The Impact of Policy Change on Job Retention and Advancement

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Editorial Note and Acknowledgements

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Abstract

This paper examines the impact of the Working Families Tax Credit (WFTC) on employment retention and advancement. The WFTC, which replaced Family Credit in October 1999, supplemented earnings of low paid workers living in low income families. It was designed to increase the financial incentive for low skilled workers to find and remain in work and in the process boost their family income. It finds evidence that WFTC increased employment retention among male recipients. WFTC does not appear to have increased wage growth compared with Family Credit but there is no evidence that employers were able to use the more generous WFTC to keep wage growth down.

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1 Introduction

The 1980s and early 1990s saw large increases in earnings and income inequality and the distribution of work across households. These factors contributed to large increases in child poverty, so that by 1997 about a third of all British children lived in relative poverty (Gregg, Harkness and Machin, 1999). The predominant reason for this was the absence of work in these families coupled with benefit levels which were insufficient to lift them out of poverty. Roughly one fifth of children lived in households with no adult in work and poverty rates among these households were very high. The reasons for this situation are disputed, for many, the gains from entering work were very low. Low skill levels often meant that the wage an individual would receive on entering work would be low. In addition, with the loss of benefits, many households would actually be worse off if they entered work, especially taking into account childcare costs. It was these disincentives to work that the Labour government sought to change with the introduction of Tax Credits and various other labour market policies.

The underlying principle behind much of the Government's welfare reform has been based on a 'work-first model'. Here the assumption is that any job is better than no job at all. In contrast the 'human capital model' promotes education and training on the basis that this would provide a higher entry point to the labour market, improve job retention and progression. The emphasis on the work-first model reflected the direction of welfare reform in the US. In the US out of work individuals are left with very little choice other than to accept any available job, in the UK, up to a point, individuals have a greater degree of choice. Welfare reform designed to decrease the number of individuals out of work and claiming benefits has (a) tightened up out of work benefit entitlement, restricting the criteria for eligibility and duration entitlement [JobSeeker's Allowance/New Deals] and (b) increased the financial incentive to take 'unattractive' jobs [in work benefits/tax credits/NMW] otherwise known as 'making work pay'. Understandably the incentive has been to move as many people off benefits as possible and while the work first approach may have the greatest short term gains, in the long term it may be counterproductive and financially inefficient. This would particularly be the case if it was found that individuals cycle through welfare programmes interspersed with low paid jobs supported through high rates of in-work benefits. There has also been some concern that whilst in the past there was a financial disincentive to find work, through the introduction of generous in-work benefits individuals may now have become trapped in low paying poor quality jobs as a result of financial disincentives to progress and move off in-work benefits.

Over the last 20 years a number of policy changes have been made to in work benefits in the UK. The two most financially important in-work benefits are wage supplements and assistance with housing costs. In terms of impacting on

the welfare to work transition perhaps the most significant have been the move from Family Income Supplement (which had been introduced in 1971) to Family Credit in 1988 and then the introduction of WFTC in 1999. These policy changes affected both eligibility rules (generally increasing the number of eligible low paid workers) and also the amount of benefit received for different working hours/wage combinations. This had fairly significant impacts on the work incentives for certain groups of individuals, which in turn appear to have impacted upon their employment rates. For example, Gregg and Harkness (2003) find that the introduction of WFTC raised lone parent employment by 7 percentage points. Interaction with Housing Benefit remains important and for some groups results in very little initial gains from finding work. However, little research work has been done on the transition rates of individuals into work and their subsequent job retention and advancement.

In this project we aim to get a better understanding of which factors make ladders out of benefit dependency sustainable in the long term. We know from existing research on low wage dynamics that for some individuals low paid jobs act as stepping stones to better paid jobs while others become trapped in either long periods in low pay or cycling between low pay and no pay. We are interested in extending this research to consider how in work benefits interact with low pay dynamics. We will examine how different groups of individuals fare with a focus on gender, age and cohort groups. Finally, we will analyse the impact of policy changes on progression. We shall concentrate on tax credits so before moving onto the analysis we provide some background on the system of tax credits in the UK and review the research evidence on the impact of tax credits on employment.

2. Tax credits

The Working Families Tax Credit was introduced in October 1999 and was phased in over a six month period. The WFTC was not a completely new innovation. Family Credit (FC), a system of in-work support, was already in place and the WFTC took on essentially the same design. However, WFTC was significantly more generous; spending on FC in 1998/99 was £2.4bn but this rose to £6.3bn in 2002/03 under WFTC. Furthermore the payment mechanism changed. FC was paid directly as a cash benefit to the primary carer but from 2000 WFTC was paid by the employer through the pay packet, with employers reimbursed by the Inland Revenue[1]. Only working families with dependent children were eligible to claim WFTC or FC.

[1] There was some variation in the payment method. Couples could elect for the credit to be paid directly to the primary carer in response to concerns about the distribution of income within families (the purse versus wallet debate). The self-employed received the credit direct from the Inland Revenue.

Eligibility for WFTC was dependent on hours of employment, the number of children, net income and capital of the family and childcare costs. To qualify, an adult in the family had to work at least 16 hours a week in paid employment. Families with a net income below a certain threshold (£90 a week in October 1999) would receive the maximum amount of WFTC. This maximum amount varied with the number and ages of children in the family. Any increases in net income above this income threshold reduced the amount of WFTC at a rate of 55%. So for every extra £1 earned over the threshold (after income tax and national insurance) the family would experience a 55 pence fall in WFTC payments. At some level of net income the family would not be eligible for any WFTC. As WFTC was counted as income in the computation of Housing Benefit entitlement it was often difficult for a family to assess their final income should their circumstances change.

If an adult worked over 30 hours a week a small extra payment was made. Financial assets over £3000 reduced the amount of credit and families with savings of over £8000 were not eligible for any credit. Families were assessed for WFTC every six months, with the onus on the family to inform the Inland Revenue of any changes in circumstances.

WFTC was more generous than FC in a number of dimensions. The maximum amount of credit was higher, the net income threshold at which a family would be fully eligible was higher but perhaps most importantly the rate of credit withdrawal was lower at 55% compared to 70% under FC (although taking income tax and national insurance into account the implicit tax rate was 69%, Lydon and Walker (2005)). From 1994 a disregard was introduced in FC for help with the costs of certain forms of childcare but was of no benefit for the poorest families on maximum credit. WFTC provided significantly more generous support for childcare. Families could claim an additional childcare tax credit of 70% of formal childcare costs up to £100 a week for those with one child to £150 a week for those with two or more children (for couples both must be working at least 16 hours a week) and this was coupled with increases in the disregard for childcare costs for the purposes of calculating entitlement to Housing Benefit and Council Tax Benefit.

In April 2003 the system of WFTC was abolished and replaced with the Working Tax Credit (WTC) and the Child Tax Credit (CTC). The receipt of CTC is not dependent on employment status and is paid to the primary carer. WTC essentially has the same features of WFTC but is more generous still. The credit amounts and income thresholds were again increased and the credit withdrawal taper was further reduced to 37%. Assets were no longer considered when calculating entitlement and child support payments are not taken into account. In addition, the eligibility was extended to those 25 years or older on low incomes without dependent children. The period of eligibility assessment was increased from the previous six months to the previous tax year; which contributed to some of the subsequent problems of over-payment.

The idea was to align the payment as closely as possible with the tax system and responsibility was moved from the Department of Work and Pensions to the Inland Revenue (now HMRC).

In the statistical analysis we present below we concentrate on comparing outcomes for recipients of WFTC with FC recipients and, therefore, we present findings up to April 2003.

3. Employment effects of Tax Credits

There is a growing body of academic research analysing the employment impacts of the WFTC. Despite these studies varying in their methodology and time period of analysis, the consensus is that the WFTC raised employment among the target groups. Most of the work examines the impact on lone parents' employment, one of the biggest beneficiaries of the WFTC, but some studies also examine the impact on couples with children.

Lone parent employment grew strongly over the period in which WFTC was introduced. However, it had been growing strongly since the UK came out of recession in 1993. The main difficulty in assessing the effect of WFTC is that we do not know what would have happened to employment in the target groups in the absence of the policy change (the counterfactual). For example, employment may have grown strongly among lone parents even if the WFTC had not been introduced. The typical way in which researchers attempt to overcome this problem is to pick a comparison group (e.g. single adults without children) and calculate any change between the two groups. The estimated impact of the policy change is therefore based on the assumption that any change in the differential is due to the policy and this may not always be true.

The first paper to examine employment effects was by Brewer and Gregg (2001). They examined the impact on lone parents' employment, using single adults without children as a comparison group, and found that the WFTC raised the employment rate of lone parents by about 1.4 percentage points. However, because they only had access to data up to Summer 2000 the statistical robustness of these results was low. Gregg and Harkness (2003) also examined lone parents and used the same comparison group. They found a larger effect on employment of 5 percentage points and also an increase in hours of work among those lone parents in employment. Leigh (2004) finds a smaller, albeit positive impact on work among lone parents and women in couples of around 1 percentage point. He also reports an increase in hours of work of one hour a week. Francesconi and Van der Klaauw (2004) find a much larger positive impact on employment among lone parents of 7 percentage points, driven by an increase in flows into employment but also by a decline in flows out of work among this group. They also report the biggest impacts among lone parents with a child under the age of five years.

Perhaps the most comprehensive analysis of the WFTC is that of Blundell, Brewer and Shepherd (2005). They examine the impact on lone parents' employment and also on couples with children. They point out that because other policies were introduced at the same time as the WFTC it is not possible to identify its impact in isolation. The most important of these other policies was the increases in child allowances for those on Income Support and Job Seekers Allowance. These would have the effect of reducing work incentives, particularly for lone parents. They report an increase in employment arising from the WFTC among female lone parents of 3.6 percentage points, or 60,000 but view this as an under-estimate of the true impact.

The results for couples are somewhat mixed, depending on whether the individual's partner is currently working or not. For men and women without a working partner they find a positive impact on employment from the introduction of the WFTC. However, for those with a partner already working they find no impact on work, and indeed for men with a working partner they report a negative impact on work status. This is perhaps not as surprising as it may seem. For individuals with a working partner the increased generosity of the WFTC provides an income boost to the household that is not contingent on them working. Economic theory predicts that some of these individuals would stop working as a result of this income boost. The overall effect is a re-distribution of work as individuals in workless households enter work and some of those in households with both adults working drop out of work. The overall effect of this is a fall in the number of workless households.

Brewer, Duncan, Shepherd and Suarez (2006) examine the employment impacts by estimating an empirical model of labour supply (a model that tells us how individuals and households respond to changes in work incentives) and evaluate the impact of the WFTC using this model. They find a positive impact on employment of lone parents of about 5 percentage points, a negative impact of about 0.57 percentage points among women in couples and a positive impact of 0.75 percentage points among men in couples. The reductions in employment among women in couples are driven by those with working partners for the reasons given above. They go on to estimate that although the total number of jobs increases by about 80,000 the number of workless households with children falls by 99,000 due to this redistribution of work.

One of the few studies that has assessed the impact of the WFTC on wage growth found that the WFTC has a positive impact on wage growth for individuals who became eligible with the introduction of the WFTC (and who were not eligible under FC) and were therefore on the taper, but a negative effect for individuals who received the maximum payment (Lydon and Walker, 2004). They hypothesise that the positive impact could be due to employers using the wage subsidy to fund general training and individuals being in the position to accept such jobs paying below their reservation wage.

Another piece of research which has looked at within year earnings and income variability of WFTC recipients has shown that there is both a considerable amount of variability in earnings and many of the income components (including tax credit payments) on a month by month basis (Hills, Smithies and McKnight, 2006). While the number of families followed on a week by week basis was small, it does provide a warning against simply using point in time estimates of earnings and income among this low income group and strengthens the case for using annual information.

4. Estimates of the impact of WFTC on job retention and advancement – the model

We want to estimate the impact of tax credits on employment retention and advancement. As we do not have experimental data where a random sample of qualifying individuals were given tax credits and a random sample of qualifying individuals were not given tax credits, we have to use statistical techniques to attempt to estimate what individuals' employment profiles would have been in the absence of tax credits (the counterfactual). We therefore have to estimate the counterfactual by identifying a number of different control groups and use statistical techniques to produce estimates of how tax credit recipients would have fared in the absence of tax credits. The main statistical method we employ is the Difference-in-Differences (Diff-in-Diffs) estimator. This estimator is often used to assess the impact of a treatment on an outcome variable in the absence of experimental data. In simple terms, the difference in the outcome between treatment and control groups before the treatment, is compared to the difference in the outcome between the same groups after the treatment. For example, the impact of an active labour market programme designed to move welfare recipients off benefit and into work can be assessed by comparing the outflow from the stock of claimants before and after the introduction of the programme compared with a group of claimants who were not eligible for the programme. From this simple example it is fairly obvious that the basic assumption underlying the Diff-in-Diffs estimator is that apart from the introduction of the treatment nothing else changed which had an unequal impact on the outcome variable for the treatment and control groups. This is often not the case and some attempt to control for other changes can be made by estimating the Diff-in-Diffs estimator in a multiple regression framework.

More formally, abstracting from other regressors, the Diff-in-Diffs estimator is defined as:

$$\hat{\delta}_{DID} = \left(\overline{Y}_{t_1}^{T} - \overline{Y}_{t_1}^{C}\right) - \left(\overline{Y}_{t_0}^{T} - \overline{Y}_{t_0}^{C}\right),$$

where $\bar{Y}^{T}$ and $\bar{Y}^{C}$ are the mean outcomes for the treatment and control groups, respectively, and t_0 and t_1 indicate time before and after the introduction of the treatment respectively.

For the purposes of this analysis the outcome variables of interest are the probability of remaining in work and wage progression rates. Comparisons will be made between individuals who move off out of work benefit into work and receive in work benefits and those who do not receive in work benefits. We define the treatment as the introduction of WFTC in 1999. We estimate a number of different models including controls for age and entry wage position.

5. Data

The data used in this paper is the Lifetime Labour Market Database (LLMDB). For a fuller description, see CASEpaper 132. The LLMDB comprises of a large number of administrative data series that can be linked together. These data are derived from a 1% random sample of individuals drawn from National Insurance records for each tax year from 1978/79 to 2004/05. The database contains information on annual earnings from employment and spells of self employment and benefits receipt. Information is also held on date of birth, sex, postcode of home address, date of death (where applicable) and whether the individual is a migrant. We can build a unique picture of individuals following them through spells of employment, self employment, and benefit receipt over a substantial portion of their working lives.

We have constructed a panel dataset that contains as much information as possible on individuals' labour market status and earnings for each tax year from 1978/79 to 2004/05. It dataset contains information on an individual's annual earnings for each tax year, whether they are self employed and whether they are in receipt of contributory benefits. However, within any given tax year, precisely when an individual is in any given state is unknown.

To these data we have supplemented information on in work benefits; Family Credit and Working Families Tax Credit. We only have information on the receipt of these benefits from 1994/95 tax year. This limits our analysis somewhat but we still have a number of years to analyse FC and WFTC separately. For FC and WFTC we actually have the start and end dates of the spells on these benefits (rather than number of weeks in the year claimed as with the other benefits). This enables us to look more precisely at spell lengths on these in-work benefits and to see if there are any differences between the two. In addition, we also observe multiple spells on these benefits, so we can analyse those individuals that cycle on and off FC and WFTC.

6. The Results

(a) Summary figures on Family Credit and Working Families Tax Credit

As our data comprises of a 1% random sample of the population of Great Britain, as such it should provide an unbiased sample of those claiming FC and WFTC. In addition, we should be able to gross up to population figures by multiplying our sample numbers by 100 (since we observe 1 in every 100 in the population). To begin with we provide an analysis of the number of individuals claiming FC and WFTC, and some of their characteristics, and compare these to the official statistics published by HM Revenue and Customs (HMRC).

Figure 1 presents the official caseloads for FC and WFTC for all claimants, couples and lone parents between 1988 and 2002. There has been a clear growth in the receipt of in-work benefits in Britain over this time period. In 1988 there were roughly 250,000 individuals claiming FC, most of these were individuals in couple households. Through the early 1990s the prevalence of FC grew so that by 1999 when it was replaced with WFTC there were some 800,000 individuals claiming. The introduction of WFTC brought a huge expansion in the number of claimants. By 2002 around 1.2 million individuals were claiming WFTC. This growth has occurred amongst both couples and lone parents.

Figure 2 presents our figures on receipt of FC and WFTC for the period 1995 – 2004. These figures look very similar to those in Figure 1 from the official caseload. This figure also reports the number of men and women claiming separately. Women make up about 60-70% of recipients. Note that our figures relate to those claiming WFTC and in work. So for a couple claiming we will observe the recipient in work for the purposes of the benefit.

Table 1 then presents the age composition of those receiving in-work benefits. The majority of recipients are between the ages of 25 and 50. However, there is some evidence that the age composition has shifted over time. There appears to be fewer younger recipients and a shift towards somewhat older recipients in the last few years.

Table 2 presents information on the family type of the recipient and who is the main earner in the household. These figures come from published statistics rather than our data since we do not observe household information. Most recipients are employees rather than self employed, but the proportion of self employed recipients roughly reflects the proportion in the workforce as a whole. Among claimants living in couples, the majority are in families where the man is the main earner. However, since most lone parents are women, they are the largest group of recipients overall.

Figure 3 then presents the average value of the award in nominal weekly terms. This trended upwards through the period of Family Credit. However, since the

introduction of WFTC the average award has become more generous. Overall the money allocated to WFTC was much more than FC. These figures tell us that some of this extra cash went to the increased caseloads, and some on the increased generosity of each claim. These changes may well have important impacts on employment retention and advancement for in-work benefit recipients.

(b) The duration of FC and WFTC claims

We now turn to examine the duration of spells on FC and WFTC. Table 3 presents information on the length of spells on in-work benefits. This shows us that the spell length is quite widely distributed across recipients. About 40% of all claims are between 6 and 12 months. However, more than 30% of claims last more than two years. So while the average duration of a spell is about 20 months, this varies widely between different claimants, with some having only short spells on in-work benefits and some having very long spells. Tables 4 and 5 present these distributions for men and women respectively. We can see that in-work benefit claims for women tend to last quite a bit longer than for men. In particular, there are significantly more women with spells lasting more than 36 months and the gap appears to be widening.

However, just looking at single spell durations may not tell us the whole story. It might well be that in-work benefit claimants are cycling on and off these benefits so that within a short time of a spell ending another one begins. Table 6 shows there is some truth in this. While about 40% of those ending a claim do not have another one (at least in the period of our data), about 15-20% will start a new claim within 3 months and some 30-40% start a new claim within the next year. This suggests quite a high degree of repeat claims of in-work benefits and is somewhat worrying for those who would hope that in-work benefits provide a step up into better paid jobs. There do not appear to be any clear differences between the extent of repeat claims for FC and WFTC claimants. Tables 7 and 8 present the same information for men and women to examine if the incidence of repeat spells is different for the sexes. The results show a very similar pattern for men and women.

(c) Transitions into work

We have established that spells on FC and WFTC can last some time and furthermore many of those who do stop claiming will start a new claim within a short space of time. We now turn to look at transitions in more detail to see how effective in-work benefits are at helping job entrants to remain in employment. In particular, we shall examine differences in the effectiveness of WFTC compared to FC in terms of employment retention of new entrants. In order to do this we have to use our data in a slightly different way than we have so far. We create annual (tax year) records of employment for individuals and follow them over time. This allows us to examine those who are moving from non-employment into employment from one year to the next. We then want to examine what happens to these job entrants the following year, i.e. whether

they are still in employment or not. Specifically we want to compare those who enter employment and claim in-work benefits with those who enter work independently of in-work benefits and how this changes pre and post WFTC. The diagram below shows the sequence of transitions we are looking at. We take all those who are out of work in year t – 1, who then enter work in year t. Here they can either enter work on WFTC or not. We then compare outcomes in terms of whether these entrants are in employment in year t + 1. This is expressed as a percent of the original group of entrants who are still in employment.

State at t-1	State at t	State at t+1
Non-employed	Employed – FC/WFTC	Employed?
	Employed – No FC/WFTC	

In terms of our difference-in-difference estimation described above we basically compare this employment probability for our in-work benefits entrants before and after WFTC introduction and for our non in–work benefits entrants before and after WFTC. Here our treatment group is those entering on in work benefits and our control group those entering but not on these benefits. Before we proceed to the estimation results let us look at some descriptives on these transitions.

Figure 4 presents the percent of those in non-employment in year t-1 who enter work in year t (note that this includes both employment and self employment). Around 13-15% of non-employed men and women enter work by the following tax year. This varies a little over the economic cycle. Figure 5 then presents the percent of these entrants who do so into Family Credit or WFTC. Roughly 5% of women entering work do so on FC and WFTC. The figure for men is higher at about 8% and this has risen since the introduction of WFTC to about 10%. It is possible that more men are entering work on WFTC because of its increased generosity over FC and therefore men now qualify for in-work benefits. It is this group of entrants that we want to compare with general job entrants to see if there is any difference in their subsequent employment retention rates.

7. The impact of WFTC on employment retention

We now turn to look at the issue of whether WFTC has led to greater employment retention than FC. For this we will use our difference-in-difference estimation technique outlined above. In fact, we will use a regression adjusted version of this. To begin with it is informative to just look at the retention rates over time for those entering work on in-work benefits and those entering without these benefits. Figure 6 shows the percent of these entrants who remain in employment at year t+1 and Figure 7 for year t+2. We can see that employment retention is higher for those on in-work benefits. Over 85% of these FC/WFTC entrants remain in employment whereas retention rates are a

few percent points lower for other entrants. But the striking thing to note about this figure is that the retention rate appears to have risen after 1999 when WFTC was introduced. This first piece of tentative evidence suggests that employment retention may have risen with the introduction of WFTC.

In order to establish how significant this apparent change in retention is we turn to our statistical model of difference-in-differences. This essentially compares retention rates in the periods before and after WFTC introduction for our FC/WFTC group and for the non-FC/WFTC group. This estimation allows us to test whether there is a statistical difference between these two groups in terms of the change in the retention rates. It also enables us to control for other factors that may be affecting the retention rates, such as age differences and even the entry wage.

Table 9 presents the results of this estimation. The results are the estimated percent point change in the employment retention rate as a result of the introduction of WFTC. When estimating such models we need to make an assessment as to whether we have estimated a statistically significant result or not. Economists usually work with degrees of significance. We signify whether there is an apparent impact of WFTC using this convention.[2] Our results suggest a positive impact on retention from the WFTC for all entrants but this relationship is not quite statistically significant. When we estimate separately for males and females, we find no effect for females but a statistically significant impact for males. The results suggest that the WFTC increased the employment retention rate for males by about 2% points.

Adding in controls for age does not change the results very much. However, when we add the wage at entry as a control the effects become even larger and have greater statistical significance. This specification is essentially comparing job entrants of the same age and same entry wage into FC/WFTC with those not on FC/WFTC. It allows us to control for changes in the characteristics of the treatment and control groups in terms of entry wages. As WFTC was more generous than FC, and therefore covers higher wage individuals, and we know that there is a positive relationship between employment retention and position in the earnings distribution, it is possible that employment retention estimates excluding controls for entry wage could overestimate the impact of WFTC

The results are quite striking. The WFTC appears to have increased job retention for males at least. It might be that we can also see this effect in terms of weeks worked in the year, rather than just employment spells. Table 10

[2] The convention is to look for relationships that can be said to meet statistical significance at the 5% level. In table 9 we report * for 10% significance level, ** for 5% significance level, and *** for 1% significance level. The latter is the most stringent criteria.

estimates the impact of WFTC on weeks worked. None of the estimated impacts are large and they are all statistically insignificant.

Finally we turn to wages. One hope has been that getting people into work will lead them to make progress on the jobs ladder into better paying jobs. Here we look to see if the WFTC has resulted in greater wage growth. Figure 8 shows the percentage change in wages for job entrants one year after they entered work. This figure shows that, on average, wage growth is the same for in-work benefit recipients and non-recipients except in 1998 and 1999 when wage growth was higher for non-recipients. Table 11 reports the estimates from the diff-in-diffs model on the impact of WFTC on wage growth the year after job entry. Again the estimated effects are small and not statistically significant.

8. Summary and conclusion

Under Conservative governments from 1979 to 1997 there were growing twin problems of work poor households and increasing child poverty rates. When Labour came to power in 1997 they quickly introduced a raft of active labour market policies designed to increase transitions from welfare to work and to increase the earnings and household incomes and the most disadvantaged in the labour market.

In this chapter we have focused on the Working Families Tax Credit which was introduced in 1999. This tax credit supplemented the wages of low paid workers living in low income families. WFTC was more generous than its predecessors (FIS/FC) and eligibility was increased through increasing the maximum earnings threshold and reducing the rate at which the credit was withdrawn. The objectives of the WFTC were to increase employment among the most disadvantaged workers by increasing the financial gains from working even in very low paid jobs, improving job retention by either making it possible for individuals to remain in very low paid jobs or, more optimistically, to use this first job as a stepping stone to better paid jobs. In addition, WFTC was designed to increase household incomes amongst this disadvantaged group where child poverty is particularly concentrated.

The LLMDB provides a unique opportunity to track a large random sample of individuals between employment states, moves on and off in-work benefits coupled with a complete record of annual earnings.

The introduction of WFTC resulted in a large increase in the number of individuals receiving in-work benefits and an increase in the average value of these awards. The LLMDB does not allow us to estimate the impact of WFTC in terms of increased flows into employment but other research has shown that WFTC increased employment particularly for some groups such as lone

parents. We focus our analysis on assessing the impact of WFTC on employment retention and wage progression.

We find evidence that the WFTC increased employment retention among male recipients relative to retention rates observed among male Family Credit recipients. We find no evidence that WFTC improved wage progression, in terms of annual earnings growth in the first year after the start of a claim, relative to FC. But importantly there is no evidence that the more generous WFTC was being used by employers to keep wage growth down. This may or may not have been helped by the simultaneous introduction of the National Minimum Wage which placed a wage floor in the low wage labour market.

Overall the evidence suggests the evidence suggests that WFTC benefited a larger number of low wage families with higher average awards and improved employment retention among male recipients without a detrimental impact on wage growth. The findings suggest that alternative policies are required to improve job progression; a job is a step in the right direction but is not an automatic leg-up onto a jobs ladder.

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Figures and Tables

Figure 1: Official Number of Claimants FC and WFTC

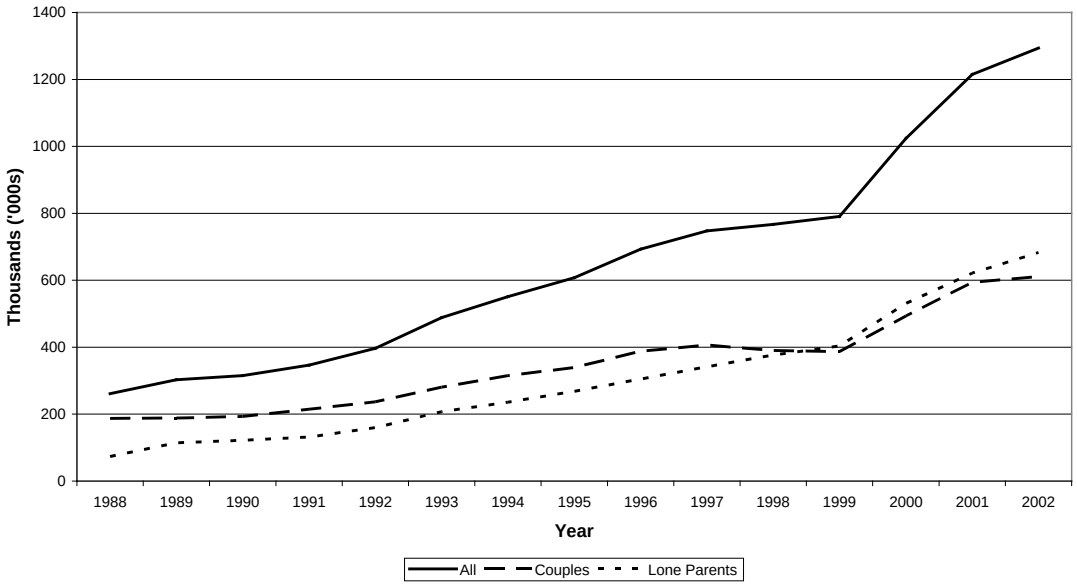

Figure 2: Estimated claimants from LLMDB

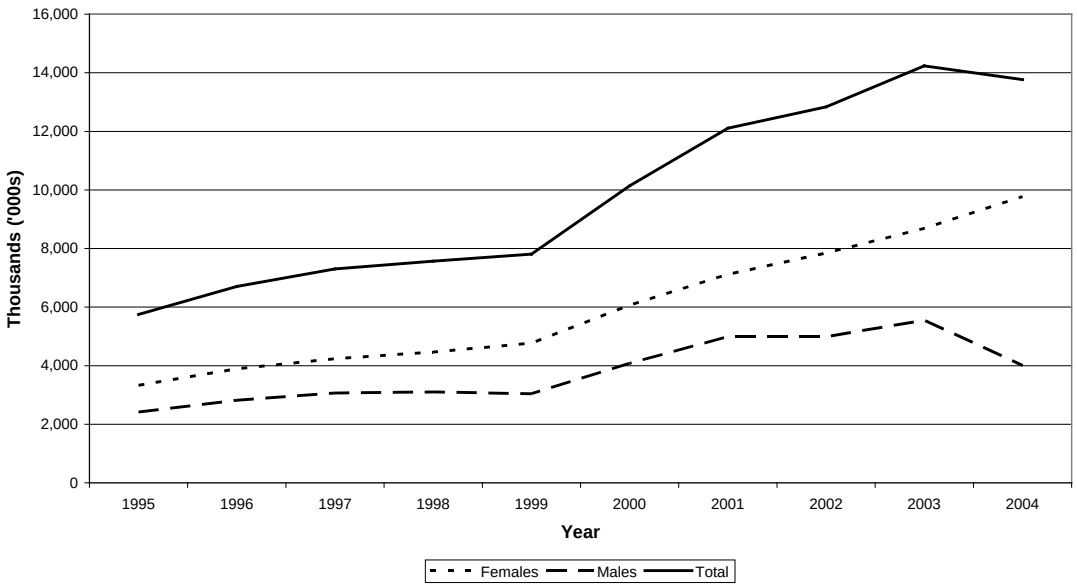

Figure 3: Average Value of Award FC and WFTC

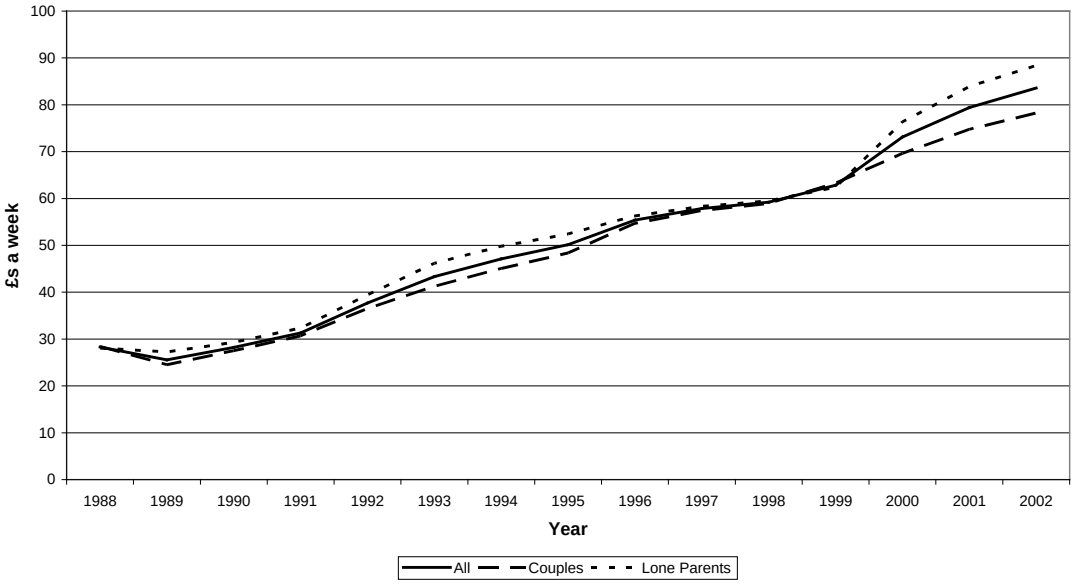

Figure 4: Job entrants

% entering employment from non-employment

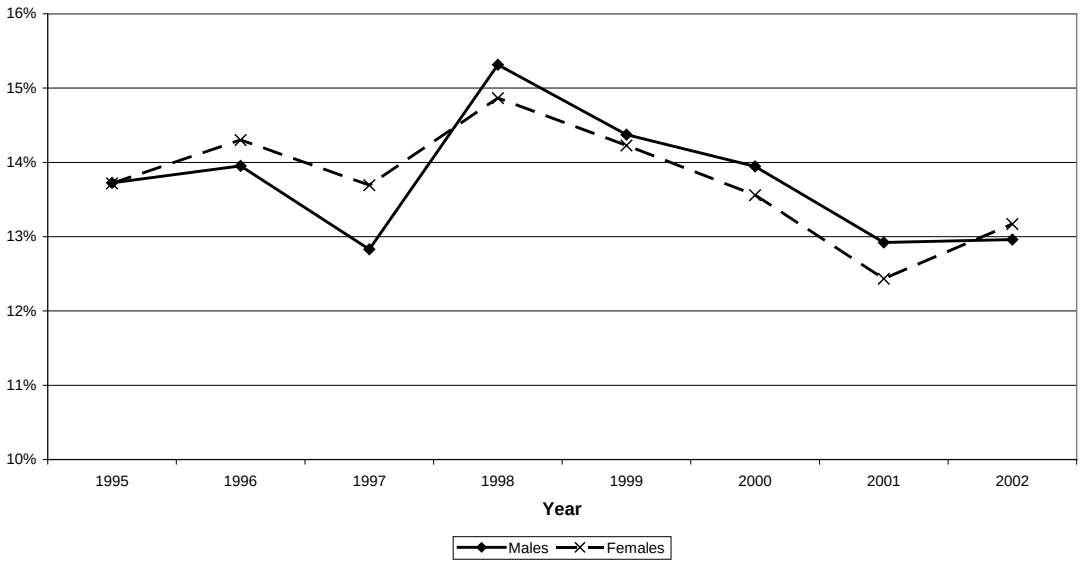

Figure 5: FC and WFTC entrants

% of entrants doing so into FC or WFTC

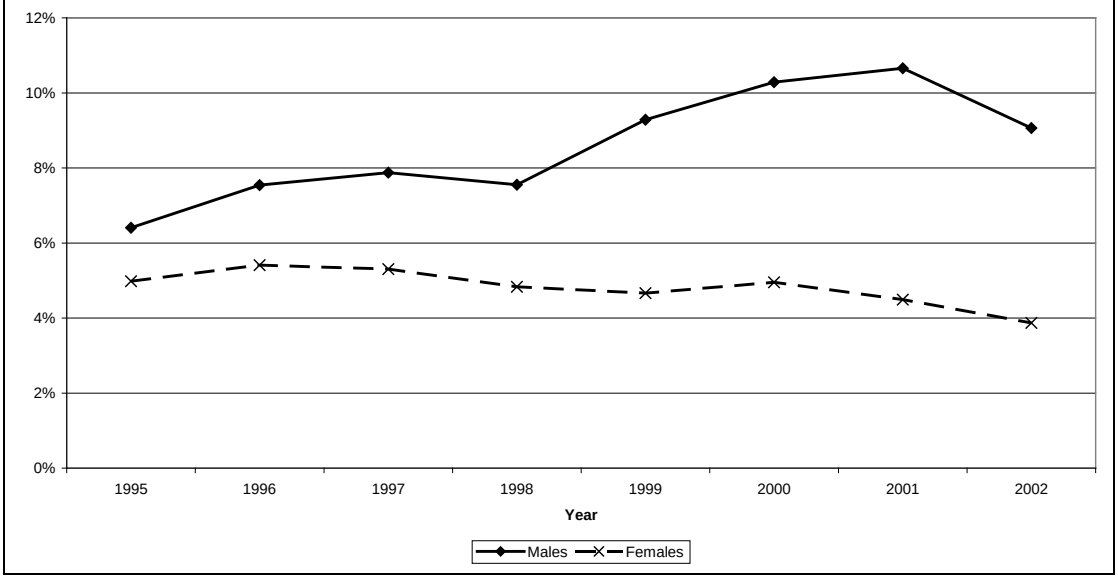

Figure 6: Employment Retention and In-Work Benefits

% of entrants in employment in year t + 1

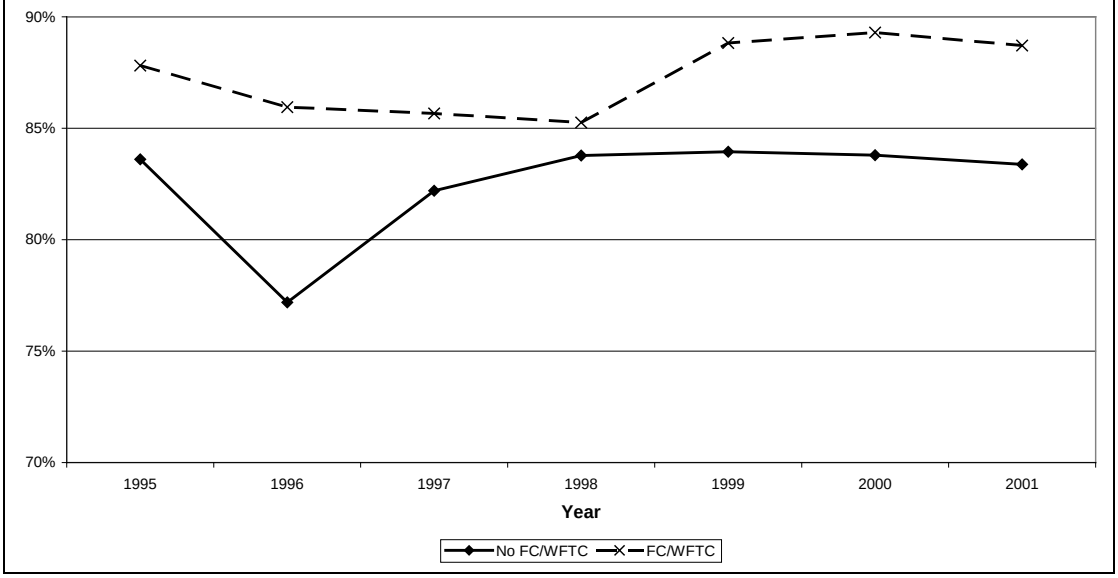

Figure 7: Employment Retention and In-Work Benefits

% of entrants in employment in year t + 2

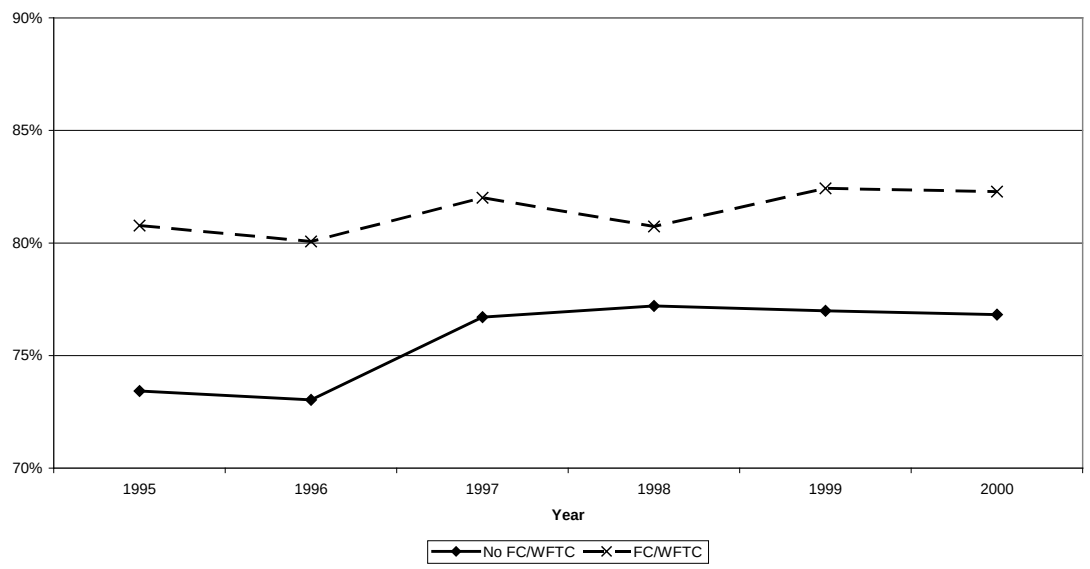

Figure 8: Wage growth and In-Work Benefits

% wage change for new job entrants

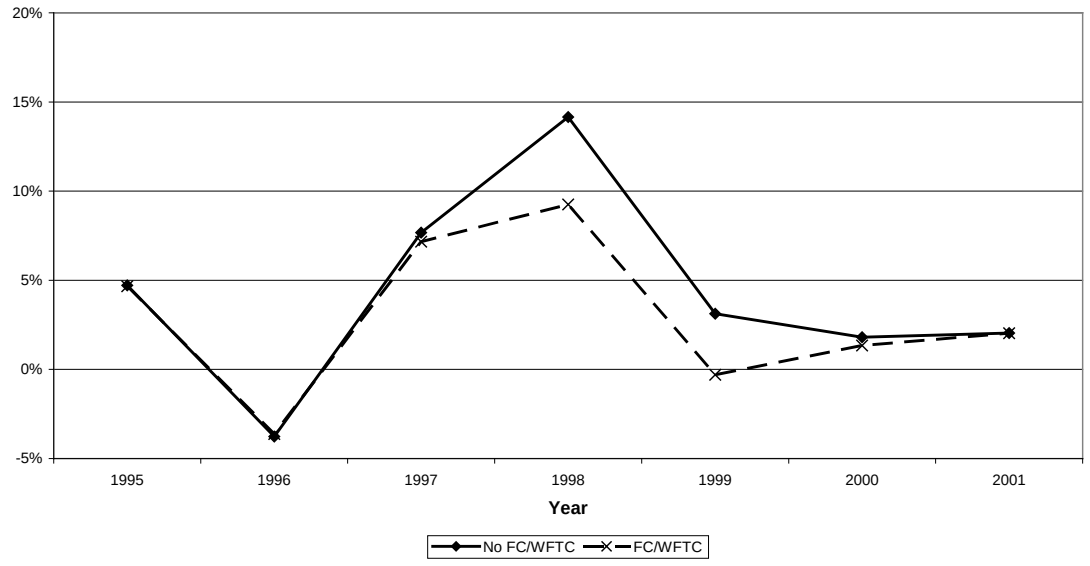

Table 1: The age profile of in-work benefit claimants

Percent of claimants in different age categories

Age Group	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<20	0.43	0.42	0.38	0.79	0.73	0.59	0.7	0.64	0.51	0.58
20-24	8.3	7.37	7.38	6.84	7.22	6.57	6.26	6.82	6.86	6.92
25-29	13.87	13.93	14.18	13.15	12.58	12.34	11.27	10.55	9.76	10.02
30-34	28.86	28.63	28.48	28.71	28.08	27.75	27.87	27.27	25.65	21.6
35-39	22.95	23.34	23.15	23.45	23.91	24.87	24.73	25.16	25.64	22.2
40-44	14.56	15.42	14.96	15.9	16.14	16.5	17.24	18.07	18.68	19.18
45-49	7.45	7.41	7.71	7.08	7.35	7.33	8.05	7.67	8.86	10.67
50-54	2.57	2.42	2.7	3.04	2.69	2.85	2.82	2.86	2.87	5.23
55-59	0.75	0.86	0.88	0.9	1.06	0.98	0.85	0.81	0.95	3.02
60+	0.26	0.21	0.18	0.13	0.24	0.23	0.21	0.16	0.24	0.57

Table 2: Recipients by Family Type and Main Earner

	All	**Employees**	**Self Employed**
All cases	1,376.3	1,245.5	130.8
Couples	639.0	542.6	96.4
Male main earner	514.7	427.7	87.0
Female main earner	124.3	114.8	9.5
Lone parents	737.3	702.9	34.3
Male	30.7	25.2	5.5
Female	706.6	677.8	28.8

Source: *WFTC and FC Quarterly Enquiry*, UK WFTC recipients (thousands), November 2002

Table 3: Duration of FC and WFTC claims

% in different duration categories

	1995	1997	1999	2001
<3 months	0.01	0.16	0.12	0.27
3-6 months	0.04	0.04	0.14	0.35
6-12 months	40.85	46.08	39.96	40.09
12-18 months	17.03	18.29	15.37	19.6
18-24 months	10.37	9.24	8.99	14.06
24-36 months	11.63	10.41	11.9	11.23
36+ months	20.06	15.79	23.52	14.4

Table 4: Duration of FC and WFTC claims - Males

% in different duration categories

	1995	1997	1999	2001
<3 months	0.03	0.18	0.04	0.51
3-6 months	0.1	0.09	0.15	0.48
6-12 months	44.41	49.86	44.34	45.33
12-18 months	17.19	18.74	14.83	19.7
18-24 months	9.83	8.68	9.12	15.72
24-36 months	10.94	9.55	11.62	10.46
36+ months	17.49	12.89	19.9	7.81

Table 5: Duration of FC and WFTC claims - Females

% in different duration categories

	1995	1997	1999	2001
<3 months	0	0.14	0.19	0.07
3-6 months	0	0	0.13	0.25
6-12 months	38.01	43.17	36.9	36.02
12-18 months	16.91	17.95	15.75	19.52
18-24 months	10.81	9.66	8.89	12.78
24-36 months	12.18	11.06	12.1	11.83
36+ months	22.1	18.02	26.05	19.52

Table 6: Repeat Spells of In-Work Benefits

% of those ending a spell who start new spell

	1995	1997	1999	2001
No spell	40.48	39.55	38.46	47.81
<1 month	6.01	6.65	9.24	10.3
1-3 months	7.49	8.29	9.26	10.68
3-6 months	7.59	7.89	8.02	7.4
6-12 months	11.69	10.65	12.64	10.34
12-18 months	5.71	5.32	5.81	5.14
18-24 months	3.53	3.6	4.08	3.49
24-36 months	4.66	6.88	4.78	3.18
36-48 months	3	3.96	3.78	1.62
>48 months	9.84	7.21	3.94	0.03

Table 7: Repeat Spells of In-Work Benefits - Males

% of those ending a spell who start new spell

	1995	1997	1999	2001
No spell	39.08	39.23	38.94	51.9
<1 month	6.94	7.22	8.46	10.5
1-3 months	8.02	8.87	9.98	9.6
3-6 months	8.88	7.45	8.37	7.6
6-12 months	11.88	11.07	14.04	10.01
12-18 months	6.01	4.94	6.46	4.59
18-24 months	3.79	3.61	4.16	2.56
24-36 months	4.51	6.86	4.65	2.24
36-48 months	1.79	4.66	2.59	1
>48 months	9.09	6.08	2.35	0

Table 8: Repeat Spells of In-Work Benefits - Females

% of those ending a spell who start new spell

	1995	1997	1999	2001
No spell	41.67	39.81	38.12	44.14
<1 month	5.21	6.17	9.79	10.13
1-3 months	7.05	7.8	8.76	11.65
3-6 months	6.5	8.26	7.77	7.22
6-12 months	11.52	10.3	11.66	10.63
12-18 months	5.45	5.64	5.35	5.64
18-24 months	3.31	3.6	4.02	4.34
24-36 months	4.78	6.89	4.88	4.03
36-48 months	4.04	3.37	4.6	2.17
>48 months	10.48	8.14	5.05	0.06

Table 9: Impact of WFTC on employment retention

% point change in retention rate due to WFTC

	All	Males	Females
Basic model no controls	1.48%	2.07% *	0.23%
Controls for Age	1.28%	2.03% *	0.25%
Controls for age and entry wage	2.81% ***	3.05% ***	1.98%

Table 10: Impact of WFTC on weeks worked

% point change in weeks worked due to WFTC

	All	Males	Females
Controls for age	-0.91%	0.38%	-3.94%

Table 11: Impact of WFTC on weekly pay

% point change in weekly pay worked due to WFTC

	All	Males	Females
Controls for age	0.63%	0.72%	-0.69%