment system.

The presence of TNM people working alongside existing non marketed employees gives rise to the problem, a political rather than economic one, as to whether TNM people can be paid less than the latter if it is necessary to do this. It is hard to say exactly what the TNM wage should be in order to make the attraction of TNM work plus wage equal to that of unemployment plus benefit. Quite possibly the basic unskilled public sector wage would not result in the former being more attractive than the latter. If TNM people do have to be paid less than those who they work alongside, this should not cause too many difficulties. This arrangement worked in the case of the Work Experience Scheme. Furthermore there is every justification for paying TNM people less than others: a TNM person assisting cleaning some buildings or collecting refuse for example will not be as experienced at the particular job as those who do it full time and will not at least for the first weeks be as productive.

In view of the similarity between TNM and TJS it is pertinent to ask whether there need be any distinction between them. The answer is that there is some economic and administrative logic in maintaining a distinction. While TNM work can abolish unemployment to all intents and purposes, there is no guarantee that TJS could do the same even where TJS labour is issued at a very low price. TJS relies on the market mechanism and too little is known about this to be able to predict just how TJS would work.

Government employment agencies in trying to find work for a particular individual could attempt in the first instance to find him a normal job and failing that would try for forms of employment with successively lower revenue product, ending up with TNM work which has zero revenue product.

In this way such labour as could not find better work would automatically end up doing TNM work; there ought to be no necessity to decide in advance how many people should do TNM work.

Were these two forms of employment implemented in this way they could share a characteristic with the unemployment benefit they replaced: they could have the aggregate demand stabilising property of unemployment benefit.

This all implies considerable changes for the non marketed sector and would possibly involve it in performing functions it cannot currently perform because of lack of manpower. But the practical problems involved in a change are no excuse for shying away from the change if the change is sound in theory and the benefits in the long run outweigh the costs. It is in any case hard to see what would be so difficult about say putting an extra hundred thousand people onto sweeping the streets, with a view to keeping our streets as clean as the streets of Moscow.

TNM work would not **necessarily** result in a secular rise in the proportion of the workforce engaged in non marketed work, though the outcome in this respect depends on the numbers involved in TNM work. In other words subsequent to introducing TNM work, government expenditure and taxation could be lowered which might bring the total numbers in non marketed work back to the previous level. However if the number of TNM people were large compared to existing numbers in non marketed work then there would be obvious problems in keeping total numbers in non marketed work constant: temporary unskilled labour can hardly replace teachers, doctors and so on.

To the extent that the number of TNM people was not matched by a rise in the total numbers in non marketed work this would involve replacing existing unskilled non marketed people — cleaners, junior clerical staff, labourers, etc — with TNM people. Indeed both TNM and TJS would tend to result in temporary personnel displacing permanent unskilled personnel and pushing the latter up the skill ladder somewhat. Unskilled jobs can be done by anyone, so it is only sensible to reserve them for those for whom there is temporarily no suitable vacancy. Conversely it is in more permanent staff that it is worth making an investment in the form of skills.

As for other useful jobs for TNM people to do, if it appeared that the existing non marketed sector could not

find work for them, then the area of economic activity encompassed by this sector could quite well be expanded. It was assumed at the beginning of the paper that where this sort of thing happened, the resulting unemployment amongst those displaced would only raise aggregate unemployment levels temporarily. This assumption requires a little qualification, as mentioned earlier, and this is that since time is required to reallocate the above labour it is no good trying to deal with cyclical unemployment nor with purely local fluctuations in employment levels by varying the area of economic activity over which TNM employment operates. It is rather the intensity with which it operates within a fixed area that must vary, for example the frequency with which the streets are swept must vary.

At the outset TNM work was defined as work which produced commodities given away rather than sold. However there is no clear distinction between commodities that are literally distributed free, commodities that are heavily subsidised and commodities sold at the full market price. The important characteristic of TNM work is not that the commodity concerned is distributed at absolutely no charge. The important characteristics are firstly that a rise in the volume or quality of the commodity produced does not require an increase in demand and secondly that fluctuations in such volume or quality do not cause the marketed sector to react to the resulting relative surpluses and scarcities by altering its own production of the commodity in question to any great extent. Any commodity distributed by the bureaucracy **and** at something below the market price will fulfil these requirements. Council house maintenance is an example in the case of Great Britain.

Quantifying the effects of TJS and TNM.

It was shown above that TNM work could deal with virtually all unemployment whatever the type of unemployment involved. Beyond that it is hard to quantify the effects of TNM and TJS work. For example it is difficult to specify by how much frictional unemployment would be reduced as a result of a given number of persons being put onto TJS work. This difficulty is compounded by the lack of agreement as to how much employment is frictional and how much attributable to other causes. Perhaps frictional factors, as claimed for example by Corry (1967), are the prime obstacle to full employment. Perhaps, as claimed by Davies (1967) and Lazar

(1977) a considerable proportion of the excess unemployment in specific regions is frictional. Since voluntary quits rise as employment levels rise (see Ohlin, 1950 p 14) perhaps voluntary unemployment is the real problem.

However one of the merits of the measures advocated here is that many of the above sort of questions do not need answering in order to solve the problem. For example TNM work backed by the no work no pay condition would prevent people who had no real intention of working from claiming unemployment benefit and being counted as unemployed whatever the extent of this abuse. While there are numerous studies of the effects of the rise in unemployment benefits in Great Britain in the mid nineteen sixties, and not much agreement on the subject, there are precious few studies of the **absolute** effects of unemployment benefits, never mind agreement on the subject.

Since it is not known how much unemployment is frictional, how much structural or how much demand deficient, it is desirable to have a system which deals with all types of unemployment. TNM work fulfils this role. Furthermore, since the importance of frictional vis a vis structural unemployment is not known it is desirable to have a system which deals with both: and TJS does this at least to some extent.

V STRUCTURAL UNEMPLOYMENT

The perfect market's reaction to a surplus of a particular type of labour is simply to lower the price of the labour concerned and/or raise the price of the opposite type of labour since this may well be in short supply. While this mechanism works to some extent in the real world there are well known obstructions in its way: minimum wage rules, custom, incomes policies and the fact that wages in some sectors of the economy are to a large extent determined by unions which frequently take little account of the supply and demand for the type of labour in question.

Thus for structural unemployment as for frictional unemployment it is arguable that there is nothing wrong with imitating the market's mechanism with employment subsidies. All that is needed is to subsidise the type of labour

liable to structural unemployment and/or place a tax on the employment of the opposite type of labour. The reason this cure has not been put into practice to any great extent is that there is a host of spurious objections to doing so. As in the case of TJS the reader can skip the objections that do not interest him, that is turn straight to "Youth Unemployment and Those Near Retirement".

The distinction between real and exchequer costs for average subsidies.

Probably the most common objection to average subsidies is that they require large sums of money compared to marginal subsidies; (see for example Prest (1975) p 72 and MacKay (1975) p 221). The first point that makes this objection look weak is that there is a method of dealing with structural unemployment along the above lines which in a sense requires no addition to public expenditure at all: it makes little difference whether one on the one hand subsidises a type of labour in surplus and then deflates or on the other hand taxes the corresponding type of labour in short supply and reflate. Thus it would be feasible to combine the two methods, that is have a subsidy on one type paid for by a tax on the other. Selective Employment Tax was to some extent an example of this arrangement. Proposals for dealing with structural unemployment in this way are nothing new; see Clark (1966 & 64) and Hutton (1968).

The effect of this arrangement would be to turn some structural unemployment into demand deficient unemployment. Put another way, having implemented the above, the natural level of unemployment would be somewhat lower and some reflation would be permissible. The exchequer cost involved in reflation is not a real cost either. To put it metaphorically, the cost of printing more banknotes is negligible compared to their face value.

To put all this another way, if, as claimed by Baily (1977) and Bishop (1979), subsidies for the structurally unemployed result in a rise in real GNP, then it is nonsense to suppose the exchequer costs involved are any sort of a real cost to the nation.

Unfortunately this is not to say that a massive increase in all existing measures against structural unemployment would involve no net real costs to the nation. The capital oriented subsidies for regional unemployment in Great Britain may well involve real net costs. The reasons for this

mesh rather nicely with the whole question of distinguishing real from exchequer costs; thus a little space is now devoted to this question. Another reason for considering this question is that although regional economists have suggested that regional employment measures involve no real costs (McCrone (1969) p 138 and Moore (1973 & 7)) their reasons are inadequate. The former would seem to admit as much (p 273) and the latter while making the distinction between exchequer costs and other costs, with greater clarity than probably anyone else, still gets them confused; for example Moore puts exchequer costs, or tax costs as he calls them, into the same cost/benefit account as other totally unrelated forms of cost (Moore (1977) p 45.)

Average subsidies can be split into two portions: the average portion which goes to employment which will exist regardless of the subsidy, and the marginal portion which is the portion going to employment brought into existence by the subsidy. Taxes can be split likewise.

To take the average portion of the tax and subsidy first, this portion cannot be counted as any sort of real cost (administrative costs apart) since this portion has no effect on any real commodities produced or resources consumed. The only effect of this portion of the tax or subsidy is to alter the consumer's surplus — for example to increase it in the case of the subsidised commodity and reduce it in the case of the taxed one. Assuming these commodities are consumed by a wide cross section of the population concerned, the only effect is to take money out of the pockets of one set of consumers and put it back into the pockets of much the same set of consumers. In the case of subsidies for the structurally unemployed this assumption is fair enough. The structurally unemployed are not notable for finding employment in industries geared exclusively to a certain group of consumers.

As for the marginal portion, this is the portion which really does the work, that is it affects real resources consumed and commodities produced. In a properly designed subsidy or tax one additional resource consumed is labour which would otherwise be unemployed.

In addition, such labour requires concomitant capital and materials. As for the commodities produced by the additional labour, this should obviously be of greater value than the above capital and materials. Value may not be added to quite the full extent of the cost of labour; indeed

the mere fact that it has to be subsidised is evidence that value added is likely to fall short of the wage, but this is better than being unemployed.

In the case of Britain's regional employment subsidies, the subsidies going to some firms are astronomic while others get virtually nothing. (See Northcott (1977) Ch VII for verification of this.) This arises because the subsidies are related to capital invested. The result is that the employees of some capital intensive plants (and assuming such plants make no more than normal profits) may be consuming so much capital that value is actually subtracted rather than added. In these circumstances wealth is destroyed rather than created and there is not question but that this is a real cost to the nation.

The phrase "real cost" was used above to refer to the amount by which an additional employee subtracts rather than adds value. This disastrous state of affairs is not all that common; this, added to the fact that we are interested in maximising the output of the regionally unemployed, means that a somewhat more useful role can be found for the phrase. It will be used henceforth to refer it to the amount by which an employee's revenue product falls short of the wage paid. The aim is thus to get all structurally unemployed people into a job and at the minimum real cost, that is to get them as productive jobs as possible.

If this is the object, then there is little point in offering one person or group of people any more subsidy per head than any other person or group of people in a given region. A subsidy shifts the supply line (or for that matter the demand line) facing a firm or industry by the amount of the subsidy. The firm or industry expands its output to the point where the costs associated with the marginal employee exceed revenue by the amount of the subsidy.

If one offers more subsidy per employee to one firm than another, then the real cost of the marginal job will be more in the former than the latter. Real GNP could be raised by transferring subsidy from the more heavily subsidised to the less heavily subsidised firm.

There is a great temptation to concentrate regional subsidies on firms which without the subsidy would not operate in a region at all; these include incoming firms and lame ducks. The attraction lies in the relatively large number of jobs created or saved per pound of exchequer cost; but the very fact that real resources consumed and commodities

produced are affected means that a high proportion and possibly all of the subsidy for such firms is real cost. All the employees of such firms are marginal, so to speak. If the object of regional employment policy is to get rid of regional unemployment and to get the regionally unemployed into as productive jobs as possible, that is into as high value added jobs as possible, then there is little point in offering one regional firm any more per head than another. There is however one generally recognised exception to this.

If an average subsidy for regional labour were introduced, or rather re-introduced, it would have to be similar to Regional Employment Premium in that it would apply to firms which export commodities from the region concerned either abroad or to other regions of this country rather than to firms serving essentially local markets. The reasons for this are firstly the multiplier effects of exports from a region and secondly to provide firms serving local markets with the subsidy would result in far too large a rise in regional living standards. This rise would probably be to above the levels in high employment areas and largely at the expense of the latter.

As for quantifying the effect of the measure advocated here, estimates on this already exist, e.g. see Moore (1975) or Strategic Plan for the Northern Region, Vol 2, HMSO (1977), p 172.

Regional economists may object to the above and claim it is a gross oversimplification. The answer to this is that nearly all the allegedly sophisticated regional theories contradict each other. Holland (1976) after a lengthy survey of numerous supposedly erudite regional theories concludes in his last paragraph that the main obstruction to a coherent regional policy may be the regional economist himself. Richardson (1978) describes shift share analysis, a popular theory in regional economics, as a game suitable for little children who like playing with pocket calculators — or words to that effect. Given these criticisms, it would seem reasonable enough to discount most regional economics so far as dealing with regional unemployment in the short to medium term goes, and to base regional employment subsidies on the well known and generally accepted measures of costs and benefits: accountancy costs and what the customer will pay respectively. These are the basic factors behind simple supply and demand schedules; they are the factors governing the bulk of economic activity and

decisions in a market economy and until regional economists can agree on why and where they are inapplicable to regions of high unemployment, it is reasonable to ignore regional economics and treat regional unemployment as just another form of structural unemployment.

Average subsidies do not leak to profits nor do they promote inefficiency.

Having considered one spurious objection to average subsidies, some other objections will be briefly considered. One of these is that such subsidies leak to profits or promote inefficiency. The possibility that subsidies lead to low productivity was considered in the case of TJS. The points made there are applicable here but will not be reiterated.

The real flaw in the idea that subsidies lead to inefficiency is that it makes no difference whether one reflate an economy (or part of it) on the one hand via subsidies for all types of labour or all goods or on the other via the more normal method: putting more money in the customers' pockets. If lowering firms' costs relative to the customers' spending power promotes inefficiency or leakages to profits then presumably raising the latter compared to the former will have the same effect. Those who make the above charge have never explained this anomaly in their argument; precious few of them are even aware of it.

Economic theory certainly does not predict that a subsidy will lead to permanent supra normal profits. As for empirical evidence, McCallum (1973) p293 found that of a sample of 50 engineering firms in Scotland 47 (94%) would have been making losses but for Regional Employment Premium. REP was a labour subsidy of the sort advocated here.

There is no more reason to suppose labour subsidies leak to profits than do capital subsidies, thus the leakage argument is not unique to labour subsidies.

Even if there is a leakage to profits, most of such proportion of the subsidy as does leak to profits still cannot be counted as a real cost. The transfer is merely between a different set of consumers, that is, it is shareholders, entrepreneurs, those who have joined pension funds or who have taken out life assurances, and above all the taxman (i.e. the taxpayer) who gain.

Another point is that subsidies do lead to profits in that they lead to gains for owners of intra marginal land (in the

economist's sense of the word). This is perfectly true, but this happens wherever there is a rise in the level of economic activity. This is certainly a problem as the spectacular profits on land (in the conventional sense) over recent years have shown. But for some strange reason the "subsidies leak to profits" brigade never object to general reflation on the above grounds; why then object to reflatting a particular part of the economy on these grounds?

Leakage to wages.

If the above employment subsidies do leak to wages then the leakages will be to precisely the types of labour which so much social policy aims to assist. As a result, the expenditure involved would be partially balanced by a reduction in the relevant forms of social expenditure.

Youth unemployment and those near retirement.

Having considered some general points about structural unemployment measures with special reference to regional unemployment in Great Britain, we now turn to other specific types of structural unemployment.

Youths and those around retirement age are more likely to be unemployed than others. The word around is used deliberately here: age is not a factor that, ideally, has anything to do with whether someone is counted as unemployed. The important factors are whether the person concerned wants to work and is capable of work. The age of an employee is a piece of information which is readily available and about which there can be little dispute. Thus a tax on prime aged employment and/or subsidy for employment at the two ends of the spectrum should be easy enough to administer. Daniel (1977) p 88 suggests something along these lines for older workers. Feldstein (1973) suggests something similar for youths.

Unemployment amongst the unskilled.

It is impossible to measure someone's skills with complete accuracy, but at the other extreme ascertaining **some** of the factors which go to make up skills, like paper qualifications, should be no more administratively expensive than ascertaining some of the factors which go to make up a person's PAYE code number.

Apart from dealing with the excessive numbers of unskilled in the dole queues, a tax on skills or subsidy for the

unskilled would result in a better allocation of scarce resources since the skills are undoubtedly underpriced under the existing system. £20,000 at 1979 prices is a not unusual figure for the cost of the education involved in a university degree, yet neither the person with the degree nor his employer have to pay government for the use of this item of capital investment.

One measure of an individual's abilities, other than those indicated by formal qualifications, is his salary particularly in the upper reaches of the salary scales. Thus an employment tax related to the salary, particularly to salaries above the national average, would assist the process of taxing skills and subsidising where there is a lack of skills. If the incidence of this tax fell on the individuals concerned then a reduction in graduated income tax might be in order.

The proposition that altering the price of unskilled vis a vis skilled labour to the employer could do something about unskilled unemployment is, of course, not new; e.g. see Flemming (1976a) and Metcalf (1977) p 29 for suggestions along these lines.

Ability.

Ability is not the same thing as skill. There are incompetent lawyers and accountants and able labourers and clerks. The same applies here as applied in the case of skills, namely that it is impossible to measure ability accurately and cheaply. Nevertheless there must be some types of lack of ability, such as readily indentifiable physical ailments, which it is administratively feasible to take into account. Ill health or injury would seem from Daniel (1974) Ch VI to be the principal reason for about 17% of job cessations.

If it is administratively feasible for people to go to their doctors for sick notes in the case of Sickness Benefit, then it ought to be feasible to do likewise in the case of those with moderate physical disabilities or ailments with a view to paying their employer some sort of "ailment" subsidy.

As in the case of TJS, there is no limit to the possible sophistication with average subsidies and it is always hard to know where the best compromise between theoretical perfection and administrative expense lies. Taking the above four average subsidies, subsidising the employment of all those in particular areas or in particular age groups would pose no very difficult administrative problems. However skill and ability are much more difficult to identify. This,

combined with the fact that a whole host of personal characteristics other than skill and ability determine the likelihood of a person being unemployed means that a subsidy based on the mere fact of having been unemployed for more than some period (or having done TJS or TNM work for more than some period) might hit more birds per stone than the above two average subsidies. The mere fact of having been unemployed is a much more accurate measure of the likelihood of being unemployed in the future than the fact of being unskilled. About a third of those unemployed at one point in time will be unemployed three years later (see Daniel (1977) and Clark (1979)). Moreover it is quite conceivable that lack of skill is not a potent cause of unemployment at all. It could equally well be that the various personal characteristics which make it likely for a person to be unemployed also make it difficult for him to learn a skill or to compete with more able people if he does learn a skill.

TJS fulfils the above role to some extent. That is TJS, like any subsidy which concentrates on the unemployed or would be unemployed, acts as a marginal subsidy for the less able. To rely on TJS alone to fulfil this role would tend to result in the less able being condemned to a series of temporary jobs. That would be an improvement on a never ending bout of relatively short term jobs and spells of unemployment which is what many of the less able are condemned to under the existing system. However it would be even better to recognise that some peoples' lack of ability is with them for life and allow them an employment subsidy which lasted for life or at least for longer periods than TJS.

VI SOME ARGUMENTS FOR AND AGAINST TAKING UNEMPLOYMENT BELOW 1%

Inflation.

The way in which TNM work brings full employment without creating or exacerbating demand pull inflation was mentioned above: it creates no extra demand. As to measures against structural unemployment improve the trade off between demand pull inflation and unemployment, these are well known. They are set out for example by Bailly (1977) and Bishop (1979), and in many text books.

As to TJS, the way in which this gets at the frictional factors which contribute to demand pull inflation below full employment has already been intimated and is quite compatible with probably the majority of models of demand pull inflation. It is certainly compatible with the Phillips/Lipsey model, a model which shows how excess demand in a sufficient number of micro labour markets leads to money wages for the labour force as a whole rising and to inflation. TJS should dissuade employers from bidding up the price of normal labour or readily giving in to demands for wage increases until nearer full employment and thus improve the trade off between demand pull inflation and unemployment.

It is important to emphasise that the measures advocated here can do nothing about cost push inflation. Where organisations with monopoly powers are competing for a bigger share of the cake, the result is inflation; but this is a problem for politicians, not economists. That may sound depressing but if the inflation at the time of writing is cost push and the above measures deal with demand pull inflation then employment levels can be raised with at least no exacerbation of inflation.

Paying for subsidies.

There is a possible objection to the above advocated subsidies, TJS in particular, which has to do with how they are financed and the effect of this on inflation. It would not seem a matter of great importance as to how these subsidies are financed, but if they are paid for by employers, and it was suggested above that this might be an idea, the employers might seem to be back where they started; thus the effect of the subsidies might appear to be nil.

The flaw in this objection is the assumption that what applies to employers as a whole applies in identical manner to an individual employer — another example of the ever popular assumption that laws of macro economics are the same as those of micro economics. From the individual employer's point of view the effect of TJS is to make the cost of temporarily unsuitable labour per unit of output nearer that of normal labour, thus TJS dissuades employers from bidding up the price of suitable labour and/or the commodities it produces so far before full employment.

It is perfectly true however that if TJS works as set out above, the result is a secular rise in labour costs per unit of output and thus presumably prices, but this does not equal

inflation. Inflation consists of continuously rising prices thus any explanation of inflation must involve some sort of vicious circle.

If it is claimed that the above secular rise in prices would induce unions to demand and get wage increases, the answer is that price increases in themselves have no effect on demand for labour, thus any consequent rise in the price of labour is not demand pull. In any case the rise in prices caused by TJS would be minute compared to the sort of annual rates of inflation experienced in the 1970s.

Big increases in unemployment in local labour markets.

It has been claimed that various broad categories of labour can be found employment; it is therefore pertinent to ask whether there are any categories which definitely could not be found work. The main circumstance in which the unemployed could not be absorbed into TNM work would be where the unemployed in a local labour market expanded too quickly to make providing them with TNM work practical. Strikes, bankruptcies and natural disasters involving plants which employed a significant proportion of a local labour market would be an example of the above circumstance. However the change per month in unemployment in the towns and cities for which the Department of Employment Gazette gives figures rarely amount to more than one twentieth of total numbers unemployed in each town. Unemployment changes of more than 5% a month occur in about 15% of towns while changes of more than 8% a month are extremely rare. If the fluctuation in the number of TNM people in local labour markets were of this order then it would seem that fluctuations too large to accommodate would be a rarity.

Imports.

Since imports are sometimes held to be a constraint on raising employment levels, a paper which claims to show how unemployment can be dramatically reduced should give imports a mention. The way in which TNM work brings full employment without import problems was mentioned above: it requires little or no extra demand.

As to methods of raising employment that involve raising demand, the claim that the balance of payments is a constraint on raising employment levels just because the balance of payments deteriorates when demand is raised is

thoroughly over simple and false. (This is the argument used by the Cambridge Economic Policy Group in Ch 1 of their 1978 Review). So long as the marginal propensity to import is below 100% then reflation plus devaluation will always raise employment levels, notwithstanding the effects of reflation on the external position.

It is perfectly true that when the marginal propensity to import is sufficiently far above the average propensity, devaluation is no longer an appropriate strategy. Import controls, assuming no capacity constraints would be better; but to assume no capacity constraints is an economic howler. It is precisely such constraints which cause the marginal propensity to import to rise above the average propensity. The solution to the problem (both of rising imports and demand pull inflation) is to get at the constraints, the labour market bottlenecks, and that is just what the measures advocated here do.

While on imports it is perhaps worth demolishing a popular fallacy which has to do with imports and investment. It is often claimed that the bottlenecks arising near full employment are to a large extent plant bottlenecks and thus that more investment would alleviate such bottlenecks thus facilitating a rise in employment. The fallacy here is that a large majority of plants in Britain or any industrial country work at less than 90% capacity; a considerable proportion work at less than 80% capacity. The proportion of plants which reach capacity when employment is raised from say 96% to 98% is small. (See for example the 'National Institute of Economic and Social Research Feb 1977 Review for empirical evidence on this.)

The factor of production which runs out as full employment (of labour) approaches is **labour**, amazing as that may seem. Hughes (1979) devotes effort and taxpayers money to trying to find empirical evidence for this, but since it is virtually true by definition, there may be better uses of time and money. It is precisely these labour shortages that have been the concern of the foregoing pages.

Since CEPG deny the importance of labour shortages (1978 Review p 11) and advocate massive amounts of additional investment (1978 Review Ch 3) it would seem CEPG have fallen for the plant bottleneck fallacy.

The unemployment levels of below 1% in West Germany and Switzerland.

The claim that unemployment can be taken below 1% on a permanent basis may seem extreme, but it cannot be ruled out as impossible in a developed market economy for the simple reason that West Germany kept unemployment below one percent for six consecutive years in the 1960s and that is after taking differences in national definitions of unemployment into account. As for Swiss unemployment, this has rarely exceeded one percent of the workforce even during the 1970s. Moreover this was achieved without the forms of artificial assistance advocated here.

It has been argued that special factors such as manipulating the flow of guest workers are responsible here, but this argument is not strong. It would certainly be possible to deal with changes in aggregate employment levels, such as cyclical unemployment, by manipulating the flow of guest workers; but this does not prove that this method of dealing with cyclical unemployment is any easier than other methods. If a government can acquire the necessary information at the necessary time to deal with cyclical unemployment, a point which is in dispute, then it should be able to deal with such cyclical unemployment as well by manipulating demand as by manipulating the flow of immigrants.

As for the idea that structural and more particularly frictional unemployment can be dealt with in this way, this is too far fetched. That is the idea that a shortage of a particular skill in a particular German town can be dealt with by whistling up someone with the right skill from Turkey or Italy in a matter of weeks is not tenable. Conversely the idea that such a worker can be deported with equal alacrity when the type of labour concerned is in surplus is equally implausible.

VII CONCLUSION

The basic claim of this paper is that it is feasible and desirable to hold unemployment below one percent of the workforce; the conclusion is, perhaps inevitably, that these claims have been substantiated.

There might in practice be various political obstructions to taking unemployment below one percent of the

workforce. The changes advocated above are large and fundamental and there are always political obstructions in the way of changes of this sort however desirable the changes may be. Also trade unions, particularly British unions, might not entirely go along with the flexibility required by the above advocated measures.

There are undoubtedly errors and omissions in the foregoing pages, but the dirty bathwater is no reason for throwing away whatever babies there are in the bathwater. The measures advocated here can at the very least hardly fail to be an improvement on some existing employment measures, in particular on the extraordinary hotch-potch of measures that have sprouted in Great Britain in the last five to ten years.

Finally, the fact of having claimed that certain measures can virtually abolish unemployment is not taken to imply that various well known factors which currently obstruct full employment and productivity increases are of any less relevance. For example the immobility of labour caused by Britain's archaic policies on rented housing and accommodation is a defect to be put right regardless of whether or not the above advocated measures are implemented.

REFERENCES

- Addison, J.T. & Siebert, W.S. (1979), **The Market for Labour: an Analytical Treatment**. Santa Monica: Goodyear.
- Alchain, A.A. (1974) **University Economics**. London: Prentice Hall.
- Baily, M.N. & Tobin J., (1977) Macro Economic Effects of Selective Employment and Wage Subsidies. **Brookings Papers on Economic Activity** p511.
- Berthoud, R. (1978) **Training Adults for Skilled Jobs: Skillcentre Training and Local Labour Markets**. London: Policy Studies Institute.
- Brittan, S. (1975) **Second Thoughts on Full Employment**. London: Centre for Policy Studies.
- Brittan, S. (1979) **Participation Without Politics**. London: Institute of Economic Affairs.
- Bishop, J. & Haneman, (1979) Selective Employment Subsidies: Can Okun's Law be Repealed? **American Economic Review**. May.
- Burton, J. (1979) **The Job Support Machine**. London: Centre for Policy Studies.
- Clark, C. & Peters, G.H. (1964) Steering Employment by Taxes and Subsidies. **Town and Country Planning** 32 p 145-9.
- Clark, C. (1966) Industrial Location and Economic Potential. **Lloyds Bank Review**. October.
- Clark, K.B. & Summers L.H. (1979) Labour Market Dynamics and Unemployment: a Reconsideration. **Brookings Papers on Economic Activity**. October.
- Classen, K.P. (1977) The Effect of Unemployment Insurance on the Duration of Unemployment and Subsequent Earnings. **Industrial and Labour Relations Review**. July.

- Corry, B. & Laidler, D. (1967) *The Phillips Relation: a Theoretical Explanation* **Economica**. May.
- Daniel, W.W. (1972) *Whatever Happened to the Workers of Woolwich?* London: Political and Economic Planning.
- Daniel, W.W. (1974) *A National Survey of the Unemployed* London: Political and Economic Planning
- Daniel, W.W. (1977) *Where are they Now?* London: Political and Economic Planning.
- Davies, G. (1967) Regional Unemployment, Labour Availability and Redeployment. **Oxford Economic Papers** 1.
- Ehrenberg, R.G. & Oaxaca, R.L. (1976) Unemployment Insurance, Duration of Unemployment and Subsequent Wage Gain. **American Economic Review**. 66 745-766.
- Feldstein, M.S. (1973) *Lowering the Permanent Rate of Unemployment, A Study for the Joint Economic Committee*. 93:1 U.S. Government Printing Office.
- Feldstein, M.S. (1976) Temporary Layoffs in the Theory of Unemployment. **Journal of Political Economy**. October.
- Feldstein, M.S. (1978) The Effect of Unemployment Insurance on Temporary Layoff Unemployment. **American Economic Review**. Vol 68 No. 5.
- Flemming, J.S. (1976) *Inflation*. Oxford University Press.
- Flemming, J.S. (1976a) Adjusting the Real Elements in a Changing Economy. **Catch '76**. Occasional Paper No. 47 London: Institute of Economic Affairs.
- Garraty, J.A. (1978) *Unemployment in History*. New York: Harper & Row.
- Gordon, R.J. (1973) The Welfare Cost of Higher Unemployment. **Brookings Papers on Economic Activity** 1
- Holland, S. (1976) *Capital Versus the Regions*. London: Macmillan.

- Hughes, J.J. & Thirlwall, A.P. (1979) Imports and Labour Market Bottlenecks. **Applied Economics** Vol. 11 No. 1. March.
- Hutton, J.P. & Hartley, K. (1968) A Regional Payroll Tax. **Oxford Economic Papers**. 20 p 417-26.
- Keynes, J.M. (1936) *The General Theory of Employment, Interest and Money*. (1973 edition) London: Macmillan.
- Kopits, G.F. (1978) Wage Subsidies and Employment: An Analysis of the French Experience. **I.M.F. Staff Papers**. Sept.
- Lazar, F. (1977) Regional Unemployment Rate Disparities in Canada: Some Possible Explanations. **Canadian Journal of Economics**. Feb.
- Levitan, S.A. (1973) Manpower Programs for a Healthier Economy in *Manpower Programs in the Policy Mix*. (L. Ulman ed.) John Hopkins University Press.
- MacKay, R.R. (1975) The Economic Rationale of Subsidies to Industry in *The Economics of Industrial Subsidies* (A. Whiting ed.) London: H.M.S.O.
- Makeham, (1978) Costs and Benefits of Sheltered Employment. **Department of Employment Gazette**. September p 1025 London: H.M.S.O.
- Manpower Services Commission (1978) *Annual Report*.
- Mattila, J.P. (1974) Job Quitting and Frictional Unemployment. **American Economic Review**. March p 235-39.
- McCallum, J.D. (1973) U.K. Regional Policy 1964-7 in *Cities Regions and Public Policy*. (G.C. Cameron & L. Wingo eds) p 271-98. Edinburgh: Oliver & Boyd.
- McCrone, G. (1969) *Regional Policy in Britain*. London: Allen & Unwin.
- Meacher, M. (1974) *Scrounging on the Welfare*. London: Arrow.

Metcalf, D. & Nickell, S. (1977) *The Plain Man's Guide to the Out of Work: the Nature and Composition of Male Unemployment in Britain*. London School of Economics Discussion Paper, No. 6.

Moore, B. & Rhodes, J. (1973) *The Economic and Exchequer Implications of Regional Policy in Minutes of Evidence Taken Before the Expenditure Committee (Trade and Industry Sub-Committee)* p 447-57. London H.M.S.O.

Moore, B. & Rhodes, J. (1975) *A Quantitative Analysis of the Effects of Regional Employment Premium and Other Regional Policy Instruments in Economics of Industrial Subsidies*. (A. Whiting ed.) p 191-220. London: H.M.S.O.

Moore, B. & Rhodes, J. (1977) *Evaluating the Economic Effects of Regional Policy in Report on Methods of Measuring the Effects of Regional Policies*. Paris: O.E.C.D.

Mukherjee, S. (1972) *Making Labour Markets Work*. London: Political and Economic Planning.

Mukherjee, S. (1976) *Governments and Labour Markets*. London: Policy Studies Institute.

Nickell, S. (1978) *Unemployment and the Structure of Labour Costs*. London School of Economics mimeo.

Northcott, J. (1977) *Industry in the Development Areas*. London: Policy Studies Institute.

Ohlin, B. (1950) *The Problem of Employment Stabilisation*. Oxford University Press.

Prest, A.R. (1975) *The Economic Rationale of Subsidies to Industry in The Economics of Industrial Subsidies* (A. Whiting, ed.) London H.M.S.O.

Richardson, H.W. (1978) *Regional and Urban Economics*. London: Macmillan.

Tobin, J. (1972) *Inflation and Unemployment*. *The American Economic Review*. March.

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ABOLISHING UNEMPLOYMENT

R. S. Musgrave.

Summary.

Government as employer in the last resort.

This idea has not been properly analysed nor effectively implemented. Witness the unsatisfactory job creation schemes.

Last resort employment must have certain characteristics, one of which is that most of those involved must still seek normal jobs. The majority of job changers do so with no intervening unemployment, so job searching while working is no problem.

The alleged merit of unemployment, namely that it facilitates a job search, is nonsense. The unemployed should have to do any old job, possibly a last resort job, pending a suitable vacancy. This in itself could virtually abolish unemployment and the resulting social problems.

Employment subsidies that imitate the market.

As for other unemployment reducing measures, since there is negligible unemployment in a perfect market, employment subsidies (or taxes) which imitate the perfect market should have an effect.

A market imitating subsidy for frictional unemployment is one which subsidises a person in or into a low net revenue product job until a job which requires no subsidy appears. As with last resort employment, this involves job searching while working.

A market imitating subsidy for structural unemployment is simply a subsidy for the types of labour concerned, e.g. for all youths. The popular objections to this are false, for example the large public expenditure costs do not equal real costs.

Conclusion: The main forms of structural unemployment can be abolished. Quantifying the effects of a frictional unemployment subsidy is difficult. Virtually all remaining unemployment can be dealt with by the last resort method.