

Welfare-to-Work: Which Policies Work and Why?

Keynes Lecture in Economics: 2001

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Abstract: Alongside the growth in overall employment and the steady rise in average real incomes over the 1990s, the UK experienced a concentration of worklessness and low pay among certain groups in society. This was particularly acute for low-income families with children, but was also reflected in the frequency of spells out of work by the young and by the falling attachment to the labour market of older men. In response, the focus of welfare policy shifted towards “making work pay”. The Working Families Tax Credit and the New Deal were central among the policy options that were implemented. This lecture considers the validity of the arguments underlying this shift in welfare policy and, drawing on evidence from the UK and abroad, asks: which policies work and why? It examines two broad classes of policy options that are motivated by the make work pay objective: active labour market programmes that involve wage subsidies together with improved job matching; and earned income tax credits that supplement wages for working low-income families. These programmes have many features in common. They are also similar to many policy reforms in Europe and North America. Using the evaluation of the UK reforms this lecture brings empirical evidence into the debate on the effectiveness of these programmes and assesses which aspects of the design of welfare to work programmes work well and which aspects could be improved.

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1 Introduction

This lecture considers the arguments behind the expansion in welfare to work programmes that occurred over the last decade and reviews the effectiveness of alternative approaches to enhancing labour market attachment and earnings among the low skilled. It concerns the ‘iron triangle’ of welfare reform – that is the three, often conflicting, goals: raising the living standards of those on low incomes; encouraging work and economic self-sufficiency; and keeping government costs low. Many different policies can be cast in terms of these broad aims, albeit with different weights attached to each of the goals. In the UK there are active labour market programmes like the New Deal and there are also financial incentive programmes like the Working Families Tax Credit. Although the latter are often classed as welfare policies and the former as active labour market policies, both are motivated by similar concerns over low incomes and low labour market attachment and share many similar design features. The key organizing idea in this lecture is to provide an integrated view of the way the wide array of ‘welfare to work’ and ‘make work pay’ policies affect the earnings, incomes and incentives of working age individuals and their families. The aim is to assess their effectiveness in addressing low income, low earnings and low labour market attachment in the working age population?

Other countries, most notably the US and Canada, have implemented a similar array of policies and I will draw on the extensive evaluations of these in the discussion that follows. However, the UK over the last decade is, in many ways, an ideal test bed in which to examine such policy reforms since both the WFTC and the New Deal¹ were introduced and enhanced over this period. These policies are targeted at two groups: (1) low income/low educated families with young children, (2) low skilled workers with long or repeat unemployment spells. In both cases the diagnosis was similar: relatively low hourly wages with little labour market experience implying little incentive for

¹ Here we refer explicitly for the New Deal for Young People, directed towards 18-24 year olds with at least six months unemployment. However, there are now similar policies in the UK directed toward those on disability benefit (New Deal for Disabled People), for those aged over twenty five – 25 Plus, for Lone Parents and for older workers - 50 plus. Although different, each have similar characteristics and are subject to similar design issues.

work.² However, the detail is different. In the first case it is the generosity of the out of work benefit system for families relative to potential earnings and child-care costs that are thought to provide the disincentive. For the second group it is employer matching and the low initial wages that are perceived as the central issue. Consequently, although the prescription for both is to enhance net earnings in work, the first involves a long-term income related supplement to earnings, possibly with a childcare component. While the second centers on job search assistance and short term employer based employment subsidies. But to what extent are these differences in the design of welfare to work programmes appropriate and could they be improved?

The ‘in-work’ structure of these two approaches is similar relying on earnings credits or employment/wage subsidies. But again they typically work rather differently. The wage subsidy is individually based, not means-tested and has limited duration. Eligibility is also typically dependent on a certain duration unemployment insurance (or welfare) receipt. The tax credit, on the other hand, is typically subject to a family income based means-test and does not have a time limit. For the later, the WFTC in the UK, the EITC in the US³ and the In-Work Tax Credit in Belgium⁴ are prime examples. For the former, the New Deal in the UK and Work First⁵ in the US are leading examples. There are, of course, many welfare to work policies that fall somewhere in between. For example, the Self-Sufficiency Project (SSP)⁶ in Canada, although an in-work tax credit like the WFTC or EITC, has a three year time-limit and eligibility depends not only on overall family income and family composition but also on a minimum welfare duration and a minimum hours requirement. The New Hope⁷ tax credit programme in the US also has a three-year time limit and a minimum hours condition. Both programmes provide job search assistance at least for some of

²The ‘scaring’ effect of spells of unemployment and welfare is also raised as a further deterrent to work (see Gregg and Wadsworth (1999)).

³ See Eissa and Liebman (1996).

⁴ See Gradus and Jusling (2001), who also review similar schemes and proposals in Germany, the Netherlands, Ireland and Finland.

⁵ See Holcomb, Pavetti, Ratcliffe and Riedinger (1998) for a review of these schemes. In particular the Work Mandate designs which are very close to the design of the New Deal.

⁶ See Card and Robins, (1998).

⁷ See Bos, et. al. (1999).

programme participants.⁸ The Minnesota Family Investment Program (MFIP)⁹, is similar to the SSP, however the job search assistance is mandatory as in the New Deal for Young People in the UK. An additional feature of these Canadian and US programmes is that many were the subject of randomised experimental evaluation, the results of which provide a vital source of information in the discussion below. Finally, the earnings supplement and job search provisions within the many state run additions to the Temporary Aid for Needy Families (TANF) programme in the US have similar characteristics to the New Deal programme (see Blank and Card, 2000).

So what is the best design for such policies? How should they differ with demographic characteristics? Does time limiting the in-work financial incentives help with human capital and wage progression? If so, how long should the time limit be set? Should there be a duration of welfare or a duration of UI reciprocity requirement for eligibility. If so, for how long? Should there be mandatory job search assistance and/or accredited training? If so, how should sanctions apply? Should family income means testing be used to target incentives to those on low incomes? If so, at what level should the credit withdrawal or phase-out rate be set? Should the wage subsidy or tax credit be tied to a specific employer? Should there be a minimum hours requirement? Should childcare costs be incorporated in the financial incentive?

The recent proposal by the UK government¹⁰ to separate the child component of WFTC from the adult component so as to form an integrated child credit (ICC) and an employment tax credit (ETC), provides a further motivation for investigating the overall design features of in-work benefits and other make work pay policies. This is especially the case once it is recognized that the new ETC will be open to all adults irrespective of whether they have children.

There is also a growing theoretical literature examining the role of work requirements in the design of optimal income transfer programmes. In a dynamic model the important issue relates to incentives for poverty reducing investments and

⁸ Quets et al (1999) provide a careful evaluation of the effect of adding job search services to the SSP. This evidence is used later in our discussion of job search assistance in financial incentive programmes.

⁹See Miller et. al., 1997. Continuation of the MFIP in work is conditional on accredited training for workers who do not have children under one year old and who are in jobs of less than 30 hours per week.

¹⁰ Inland Revenue (2001).

investments in human capital. Besley and Coate (1992) derive conditions under which workfare can be optimal. Cossa, Heckman and Lalonde (1999) develop a dynamic model with time limits and human capital investment. In a more static setting the recent contribution by Saez (2000) shows that, where labour supply responses are concentrated along the extensive margin (participation in work), an Earned Income Tax Credit system with transfers that increase with earnings at low levels can be optimal and justifies the move away from negative income tax schemes.

Examining the impact of such reforms on employment and on poverty requires a careful analysis. In any programme of this type there will be those that are induced into employment by the programme and those who benefit financially from it but are already in employment or who would have moved in to employment anyway.¹¹ The distinction between these groups is key and we will draw on experimental and non-experimental evidence to gauge their likely size. Similarly any reliable evaluation requires a control group for comparison. This is in turn made more difficult when there are spill over effects (through displacement or more general equilibrium effects) on to groups that are not directly eligible. Again where possible we will pay attention to the importance of these effects, most notably in the analysis of the mandatory job search and wage subsidy elements of the New Deal policy.

To set the scene for our analysis we turn, in the next section, to the labour market trends over the last two decades that motivated the UK reforms. The cyclical volatility of employment for certain target groups and the secular changes in employment patterns for others is highlighted. Section 3 then considers a number of central design features, focussing on time limits, means testing and implicit tax rates, minimum hours requirements, welfare receipt eligibility, and wage progression. This is done in the context of the design of the New Deal and of the WFTC. In section 4 we move on to evaluate specific aspects of the New Deal and WFTC reforms. We conclude, in section 5, with an overview of these schemes and their effectiveness, and an assessment of the appropriate design of welfare to work and make work pay programmes.

¹¹ These are sometimes referred to as the ‘windfall beneficiaries’ of the programme.

2 The Changing Structure and Economic Environment of Low Wage Workers in the UK

This section considers the labour market trends that stimulated the New Deal and WFTC reforms in the UK. Turning first to the labour market for the young unskilled that motivated the New Deal (for Young People) NDYP programme, we highlight the cyclical volatility of unemployment for this group and the frequency of short run transitions. We then move on to the corresponding employment trends for low-income families with children, which motivated the WFTC reform. Here non-employment rather than claimant unemployment or active job search is a more relevant measure of activity and we highlight the importance of both cyclical and secular trends.

2.1 The Labour Market Background for the New Deal Reform

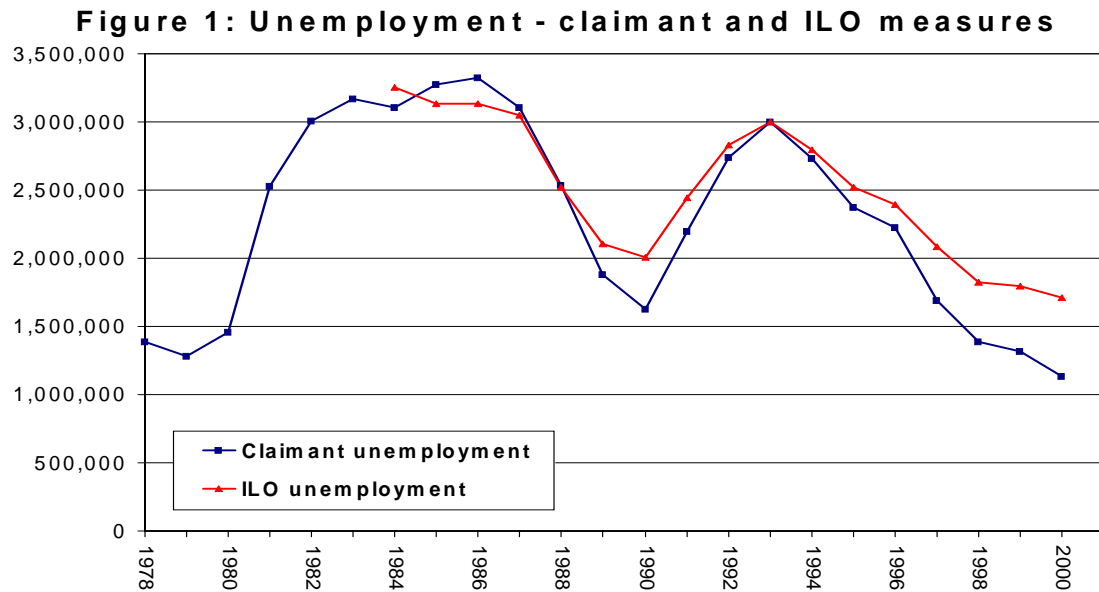
The New Deal for Young People was directed at 18-24 year olds with more than 6 months unemployment. Across all countries youth unemployment is higher than unemployment for prime age individuals. In the late 1990s there was a relatively high proportion of young Britons in jobs and a low proportion of young people in full time education. There was a large proportion of British youth that are neither in school nor in the labour force. Moreover, in the 1990s the UK had the highest numbers of 18-year-old men in this category and was second (after Italy) for 22-year-old men¹². It also had the UK had the largest increase in the proportion of this group of youth.

Another feature of the youth labour market is its sensitivity to the business cycle.¹³ The level of unemployment of the younger group, displayed in Figure 2, broadly mirrors the overall picture in Figure 1, but the cycle is, if anything, more pronounced. This is also true for employment rates as can be seen from Figure 3 (see also Bell, Blundell and Van Reenen, 1999). The extent of cyclical, and the differences across the cycle in unemployment and employment rates by age, is particularly important for the evaluation of the impact of welfare to work programmes

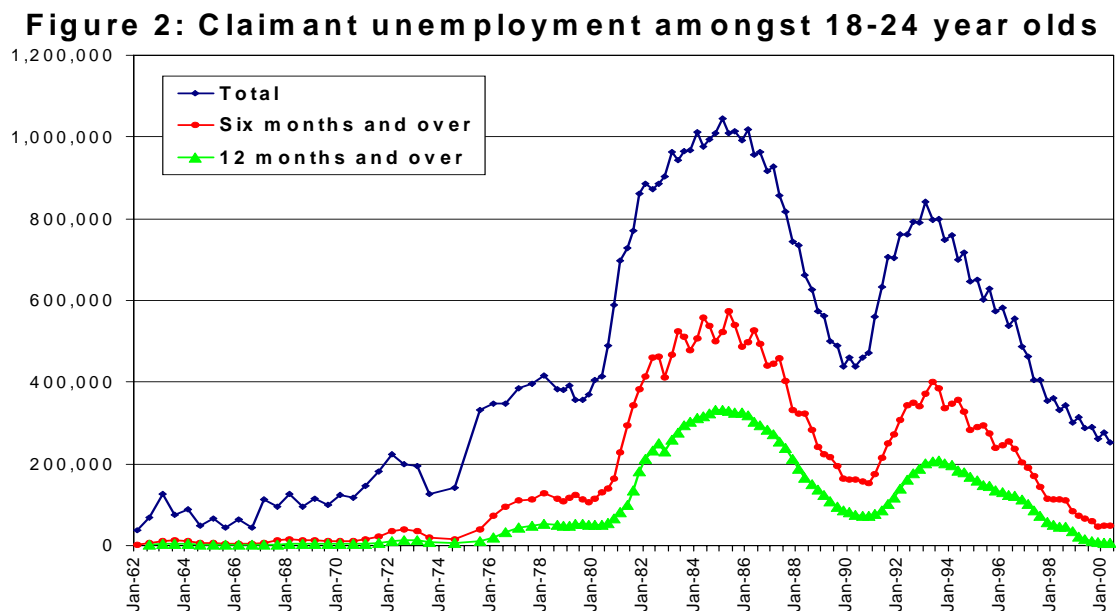
¹² The proportion of NEETs (not in employment, education or training), sometimes referred to as the 'idle', was 8.4% in the UK in 1997 compared to 2.3% in 1984. In 1997 the corresponding figure was 5.6% in the US, 4.2% in Germany, 3.3% in France and 9.1% in Italy (see Blanchflower and Freeman, 2000)).

¹³See Nickell (1999) for an extensive review of the British data. Hoynes (2000) also notes a strong degree of sensitivity to the cycle among young welfare recipients and low skilled workers in the US.

like the New Deal. For example, if a group of similar but older men were to be used as a comparison group for

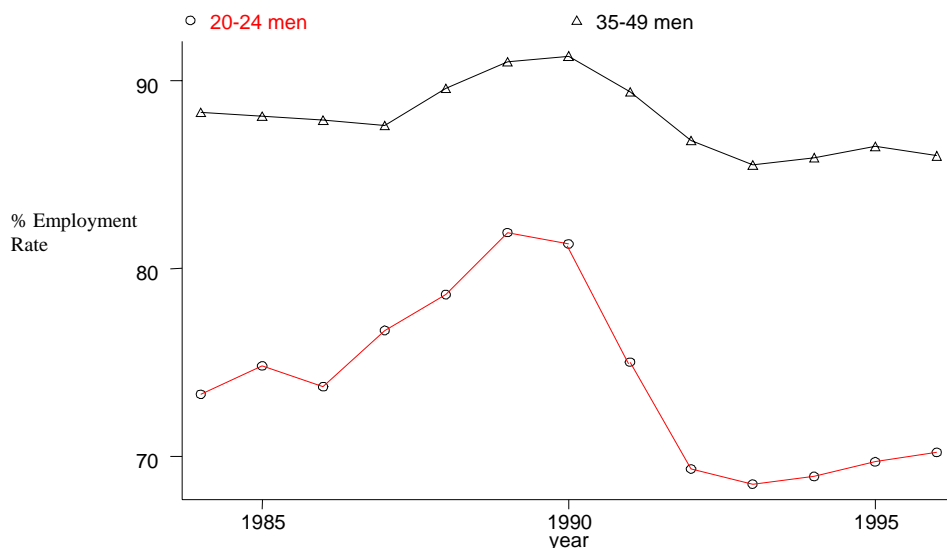


Source: Labour Market Trends and Employment Gazette, various issues



Source: Labour Market Trends and Employment Gazette, various issues

Figure 3: The Impact of the Cycle on Employment Rates by Age



Source: LFS

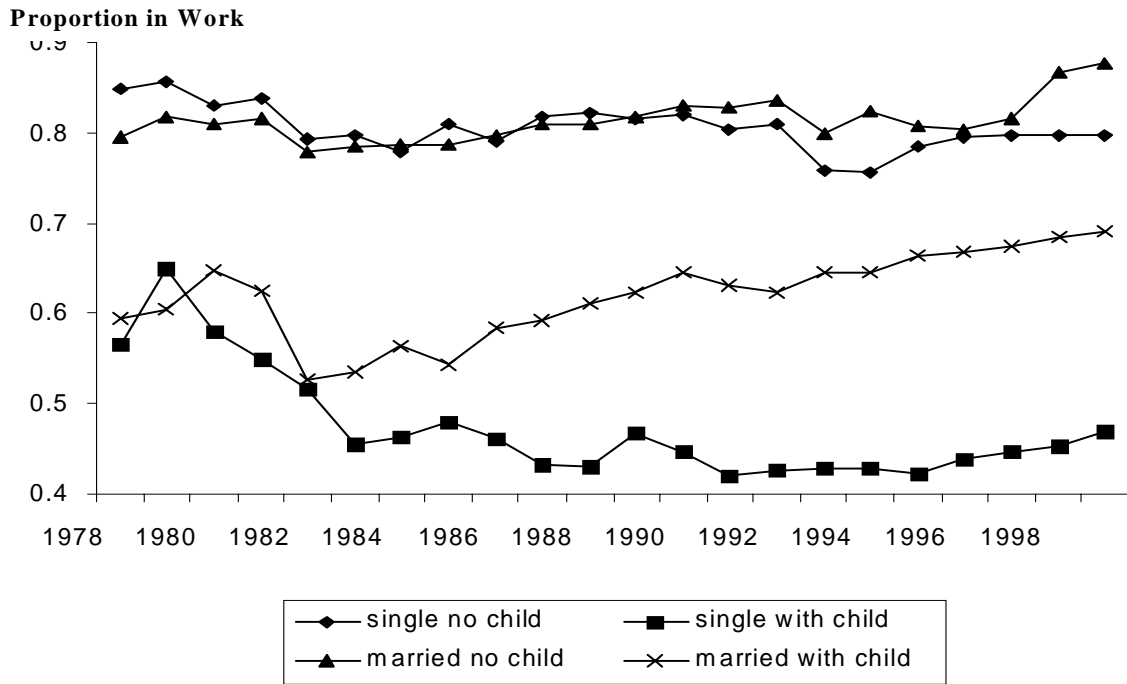
those entering the New Deal then adjustment for cyclical differences across the groups would be crucial. Otherwise the impact of cyclical differentials would be incorrectly attributed to the New Deal reform. This is highlighted in our examination of the impact of the New Deal on employment in section 4 below.

2.2 The Labour Market Background for the WFTC Reform

The high levels of non-employment, experienced by certain specific demographic groups, were also the motivation for earned income tax credit reforms – or in-work benefit reforms. For example, one central stimulus for the introduction and subsequent expansion of the Working Families Tax Credit in the UK was the persistence in the low levels of attachment to the labour market by single mothers - at a time when for other groups of similar women attachment was generally been increasing. Figure 4 shows the secular change in female employment across four household types in the UK. The growth in the attachment by women in couples with children is as

noticeable as is the fall for single women with children.¹⁴ This is even more pronounced for those who left school at age 16 or before (age 16 being the minimum school leaving age for those born after 1960). Not only has attachment of lone mothers fallen but, at the same time, the size of this group has risen by more than twofold over the last twenty

Figure 4: Employment Trends for Women in the UK: Proportion in Work



Notes: FES Data, working age.

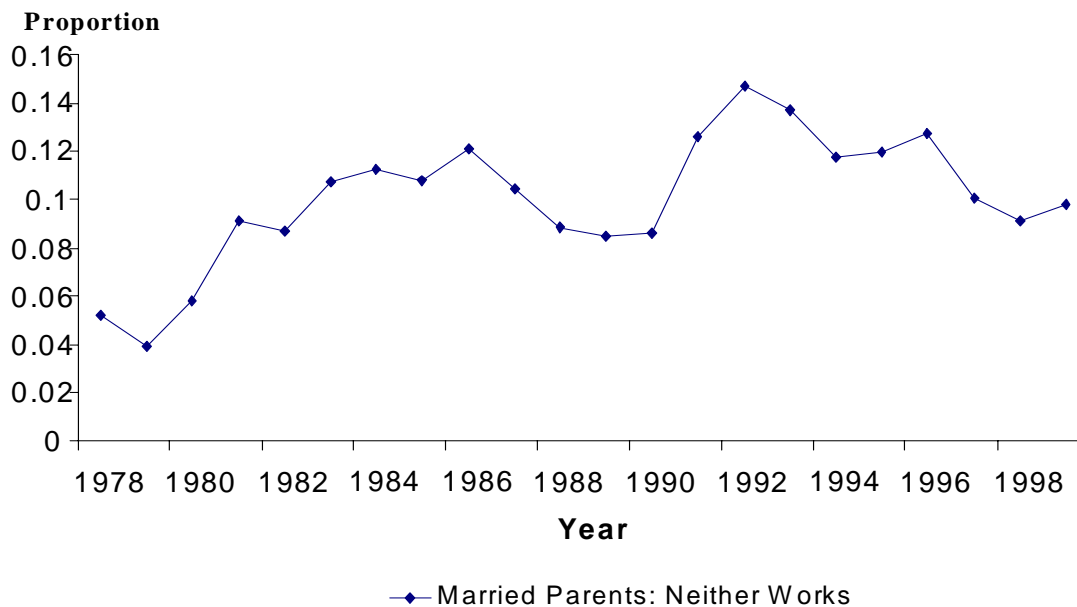
years. Blundell and Hoynes (2001) document this change and examine the similarities between demographic trends for single mothers in the UK and US.

Another distinguishing feature of the UK has been the growth in workless couples with children. This is documented in Figure 5 and provided a strong argument in the debate over the WFTC reform (see Gregg, Hansen and Wadsworth (1999)). Indeed, for women in couples with unemployed partners employment rates have stayed no higher than 30% over the past two decades – even lower than employment rates for the single parent group (see Blundell (2001)). The (non-) employment rates for these

¹⁴ These figures are drawn from the repeated cross-sections of the British Family Expenditure Survey. As such they refer to different people over time and will therefore exhibit systematic composition changes according to birth cohort, education and other factors.

two groups show clearly why they have been singled out as two target groups for tax and benefit reform.

Figure 5: Proportion of Workless Couples in the UK



Notes: FES Data. Working age head.

2.3 Inequality and the Real Wages of the Young Low Skilled

It is not just the low employment rates among the low skilled that have attracted attention. So have the low real wages and the relatively slow growth in these wages over the past two decades.¹⁵ Indeed, there have been well documented and remarkable shifts in returns to education and skill in many countries (see Gosling, Machin and Meghir (2000) for the UK and Katz and Autor (1999) for a survey of international evidence). For example, in the U.S. real earnings for the lowest education groups fell yearly from the late 1970s to the mid 1990s. This characteristic was quite exaggerated in the U.S., but the overall pattern was common to most developed countries. Indeed, there is evidence that lower educated younger workers have seen a stronger decline in their wages relative to those with more education over the last two decades¹⁶, reducing further the incentives to take paid employment.

¹⁵ See Dickens (2000) and the references therein.

¹⁶ See Blundell and Preston (1998).

3 The New Deal and WFTC Reforms in Context

The simple but stark facts about the low skill labour market, reviewed in the last section, focussed policy attention in the UK on ‘make work pay’ policy reforms for the low skilled, the aim being to make work more attractive for those whose current labour market opportunities are not sufficient to induce work. As mentioned in the introduction the key organising idea of this lecture is to place the various ‘welfare to work’ or ‘make work pay’ reforms alongside each other, to focus on specific design features and to examine the importance of each of these features in addressing the objectives: raising the living standards of those on low incomes; and encouraging work and economic self-sufficiency. Before considering design issues, we first consider the specific characteristics of the New Deal and the WFTC policies in the UK. In our general discussion that follows we will then compare these features with those of similar reforms in North America, Canada and elsewhere.

3.1 The Design of the New Deal

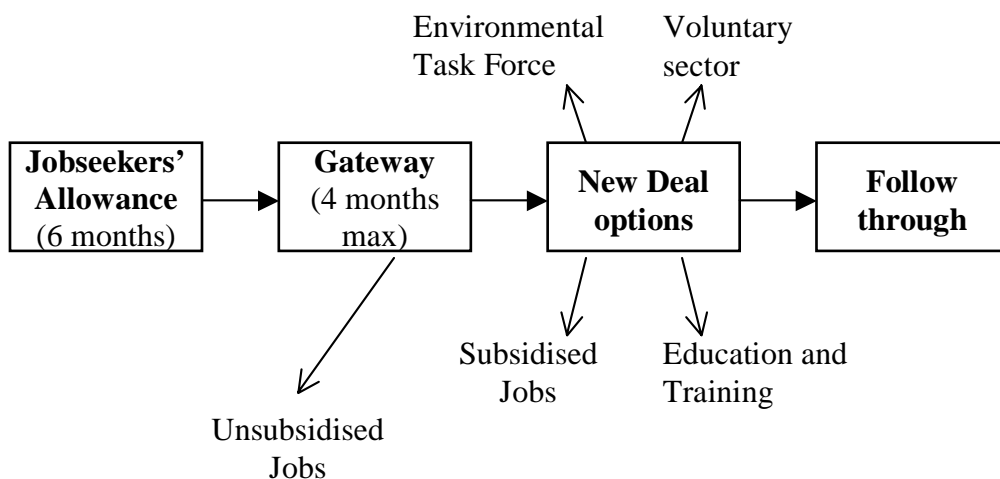
The New Deal for Young People in the UK, which was launched in early 1998, is targeted at the 18 to 24 years old with at least six months unemployment. Participation is compulsory, so that every eligible individual who refuses to participate risks losing their entitlement to benefits. The criteria for eligibility are simple: every individual aged between 18 and 24 by the time of completion of the sixth month on Job Seekers' Allowance (JSA) – the standard flat rate Unemployment Insurance in the UK - is assigned to the programme and starts receiving treatment. Given the stated rules, the programme can be classified as one of “global implementation”, being administered to everyone in the UK meeting the eligibility criteria. Indirect effects that spill over to other groups than the treatment group may occur. The nature of these effects will be discussed below.

The path of a participant through the New Deal is composed of three main steps (see Figure 6). On assignment to the programme, the individual starts the first stage of the treatment called the *Gateway*. It lasts for up to 4 months and is composed of intensive job-search assistance and small basic skills' courses. Each individual is assigned a “Personal advisor”, a mentor who they meet at least once every two weeks to encourage/enforce job search. The aim is to place individuals in unsubsidised

employment (although there are a proportion who exited into subsidised jobs before exhausting the gateway period).

The second stage is composed of four possible options. First, there is the employer option - a six-month spell on a subsidized employment. For the subsidized employment option, the employer receives a £60 a week wage subsidy during the first six months of employment plus an additional £750 payment for a required minimum amount of job training equivalent to one day a week¹⁷. Second, an individual can enroll in a stipulated full-time education or training course and receive an equivalent amount to the JSA payment for up to twelve months (and may be eligible for special grants in order to cover exceptional expenses). Third, individuals can work in the voluntary sector for up

Figure 6: A Simplified Flow Diagram of the New Deal Program



to six months (paid a wage or allowance at least equal to JSA plus £400 spread over the six months). Finally, they may take a job on the Environmental Task Force (essentially government jobs) and be paid a wage or allowance at least equal to JSA plus £400 (spread over the six months).¹⁸

¹⁷ This is quite generous. The mean starting wage for those on a subsidized job is £3.78 an hour, implying a 40 per cent level of subsidy for a 37 hour week.

¹⁸ Once the option period is over, if the individual has not managed to keep/find a job or leave the claimant count for any other reason, the third stage of the program is initiated, the Follow Through. This

The programme was launched in the whole UK in April 1998. There was, however, a previous Pilot three months' period, from January to March 1998, when the programme was implemented in 12 areas, called the *Pathfinder* Pilots (see Anderson, Riley and Young, 1999). Clearly, identification of the treatment effect under these conditions requires stronger assumptions than when an experiment is run within regions using random assignment. The problem relates to the fact that the counterfactual must either be drawn from a different labour market or from a group with different characteristics operating in the same labour market. However, we are able to use the features of the pathfinder pilots in comparison to non-pathfinder areas to examine the impact of the policy and the potential issues concerning substitution effects and general equilibrium effects. These evaluation issues are discussed in detail in Blundell, Costa-Dias, Meghir and Van Reenen (2001), in section 4 below we simply summarise the results of that evaluation study and draw conclusions for the appropriateness of its design.

3.2 The Design of the WFTC

In-work benefits have existed in the UK in various forms since the 1970s. However, the current Working Families Tax Credit has its antecedents in the Family Credit system introduced in the late 1980s.¹⁹ The Family Credit was designed to provide support for low wage working families. In this system each eligible family was paid a credit up to a maximum amount which depended on the number of children. There was also a small addition if in full time work. Eligibility depended on family net income being lower than some threshold (£79.00 per week in 1998-99). As incomes rose the credit was withdrawn at a rate of 70%. In 1996 average payments were around £57 a week and take-up rates stood at 69% of eligible individuals and 82% of the potential expenditure.

A striking feature of the Family Credit system, retained in the WFTC reform, is a minimum weekly hours eligibility condition. A family with children required one adult working 16 hours or more per week to qualify. At its introduction in 1988 this minimum hours cut-off was set at 24 hours but then reduced in 1992 to encourage part-time work

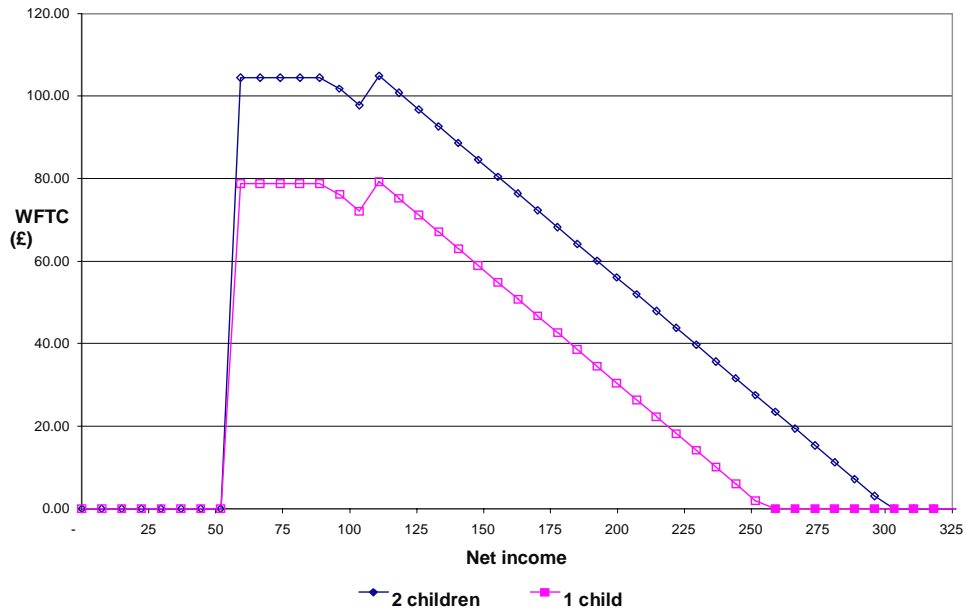
is a process similar to the Gateway, taking up to 13 weeks, where job-search assistance is the main treatment being provided.

¹⁹ See Blundell and Hoynes (2001) for a brief historical review.

by lone parents with young children (see Blundell, Duncan, McCrae and Meghir (1999)).

The WFTC reform increased the generosity of in-work support relative to the FC system in four ways: It increased the credit for younger children. It increased the threshold. It reduced the benefit reduction rate from 70% to 55%. Finally, the reform incorporated a childcare credit. This was worth 70% of actual childcare costs up to £150 per week (for two children, £100 for one child). The largest cash gains went to those people were currently just at the end of the benefit reduction taper.

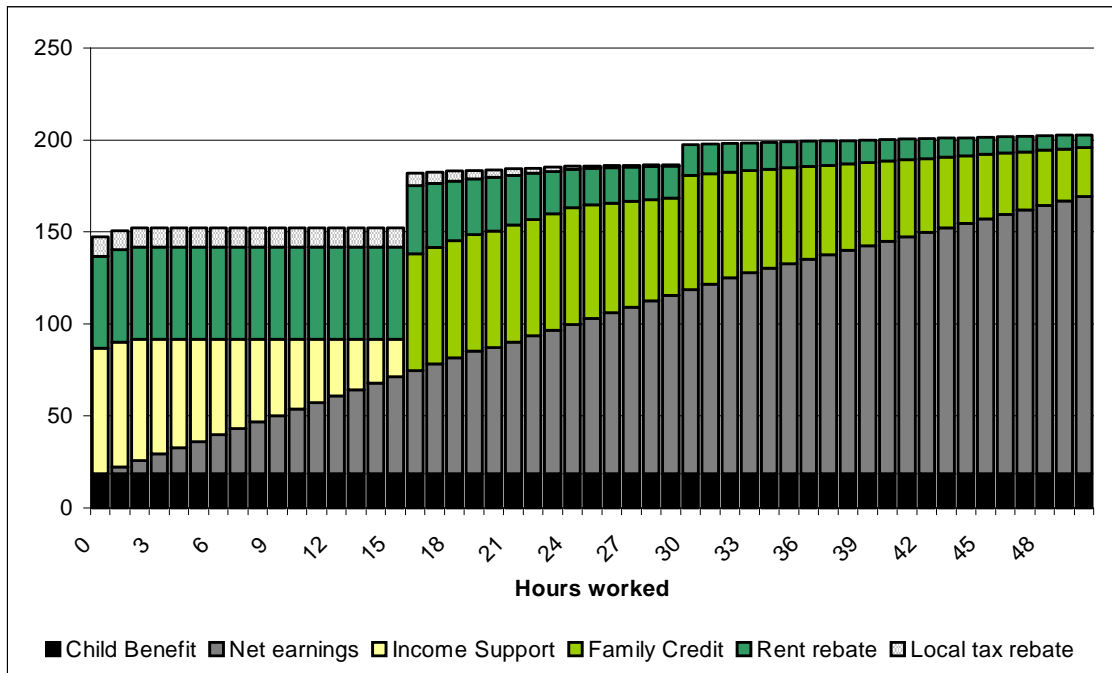
Figure 7. WFTC weekly award, June 2000



Source: Brewer (2000)

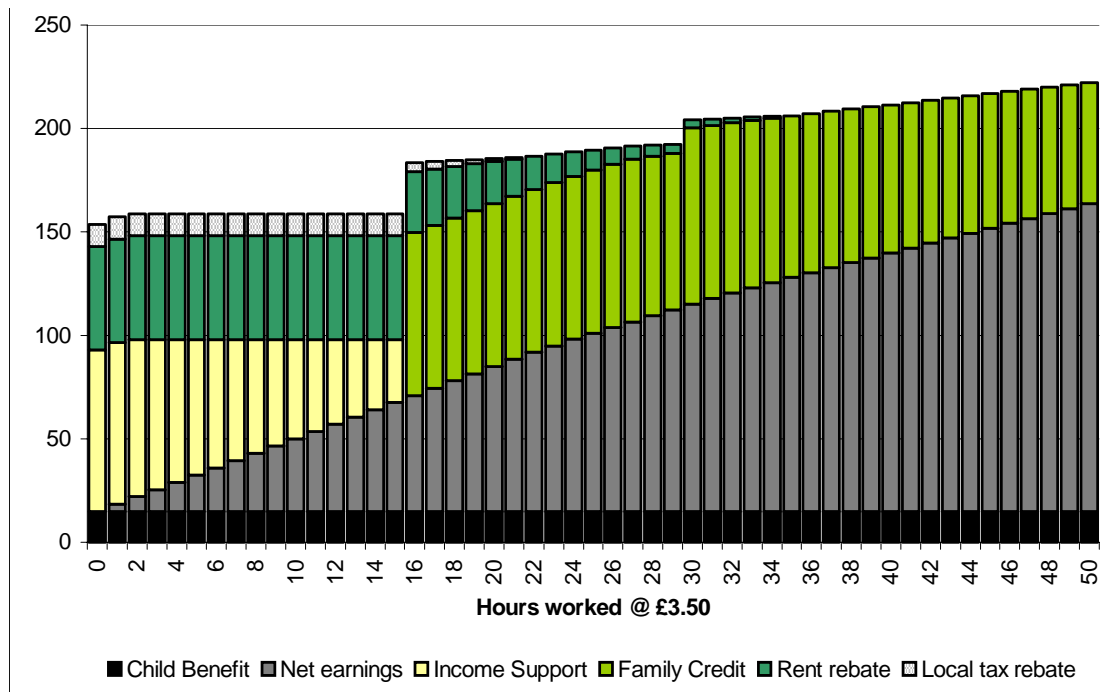
The credit was available to lone parents and couples where both partners work more than 16 hours per week. The transfers (excluding childcare credit) underlying the WFTC are illustrated in Figure 7.

Figure 8: Single Mother before WFTC



Notes: Single parent, April 1997, earning £3.50 per hour (2000 prices).

Figure 9: Single Mother after WFTC



Notes: Single parent, April 2000, earning £3.50 per hour (2000 prices).

The impact of the WFTC reform relative to existing Family Credit is shown in the budget constraint for a ‘typical’ single parent presented in Figures 8 and 9. These highlight the similarity of the FC and WFTC systems. They also highlight another central design feature: the importance of interactions between the in-work tax credit system and other means tested benefits. In particular income support and housing benefit seriously reduce the underlying incentive in the system (see Blundell, 2001, for further discussion).

Despite the dampening effect of these interactions with other benefits, there does seem to be some prima facie evidence of an impact on behaviour. A look at the histogram of weekly hours worked for single parents presented in Figure 10a, for example, shows a strong peak in hours worked at 16 hours. This is not evident for ineligible groups such as single childless low educated working women as reported in Figure 10b. Of course, there will be a large number of so called ‘windfall beneficiaries’ and there may also be those who decide to reduce their working hours in response to the

Figure 10a: Weekly Hours Worked: Low Education Single Parents in the UK

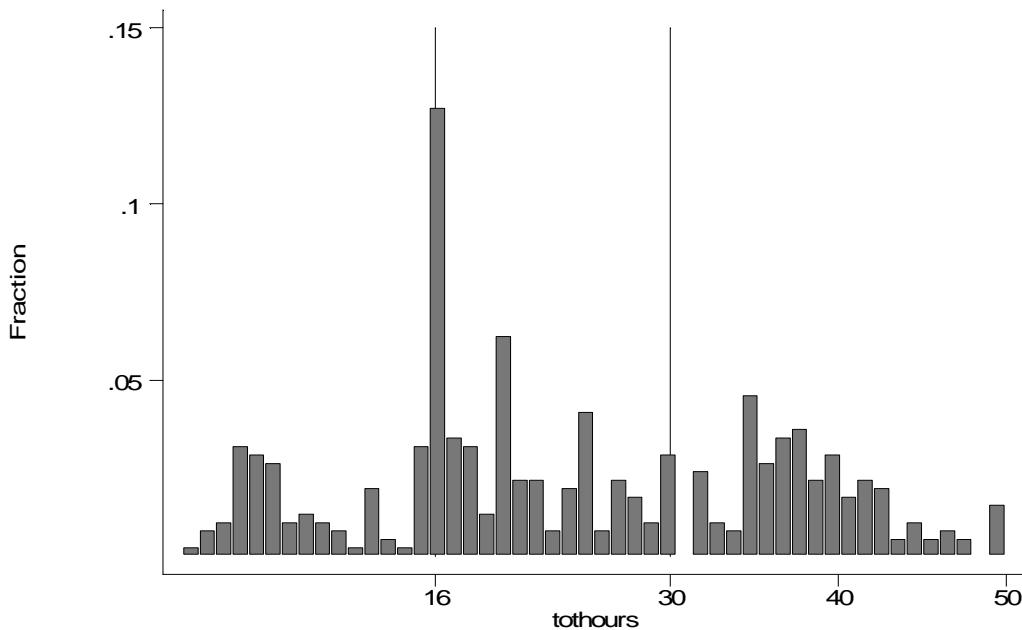
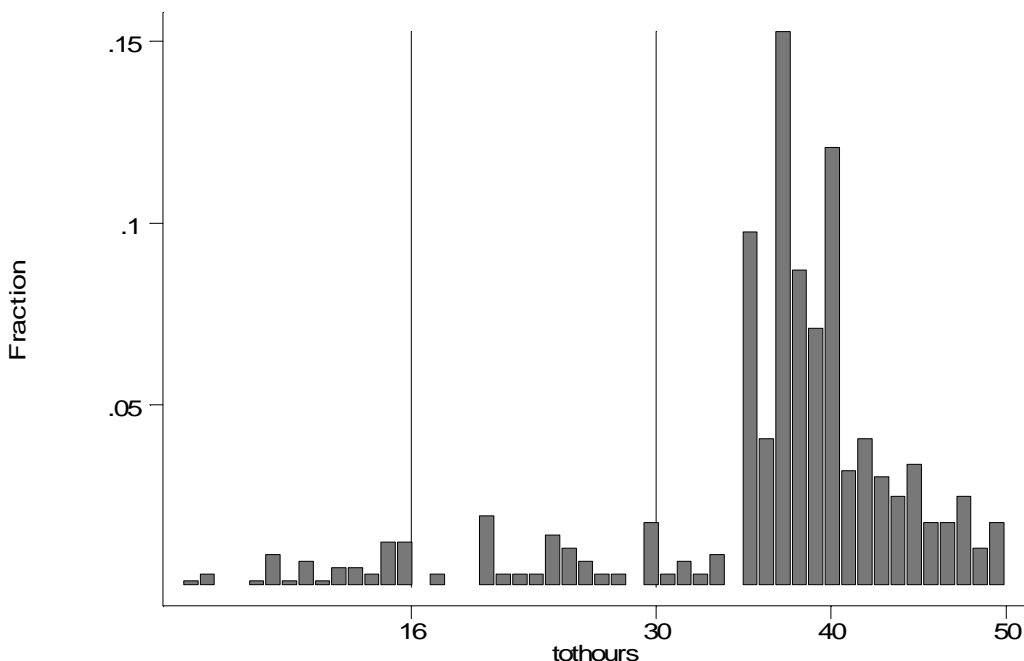


Figure 10b: Weekly Hours Worked: Low Education Single Women without children in the UK



Notes: Family Resources Survey, 1998/99; Blundell and Hoynes (2001).

incentive at 16 hours. These issues will be considered in the evaluation of the impact of WFTC reform on hours and employment in section 4 below.

It is worth noting at this stage that many of these design features are absent in other employment/earnings tax credit systems. The EITC in the US, for example, has no minimum working hours condition and the level of the credit is not counted as income in the computation of other taxes and benefits.²⁰ There is also a small EITC available to low earning workers without children in the US. In the Canadian SSP there is a 30 weekly working hour condition (averaged over a month) but receipt of the credit is time limited to three years and eligibility requires a 12 month welfare duration, not simply a low family income as in the EITC and WFTC.

²⁰ See Brewer (2000).

3.3 Aspects of Design

The discussion so far of the New Deal and the WFTC programmes in the UK has highlighted certain central features in the design of these make work pay programmes. Here we gather them together under the following seven headings:

1. Time Limits and Wage Progression

There are a number of ways in which time limits have been incorporated in welfare to work programmes. The US debate has focussed mainly on the time limits in the Temporary Assistance for Needy Families (TANF) programme (see Moffitt and Pavetti, 2000). In this programme of income support the individual state can set a lifetime limit for receipt. Typically set at 60 months (the maximum allowed) and introduced in 1996, these time limits are just beginning to bind. Perhaps not surprisingly many individuals have left welfare before the limit and there is consequently some evidence that the limits themselves have helped in the dramatic reduction in welfare rolls in the US (Grogger, 2000). Part of the success of the New Deal in the UK documented below is the effective time limit it places on receipt of JSA, although it is difficult, in the UK context, to separate the effect of this from the mandatory job search assistance and benefit sanctions that are included as part of the programme.

Time limits can equally well be imposed on the receipt of financial incentives in work. This is not a feature of the WFTC or EITC. But it is part of the Canadian SSP tax credit system and it does feature in the earnings disregard programmes that form part of the individual state specific features of the TANF programme. These vary from 6 months for the New Deal and Work First and JOBS Plus²¹ programmes to three years in the case of SSP and many of the TANF based programmes in the US.²² The appropriate design of such time limits depends on the expected level of wage progression for programme participants and the incentives for wage progression created by the time-limited system itself.

Incentives for wage progression are often enhanced by the provision of training – a central part of the New Deal programme. With no time limit, tax credit systems can provide a strong negative incentive for wage progression and human capital investment,

²¹ See Dickert-Conlin and Holz-Eakin (2000).

²² See Pavetti and Strong (2001).

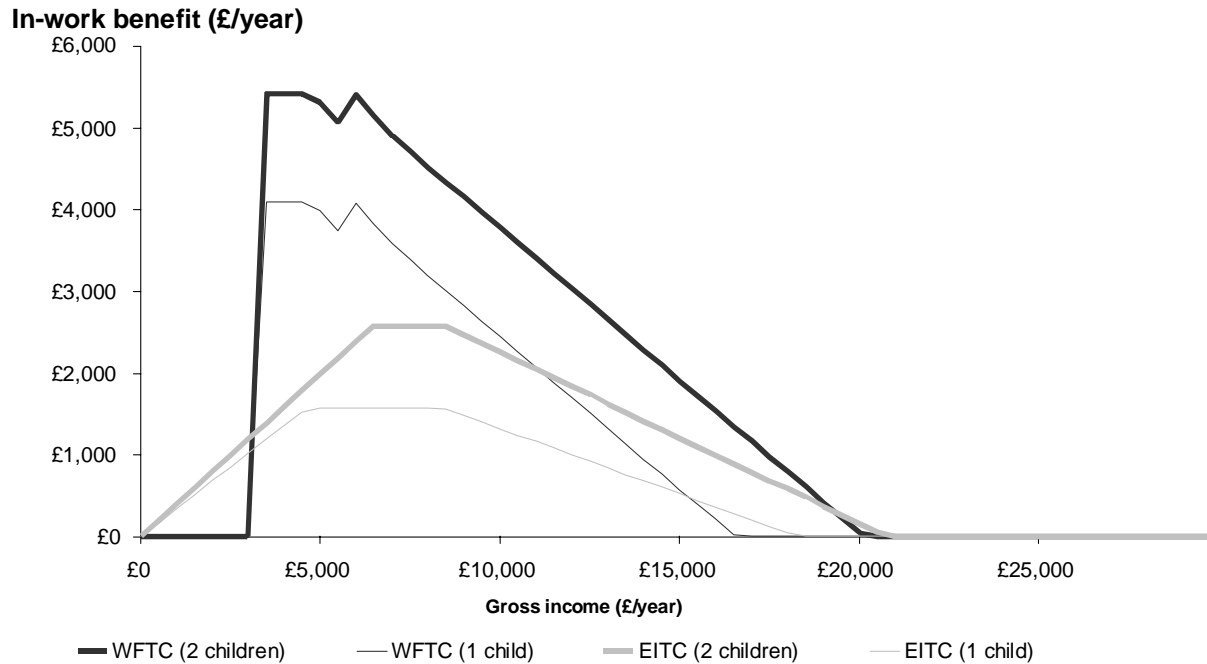
reducing the chance of longer run self-sufficiency. This will depend largely on the relative importance of the passive return to work experience, which occurs automatically once in work, in comparison with the return to 'active' human capital investment, which requires effort or time inputs by the individual. Cossa, Heckman and Lochner (1999) make this point forcibly. However, evidence of steep wage progression among low skilled workers is rare. Most studies suggest that wage progression will be slow, no more than 3-4% per year, see Gladden and Taber (2000). This is further supported by the recent work by Card, Michalopoulos and Robins (2001) on the wage growth among the recipients of the Canadian SSP experiment. Consequently, a six-month time limit is unlikely to provide time for wage progression to result in self-sufficiency and could be counter productive. At the end of the subsidy either workers will move to lower wages, lose their employment or move into some other 'make work pay' programme. For example, the EITC in the US is used by many as a way of working themselves off time limited earnings supplements in TANF. But then in the EITC the incentives for active wage progression and human capital investment, once in work, are slight.

2. Means Testing and Implicit Tax Rates

A key ingredient in understanding the structure of financial incentives underlying make work pay policies is their interaction with the tax and benefit system. Nowhere is this more pronounced than in the comparison between the EITC in the US and the WFTC in the UK. As we have seen above, in the UK the level of WFTC credit counts as income in means tested benefit programmes like Housing Benefit. This is deliberate and was part of the Family Credit reform in 1988. It ensures there are no implicit tax rates on earnings that exceed 100%. But implicit tax rates can be high, as is evident from figures 8 and 9.

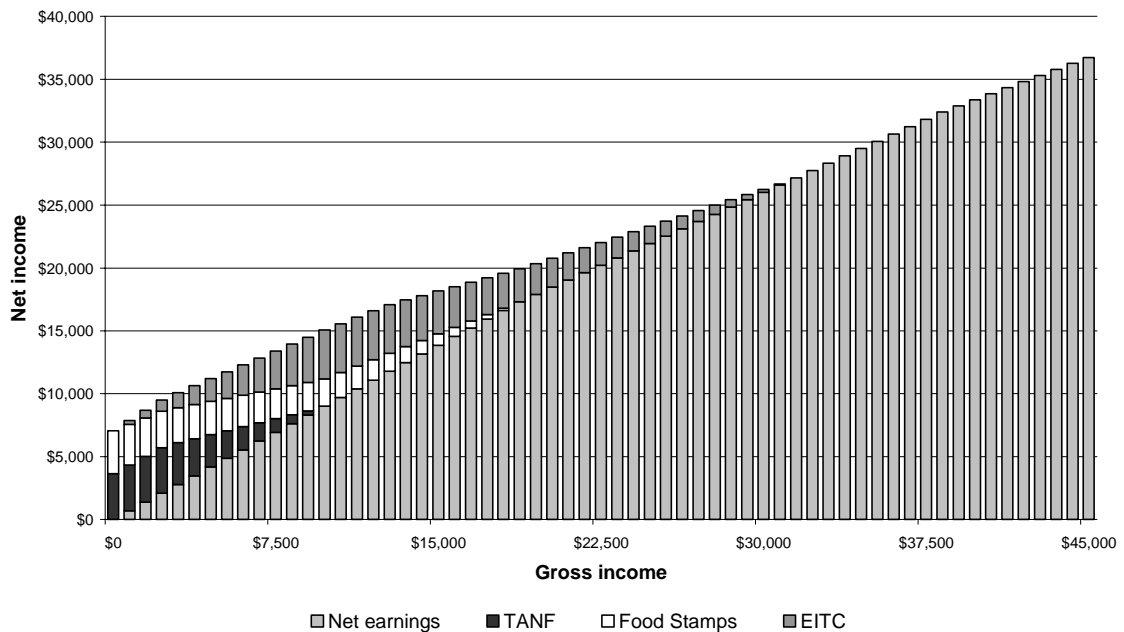
In contrast, the EITC shown in Figure 11, although providing a less generous credit, sits on top of the tax and benefit system. A consequence of this is that the lower withdrawal rates (phase-out rates) in EITC must be added to the implicit tax rates in TANF, Food Stamps and the income tax system. A typical budget constraint for a US EITC recipient

Figure 11 EITC schedule and WFTC weekly award, 2000



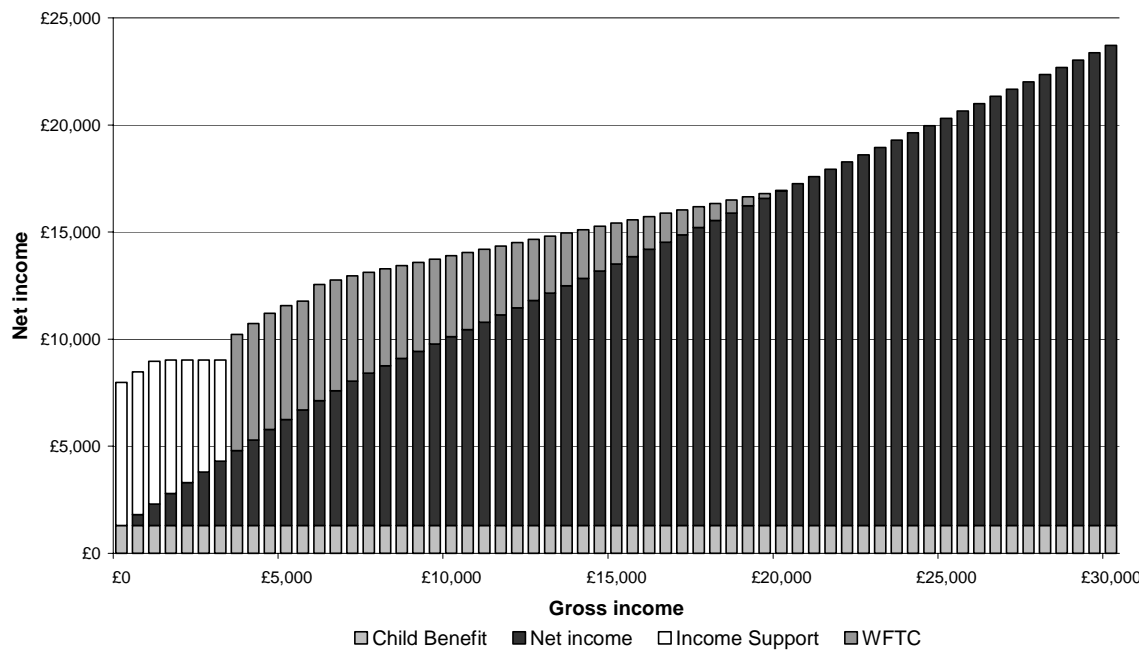
Source: Brewer (2000), Notes: £1 = \$1.50. Assumes 2000 tax system in US, and 2000 tax system in UK

Figure 12: Gross and net incomes, lone parent with 2 children, US



Notes: Assumes 2000 federal tax system and Florida's TANF system. Ignores housing and childcare costs and subsidies. Assumes all TANF and Food Stamps requirements are met, and that all income is earned.

Figure 13: Gross and net incomes, lone parent with 2 children, UK



Notes: Assumes 2000 tax and benefit system plus a Children's Tax Credit. Ignores housing and childcare costs and subsidies. Assumes 2 WFTC awards/year and minimum wage work, so that eligibility for WFTC occurs at £3,078 and 30 hour premium at £5,772.

Source: Brewer (2000).

is drawn in Figure 12, which should be contrasted with the similar UK system in Figure 13.

For couples, there a further issue is whether the tax credit should be subject to an individual or a family means test. As is argued below, a family based system creates adverse incentives for labour supply of 'secondary' workers in the household. However, such a system is well targeted to family poverty and to the reduction of workless households. In contrast, individual tax credits can better target low wage workers and low skills. A family means test means that work incentives can be improved for one and worsened for another partner, and can alter (usually worsen) the incentives to form a couple/marry. Both EITC and WFTC use a family income means test.

3. Setting the Level of Credit or Subsidy

The appropriate level of the credit or subsidy is intricately tied to whether it is to be means tested and whether it is time limited. The typical wage or employment

subsidy, as in the New Deal, is a fixed weekly sum, time limited and independent of family income and composition. In contrast the credit in WFTC is means tested, varies with family composition and has no time limit. In some sense this reflects no more than the desire to achieve distributional objectives with the WFTC, in particular the desire to reduce the level of child poverty. Nonetheless the proposed separation of the child component in the WFTC in to an integrated child credit (ICC) (see Brewer, Clark and Myck, 2001), leaves an adult employment tax credit (ETC) that is available to those without children and whose level is much less about child poverty.

A higher level of credit implies a higher withdrawal rate, unless the credit is to extend high in to the earnings and income distribution. Indeed the increased generosity underlying the WFTC reform together with the reduction in the withdrawal rate, extended eligibility and the phase-out region much higher into the income distribution than had previously been the case. Increasing the cost of the programme and the number of recipients with relatively high incomes. The price for extending generosity at lower earnings, without increasing withdrawal rates, is a higher implicit tax rate further up the income distribution.²³

4. Minimum Hours Conditions

Minimum hours conditions can reduce costs and remove the incentive to reduce hours to very low levels. However, if they are set too high they reduce the attractiveness of the programme to individuals out of employment, especially those that have young children. The reduction in the hours condition, from 24 at the introduction of Family Credit to 16 in WFTC, can be seen to have encouraged a significant fraction of inactive single parents in to work (see Dilnot and Duncan (1992) and Blundell and Hoynes (2001), for a discussion). It also reduced the number of hours worked by many single parents in employment. It should be noted that in 1995 a 30 hour ‘full time’ bonus of £10 was introduced.²⁴ In comparison EITC has no minimum hours condition whereas SSP in Canada and New Hope in the US have a 30 hours condition. Some have argued for hourly wage based credits to address the adverse hours and effort incentives.²⁵

²³ See IFS (1999) for a discussion of the impact of the WFTC reform on implicit tax rates.

²⁴ This is the second ‘peak’ in Figure 7.

²⁵ See MaCurdy and McIntyre (2001), for example.

Help with childcare costs can overturn some of these arguments. Indeed, the WFTC has a generous childcare credit. Also note that the proposed Employment Tax Credit in the UK is set to have a 30 hours condition for adults without children. It may well be true that wage progression in part time low skilled jobs is quite slow.²⁶

5. Training requirements and Human Capital Incentives

Many of the issues concerning individual incentives for human capital investment and wage progression have been made in the discussion of time limits and wage progression above. However, there are remaining issues concerning training provision. There is also strong evidence that workplace based training that leads to a vocational qualification is the most effective, at least for the lower skilled with relatively low formal education levels (see Blundell, Dearden and Meghir, 1997 and references therein).

Is it possible to design an effective training incentive within an individually based tax credit system? Presumably, provided training is monitored and leads to accredited qualifications, an individual incentive scheme can be as effective as one operated through the employer. It may have the added attraction of allowing, or even enhancing, mobility. There is also no reason why accredited training should not be a condition of continuing receipt of an employment tax credit or wage subsidy.

6. Welfare, UI Duration Requirements and Programme Take-Up

Welfare receipt conditions are chosen so as to reduce costs and target the workless. SSP in Canada requires a 12-month duration on welfare for eligibility. But like WFTC and EITC, the New Hope programme simply uses low income as an eligibility condition. The New Deal has a 6-month unemployment claimant condition. There are many other examples in other similar programmes.

There are a number of counter arguments to such targeting. The first is the stigma impact perceived by both employer and employee. This is often cited as the reason for the low take up, especially among employer based subsidy schemes.²⁷ The

²⁶ As noted already, empirical evidence on wage progression for specific types of workers is sadly lacking. Reliable evidence for low skilled workers is dogged by selection and attrition problems as highlighted in the study of age growth in the SSP treatment population by Card et al (2001).

²⁷ See Katz (1998).

second is the churning or cycling effect. Since eligibility depends on welfare receipt individuals have an incentive to churn or cycle through the system and the long run impact of such programmes on employment will be mitigated (see Grubb and Martin, 2001, and Meyer, 1995, for example). Finally there is an entry effect where by those with short durations on welfare extend their spell to become eligible for the financial incentive.

It is clear that all these issues play a role. Indeed there is recent evidence, from the Swedish welfare to work programmes²⁸, that it may be important to act as soon as workers enter unemployment, or the welfare system, and not to wait. However, the argument in terms of reducing the number of so called ‘windfall beneficiaries’ often wins the day, see the discussion in Card and Blank (2000). There is an important balance to be made and it may well be the case that a welfare recipient condition, as in the Canadian SSP, together with a relatively long time limit for receipt of the credit is an optimal schedule for helping those on welfare in to work, supporting their income and leaving some incentive for wage progression and human capital investment. Once again though, if the only way to obtain the financial incentive is to have a period on welfare, there is an important issue of how to guard against inducing long welfare spells and cycling.

7. Active Provision of Job Search Assistance

One important difference between various make work pay and welfare to work programmes is whether they provide job search assistance. In some ways the EITC and WFTC programmes, by focussing on workers, do not directly face this issue. But in so far as they are designed to enhance labour market attachment, job search assistance for new entrants and those likely to enter the programme would seem quite plausible.²⁹ The New Deal for Lone Parents in the UK act in this way as once in work the Lone Parents become eligible to WFTC. On the job help in improving matching of workers could also be an important way of enhancing earnings through job mobility for such workers.

What kind of job search help should be given and should it be mandatory? The New Deal for Young People described above is mandatory and provides the participant

²⁸ See Sianesi (2001).

with a personal advisor, with meetings at least once every two weeks to encourage/enforce job search. Missing a meeting can incur sanctions. This may be the effective part of the Gateway and builds on the apparent success of the Restart interviews³⁰. However, it may well be the possibility of financial sanctions that had most impact.³¹ Certainly the additional impact of voluntary job search advisors in the SSP randomised experiment had a relatively small impact over the financial incentives alone, on longer-term full time jobs³². Mandatory job search assistance in the MFIP had a bigger effect.³³

Before further discussion of what components of a welfare to work system are likely to work and for whom they work best, we turn our attention to the evaluation of the two UK programmes on which we have focused: the New Deal and the WFTC.

4 Evaluating the Labour Market Impact of Reforms

The first concern of any evaluation is whether the appropriate statistical approach has been adopted. There is a growing use of experimental evaluations and demonstration projects, especially in North America.³⁴ These clearly have some advantage over observational studies and they can provide important evidence to benchmark the discussion that follows.

However, experiments do not address all concerns and they do not adapt well to extrapolation and to the study of variations in policy design. Area based studies can also be attractive. As mentioned above the piloting of the New Deal in pathfinder areas provides some useful information on certain spillover effects.³⁵

In some cases so called ‘natural experiments’ are useful. These occur when a control group appears naturally in the data rather than through a randomised experiment. For example, there may be a very similar group to the target group that is ineligible to the programme. Provided they have the same macro economic trends and

²⁹ As already noted, there is no reason why continuation of the credit could not be conditional on various advancement conditions oriented toward wage progression such as job search and accredited training.

³⁰ Dolton and O’Neill (1996).

³¹ See Abbring, Van Berg and Van Ours (1997) for further evidence on the effectiveness of sanctions on transition rates into employment from unemployment.

³² This is referred to as the SSP Plus experiment in Quets et al (1999).

³³ Miller et al (1999), and the discussion in Card and Blank (2000).

³⁴ See Riccio and Bloom (2001), for example.

there are no systematic composition changes before and after the programme³⁶, a simple difference in differences methodology can provide a useful guide to the extent of a policy impact. Of course this is an ex-post evaluation.

Ex-ante evaluations either arise through an experimental demonstration project or through a structural econometric model in which the proposed reform can be simulated.³⁷ It is also sometimes possible to use matching on observables to mimic the controlled experiment. Where rich administrative data sources are available for evaluation, this is a particularly attractive approach³⁸.

We will make use of all these alternative methods in what follows. We turn first to specific aspects of the New Deal and WFTC policies.

4.1 The Impact of the New Deal for Young People

Although there is now some evidence of the impact of employment of individuals completing the options in the New Deal, we focus here on an evaluation of the Gateway.³⁹ In particular, we are concerned with the degree to which enhanced mandatory job assistance has led to more outflows to (unsubsidised) employment. The evaluation is based on data provided by the Pathfinder areas before the National Roll Out of the programme, as well as on data available following the National Roll Out.

As mentioned above, there are two main issues that need to be considered in evaluating the impact of the programme: the precise nature of the comparison group, and hence the definition of what is being measured, and the set of assumptions that underlie the interpretation of the parameter we estimate in each case. The clear understanding of these issues is an important input in an eventual cost-benefit analysis of the programme since they determine the outcome from the programme.⁴⁰ There are some important aspects covered within this discussion. One of them concerns the extent to which we can estimate the overall impact of the programme on employment as opposed to the impact on the eligible individuals. Potential differences in the two

³⁵ See also the design of the New Deal for Long Term Unemployed, 25 Plus, analysed in Lissenburgh (2001)

³⁶ See Blundell, Duncan and Meghir (1998).

³⁷ See Blundell and MaCurdy (2000), for a review.

³⁸ See Blundell and Costa Dias (2000).

³⁹ Bonjour et al (2001) and Dorsett (2001) provide a detailed description of the option and post-option results.

outcomes may result from two main factors. First, the impact of the programme on eligible individuals may be at the expense of worsened labour market opportunities for similar but ineligible individuals. Second, the wider implementation of the programme and the opportunities it offers to participants may affect the equilibrium level of wages and employment, affecting all workers. We focus on the impact of the programme on the proportion leaving unemployment within four months of entering the Gateway. We pay special attention to the *outflows into employment*, but we also examine total outflows from unemployment to all destinations.⁴¹

Our approach to estimating the impact of the New Deal programme relies on using information from the pilot period as well as information from the *National Roll out*. The New Deal can affect employment of both eligible and ineligible individuals in a number of ways. First the eligible individuals receive job search assistance, which may enhance their ability to find a job. Second, some of the individuals in the Gateway programme receive wage subsidies, reducing the cost of employing them for an initial period of six months. This wage subsidy will expand the employment of such workers but may also lead to a substitution of other workers for these cheaper ones. The extent to which this may happen will depend on a number of factors. If the subsidy just covers the deficit in productivity and the reservation wage of the workers as well as the costs of training, we would not expect any substitution; these workers are no cheaper than anyone else. Second, it will depend on the extent that these workers are substitutable in production for existing workers and on the extent that it is easy to churn workers. The latter is an important point, since the subsidy only lasts six months. Moreover the agencies implementing the New Deal are supposed to be monitoring the behavior of firms using wage subsidies and employing individuals on the New Deal. Of course if job durations are generally short, firms will be able to use subsidized workers instead of the non-subsidized ones, without any extra effort.

⁴⁰ See Van Reenen (2001) for a careful cost benefit analysis of the New Deal.

⁴¹ Blundell, Costa-Dias, Meghir and Van Reenen (2001) assess the importance of the estimated effects and interpret them in an historical perspective. They provide some lower and upper bounds for the treatment effect by using other pre-program time periods. This can be done for total outflow for all years since 1982.

An additional effect of the New Deal may be to decrease wage pressure through the increase in labour supply and through the presence of wage subsidies.⁴² This will tend to increase employment for all types of workers and will counteract the effects of substitution on the non-treatment group.

Assessing the importance of substitution and of general equilibrium effects through wages or other channels is of central importance. Using the comparison between the pilot and control areas as described below, and assuming these areas are sufficiently separate labour markets from each other, we will be able to assess the extent to which substitution and other General Equilibrium effects combined are likely to be important “side-effects” of the programme, at least in the short run.

The available options for the choice of the comparison group depend on the type of evaluation being performed. When assessing the programme from data on its National Roll Out, we are constrained to use ineligible individuals within the same area, for which we have chosen the age rule to define (in)eligibility. The Pilot Study, however, provides an additional instrument in the definition of the comparison group. We have used it in two ways, constructing two possible comparison groups: The first takes all eligible individuals living in all non-Pathfinder areas; the second matches eligible individuals in the set of non-Pathfinder areas that most closely resemble the Pathfinder areas. The goal of a careful choice of the comparison group is to satisfy a central assumption in non-experimental evaluation, which requires that the time trend evolve in the same way for treatments and controls.

The aim of matching the areas is to achieve a match as close as possible with respect to labour market characteristics. The procedure followed to match on labour market characteristics makes use of a quarterly time-series of the outcome variable from 1982 to just before the introduction of the New Deal, in January 1998. A measure of distance was then computed for each possible pair of Pathfinder and non-Pathfinder areas and the two nearest neighbors were chosen. Once the two nearest neighboring areas have been chosen based on similarity of the labour market trends, we carry out our

⁴² See Adnett and Dawson (1996) for a look at European schemes and Dickert-Conlin and Holz-Eakin (2000) for an extensive review of the issues.

estimation (see Blundell, Costa-Dias, Meghir and Van Reenen (2001) for details of these procedures).

Table 1: New Deal Gateway Employment Effects for Men

Experiment	Treatment group	Comparison group	Nr of observ.	Diff-in-Diff with Matching Estimator
(1)	19-24 year olds living in Pathfinder areas	19-24 year olds living in all non-Pathfinder areas	3,716	0.110** (0.039)

Source: Blundell, Costa Dias, Meghir and van Reenen (2001)

Notes: Estimates of the effects of the New Deal used the JUVOS 5% longitudinal sample of JSA claimants. By the end of the 10th month, conditional on being on JSA for 6 months. All estimates from regressions including a set of other controls, namely marital status, sought occupation, region and some information on the labour market history (comprising the number of JSA spells and the proportion of time on JSA over the 2 years that precede the start of the present spell). Age and the number of JSA spells since 1982 are also included when similar age groups are being compared. Propensity score matching is done over the same covariates as the other estimates and the outcomes for the comparison groups are smoothed using cubic splines on the two propensity scores to achieve higher precision. Standard errors in parentheses ** = significant at 0.05 level. * = significant at 0.10 level.

The Results from the New Deal Pilot Areas

Table 1 presents the main estimate of the impact of the Gateway on eligible men living in Pathfinder areas during the Pilot period. Precisely the effects of the Gateway on *outflows to employment* after 4 months of treatment.⁴³ The estimate compares men aged 19 to 24 years old living in Pathfinder areas with a similar 19-24 year old age group living in all non-Pathfinder areas. After 4 months of treatment, it is estimated that the Gateway has improved participants' exits into employment very significantly – pointing to an impact of about 10-11 percentage points. In the pre-programme period only 24 per cent of individuals in the treatment group obtained employment over the similar four months period (compared to 33 per cent afterwards). Thus, the improved job-search assistance provided during the Gateway seems to have raised the probability of getting a job by about 42% (=10%/24%) after 4 months of treatment.

⁴³ All regressions in Table 1 and Table 2 include a set of other controls, including age (when similar age groups are being compared), marital status, region, sought occupation and labour market history variables. All computations have been performed excluding these covariates as well. Given the similarity of the results, however, we skip their presentation.

This result should be contrasted with the information from the New Deal Evaluation Database concerning outflows into the employment option. It is estimated that the outflows into an employment option after 4 months of treatment sum up to 5.7 per cent of men joining the Gateway. Subtracting this off the overall New Deal effect would give a “pure” Gateway impact (on outflows to unsubsidized employment) of about 4 per cent. But this is likely to be a lower bound. The calculation assumes that there is essentially no deadweight of the employer subsidy. This happens under the assumption that participants can be split into groups according to their ability to find a job, and that subsidized jobs are being attributed to those in need of a subsidy to leave unemployment. If, on the other extreme, it is believed that the subsidized jobs are being allocated to the most employable participants, then the amount of scaling down required might be small. Furthermore, the NDED will tend to find larger job outflows because of fewer missing values. Thus 4 per cent is a lower bound for the pure Gateway/job assistance effect. The method used to estimate the impact of treatment does not seem to substantially influence the results, reflecting some robustness of the estimates to the functional form assumptions.⁴⁴

Table 2 considers a number of different possible comparison groups, providing some insight on the possible size of indirect effects. Each row in the table corresponds to a different comparison, including different estimates, obtained under different methods, of the effects of the Gateway on *outflows to employment* after 4 months of treatment. These provide some clues about the robustness of the results. We start by restricting the comparison group to be composed of eligible men living in matched non-Pathfinder areas in the second row. Depending on the method used, the estimated effect may rise or fall slightly, but not significantly so. *This evidence supports the comparability of the two groups used in row 1 of Table 1.*

The next row compares eligible and ineligible men aged 25 to 30 years old within the Pathfinder areas. Using an age-based eligibility criterion is our second main source of identification and is all that is available after the pilot period. The point estimates of

⁴⁴ Blundell, Costa Dias, Meghir and van Reenen (2001) presents some comparisons between treatments and controls with respect with some of the covariates being considered, including a few checks on the quality of the propensity score matching.

the 4 months effect using age-based are very close and insignificantly different from those in row 1 using different areas.

Table 2: Further Results for the New Deal Employment Effects for Men:

Experiment	Treatment group	Comparison group	Nr of observ.	Diff-in-Diff with Matching Estimator
(2)	19-24 year olds living in Pathfinder areas	19-24 year olds living in matched non-Pathfinder areas	1,193	0.134** (0.053)
(3)	19-24 year olds living in Pathfinder areas	25-30 year olds living in matched Pathfinder areas	1,096	0.104* (0.055)
(4)	19-24 year olds living in Pathfinder areas	31-40 year olds living in matched Pathfinder areas	1,169	0.159** (0.050)
<i>Outflow into the employment option (affecting 19-24 year olds living in Pathfinder areas)</i>			4,486	
(5)	25-30 year olds living in Pathfinder areas	25-30 year olds living in all other areas	3,180	0.016 (0.042)
(6)	25-30 year olds living in Pathfinder areas	25-30 year olds living in matched non-Pathfinder areas	983	0.055 (0.058)
(7)	19-30 year olds living in Pathfinder areas	19-30 year olds living in all other areas	6,896	0.066** (0.029)
(8)	19-50 year olds living in Pathfinder areas	19-50 year olds living in all other areas	12,749	0.036* (0.021)

Source: Blundell, Costa Dias, Meghir and van Reenen (2001)

Notes: See Table 1.

The estimates suggest a treatment effect of 10.4 percentage points when 25-30 year olds are used as the comparison group (row 3) compared to 11 percentage points when 19-24 year olds in non-Pathfinder areas are used as a comparison group (row 1 in Table 1). This estimate may suffer from substitution more acutely and it is not immune to local labour market wide wage effects. However, it is informative to know that the obtained results are very similar, independently of the procedure used. We cannot reject the simple null hypothesis of a model without substitution and equilibrium wage effects.⁴⁵ Alternatively, their effects may cancel out, the relative sizes of the substitution

⁴⁵ Bartik (2000) finds relatively small displacement and substitution effects for the recent US welfare reforms, despite the large declines in caseload.

and wage effects being very similar. We further test for substitution using the older group of 31 to 40s living in Pathfinder areas as control. This group is expected to be less substitutable for 19-24 year olds than the younger 25-30 year old comparison group. Under this assumption, and given that substitution exacerbates the impact of the programme, we would expect this estimate to be lower than the one presented in row 3. But the fourth row presents an estimate of the 4 months effect of the Gateway that, if anything is higher than the previously presented results. This is not consistent with large substitution effects. In rows 5 and 6 we compare ineligible individuals living in Pathfinder and non-Pathfinder areas. If there were significant substitution effects or differential trends across regions we may find differences in outflows in the New Deal period. In fact no significant effects of the Gateway are found.

Finally, rows 7 and 8 in table 2 contain estimates of the employment effect in the “whole market”. Men aged 19 to 30 and 19 to 50 years old and living in Pathfinder areas are compared with similar individuals living in non-Pathfinder areas. The results only confirm what has been established before: that, during the Pilot period, the programme had a very significant positive impact on outflows to employment on the markets it has been implemented. The point estimates are smaller because 19-24 year olds are only a fraction of the larger age range. For example, just over half the 19-30 year old group are 19-24 year olds. In the linear matching estimator in row 7 implies a New Deal effect of 6.6 percentage points – as expected just over half the magnitude of the effect in Table 1.

Results from the New Deal National Roll Out

Table 3 contains the main result from the National Roll Out. The first row shows an implied effect of around 5 per cent on a pre-programme base outflow (table 2) of 25.8 per cent, and once more, the method used does not seem to affect the result significantly. Although this is still a substantial impact, it is about half the magnitude estimated for the Pilot period. These differences in size can be accounted for by a “programme introduction” effect. In the first few months the programme is operating, a very large increase in the flows to employment is observed, which then falls as the programme matures. This is illustrated in the other rows of the table. The second and third rows report comparable estimates of the Gateway effect after 4 months of

treatment for the first quarter the programme operates in the Pathfinder and non-Pathfinder areas, respectively. As noticed before, estimates for the Pilot period (first quarter in Pathfinder areas) are about twice the size of the effect over the whole period. The same is also true if one considers the estimates for the first quarter the New Deal operates in non-Pathfinder areas (see row 3). The fourth row presents estimates obtained using the following second and third quarters the programme is operating and these are comparatively much lower and less significant.

In summary, the New Deal is a mandatory programme affecting all young people claiming unemployment benefit for at least six months in the UK. The programme offers a combination of treatments, particularly job assistance for four months and a wage subsidy paid to employers. Two sources of identification were used to construct comparison groups in order to make inferences on the impact of the New Deal: a comparison between Pilot and non-Pilot areas and an age-related eligibility criteria. Our results suggest similar quantitative effects whichever comparison group is chosen.

Table 3: Employment effects from the New Deal National Roll Out

Experiment	Type of estimate	Number of observ.	Diff-in-Diff with Linear Matching
(1)	Overall effect for the sample including the Pilot period and the National Roll Out (first three quarters the ND is operating in each region)	17,433	0.053** (0.013)
	<i>Outflows to subsidized jobs</i>	<i>55,051</i>	<i>0.039</i>
(2)	Effect for the Pilot period – 1 st quarter the programme operates in Pathfinder areas	1,096	0.104* (0.055)
	<i>Outflows to subsidized jobs</i>	<i>4,486</i>	<i>0.057</i>
(3)	Effect for the 1 st quarter the programme operates in non-Pathfinder areas	5,169	0.088** (0.025)
	<i>Outflows to subsidized jobs</i>	<i>20,331</i>	<i>0.039</i>
(4)	Effect for the 2 nd and 3 rd quarters the programme operates in all areas	11,161	0.031* (0.016)
	<i>Outflows to subsidized jobs</i>	<i>30,234</i>	<i>0.036</i>

Source: Blundell, Costa Dias, Meghir and van Reenen (2001)

Notes: See Table 1

The main finding is of an economically and statistically significant effect of the programme on outflows to employment among men. The programme appears to have

caused an increase in the probability of young men (who had been unemployed for 6 months) finding a job in the next four months. On average, this increase is about 5 percentage points (relative to a pre-programme baseline of 26 per cent). Part of this overall effect is the job subsidy element and part is a pure “Gateway” element (enhanced job search). We estimate that *at least* 1 percentage point of the 5 percentage points is due to the Gateway services, such as job search assistance. We also found that the treatment impact is much larger in the first quarter of introduction. These findings are robust to a large number of experiments.

Our results are more optimistic than many of the results from U.S. studies of the effects of government labour market programmes for male youth. There are three reasons. First, it is important to recognize that the programme was mandatory. Refusal to participate results in sanctions. Mandatory, sanction-enforced schemes have often been found to be more effective than voluntary schemes. Secondly, the "disadvantaged youths" we consider are less disadvantaged than those treated in typical US programmes (e.g. ex-offenders). To the extent that programmes are more effective on those who are more job ready, one would expect to see more signs of a programme effect in the UK than in the US. Finally, recall that we are evaluating the effects of job search assistance and wage subsidies. The U.S. evidence here is less pessimistic than the evidence on public training schemes.⁴⁶

4.2 Evaluating the Impact of the WFTC Reform

WFTC was introduced in October 1999. There was no piloting or randomised demonstrations to assist in the evaluation of the WFTC reform. To evaluate it we therefore adopt two approaches. The first uses an ex-ante simulation model developed in Blundell, Duncan, McCrae and Meghir (1999).⁴⁷ This model was estimated using pre-reform household level data from the Family Resources Survey. In the second approach we use post-reform administrative figures to double-check our predictions.

⁴⁶ See the surveys by Katz (1998) and by Meyer (1995). Also a round up of the evidence on wage subsidy programmes in Bell et al (1999).

⁴⁷ This work develops earlier structural labour supply simulation models by Hoynes (1996), for example. In particular, it allows for child care demands to vary with hours worked and it allows for fixed costs of work. It also accounts for take-up by incorporating welfare stigma following on from Keane and Moffitt (1998).

We also use data from the Labour Force Survey before and after the reform. This before and after evaluation requires choosing a control group and here we follow the Eissa and Liebman (1998) study of the EITC reform and use higher educated women with children whose earnings are sufficiently high to render them largely ineligible to WFTC. To summarise: the structural model simulations appear to line up well with the ex-post data and can therefore be used with some confidence to assess many of the important aspects of designing and implementing a tax credit programme of this type.

The simulations focus on two target groups for the WFTC reform: single parents and married couples with children. Nearly 50% of currently working single parents were found to be in receipt of some Family Credit. For married couples with children this proportion is smaller, at around 16%. However, the latter group is more than two and half times the size of the former.

As we have seen, the WFTC reform is designed to influence the work incentives of those families with low potential returns in the labour market. It does this via the increased generosity of in-work means-tested benefits. For single parents the WFTC does unambiguously increase the incentive to work. For couples, however, income effects from a working spouse created by the WFTC, can lead to a *lower* participation in the labour market. Table 4 presents an overall simulated impact of the reform.

Table 4: WFTC Reform Simulations: Summary Impact on Employment

<i>Group</i>	<i>Increase in Employment</i>	<i>% point change</i>
Single Parents	34,000	2.20
Women in couples (Partner not working)	11,000	1.32
Women in couples (Partner working)	-20,000	-0.57
Married men, partner not working	13,000	0.37
Married men, partner working	-10,500	0.30
Total Effect	27,500	
Decrease in Workerless Families	57,000	

Source: Blundell, Duncan, McCrae and Meghir (2000)

In Table 5 are the detailed simulations. Panel (a) presents the responses for single parents. The simulation takes around 2.2% of the sample from no work to either part-time or full-time work, with no offsetting movements out of the labour market. One can clearly see the reason for this move in to work in the earlier graphs of the potential

impact of the WFTC on single parents' budget constraints. At or above 16 hours per week the single parent becomes eligible for WFTC (with any childcare credit addition to which she may be entitled). For some women this extra income makes a transition to part-time employment attractive. Nevertheless, the level of the aggregate behavioural response is perhaps lower than one might have anticipated.

Table 5: WFTC Reforms, Detailed Simulation Results

(a) Single Parents

<i>pre-reform</i>	out of work	<i>post-reform</i> part-time	Full-time	Pre-reform %
Out of work	58.0	0.7	1.5	60.2
Part-time	0.0	18.6	0.5	19.1
Full-time	0.0	0.2	20.6	20.7
Post-reform %	58.0	19.4	22.6	100
Change (%)	-2.2	0.3	1.9	

(b) Women in couples with employed partners

<i>pre-reform</i>	Out of work	<i>post-reform</i> part-time	Full-time	pre-reform %
Out of work	32.2	0.1	0.1	32.4
Part-time	0.3	31.6	0.0	32.0
Full-time	0.4	0.1	35.0	35.6
Post-reform %	33.0	31.8	35.2	100
Change (%)	0.6	-0.1	-0.4	

(c) Women in couples with partners out of work

<i>pre-reform</i>	out of work	<i>post-reform</i> part-time	Full-time	pre-reform %
Out of work	56.8	0.4	0.9	58.1
Part-time	0.0	22.2	0.4	22.6
Full-time	0.0	0.1	19.2	19.3
Post-reform %	56.8	22.8	20.5	100
Change (%)	-1.3	0.2	1.1	

Source: Blundell, Duncan, McCrae and Meghir (2000)

We see a minor offsetting reduction in labour supply through a simulated shift from full-time to part-time employment among 0.2% of the sample. This is consistent with a small (negative) income effect among some full-time single women, for whom the increase in income through the WFTC encourages a reduction in labour supply.

Nevertheless, the predominant incentive effect among single parents is positive. Given the low level of participation – a little over 40% - a 2.2 percentage point increase is important.

For women in couples the simulated incentive effect is quite different. In panel (b) of Table 5 we report estimates of the transitions following WFTC among a sub-sample of women with employed partners. There is a significant overall *reduction* in the number of women in work of around 0.57%, equating to a grossed-up figure of around 20,000 in the population.⁴⁸ This overall reduction comprises around 0.2% who move into the labour market following the reform, and 0.8% who move from work to non-participation. The number of hours worked by women with employed partners is predicted to fall slightly, by 0.18 hours on average over the full sample.

The predominant negative response is clearly not one that is intended, but from the earlier discussion one can easily see why. There will be a proportion of non-working women whose low earning partners will be eligible for the WFTC. The greater generosity of the tax credit relative to the current system of Family Credit increases household income. This increase in income would be lost if the woman in the household were to work. And for those women currently in the labour market, the WFTC increases the income available to the household if she were to stop working.

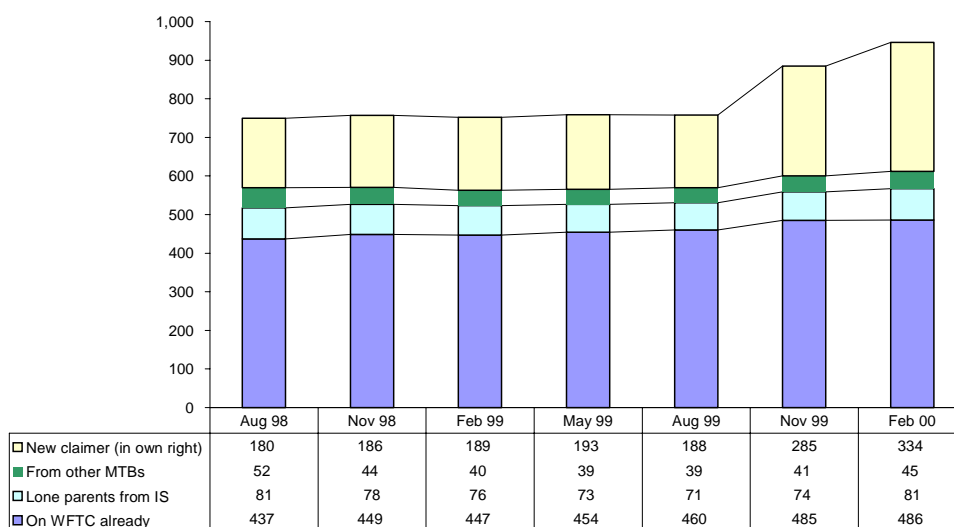
In panel (c) the incentives for a sub-sample of women whose partners do not work are presented. For this group there is a significant overall increase of 1.32% in the number of women who work, equating to a grossed-up figure of around 11,000 in the population. The reason for this shift is more straightforward, and stems from the increased generosity of the basic WFTC relative to the current Family Credit system for those women who choose to move into work. Note that for this group the generosity of the childcare credit component of the WFTC is not an issue, since households only qualify for the childcare credit if both household members work 16 hours or more. There is of course potential for both members of an unemployed household to move into work in order to qualify for the WFTC including the childcare credit, but a joint simulation (not reported here) shows that such an outcome is virtually non-existent.

⁴⁸ Interestingly a similar ‘unintended’ adverse effect on employment rates among married women has been documented for the EITC expansions in the US, see Eissa and Hoynes (1999).

Some Recent Ex-Post Evidence

The WFTC was introduced for all new recipients in October 1999 and fully phased in by April 2000. From recent administrative caseload data⁴⁹, the introduction of the WFTC, and the substantial increase in generosity, appears to have had a marked effect on the number of people claiming in-work benefits. Indeed the caseload rose by 30% in the 12 months following May 1999.⁵⁰

Figure 14: Transitions of Families onto WFTC



Source: Blundell and Brewer (2000).

Some of the change in WFTC caseload will be due to the increased numbers of already working parents who qualify for WFTC due to its increased generosity – some of the so called ‘windfall beneficiaries’. This alone cannot be taken as a measure of success in increasing employment, although it may be justified from a redistribution point of view. We can learn a little more by looking at administrative data on cross-benefit flows. Figure 14 breaks down the WFTC/FC caseload by their situation 12 months ago. It shows that a large component the caseload increase (around 75%, taking

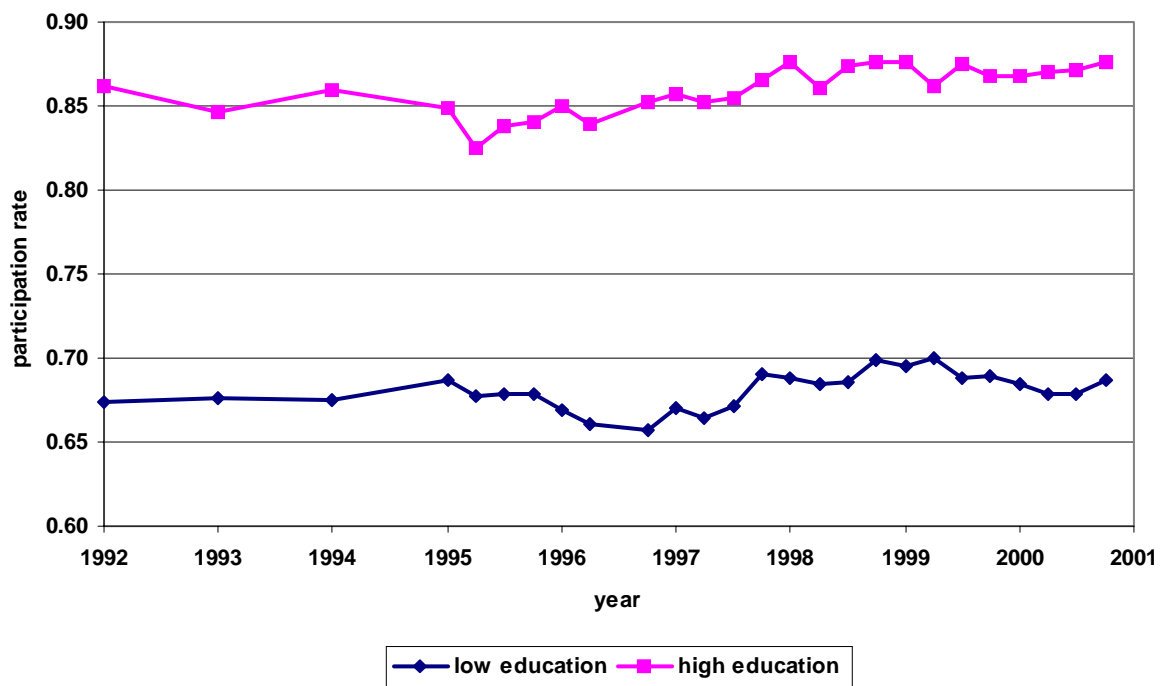
⁴⁹ Department of Social Security, Client Group Analysis.

⁵⁰ There has also been a large increase in take-up of the Childcare Tax Credit compared to the childcare disregard under Family Credit. 111,000 families were receiving help with childcare costs in May 2000, a

the last 4 quarters of FC as a baseline) since October 1999 came from people who were not claiming any means-tested benefits or tax credits 12 months before. Both these two facts are consistent with the increased entitlement of the WFTC compared with FC.

We also examine the impact on the relative employment rates of the main target groups. For example, Figure 15 shows the relative growth of low education to high education single parents. Using the high education group to control for common trends⁵¹ the relative increase in employment since the introduction of WFTC in late 1999 shows about a 2.5% rate rise, very close to the prediction in Table 4. Figure 16 presents the same comparison for women in couples with children who have working partners. Here there is evidence of a small relative decline in participation. Again much the same as predicted in Table 4.

Figure 15: Single Parent Employment Rates by Education of Mother

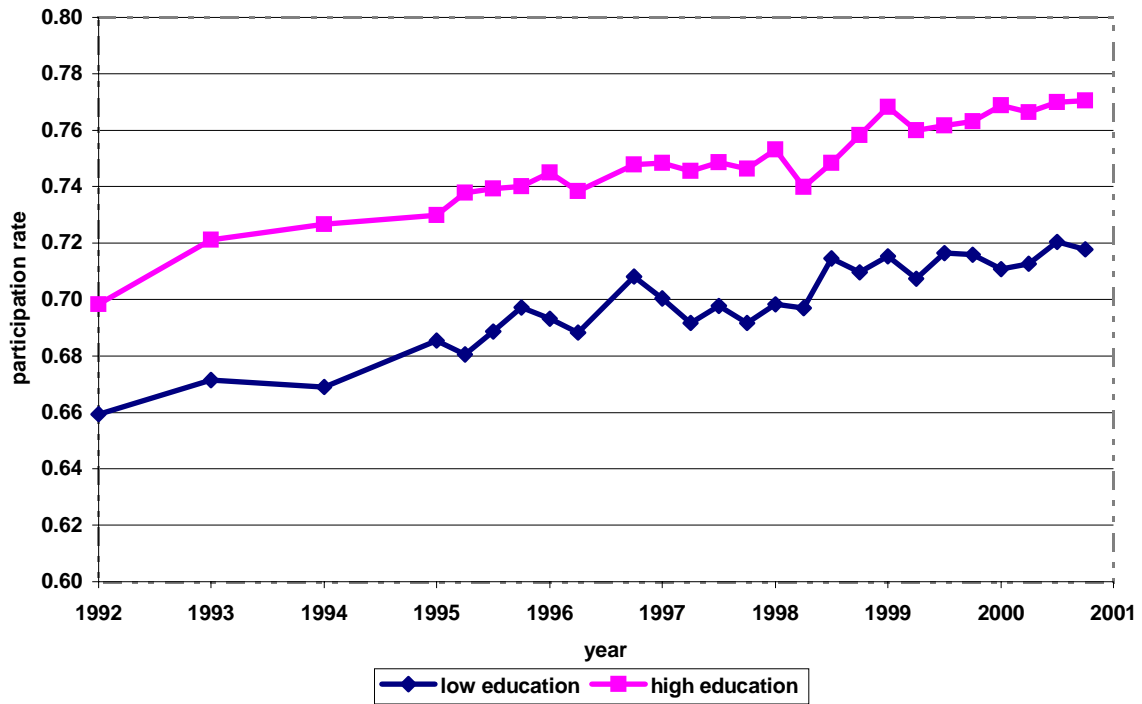


Source: LFS

156% increase over 12 months. The average amount of costs claimed was £32 a week. But although a large increase, this is still only 10% of the total WFTC caseload

⁵¹ See Eissa and Liebman (1996) for use of similar control groups in the evaluation of the EITC reforms. As mentioned above this type of before and after evaluation is often termed a 'natural experiment'.

Figure 16: Employment Rate: UK Women in couples with Children with Partner Working



Source: LFS.

Taken together with our simulation results these administrative statistics suggest that the impact of the WFTC reform on employment among low-income families in the UK has been positive but modest. This supports our overall view that the workings of the tax and benefit system in the UK together with the increased generosity to workless families with children, mean that changes to financial work incentives from in-work benefit reforms are significant but relatively small.⁵²

⁵² One caveat to this is the possible impact of childcare credit. Under WFTC this is a generous scheme available only to those in work (requiring both parents in a couples to work at least 16 hours) but it is currently taken up by only a small fraction of WFTC recipients. If participation in this part of the WFTC program was to expand significantly it could further encourage labour supply among those low-income parents currently who are currently out of work and claiming Income Support.

4.3 The Self Sufficiency Programme (SSP) – An Experimental Evaluation

To conclude this discussion we look more closely at an evaluation of a particularly interesting financial incentive programme in Canada - the Self-Sufficiency Programme. This is purely an experimental or demonstration programme, running in British Columbia and New Brunswick, and is examined in detail in Card and Robbins (1998). Figure 17 shows a typical budget constraint for a Canadian welfare recipient. It gives the budget set that an individual would face if they were earning the minimum wage in British Columbia, which was \$6 an hour in 1993. Taking a job at a few hours a week attracts an earnings disregard of around \$200, thereafter all earned income is effectively lost in a dollar-for-dollar transfer back to the income assistance programme. So, until recipients have exhausted their income assistance - that is working nearly 50 hours a week - they would have no return, with an implicit tax rate of 100% on their earnings.

The SSP is available to a single parent with twelve months welfare history and who finds a job averaging 30 hours a week over a period of a month. This is calculated on a monthly rolling period. Provide employment is found within the first twelve months of the programme, the participant remains eligible for three years. It is a generous system and does not change the income assistance level; so it is not, for example, causing more individuals who do not find employment to be on lower incomes. It is simply giving an earnings supplement to those who move into work.

The experimental nature of this reform makes it particularly attractive for evaluation reforms that rely on financial incentive to induce welfare recipients into work. The experiment entailed following 6,000 families for 5 years starting in 1993. One-half of the group of 6,000 eligible single parents on welfare were offered the programme and the others were not - they are the controls. The individuals that are on the programme are the treatments - and we can compare those two groups. As can be seen for Figure 18, the control and the treatment have very similar employment patterns before the experiment takes place. This is an indication of a well designed experiment and means that the controls are really quite a good match for the treatment group.

There is almost a doubling in employment for the treatment group. This is displayed in Figure 18, which also shows the close relationship between employment rates across the control and treatment group before the experiment began. Card and

Figure 17: The SSP Budget Constraint

Monthly Income for a Single Parent with One Child

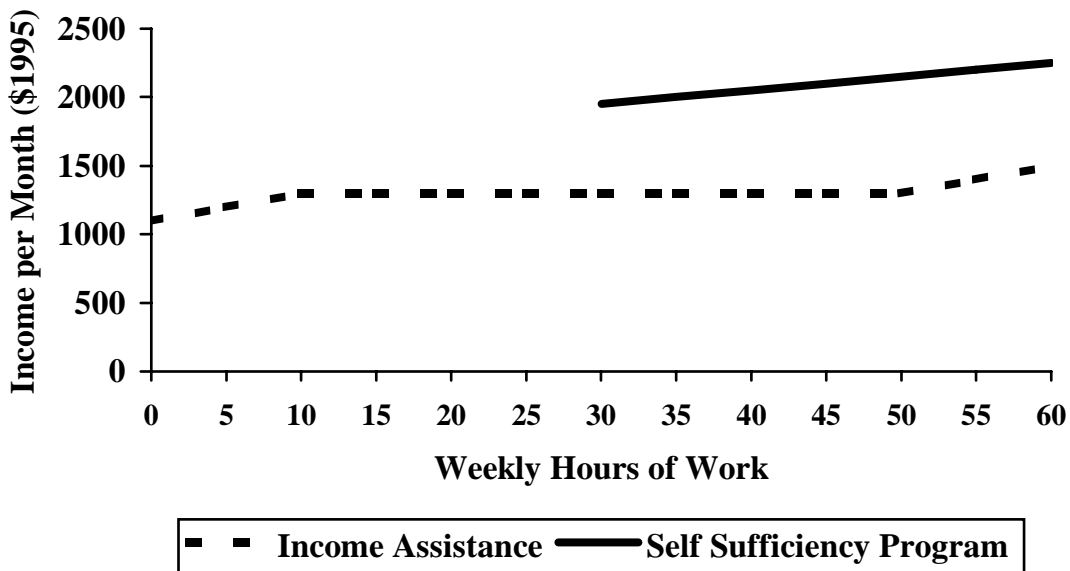
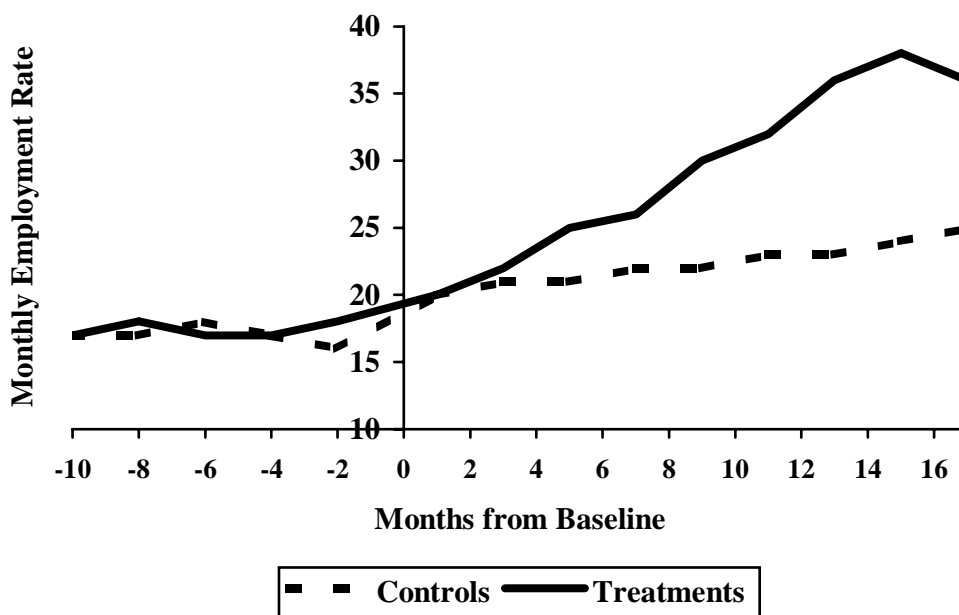


Figure 18: The SSP Impact on Monthly Employment for Single Parents



Robbins (1998) report many more results. In particular, the impact on hours and employment is very similar. These are low hour working individuals. The eligibility criterion is that recipients work at least one week of the month for 30 hours. For this experiment, the treatment group was found to have increased its hours of work, more or less, twofold over the control group.

Recent evidence on the SSP, see Bloom and Michalopoulos (2001), points to the control groups slowly catching up with the treatment group suggesting that these schemes enhance the speed with which individuals move off welfare but may not have such a large long run impact. It is also worth noting that the wages received by the participants were slightly lower than those received by the controls. Suggesting that the ‘incentivised’ group does, as one would expect, face less attractive labour market conditions.

5. Conclusions: Designing an Appropriate Welfare to Work Policy

5.1 An Overview

This lecture has identified several central aspects of the design of ‘welfare to work’ and ‘make work pay’ programmes. It focussed on two broad types of schemes. The first is an individually based active labour market programme that assists in job search and provides a wage or earnings subsidy once employment is found. Eligibility typically depends on a minimum duration of unemployment insurance or welfare, the subsidy is typically individually based and time limited. The second type of programme is an earned income tax credit. This also provides a wage or earnings supplement. However, in this case the level of the supplement is typically means tested according to family income and varies with family size and composition. It is also typically not time-limited and has no welfare or UI duration eligibility. Although both operate through a supplement to earned income, they operate in very different ways. Is one design better than another? Is one more suited to a particular group? The analysis presented in this paper has highlighted five central design features: targeting, time limits, hours conditions, incentives for wage progression, and job search assistance.

Targeting can be by type of individual, by level of earnings and by family income. Each is designed to reduce cost and reduce deadweight. Targeting by type can increase substitution with ‘close’ types and, to be cost effective, it also typically requires some

welfare/UI duration condition. But this in turn can lead to stigma effects. Targeting by earnings has the advantage of identifying low earners and the low skilled. But it can create a disincentive for effort and hours worked. It also reduces incentive for wage progression and skill formation in an effort based learning model. MaCurdy and McIntyre (2001) argue for an hourly wage based credit since this is more directly related to low skill, rather than simply low hours and creates less adverse effects on effort.⁵³ Targeting by income has the advantage of identifying poor families but often carries with it stigma effects and can create adverse family labour supply incentives. Operating through the tax return, as in the case of EITC (and WFTC), arguably reduce stigma effects.

Turning to time limits, these can refer to time limited unemployment or welfare benefits as well as time limited in-work tax credits and earnings supplements. Each seems to effectively reduce the disincentive effects that naturally occur in welfare and tax credit systems. An important issue is to what extent individuals move out of the system or simply cycle round the system.⁵⁴ These effects can be offset by wage progression. Indeed, time limits on earnings supplements and subsidies may enhance the incentive for wage progression in some cases. Of course, a phase-out rate with wage progression can act as a natural time limit. But a phase-out itself acts as a disincentive for wage progression.

The impact of these alternative designs on wage progression depends on the form of skill formation. There are typically two models used in the labour economics literature: (1) 'passive' learning by doing models, in which wage progression itself provides a natural 'time limit'. However, low experience related learning for low skilled and low overall wage progression at some 2-3% per year suggests time limits that are too short, could be counter productive. (2) effort based learning/investment models in which withdrawal rates act as a disincentive for human capital investment. In this case a time limit can help offset these adverse incentives. There is some evidence of important active wage progression and time limits will reduce the negative effect of the phase-out rate.

⁵³ See also the discussion in Dickert-Conlin and Holz-Eakin (2000).

⁵⁴ Meyer (1995) highlights the potential for cycling effects.

The imposition of a minimum hours requirement is designed to offset the incentive to reduce hours which underlies a high phase-out rate. However, quite different levels are used: for example, 35 hours in New Deal, 30 hours in SSP, 16 hours in WFTC, no minimum in EITC. If set too high they discourage work for those facing fixed costs of work – childcare costs, for example. It may be natural therefore to choose a ‘low’ limit for parents – 16 hours. Although the likelihood of wage progression in part-time low skilled jobs may be slight. Adequate childcare support could mitigate against the need to set very low minimum hours conditions. In any case, there is strong evidence that the incentives underlying minimum hours conditions work, as noted by the peaks in working hours distributions.

A welfare or UI duration requirement reduces deadweight and targets those with low labour market experience. But it may induce longer welfare durations and increases stigma or labelling. It also is unable to adjust to ‘shocks’ or changes in earnings that occur without an unemployment spell. Again we have seen that schemes vary considerably. The New Deal choosing 6 months of unemployment claims and the SSP 12 months of welfare claims.

Job search assistance seems a natural supplement to any financial incentive to move from welfare to work. However, the evidence is mixed. In the New Deal the mandatory nature of the scheme seem to have a relatively important impact but this may also reflect the threat of sanctions.⁵⁵ In the MFIP mandatory job search assistance also seems to have worked well. And this was measured through a randomised experiment. However, a voluntary scheme in the SSP (also experimentally evaluated), although having high take-up had relatively small effects on longer-term employment.

5.2 An Assessment: Designing an Appropriate Welfare to Work Policy

The aim of this lecture was to open up the discussion of ‘welfare to work’ or ‘make work pay’ programmes so as to define a broad set of design issues. The idea is to think in terms of an integrated set of policies designed to address the problems of subpopulations with low income, low human capital and low labour market attachment.

⁵⁵ The review of such schemes by Meyer (1995) finds a significant (and cost effective) impact of mandatory job search assistance schemes operating in the late 1980s in the US.

There are no magic solutions but several preferred design features emerge. There is strong evidence that financial incentives encourage work even among the low skilled, welfare dependent populations with little labour market experience. Time limiting seems to help with human capital incentives and self sufficiency, but the length needs to be gauged to allow for the relatively slow rates of wage progression that are likely to occur. Indeed the evidence is that wage progression is likely to be low and time limits should be relatively generous. Targeting welfare dependent and unemployed populations is also more cost effective and probably reasonably equitable provided a longish time limit is set. That is not to say there should not remain some overall negative income tax or tax credit in place, but the generosity of this can be traded off against the need to target certain low-income populations. Indeed, it may not be beneficial on the mothers of young children to work, at least in comparison to pure income transfers. Here there is little reliable evidence.⁵⁶

Financial incentives appear to work better when they are individually based rather employer based. This may be because job mobility is an important route to wage progression but it also seems to be affected by issues relating to stigma. Moreover, mandatory job search assistance, together with sanctions, seems to play a useful role. Further there is no reason why help with job search and job matching should not extend into work. Progression and advancement in work can also be enhanced by training. This appears to bring higher returns if work place located, at least for lower skilled individuals with low levels of prior education. This is particularly the case for training that leads to accredited qualifications to enhance transferability. Consequently an additional training subsidy for the employed may be needed in addition to an individual financial incentive. Although, in principle, the financial incentive should allow the individual to bear the reduced wage during training.

There is lots we still need to know. But there is a growing evaluation literature, some of which has been referred to here, which is building a large array of results on a wide variety of programmes, all of which try to address the problems of low income and low labour market attachment. This evidence is disparate and reforms are typically piecemeal. But they need not be. An integrated view of reform in this area needs to

⁵⁶ For two recent important studies see Ermisch and Francesconi (2000) and Morris and Michalopoulos (2000).

bring together welfare to work, tax credit, benefit and active labour market programmes under one guise so that a complete picture can be drawn of the incentives for labour market attachment, income progression and redistribution.

The analysis so far suggests that a earnings tax credit programme with time limits that are reasonably long and which targets welfare dependency, thereby focusing on low human capital and low labour market attachment, could form the basis for an integrated view of employment tax credits and new deal style programmes. It could work as a relatively low cost way of enhancing earnings and self-sufficiency among these target populations.

REFERENCES

- Abbring, J.H., van den Berg, G. and van Ours, J. (1997) "The effect of unemployment insurance sanctions on the transition rate from unemployment to employment" Working Paper Tinbergen Institute.
- Adnett, N. and A. Dawson, (1996) 'Wage subsidies and European unemployment: theory and evidence', *Economic Issues*, March, 1-21.
- Anderson, B., R. Riley and G. Young (1999), *The New Deal for Young People: First Year Analysis of the Implications for the Macro-Economy*, Employment Service Research and Development Paper No. 33
- Ashenfelter, O. Ashmore, D. and Dechenes, O. (1999) "Do Unemployment Insurance Recipients actively seek work? Randomized trials in four U.S. States" National Bureau of Economic Research Working Paper 6982.
- Bartik, T.J. (2000), 'Displacement and Wage Effects of Welfare Reform', in Card, D. and R. Blank (eds) (2000), *Finding Jobs: Work and Welfare Reform*, Russell Sage Foundation.
- Bell, B., Blundell, R. and Van Reenen, J. (1999), "Getting the Unemployed Back to Work: An Evaluation of the New Deal Proposals", *International Tax and Public Finance*, 6, 339-360. <http://www.ifs.org.uk/workingpapers/wp9912.pdf>
- Besley, T. and S. Coate (1992), 'Workfare versus Welfare: Incentive Arguments for Work Requirements in Poverty Alleviation Schemes', *American Economic Review*, 82, 249-261
- Bishop, J. and M. Montgomery, (1993) 'Does the targeted jobs tax credit create jobs at participating firms?' *Industrial Relations*, 32, 2, 289-306.

- Bingley, Paul and Ian Walker (1997), “The Labour Supply, Unemployment and Participation of Lone Mothers in In-Work Transfer Programs”, *Economic Journal*, 107, 1375-1390.
- Blanchflower, D. and Freeman, R. (2000) “The declining economic status of Young Workers in OECD countries” in D. Blanchflower and R. Freeman (eds) *Youth Unemployment and Joblessness in Advanced Countries*, Chicago: University of Chicago Press
- Blank, R. (2000), “Declining Caseloads / Increased Work: What Can We Conclude about the Effects of Welfare Reform,” prepared for conference *Welfare Reform Four Years Later*, Federal Reserve Bank of New York.
- Bloom, D. and C. Michalopoulos (2001), ‘How Welfare to Work Programs Affect Employment and Income: A Synthesis of Research’ MDRC, Washington.
- Blundell, R. (2001), ‘Welfare Reform for Low Income Workers’, Hicks Lecture 1999, *Oxford Economic Papers* (53), 18-214.
- Blundell, R. and M. Brewer (2000), ‘Tax and Benefit Reform in the UK: Making Work Pay’, in *Peer Review of UK Tax and Benefit Reform: Making Work Pay*, European Commission – DG EML, Peer Review Programme 2000. <http://peerreview.almp.org/de/UKnov00.htm>
- Blundell, R. and M. Costa Dias (2000), ‘Evaluation Methods for Non-Experimental Data’, *Fiscal Studies*, 21(4), 427-468.
- Blundell, R. and M. Costa Dias (2002), ‘Alternative Approaches to Evaluation in Empirical Microeconomics’, CeMMAP Working Paper CWP10/02, http://cemmap.ifs.org.uk/working_papers.shtml.
- Blundell, R., Costa Dias, M. Meghir, C. and Van Reenen, J. (2001) ‘Evaluating the Employment Impact of a Mandatory Job Search Assistance Program’ IFS Working Paper, WP01/20, <http://www.ifs.org.uk/workingpapers/wp0120.pdf>.
- Blundell, R., A. Duncan, and C. Meghir, (1998), ‘Estimating Labour Supply Responses using Tax Policy Reforms’, *Econometrica*, 66, 827-861.
- Blundell, R., A. Duncan, J. McCrae and C. Meghir (1999), “Evaluating In-Work Benefit Reforms: The Working Families Tax Credit in the UK”, paper presented at the Institute for Poverty Research Conference, North Western University, November 1999.
- Blundell, R., A. Duncan, J. McCrae and C. Meghir (2000), “The Labour Market Impact of the Working Families Tax Credit”, *Fiscal Studies*, 21(1), 65-7, <http://www.ifs.org.uk/publications/fiscalstudies>
- Blundell, R., L. Dearden and C. Meghir (1996), ‘The Determinants and Effects of Work Based Training in Britain’, *IFS Commentary R50*, April.

- Blundell, R., and H. Hoynes (2001), 'Has In-Work Benefit Reform Helped the Labour Market?', NBER Working Paper 8546, forthcoming in Richard Blundell, David Card and Richard Freeman (eds.) *Seeking a Premier League Economy*, University of Chicago Press.
- Blundell, R. and MaCurdy. T. (2000), *Labour Supply: A Review of Alternative Approaches*, in Ashenfelter and Card; eds, *Handbook of Labor Economics*, Vol 3a, North Holland.
- Blundell, R. and Meghir, C. (2002), "Active labour market policy vs employment tax credits: lessons from recent UK reforms", *Scandinavian Working Papers in Economics* (No 2002:1), IFAU, forthcoming in *Swedish Economic Policy Review*.
- Blundell, R. and I. Preston (1998), 'Income Uncertainty and Consumption Inequality', *Quarterly Journal of Economics*, May.
- Brewer, M. (2001), "Comparing In-work Benefits and the Reward to Work for Low-Income Families with Children in the US and UK", *Fiscal Studies*, 22(1), p41-77
- Brewer, M. and P. Gregg (2001), 'Eradicating Child Poverty in Britain: Welfare Reform and Child Poverty since 1997', IFS Working Paper 01/08.
- Brewer, M., T. Clark and M. Myck (2001), 'Credit Where It's Due? An Assessment of the New Tax Credits', *IFS Commentary*, No. 85, October.
- Brewer, M., M. Myck and H. Reed (2001), 'Financial Support for Families with Children: Options for the New Integrated Child Credit', *IFS Commentary* No. 82, January.
- Bonjour, D., Dorsett, R., Knight, G., Lissenburgh, S., Mukherjee, A., Payne, J., Range, M., Urwin, P. and White, M. (2001) *New Deal for Young People: national survey of participants: stage 2* Employment Service Report ESR67.
- Bos, J., A Houston, R. Granger, G. Duncan, T. Brook and V. McLoyd (1999), 'New Hope for People with Low Income', MDRC, Washington, D.C.
- Bryson, A. and A. Marsh (1996), 'Leaving Family Credit', Department of Social Security, research report No. 48.
- Bryson, A., Knight, G. and White, M. (2000) *New Deal for Young People: national survey of participants: stage 1* Employment Service Report ESR44.
- Card, D. and R. Blank (eds) (2000), *Finding Jobs: Work and Welfare Reform*, Russell Sage Foundation.
- Card, D., C. Michalopoulos and P. K. Robins (2001), 'The Limits to Wage Growth: Measuring the Growth Rate of Wages for Recent Welfare leavers', NBER Working Paper 8444, August.
- Card, D. and P. K. Robins (1998), "Do Financial Incentives Encourage Welfare Recipients To Work?", *Research in Labor Economics*, 17, pp 1-56.
- Cossa, R, J. Heckman, and L. Lochner (1999), "Wage Subsidies and Skill Formation: A Study of the Earned Income Tax Credit", mimeo, May, Chicago.
- Costa Dias, M. (2000) "A Dynamic General Equilibrium Model of A Labour Market Reform", Institute for Fiscal Studies, mimeo, July.

- Davidson, C and S. A. Woodbury (1993), 'The Displacement Effect of Reemployment Bonus Programs', *Journal of Labor Economics*, vol. 11, 575-605.
- Danziger, S (2000), 'Approaching the Limit: Early Lessons from Welfare Reform', mimeo, Center on Poverty, Risk and Mental Health, University of Michigan, July.
- Dickens, R., and D. Ellwood (2001), "Whither Poverty in Great Britain and the United States? The Determinants of Changing Poverty and Whether Work will Work", forthcoming in Richard Blundell, David Card and Richard Freeman (eds.) *Seeking a Premier League Economy*, University of Chicago Press.
- DfEE (1997) Design of the New Deal for 18-24 year olds, Department for Education and Employment, October.
- Dickens, R. (2000), 'The Evolution of Individual Male Earnings in Britain: 1975 – 1995' *Economic Journal*, 110, 460.
- Dickert, S., S. Houser and J. K. Scholtz (1995), "The Earned Income Tax Credit and Transfer program: A Study of Labor market and Program Participation", in *Tax Policy and the Economy*, vol 9, James Poterba, ed. Cambridge MIT press.
- Dickert, S., and S. Houser (1998), "Taxes and Transfers: A New Look at the Marriage Penalty", *National Tax Journal*, 51, 175-217.
- Dickert-Conlin, S. and Holtz-Eakin, D. (2000) "Employee-based versus employer based subsidies to low wage workers: A Public finance perspective" in Card, D. and Blank, R. *Finding Jobs: Work and Welfare Reform*, New York: Russell Sage Foundation.
- Dilnot, A. and A. Duncan (1992), "Lone Mothers, Family Credit and Paid Work", *Fiscal Studies*, 13, pp.1-21.
- Dolton, P. and D. O'Niell (1996), 'Unemployment Duration and the Restart Effect: Some Experimental Evidence', *Economic Journal*, 106, March.
- Dorsett, R. (2001), 'The New Deal for Young People: relative effectiveness of the options in reducing male unemployment', PSI, mimeo, October.
- Eissa, N. and J. Liebman (1996), "Labor Supply Response to the Earned Income Tax Credit", *Quarterly Journal of Economics*, CXI, 605-637.
- Eissa, N. and H. Hoynes (1999), 'The Earned Income Tax Credit and the Labor Supply of Married Couples', National Bureau of Economic Research, Working paper 6856, December.
- Ellwood, D. and Welty, E. (2000) "Public Service Employment and Mandatory work: A policy whose time has come and gone and come again?" in Card, D. and Blank, R. *Finding Jobs: Work and Welfare Reform*, New York: Russell Sage Foundation.
- Ermisch, J. and M. Francesconi (2000), 'The Effect of Parent's Employment on Children's Education', ISER Working paper, 2000-31.
- Giles, C., Johnson, P. and McCrae, J. (1997), "Housing Benefit and the Financial Returns to Employment for Tenants in the Social Sector", *Fiscal Studies*, 18, 49-72.

- Gladden, T. and C. Taber, (2000) "Wage Progression among Less Skilled Workers" in *Finding Jobs: Work and Welfare Reform*, David Card and Rebecca M. Blank (eds), New York: Russell Sage Foundation.
- Gosling, A., Machin, S. and Meghir, C. (2000) 'The Evolution of male earnings in Britain 1984-94' *Review of Economic Studies*, 67(4), 233, 635-666.
- Gradus, R.H and Julsing, J.M. (2001), "Comparing Different European Income Tax Policies: Making Work Pay", OCFEB Research Memorandum 0101, Erasmus University.
- Greenwood, J. and J-P Voyer (2000), 'Experimental Evidence on the Use of Earnings Supplements as a Strategy to 'Make Work Pay'', *OECD Economic Studies*, No. 31, 2000/II.
- Gregg, Paul, Paul Johnson and Howard Reed (1999), "Entering Work and the British tax and benefit System", IFS Monograph, London.
- Gregg, P., K. Hansen and J. Wadsworth (1999), 'The Rise of the Workless Household', in Gregg, P. and J. Wadsworth (eds), *The State of Working Britain*, Manchester University Press.
- Gregg, P. and J. Wadsworth (1999), *The State of Working Britain*, Manchester University Press.
- Grogger, J. and C. Michalopoulos (1999), 'Welfare Dynamics Under Time Limits', NBER Working Paper 7353.
- Grogger, J. (2000), 'Time Limits and Welfare Use', NBER Working Paper 7709.
- Heckman, J.J., (1974c), 'Effects of Child-Care Programs on Women's Work Effort', *Journal of Political Economy*, 82(2), S136-S163.
- Heckman, J. Lalonde, R. and Smith, J. (2000) "The Economics and econometrics of active labour market policies" in O. Ashenfelter and D.Card (eds) *Handbook of Labor Economics Volume III*
- Heckman, J.J., Lochner, L. and C. Taber, (1998), "Explaining Rising Wage Inequality: Explorations with a Dynamic General Equilibrium Model of Labor Earnings with Heterogeneous Agents", NBER Working Paper, No. 6384.
- Heckman, J., Ichimura, H. and Todd, P. (1997), "Matching as an Econometric Evaluation Estimator: Evidence from Evaluating a Job Training Program", *Review of Economic Studies*, 64, 605-654.
- Heckman, J., Smith, J. And N. Clements, (1997), "Making the Most out of Program Evaluations and Social Experiments: Accounting for Heterogeneity in program Impacts", *Review of Economic Studies*, 64, 487-536.

- Heckman, J. and Robb, R. (1985), "Alternative methods for Evaluating the Impact of Interventions", in *Longitudinal Analysis of Labor market Data* (New York: Wiley).
- Heckman, J. and Robb, R. (1986), "Alternative methods for Solving the Problem of Selection Bias in Evaluating the Impact of Treatments on Outcomes", in Howard Wainer (ed.), *Drawing Inferences from Self-Selected Samples* (Berlin: Springer Verlag).
- HM Treasury (1999b), *Supporting Children Through the Tax and Benefit System*, The Modernisation of Britain's Tax and Benefit System 5.
- HM Treasury (2000), *Tackling Poverty and Making Work Pay: Tax Credits for the 21st Century*, The Modernisation of Britain's Tax and Benefit System 6.
- Holcomb, P.A., L. Pavetti, C. Ratcliffe and S. Riedinger (1988), 'Building an Employment Focused Welfare System', Urban Institute, June. <http://www.urban.org/welfare/worksfirs.htm>
- Hollenbeck, K. and R. Willke, (1991) *The Employment and Earnings Impact of the Targeted Job Tax Credit*, Upjohn Institute for Employment Research.
- Hoynes, H. (2000) 'The Employment, Earnings and Income of Less Skilled Workers over the Business Cycle' in Card, D. and R. Blank (eds) (2000), *Finding Jobs: Work and Welfare Reform*, Russell Sage Foundation.
- Inland Revenue (various years), *Working Families' Tax Credit Quarterly Enquiry*, London: Government Statistical Service.
- Inland Revenue, (2001), *New Tax Credits: Supporting Families, Making Work Pay and Tackling Poverty*, London: Inland Revenue.
- Institute for Fiscal Studies, (1999), *The IFS Green Budget*, IFS, Commentary 76.
- Institute for Fiscal Studies, (2000), "Distributional Consequences of Fiscal Reform Since 1997", <http://www.ifs.org.uk/taxben/fiscalreform.pdf>.
- Katz, L. F. (1998) "Wage Subsidies for the Disadvantaged." In *Generating Jobs*, Richard Freeman and Peter Gottschalk, eds., New York, NY: Russell Sage Foundation, pp. 21-53.
- Katz, L. F. and D. H. Autor, "Changes in the Wage Structure and Earnings Inequality" in *Handbook of Labor Economics Amsterdam*. Edited by Orley Ashenfelter and David Card. North-Holland, 1999.
- Lissenburgh, S. (2001), 'New Deal for the Long Term Unemployed: A Comparison of Provision in Pilot and National Areas', ESR69, March.
- MaCurdy, T. and F. McIntyre (2001), 'Helping Working-Poor Families: Advantages of Wage-Based Tax Credits Over the EITC and Minimum Wages' mimeo, University of Stanford Economics Department, June.

- Martin, John and Grubb, David (2001) "What Works and For Whom: A Review of OECD Countries Experience with Active Labour Market Policies" OECD mimeo, September.
- Meghir, C and M. Palme (2001) 'The effects of a Social Experiment in Education', IFS working paper 01/11
- Meyer, B. (1995) 'Lessons from US Unemployment Insurance Experiments' *Journal of Economic Literature*, 33, 1, 91-131.
- Miller, C et. al. (1997), 'Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program' Manpower Demonstration Research Corporation, September.
- Moffit, R. and L.A. Pavetti (2000), 'Time Limits' in Card, D. and R. Blank (eds) (2000), *Finding Jobs: Work and Welfare Reform*, Russell Sage Foundation.
- Morris, P. and C. Michalopoulos (2000), 'The Self-Sufficiency Project at 36 Months: Effects on Children of a Program that Increased Parental Employment and Income', SDRC, June, Canada.
- Nickell, S.J. (1997) "Unemployment and Labour Market Rigidities: Europe vs. North America" *Journal of Economic Perspectives*.
- Nickell, S.J. (1999), 'Unemployment in Britain', in Gregg, P. and J. Wadsworth (eds), *The State of Working Britain*, Manchester University Press.
- O'Neill, D. (2000), 'Evaluating Labour Market Interventions', mimeo, NUI Maynooth College, March.
- Organisation for Economic Co-operation and Development (1994), *The OECD Jobs Study*, Paris.
- Organisation for Economic Co-operation and Development (2000), *Make Work Pay: Special Issue*, OECD Economic Studies, No 31, 2000/II.
- Pavetti, L, and D. Strong (2001), 'Work Based Strategies for Hard-to Employ TANF Recipients' Final Report, *Mathematica*, Washington, May.
- Phelps, E.S. (1994), 'Raising the Employment and Pay of the Working Poor: Low wage Employment Subsidies vs the Welfare State', *AER Papers and Proceedings*, May, 54-58.
- Riccio, J.A. and H.S. Bloom (2001), 'Extending the Reach of Randomized Experiments: New Directions in Evaluations of American Welfare to Work And Employment Initiative' MDRC Working Paper, August.
- Riley, R. and G. Young (2001), 'The Macroeconomic Impact of the New Deal for Young People', NIESR mimeo, August.
- Quets, G, P.K. Robins, E.P. Pan, C. Michalopoulos, and D. Card (1999), 'Does SSP Plus Increase Employment? The Effect of Adding Services to the Self Sufficiency Project's Financial Incentives', SRDC, May.
- Saez, E. (2000), 'Optimal Income and Transfer Programs: Intensive versus Extensive Labor Supply Responses', NBER Working Paper 7708.

- Schmitt, J. (1995) "The changing distribution of male earnings in Britain 1974-88" in R. Freeman and L. Katz (eds) *Differences and changes in wage structures*, Chicago: University of Chicago Press
- Schoeni, R.F and R.M. Blank (2000), 'What Has Welfare Reform Accomplished? Impacts on Welfare Participation, Employment, Income, Poverty and Family Structure', mimeo, University of Michigan, February.
- Scholz, J.K. (1996), 'In-Work Benefits in the United States: The earned Income Tax Credit', *Economic Journal*, 106, 156-169.
- Sianesi, B. (2001), '[An Evaluation of the Swedish Active Labour Market Programmes](http://swopec.hhs.se/ifauwp/abs/ifauwp2001_005.htm), IFAU Working Paper 2001:5, Office of Labour Market Policy Evaluation, Uppsala (2001). http://swopec.hhs.se/ifauwp/abs/ifauwp2001_005.htm
- Snowder, D. (1994), 'Converting Unemployment Benefits into Employment Subsidies', *AER Papers and Proceedings*, May, 65-70.
- Van der Berg, G., van der Klaauw, B. and van Ours, J. (1998) "Punitive Sanctions and the transition rate from Welfare to Work" Tinbergen Institute mimeo
- Van Reenen, J. (2001), "Active Labor Market Policies and the British New Deal for Unemployed Youth in Context" forthcoming in Richard Blundell, David Card and Richard Freeman (eds.) *Seeking a Premier League Economy*, NBER, University of Chicago Press.
- Walker, R. and Wiseman, I. (1997), "The Possibility of a British Earned Income Tax Credit", *Fiscal Studies*, 18(4).
- White, M. and Lakey, J. (1992) *The Restart effect* London: Policy Studies Institute.