

# **Analysis of tax and benefit changes affecting families with children for Gingerbread**

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This note compares three policies that have been recently suggested which would change the way that families with children are treated by the tax and benefit system. The suggestions are:

- a transferable personal income tax allowance, restricted to the basic rate, and restricted to couples with children who are married (or in a civil partnership) rather than cohabiting;
- increasing the value of the working tax credit for couples with children;
- increasing the value of the child element of the child tax credit.

To make fair comparisons, it is necessary to consider proposals for change that all cost the exchequer roughly the same amount. Accordingly, two sets of comparisons have been made. The first involves proposals that would cost around £800m a year (hereafter called the small reforms), which is the cost of a transferable personal allowance (TPA) for married couples with children under 5. The second set involves proposals that would cost around £1.6bn a year, which is the cost of a TPA for married couples with children under 16. Table 1 sets out the proposals in full.

**Table 1. The three policies to be compared**

	<b>Small reforms</b>	<b>Large reforms</b>
<b>A transferable personal income tax allowance, restricted to the basic rate, and restricted to couples with children who are married (or in a civil partnership) with a child aged under:</b>	5	16
<b>An increase in the weekly entitlement to the working tax credit for couples with children of:</b>	£10.50	£19.00
<b>An increase in the weekly entitlement to the child element of the child tax credit of:</b>	£2.25	£4.00
<b>Cost per year</b>	£800m	£1,600m

Below, we analyse the impact of these policies on families' budget constraints, incomes and financial work incentives. All costs and financial values are in 2009–10 prices.

## What would the reforms achieve?

### *A transferable personal allowance (TPA) for married couples with children*

The idea behind a transferable personal allowance is that it allows an adult who is not paying income tax (because their income is below the income tax personal allowance) to transfer some or all of their income tax personal allowance to someone else.

There are many possible variants of TPAs, and Box 1 discusses some of the explicit proposals that have been made in recent years. A TPA for married couples allows someone to transfer their allowance only to their spouse. If this transferred allowance is restricted to the basic rate of income tax, then this reform only benefits married couples with children where one partner is paying income tax and the other is not a taxpayer.

The reform would increase the incomes of such families, by reducing the amount of tax paid by the taxpaying adult.

Because non-married parents are not entitled, the policy would reduce any ‘couple penalty’ (or increase any ‘couple bonus’) that can exist when a lone parent marries or starts to cohabit, due to the combined benefit entitlement for a couple being lower (or higher, for a couple bonus) than that for two individuals living independently.<sup>1</sup>

The UK income tax system is currently assessed entirely at the individual level for those aged under 75. The proposal would mean that the income tax system in the UK ceased to be a fully individualised system for married couples with children, and a little bit closer to a jointly-assessed system like tax credits. In 2009–10, the personal allowance was £6,475 and so was worth £1,295 a year (because the basic rate of tax is 20%).<sup>2</sup>

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<sup>1</sup> The Institute for Fiscal Studies plans more research on the distribution of the ‘couple penalty’, due to be completed in Spring 2010.

<sup>2</sup> These are expected to be the values in 2010–11, as the value of RPI inflation that is usually used to increase the personal allowance from April 2010 was negative, and the Treasury said in Budget 2009 that it would not cut the nominal value of the personal allowance in such circumstances.

There would also be implications for financial work incentives. A transferable personal allowance is likely to be worth nothing if neither adult in a couple works, and also if both adults in a couple work (and it is certainly worth nothing if both adults in a couple each have income high enough to pay income tax). A TPA will therefore:

- increase the financial incentive for some low- to middle-income couples with children to have one earner compared with no earners;
- reduce the financial incentive for second earners (or potential second earners) in some low- to middle-income couples with children to work at all, or to work additional hours. This is because, once someone has elected to transfer a personal allowance, any increase in that person's earnings will then effectively be liable to income tax from the first pound (rather than only after the 6,476<sup>th</sup> pound, as is the case at present). Because this policy provides up to £1,295 a year extra help to one-earner couples and not to two-earner couples, it follows that it must reduce the incentive to move from being a one-earner couple to being a two-earner couple by that same amount.

These impacts on financial work incentives are discussed in more detail later.

The proposal would increase the financial incentive for some married couples to have children (because it increases the support received by some couples with children, but not by couples without children). Whether this would actually affect childbearing decisions, though, is not clear.

The proposal would mean that there was financial incentive for some cohabiting couples to marry. Whether a tax incentive to marry would lead to more marriages and/or better outcomes for children is unclear, though.

#### **Box 1. Proponents of a transferable personal allowance**

Several variants of a transferable personal allowance (TPA) have been proposed in the past. Some have been limited to married couples – which would create a tax incentive to marry – while some would be available to all couples with children.

In 2006, a TPA was proposed by the Tax Reform Commission established by the Conservative Party and headed by Lord Forsyth. The proposal was that individuals in couples with children should be able to transfer their income tax

personal allowance to their spouse if they are not making full use of it. The Forsyth Review proposed restricting this to couples with children aged 5 or under and restricting the value of the transferred personal allowance to the basic rate of income tax. The Review (page 61) said that:

‘The financial disadvantages suffered by parents, usually women, who look after children while their partners are out at work, represent a major unfairness in the tax system ... This unfairness can be addressed by giving parents an option to transfer their personal allowance to their partner while they have young children. Restricting the transferable allowance so that relief is only available at the basic rate would ensure that this reform is appropriately targeted.’

A TPA was also proposed in 2007 by a report from the Centre for Social Justice, chaired by Iain Duncan-Smith, which said that:

‘The allowance is intended to support the institution of marriage because of its proven advantages to children and the wider society’

and that:

‘It would make it easier for a mother or father to remain at home to look after their children whilst the other spouse worked ... We would thus see this as a measure with the potential to increase family stability and improve the quality of family life.’

(Social Justice Policy Group, *Breakthrough Britain: Ending the Costs of Social Breakdown*, page 137)

Both of these reports were commissioned to make recommendations to the Conservative Party. Although David Cameron has spoken about wanting to recognise marriage in the tax system, he has not yet set out in detail how he wants to do that. However, the Conservative Party’s 2001 election manifesto contained a proposal for a TPA to be limited to married couples with children under 11.

*An increase in the working tax credit (WTC) for couples with children*

This reform would give more support to low-income couples with children who have at least one adult working 16 or more hours per week.

Having a higher basic credit for couples with children than for lone parents would mirror the situation that currently exists for families without children, where a couple without children receives more working tax credit than a single adult without children with the same gross income. It would also mirror the situation in means-tested benefits.

The direct impact of giving couples with children more working tax credit would be to increase the incomes of low-income working couples with children. Because lone parents are unaffected by this proposal, it would also reduce, by precisely the same amount, any ‘couple penalty’ (or increase any ‘couple bonus’) that can exist when a lone parent starts to cohabit.

There would also be implications for financial work incentives. The policy would:

- increase the financial incentive for some low-income couples with children to have one earner compared with no earners;
- reduce the financial incentive for the working partner in some one-earner couples with children to earn more, whether through additional hours or being paid more per hour;
- reduce the financial incentive for second earners (or potential second earners) in some low-income couples with children to work at all, or to work additional hours.

These impacts on financial work incentives are discussed in more detail later.

The proposal would increase the financial incentive for some couples to have children (because it increases the support received by some couples with children, but not by couples without children). Whether this would actually affect childbearing decisions, though, is not clear.

*An increase in the child element of the child tax credit (CTC) for all families with children*

This reform would give more support to low-income families with children, regardless of their family composition, in order to reduce child poverty.

An increase in the per-child element of the child tax credit could, for some families, slightly increase the size of any ‘couple penalty’ (or reduce any ‘couple bonus’) that can exist when a lone parent starts to cohabit.

There would also be implications for financial work incentives. The policy would:

- slightly reduce the financial incentive for some low-income families with children to have one earner compared with no earners;
- reduce the financial incentive for some working lone parents or some of the main earners in couples with children to earn more, whether through additional hours or being paid more per hour;
- reduce the financial incentive for second earners (or potential second earners) in some low-income couples with children to work at all, or to work additional hours.

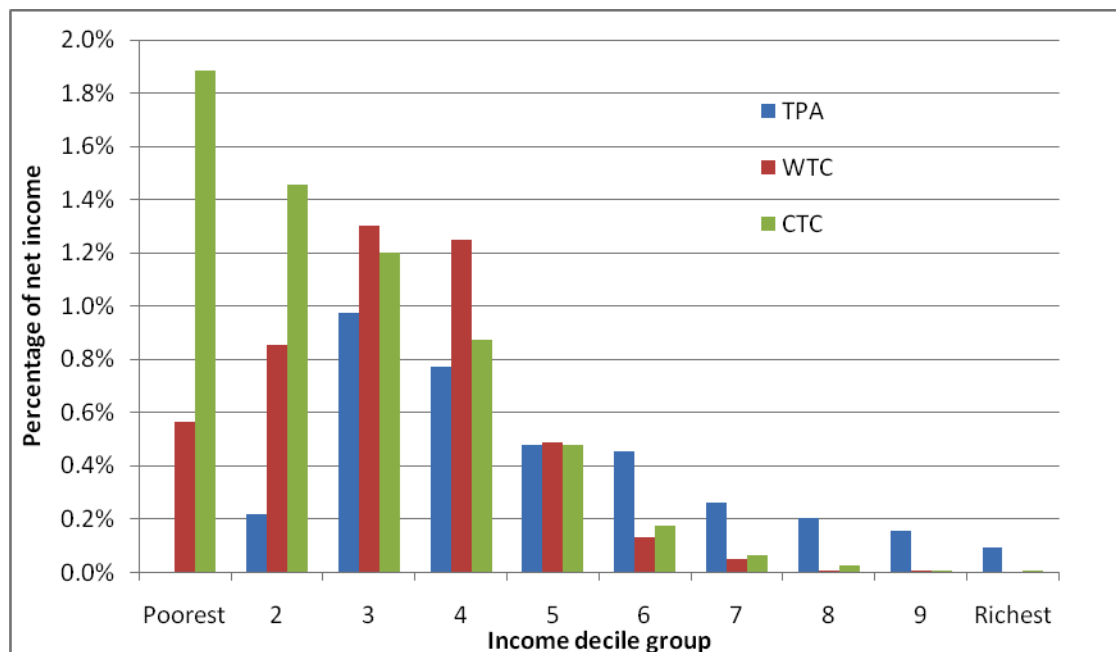
These impacts on financial work incentives are discussed in more detail later.

The proposal would increase the financial incentive for some families to have children (because it increases the support received by some couples with children, but not by couples without children). Whether this would actually affect childbearing decisions, though, is not clear.

## The impact on the incomes of families with children

This section discusses how the policies would affect the incomes of families with children. Figure 1 shows the gains amongst families with children as a fraction of net income, ranked by their position in the overall income distribution (so the values for the poorest decile, for example, show the average change in family income experienced by those families with children in the poorest tenth of the entire income distribution). (The distributional impact of the larger reforms is shown in Figure A1 in Annex A. Other than the scale on the vertical axis, the analysis is almost identical to Figure 1.)

**Figure 1. Distributional analysis across families with children: the small reforms**



Notes: Income decile groups are derived by dividing all households into 10 equal-sized groups according to income adjusted for household size using the McClements equivalence scale. Decile group 1 contains the poorest tenth of the population, decile group 2 the second poorest, and so on up to decile group 10, which contains the richest tenth.

Source: Authors' calculations using the Family Resources Survey 2006–07 and the IFS tax and benefit model, TAXBEN.

Although these policies are intended to benefit families with children with low to moderate incomes, not all of these families would gain from each policy,

and the distribution of gains is different for each policy. In general, the two proposals that involve changing tax credits are able to focus the gains on a narrower range of the income distribution, because tax credits have a relatively steep taper that ensures that high-income families do not benefit:

- The extra WTC for all couples is therefore targeted at low-income working couples with children, most of whom have only one earner.
- The TPA is less targeted by income, benefiting all one-earner couples with children of a certain age provided the main earner earns at least £6,475 a year, but is restricted to families with young children.
- The extra CTC is targeted at all low-income families with children, including lone parents, and including families with no adult in work.

For all the policies, the beneficiaries are concentrated in low- to middle-income couples with children. The policy that is most directly targeted at low-income families with children is the extra CTC. The policy of most benefit to high-income couples with children is the TPA.<sup>3</sup> But none of these reforms particularly helps very high-income couples with children: such couples tend to have both adults in work (and therefore cannot benefit from a TPA) and have too high an income to benefit from the working tax credit.

Only the rise in the CTC would help families with children where no adult is in work, but the TPA and extra WTC for all couples would increase the incentive for some couple families to have one adult in work (see the section on financial work incentives).

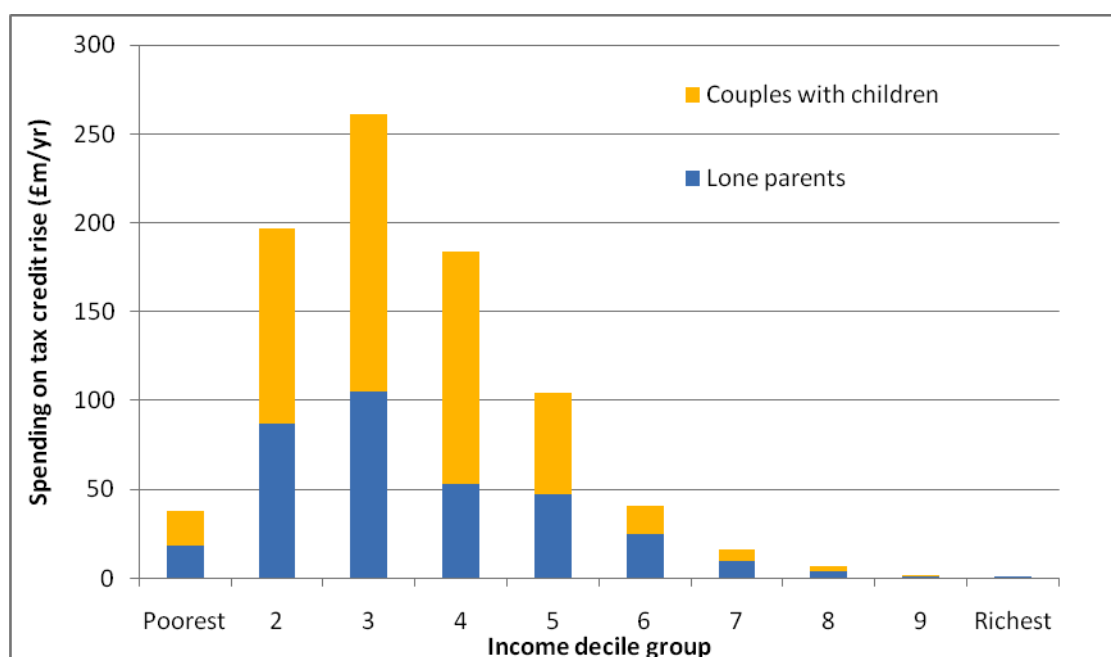
Unlike the other two measures, a rise in the CTC also benefits lone parents. Lone parents make up around 46% of the beneficiaries of this policy, and 41%

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<sup>3</sup> One complicating factor when comparing the distributional impact of these proposals is that the TPA is limited to families with young children but the other proposals are not. Families with young children tend to have lower incomes than families with older children, partly because their parents are younger and therefore tend to have lower hourly wages, but more importantly because women are more likely to be taking time out of the labour market when they have young children. The restriction of the TPA to families with young children probably reflects a desire by its proponents to target help on families with young children (rather than those with older children) and a belief that it would be worse to discourage potential second earners from working when they have older children than it is when they have young children.

of the extra spending is directed at them.<sup>4</sup> Figure 2 shows how the additional spending on tax credits is distributed across family types and the income decile groups (this is shown only for the small rise in the CTC). The low spending in the bottom decile group reflects that there are few families with children in the bottom decile group, as the decile groups are defined across all families.

**Figure 2. Spending on child tax credit rise, by income decile group and family type**



Notes: Income decile groups are derived by dividing all households into 10 equal-sized groups according to income adjusted for household size using the McClements equivalence scale. Decile group 1 contains the poorest tenth of the population, decile group 2 the second poorest, and so on up to decile group 10, which contains the richest tenth.

Source: Authors' calculations using the Family Resources Survey 2006–07 and the IFS tax and benefit model, TAXBEN.

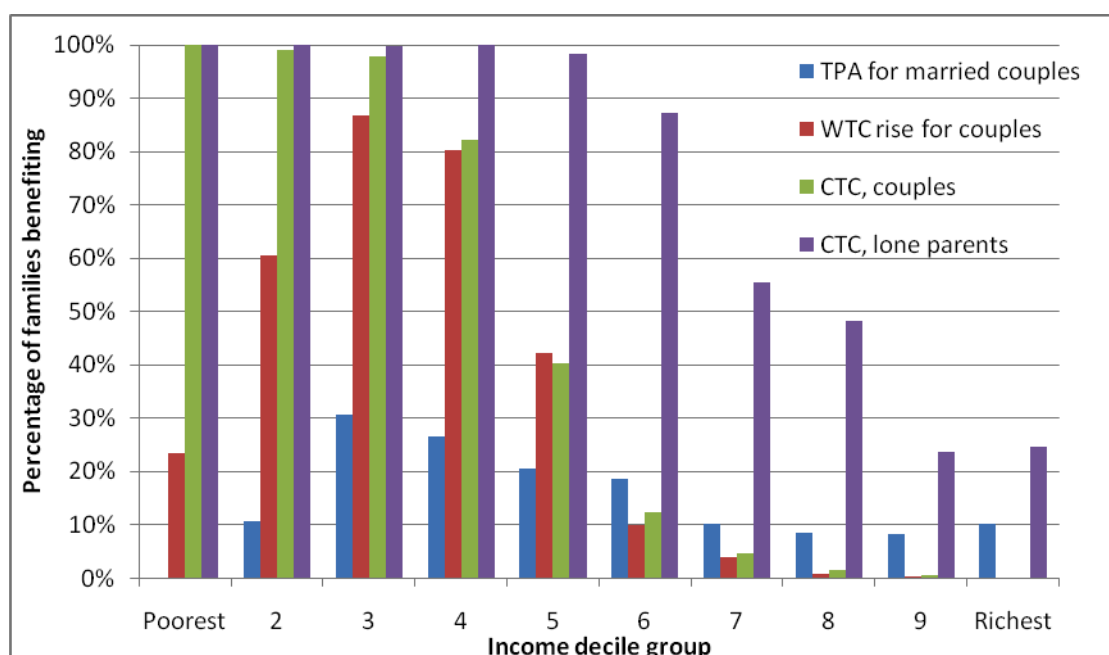
Around 880,000 families with children would gain from a TPA, around 1,750,000 would gain from the WTC for all couples with children, and around 3,910,000 (2.1m couples and 1.8m lone parents) would gain from a rise in the CTC. Because all the policies cost the same, this means that the average

<sup>4</sup> The mismatch being due, amongst other things, to the fact that low-income couples have more children, on average, than low-income lone parents.

(mean) gain among those benefiting is highest for the TPA and lowest for the CTC. Figure 3 shows the proportion of each family type who would benefit from each policy, by income decile group (see Figure A2 in Annex A for the equivalent for the large reforms). It shows that:

- the increase to the CTC achieves essentially universal coverage across low-income families with children (under the assumption of full take-up);
- the increase in the WTC does not benefit couples who do not work for at least 16 hours per week, and so its coverage in the poorest decile groups is less than 100%;
- the coverage of a TPA amongst all couples with children is much lower, by contrast, never exceeding a third in each decile group. This is because the measure is limited to couples who are married with a child under 5, and where only one adult is currently liable to income tax.

**Figure 3. Proportion who would benefit, by family type and income decile group**



Notes: Income decile groups are derived by dividing all households into 10 equal-sized groups according to income adjusted for household size using the McClements equivalence scale. Decile group 1 contains the poorest tenth of the population, decile group 2 the second poorest, and so on up to decile group 10, which contains the richest tenth.

Source: Authors' calculations using the Family Resources Survey 2006–07 and the IFS tax and benefit model, TAXBEN.

## The impact on child poverty

In recent work, IFS researchers with Holly Sutherland simulated the level of child poverty in 2010–11 under current policies and under a range of possible reforms to taxes and benefits.<sup>5</sup> We have used the same methods to estimate the impact of these reforms on child poverty in 2010–11. The results are given in Table 2 and they show that:<sup>6</sup>

- Amongst a set of reforms costing the same, the increase in the child tax credit reduces child poverty by the most, followed by the working tax credit and then the transferable personal allowance.
- The TPA reduces poverty by a small amount partly because it is worth little to families in poverty (Figure 1 showed that the TPA is worth very little to families in the second decile, which is roughly those around the poverty line), but also because it increases median income by considerably more than the CTC or WTC rises (this can also be seen by looking at the gains for the sixth decile group in Figure 1). This increases the poverty line, classifying more children as being in poverty even though their family's income is unchanged.
- For a given reform, the large reform reduces child poverty by more than the small reform.

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<sup>5</sup> See Mike Brewer, James Browne, Robert Joyce and Holly Sutherland, *Micro-simulating child poverty in 2010 and 2020*, IFS Commentary 108.

<sup>6</sup> One small difference between the modelling in this section and that in the other sections is that the simulations of child poverty in 2010–11 contain an adjustment to reflect non-take-up and non-reporting of means-tested benefits and tax credits.

**Table 2. Simulated impact on child poverty in 2010–11**

	Level of child poverty	Reduction compared with baseline policies	Simulated median income	Level of child poverty	Reduction compared with baseline policies	Simulated median income
	BHC			AHC		
Baseline	2,254,800	n/a	415.75	3,310,631	n/a	356.72
TPA U5s	2,246,336	8,464	416.87	3,233,485	77,146	357.55
TPA U16s	2,187,966	66,834	417.29	3,175,066	135,565	358.07
WTC small	2,157,460	97,340	416.08	3,206,652	103,979	357.19
WTC large	2,080,179	174,621	416.44	3,118,243	192,388	357.74
CTC small	2,124,236	130,564	416.01	3,197,717	112,914	357.14
CTC large	2,037,029	217,771	416.51	3,080,497	230,134	357.35

Notes: IFS calculations using Family Resources Survey 2006-7 data and drawing on methods in Mike Brewer, James Browne, Robert Joyce and Holly Sutherland, Micro-simulating child poverty in 2010 and 2020, IFS Commentary 108. There are simulated to be 12,887,898 children, and so the rate of child poverty under the baseline is 17.5%.

## The impact on financial work incentives

Below, we analyse how these policies would change two measures of financial work incentives: the marginal effective tax rate (METR) and the participation tax rate (PTR). The METR is a measure of the disincentive provided by the tax and benefit system to earning a little more, whether through working more hours or earning more per hour. The PTR is a measure of the disincentive provided by the tax and benefit system to working at all.

Box 2 explains how these numbers are calculated; higher numbers mean weaker incentives for both measures.

### **Box 2. The marginal effective tax rate and the participation tax rate**

The marginal effective tax rate (METR) measures the extent to which the tax and benefit system provides a disincentive for people to increase their earnings. It is calculated as the proportion of a small rise in earnings that is lost to the government in taxes and forgone benefits or tax credits.

The participation tax rate (PTR) measures the extent to which the tax and benefit system provides a disincentive for people to work at all. It is calculated as:

$$1 - (\text{Increase in family income when a person works} / \text{That person's gross earnings}).$$

It measures what fraction of an individual's earnings is lost to the government in taxes and forgone benefits or tax credits, and so is a direct measure of the disincentive to work that arises from the personal tax and benefit system.

Both calculations ignore the temporary (one-year) disregard in tax credits that applies when gross earnings rise, so the short-run financial work incentives are, in practice, stronger than those shown here.

To calculate a measure of the incentive to work at all for the adults in our data who are not working, it is necessary to impute how much they would earn if they were to work. This was done by predicting how much they would earn if they were to work particular numbers of hours a week (0–15 hours, 16–23 hours, 24–29 hours and 30+ hours) and calculating their PTR at each of these hours points. Log wage equations were used to calculate

earnings at each hours point, with variables: age, region, age when left education, number of children, age of youngest child, housing tenure and marital status. A multinomial logit model was then used to estimate the probability of each individual choosing to work each number of hours, and the four PTRs were then weighted by these probabilities to create a weighted average PTR. Childcare use was assumed to remain unchanged for these calculations. Full details are available on request.

Figures 4–18 show how the (cumulative) distribution of METRs and PTRs would change under each of the reforms (only the small reforms are shown). For each value on the vertical axis, the horizontal axis shows the proportion who have a METR/PTR below that value. If the line for Reform A is further to the left or higher than the line for the Base system, then it means that METRs/PTRs are higher for that reform over that part of the distribution.

The graphs are shown separately for:

- METRs for workers, by sex;
- PTRs for workers (who, in couples, will include those with working and non-working partners);
- PTRs for non-workers (who, in couples, will include those with working and non-working partners).

For the CTC rise, separate graphs are shown for lone parents and couples with children. METRs are not shown for non-workers, because the METR is much less relevant to them than the PTR. The analysis of METRs is shown by sex; that of PTRs is not, to save space, but the analysis of the average (mean) METRs and PTRs in Table 3 is done by sex, family type and work status.

The graphs show that:

*For marginal effective tax rates amongst working adults:*

- The WTC rise tends to reduce the number of working adults with very high METRs (above 75%), but tends to increase METRs below this point,
- The TPA tends to reduce the number of working men with METRs above 55%, but tends to increase METRs for working women,

particularly amongst those who would face a very low METR (below 33%) in the absence of the TPA.

- The CTC rise leads to a very slight rise in METRs for both working adults in couples and working lone parents, but it is barely discernible on the graphs. (Figures 8–10.)

*For participation tax rates amongst working adults:*

- The TPA and WTC rises tend to increase the PTRs of those whose PTRs are low already, but lower the PTRs of those with high ones. The effect is more obvious for the TPA. (Figures 11 and 12.)
- The CTC rise leads to a very slight rise in PTRs for both working adults in couples and working lone parents, but it is barely discernible on the graphs. (Figures 13 and 14.)

*For participation tax rates amongst non-working adults:*

- The TPA and WTC rises tend to increase the PTRs of those who initially have PTRs below 50%. The effect is more obvious for the TPA. (Figures 15 and 16.)
- The CTC rise leads to a very slight rise in PTRs for non-working adults in couples and non-working lone parents, but it is barely discernible on the graphs. (Figures 17 and 18.)

The explanation for these effects is given below.

*For the transferable personal allowance:*

- The main impact of the TPA on work incentives is to increase the PTR of the second actual or potential earner. This is more obvious when looking at adults in couples who do not currently work, most of whom will have a working partner, and so most of whom see a rise in their PTR. But the TPA also reduces the PTR of a single earner in a couple. This leads to a mixed impact on PTRs for both workers and non-workers, although the impact is more negative amongst those currently not in work.
- The TPA will increase the METR of any adult who transfers their allowance to their spouse. Such people would have previously paid no income tax on any extra earnings, but after transferring their allowance, they will effectively be paying a rate of 20%. Most of these will be non-working adults (whose METR is not shown), but some will be low-

earning secondary workers. Amongst those in work, the graphs show that this affects women more than men, because those adults in work but not paying tax are more likely to be women. However, a working spouse who benefits from a transferred personal allowance may, as a result, have too much income to be entitled to housing benefit and/or council tax benefit. This will lower some very high METRs amongst workers, and the graphs show that this affects men more than women.

*For the working tax credit rise for couples:*

- The WTC rise reduces the PTR of primary earners in some couples, and increases the PTR of secondary earners in some couples. This leads to mixed effects on PTRs of workers, but has generally negative impacts on non-workers.
- The WTC rise increases the range of earnings over which families will be subject to the tax credit taper. This increases METRs amongst some workers and amongst some non-workers (but the latter is not shown). However, some beneficiaries may, as a result, have too much income to be entitled to housing benefit and/or council tax benefit, and this will lower some very high METRs amongst workers. The graphs suggest that both these effects are more likely for men than for women. This is because the WTC rise is more likely to affect one-earner than two-earner couples, and the earner in a one-earner couple is more likely to be male than female.

*For the child tax credit rise:*

- The CTC rise will slightly increase the PTR of primary earners in some couples, and will slightly increase the PTR of secondary earners in some couples. But these impacts are too small to be discernible in the graphs.
- The CTC rise increases the range of earnings over which families will be subject to the tax credit taper. This increases METRs amongst some workers and amongst some non-workers (the latter is not shown). But these impacts are only just large enough to be discernible in the graphs, and look little different for men and women.

Table 3 reports the average (mean) METR and PTR under these policies by sex, family type and work status. It confirms that:

- Amongst working adults in couples, the average METR of men rises by more than that of working women in couples through the tax credit rises, and that of women rises more through the transferable personal allowance, for the reasons set out above (although there are more working men in couples than working women). However, for all three reforms, the average PTR of working women rises by more than that of working men in couples.
- Amongst non-working adults in couples, women are more likely to see a rise in their average PTR in response to the reforms than men (and there are more non-working women than non-working men in couples). Indeed, a TPA would reduce the average PTR of non-working men but increase the average PTR of non-working women. This is because the non-working men are more likely to have a non-working partner than the non-working women, and we discussed above that the TPA will increase the incentive for couples to have one earner in work, but reduce the financial gain from having a second adult in work.
- There are no substantial differences by gender for lone parents, given their work status (but, as is well known, the majority of lone parents are women).

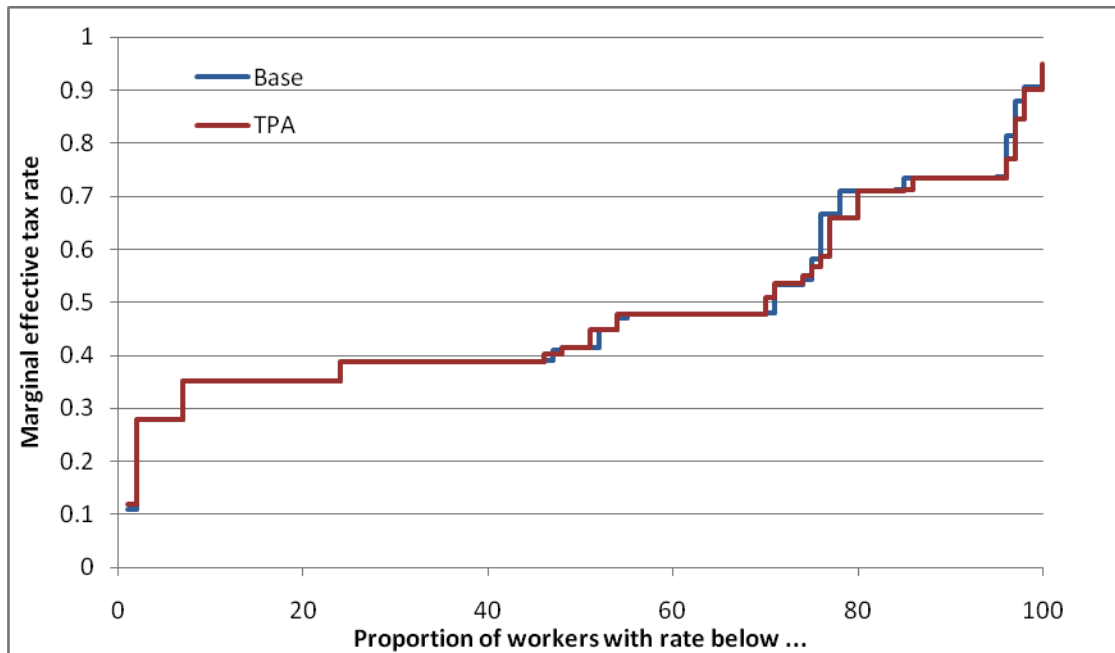
Overall, the TPA and WTC have a complicated set of impacts on work incentives, with some people seeing incentives strengthen and some seeing them weaken. The CTC rise, though, has only negative impacts on work incentives, but of a much smaller scale, in part because the reform is spread over so many more families. Amongst couples, the average METR of working women rises by more than that of working men (whose average METR actually falls) in response to the TPA, and the average PTR of non-working women rises by more than that of non-working men in response to all reforms. However, the average METR of working men rises by more than that of working women in response to the WTC rise.

**Table 3. Change in average financial incentives under reforms, by sex, family type and work status**

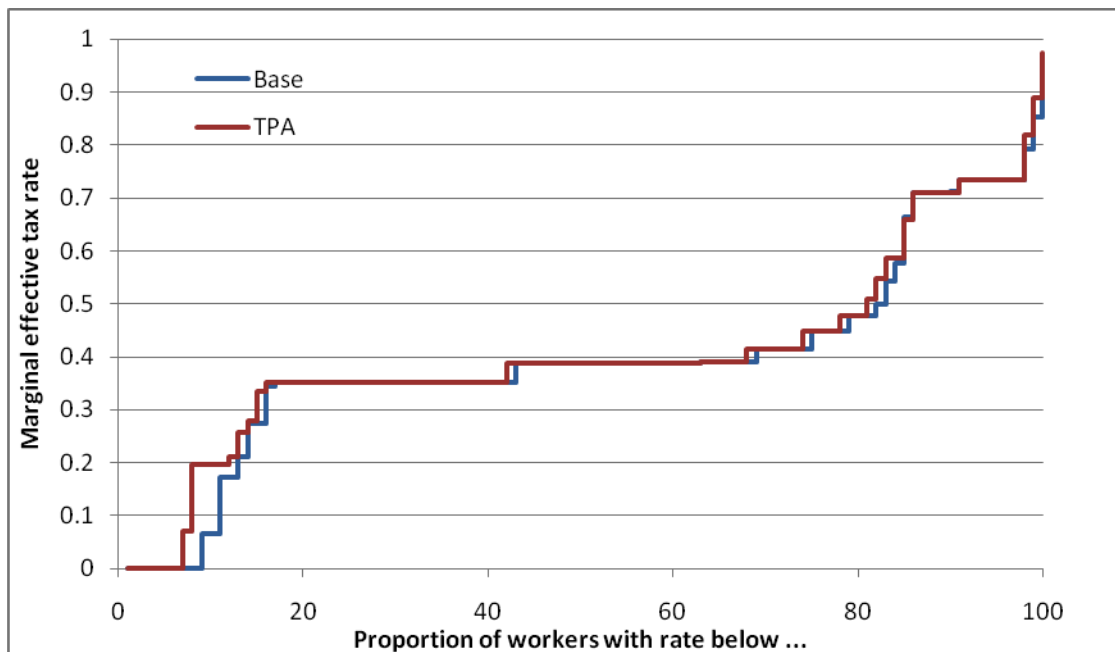
	Base	TPA	WTC	CTC	Number
<b>METRs, working adults</b>					
Men working in couples	48.8%	48.6%	49.5%	49.1%	4,869,171
Women working in couples	39.9%	40.8%	40.2%	40.1%	3,733,716
All working in couples	44.9%	45.2%	45.5%	45.2%	8,602,887
Working lone fathers	48.6%			49.8%	116,211
Working lone mothers	63.7%			63.8%	836,708
All working lone parents	61.8%			62.1%	952,919
<b>PTRs, working adults</b>					
Men working in couples	51.0%	51.1%	51.2%	51.3%	4,869,171
Women working in couples	30.3%	32.7%	31.2%	30.7%	3,733,716
All working in couples	42.0%	43.1%	42.5%	42.4%	8,602,887
Working lone fathers	53.7%			53.9%	116,211
Working lone mothers	50.9%			51.0%	836,708
All working lone parents	51.2%			51.3%	952,919
<b>PTRs, non-working adults</b>					
Men not working in couples	61.5%	61.0%	61.6%	61.7%	689,254
Women not working in couples	46.5%	48.4%	47.0%	46.8%	1,829,207
All non-workers in couples	50.6%	51.8%	51.0%	50.9%	2,518,461
Non-working lone fathers	51.2%			51.3%	103,754
Non-working lone mothers	61.5%			61.6%	785,696
All non-working lone parents	60.3%			60.4%	889,450

Notes: Authors' calculations using the Expenditure and Food Survey 2006 and the IFS tax and benefit model, TAXBEN. Weekly earnings for non-workers calculated as described in Box 2. METRs and PTRs below 0% were set to 0%, and those exceeding 100% were set at 100%.

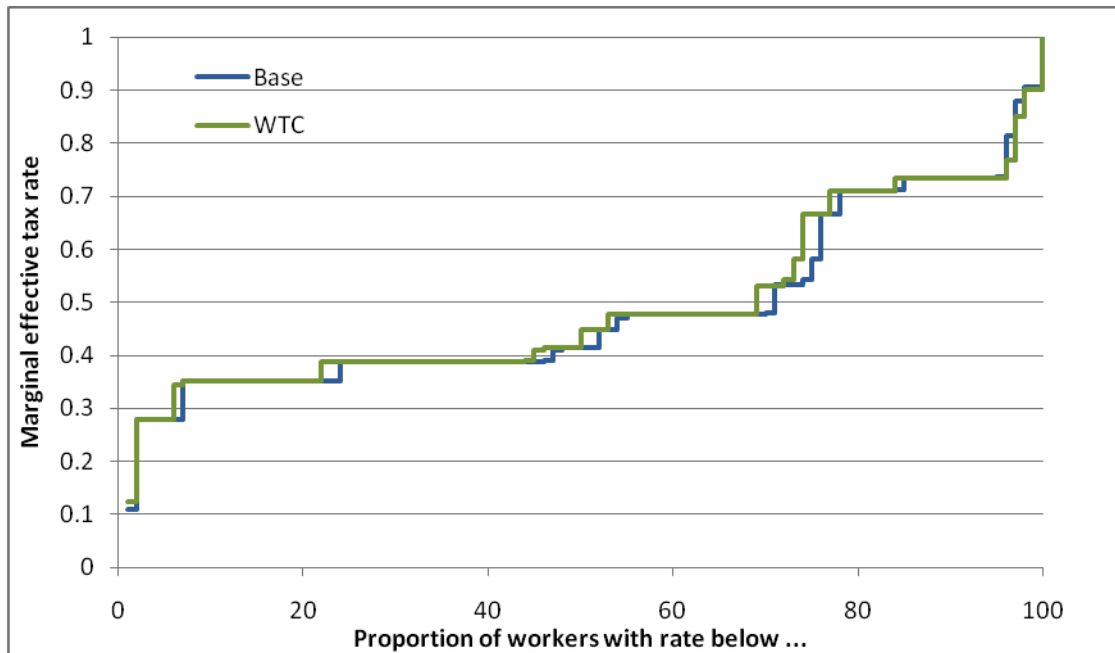
**Figure 4. Change in the distribution of METRs, male workers in couples, TPA**



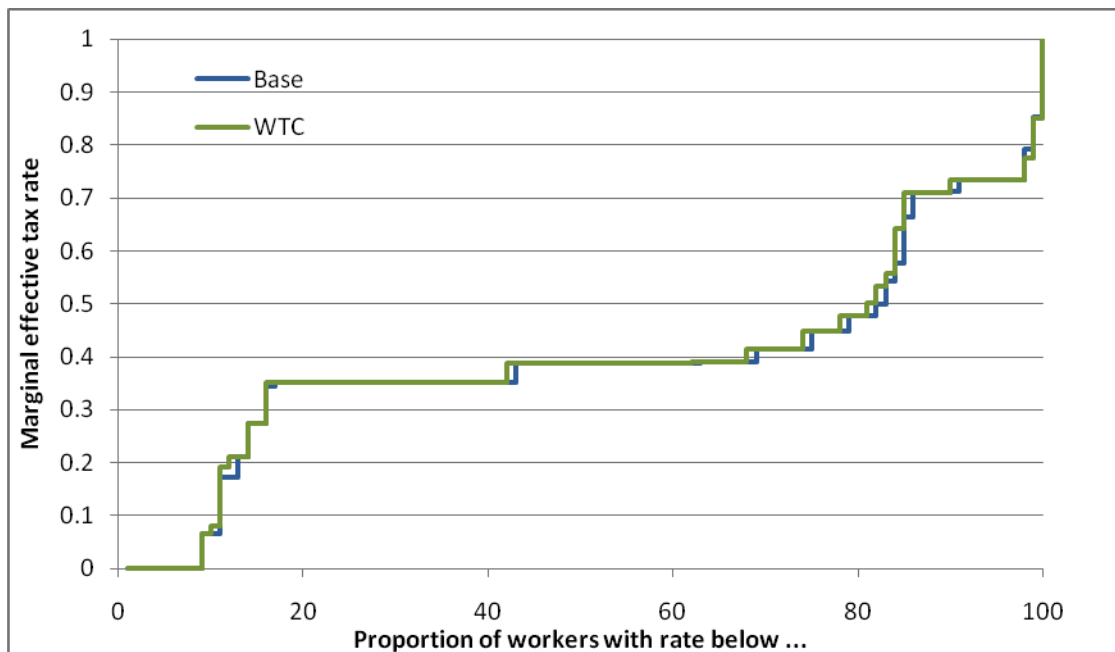
**Figure 5. Change in the distribution of METRs, female workers in couples, TPA**



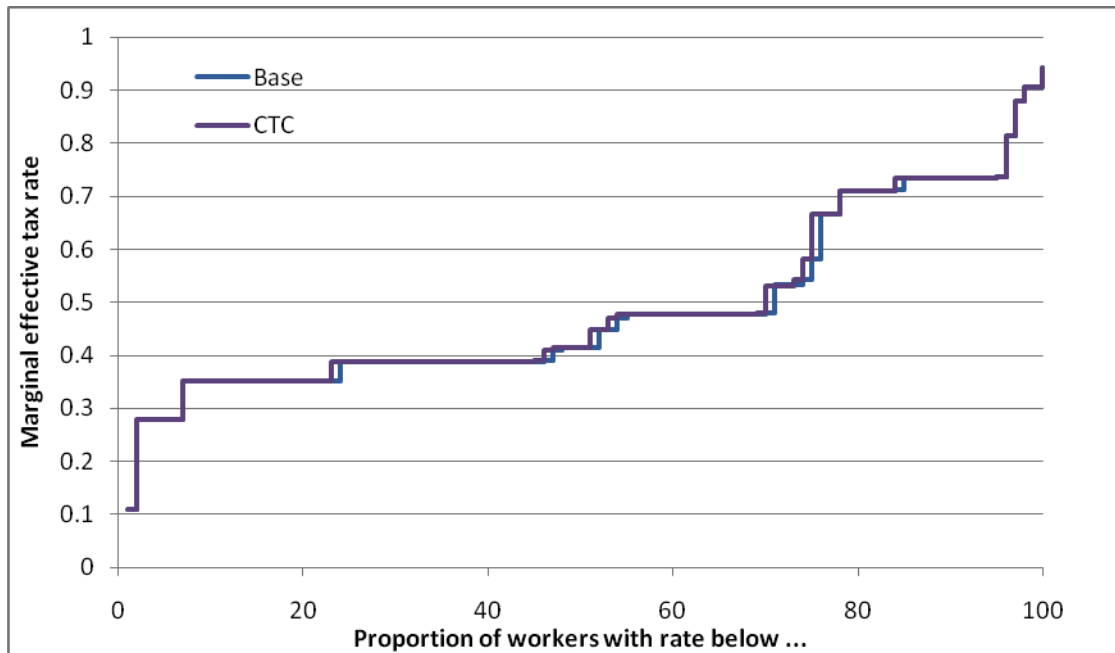
**Figure 6. Change in the distribution of METRs, male workers in couples, WTC**



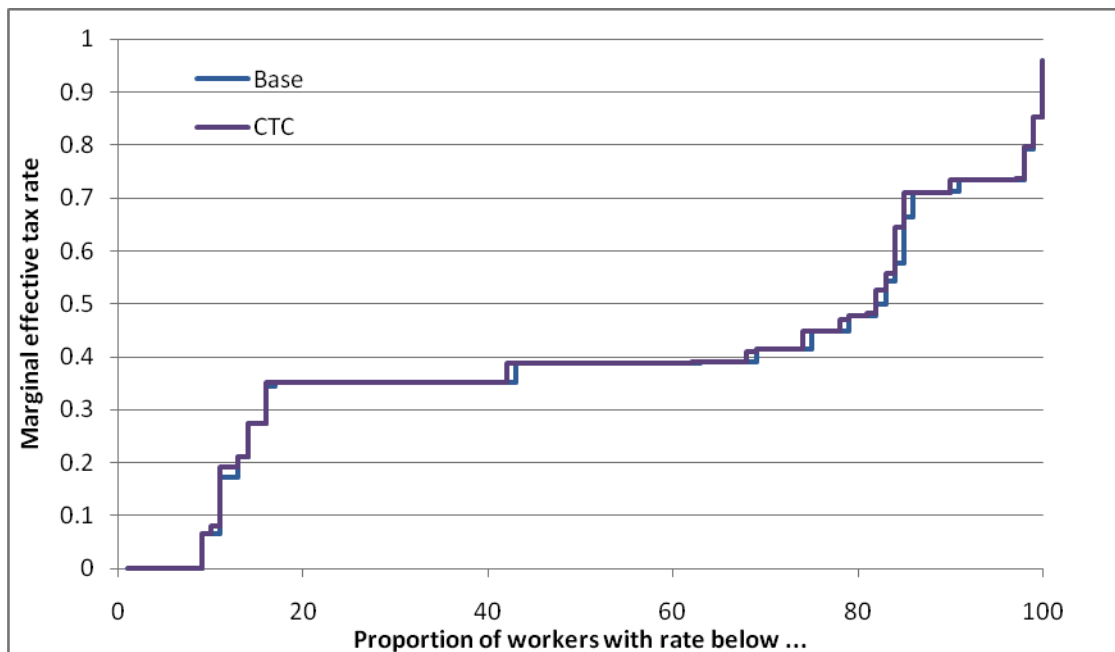
**Figure 7. Change in the distribution of METRs, female workers in couples, WTC**



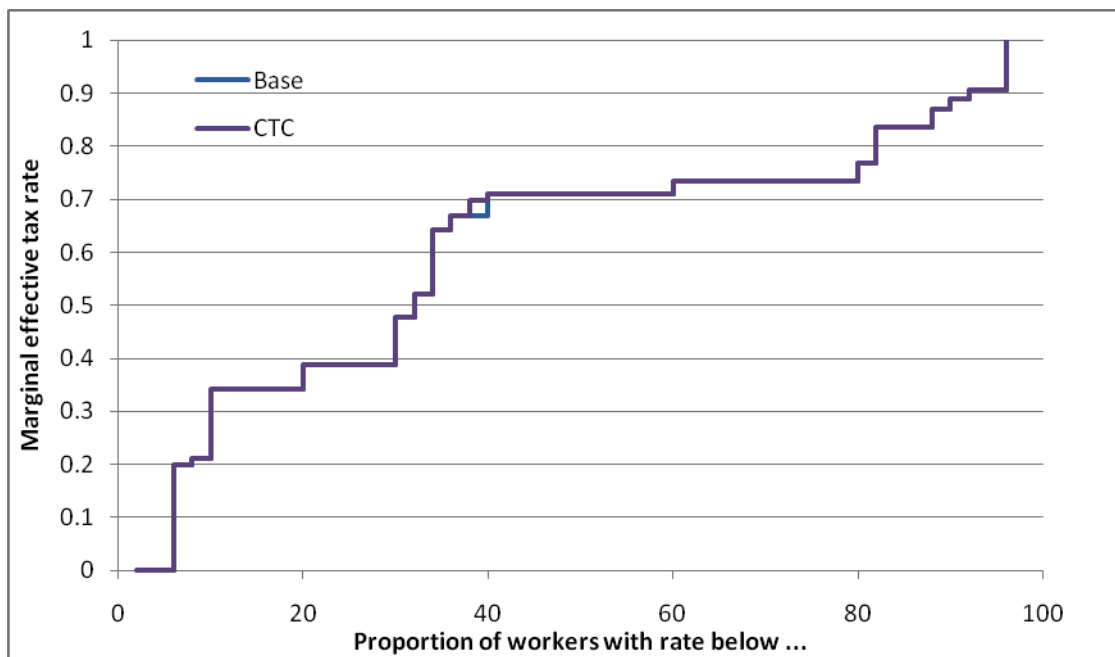
**Figure 8. Change in the distribution of METRs, male workers in couples, CTC**



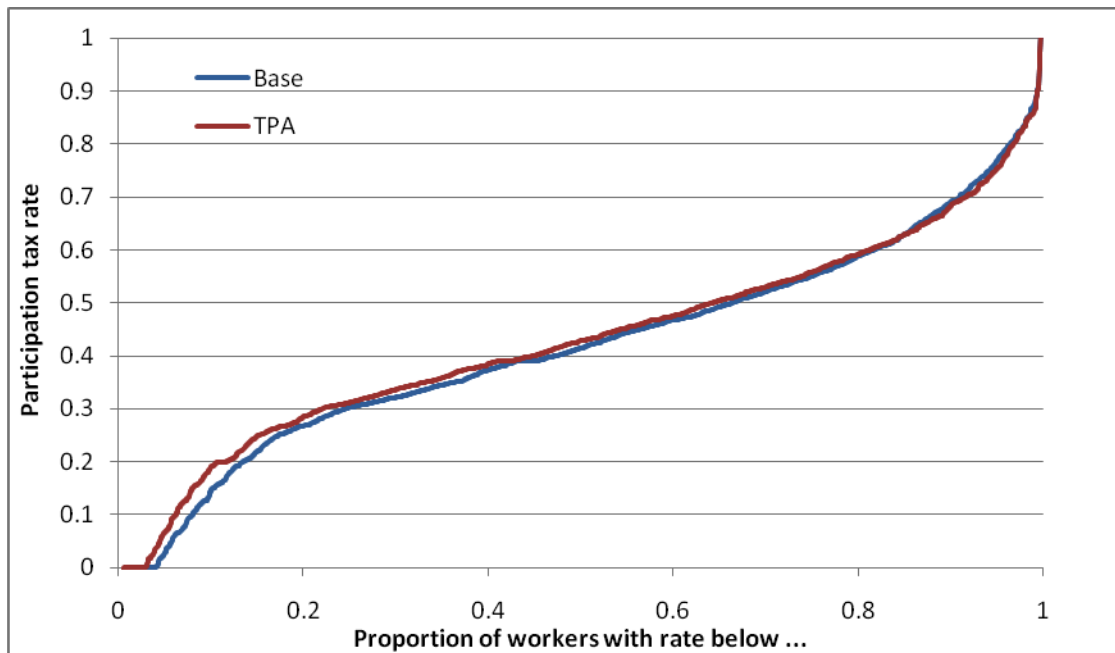
**Figure 9. Change in the distribution of METRs, female workers in couples, CTC**



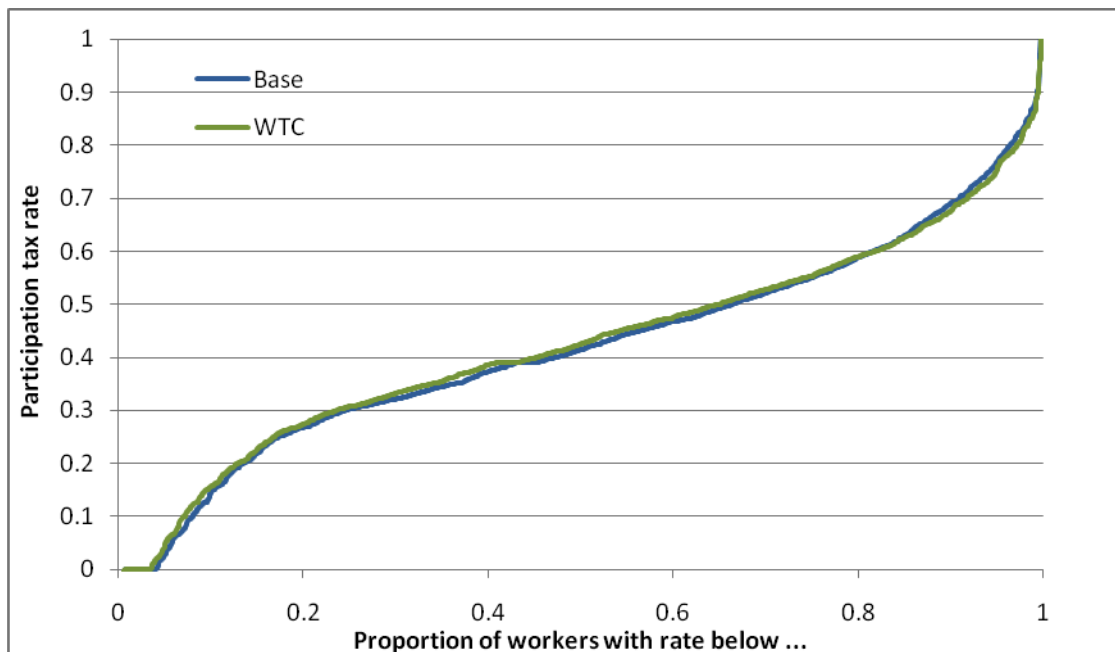
**Figure 10. Change in the distribution of METRs, working lone parents, CTC**



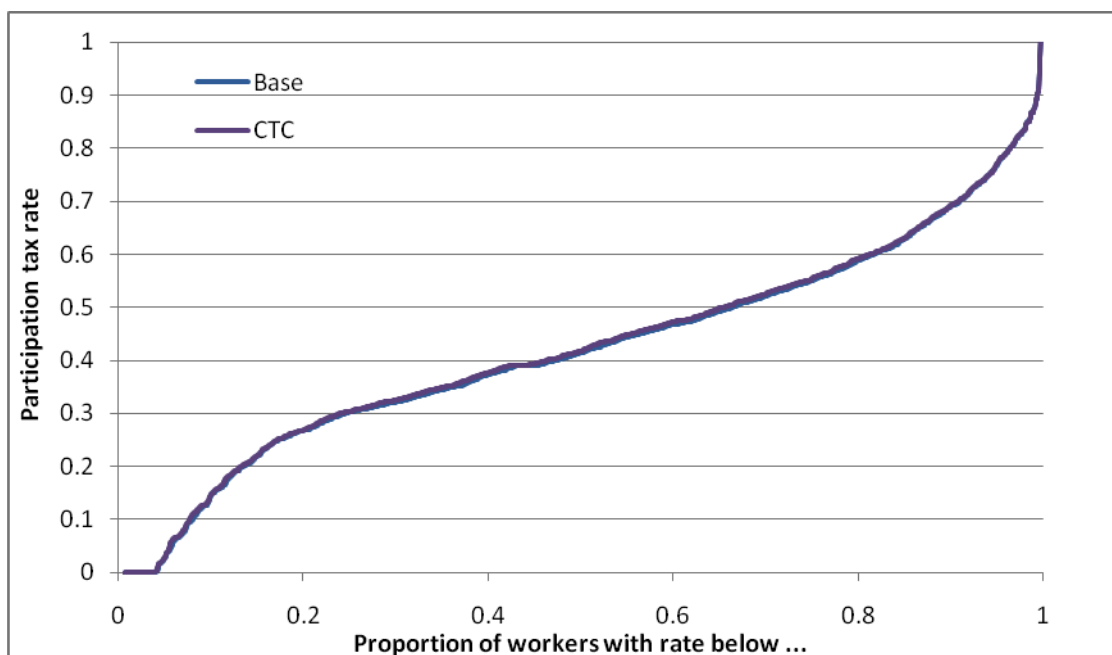
**Figure 11. Change in the distribution of PTRs, workers in couples, TPA**



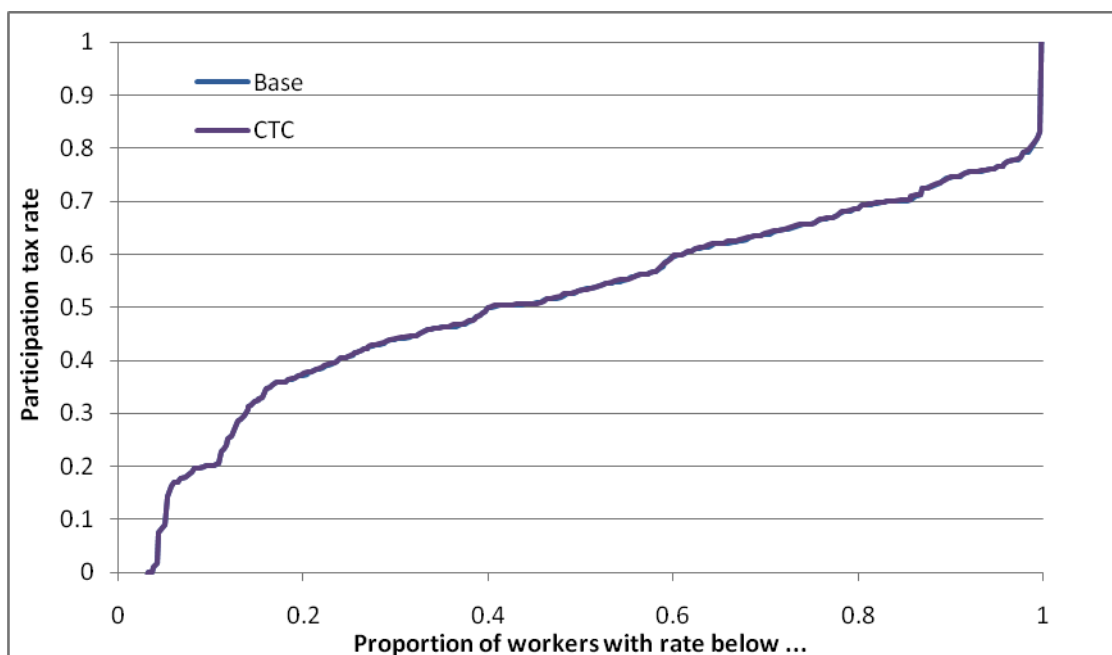
**Figure 12. Change in the distribution of PTRs, workers in couples, WTC**



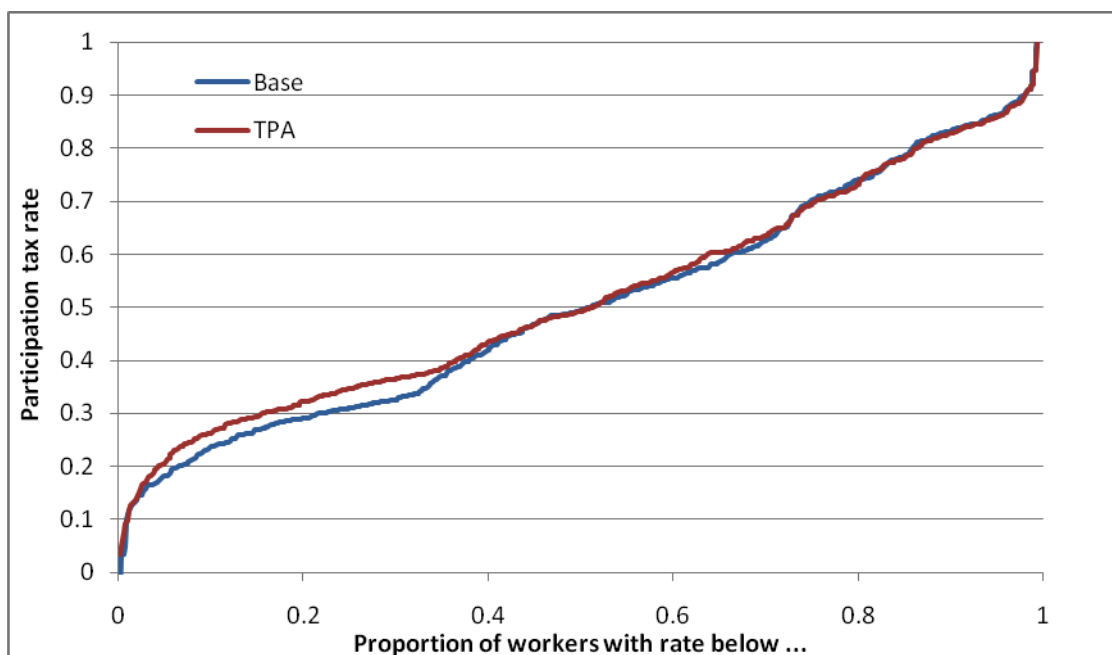
**Figure 13. Change in the distribution of PTRs, workers in couples, CTC**



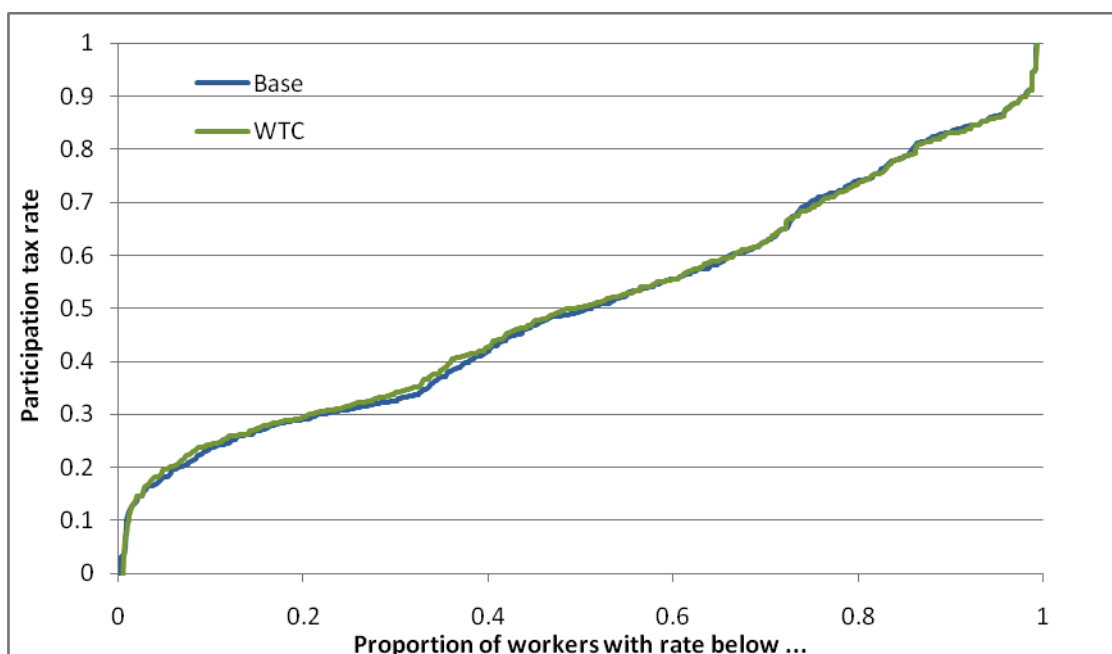
**Figure 14. Change in the distribution of PTRs, working lone parents, CTC**



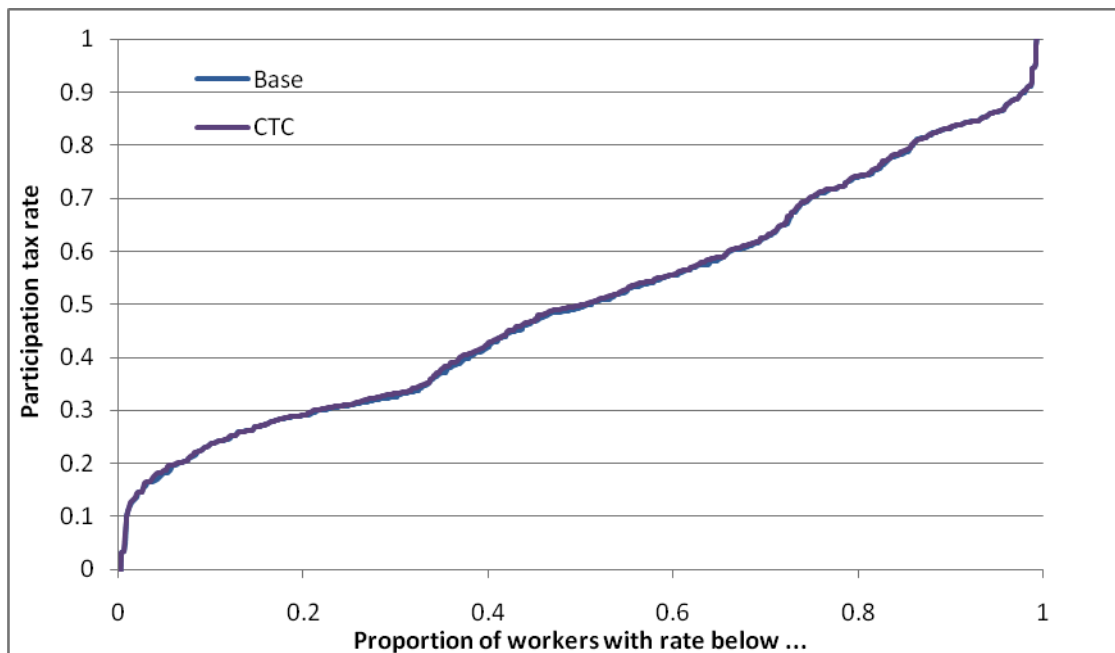
**Figure 15. Change in the distribution of PTRs, non-workers in couples, TPA**



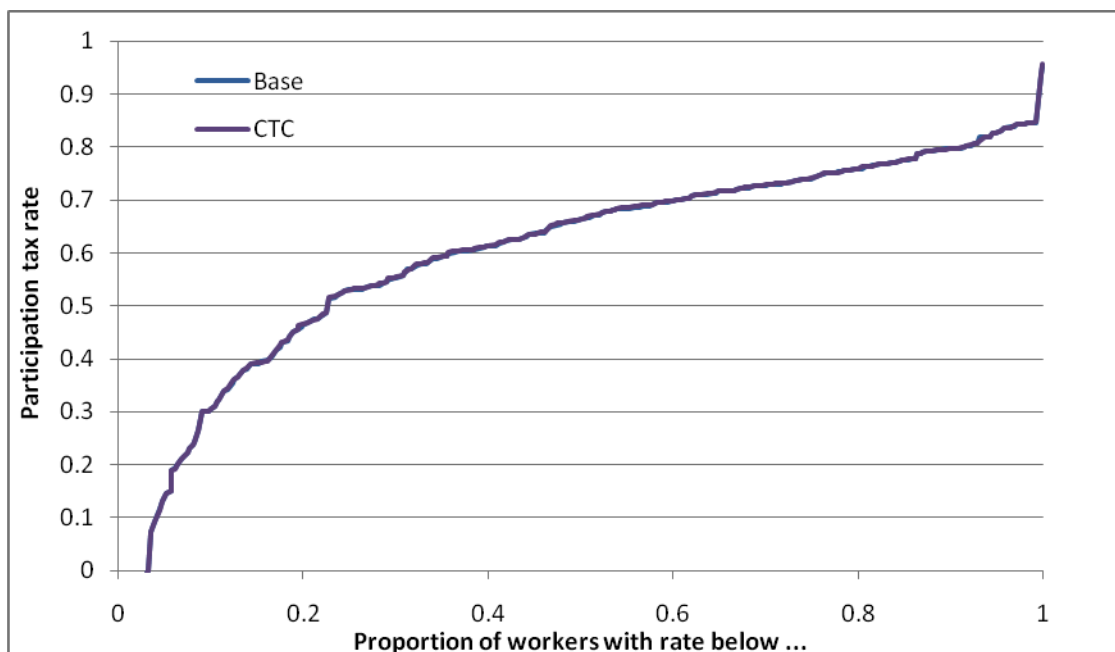
**Figure 16. Change in the distribution of PTRs, non-workers in couples, WTC**



**Figure 17. Change in the distribution of PTRs, non-workers in couples, CTC**



**Figure 18. Change in the distribution of PTRs, non-working lone parents, CTC**



Notes to Figures 4–18: Authors' calculations using the Expenditure and Food Survey 2006 and the IFS tax and benefit model, TAXBEN. Weekly earnings for non-workers calculated as described in Box 2.

## Summary

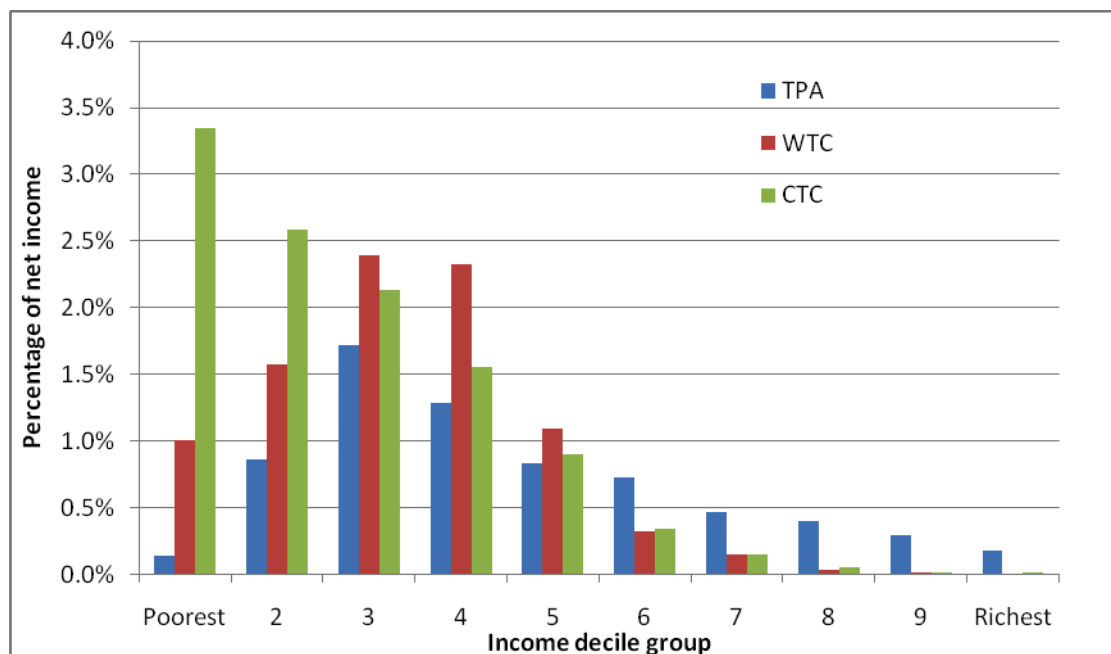
- This note has compared three policies that would cost the exchequer approximately the same (£0.8bn). These are a transferable personal allowance (TPA) for married couples with children under 5, a rise of £10.50 a week in the working tax credit (WTC) for couples with children, and a rise of £2.25 a week in the per-child element of the child tax credit (CTC). A variant compares a TPA for married couples with children under 16 to rises in the WTC and the per-child CTC that cost the same (£1.6bn).
- A TPA for married couples with children under 5 benefits such families if one of the adults is not working or earns less than the income tax personal allowance. Around 880,000 families would gain an average of £18 a week. Although the bottom half of the income distribution would benefit by more than the top half, the policy would directly reduce child poverty by less than 10,000. This impact is small partly because many couple families in poverty have too little income to benefit, and partly because the policy would increase median income, and therefore raise the poverty line (by £0.60 a week). A TPA would strengthen the incentives for some couples to have one person in work but would reduce the incentive for some second earners. Women's work incentives are more likely to be weakened than men's. It would reduce the 'couple penalty', and mean that some cohabiting couples would be better off if they married. All effects, of course, are limited to married couples with children aged under 5.
- The extra WTC for all couples benefits low-income working couples with children. About 1,750,000 couples would gain an average of £9 a week. The gains are almost exclusively in the bottom half of the income distribution, and a £0.8bn increase would cut child poverty by around 100,000. The rise in WTC would strengthen the incentives for couples to have one person in work, but reduce the incentive for the second earner to work. It also tends to lead to higher marginal effective tax rates (METRs), or weaker incentives to earn more, for both first and second earners in relatively low-income families. The effect on participation tax rates (PTRs) is more likely to affect women, but the

effect on METRs is more likely to affect men. The rise in WTC would reduce the ‘couple penalty’.

- The extra CTC benefits low-income couples with children, regardless of their family type or work status. Around 3,910,000 families would benefit by an average of £4 a week. The gains are almost exclusively in the bottom half of the income distribution, and a £0.8bn increase would cut child poverty by around 130,000. The rise in CTC would slightly weaken the incentive for some parents to be in work, and, by expanding the range of earnings over which tax credit withdrawal applies, it also weakens the incentives for working adults in relatively low-income families to earn more. It would slightly increase the ‘couple penalty’.

## Annex A. Supplementary results for the larger set of reforms

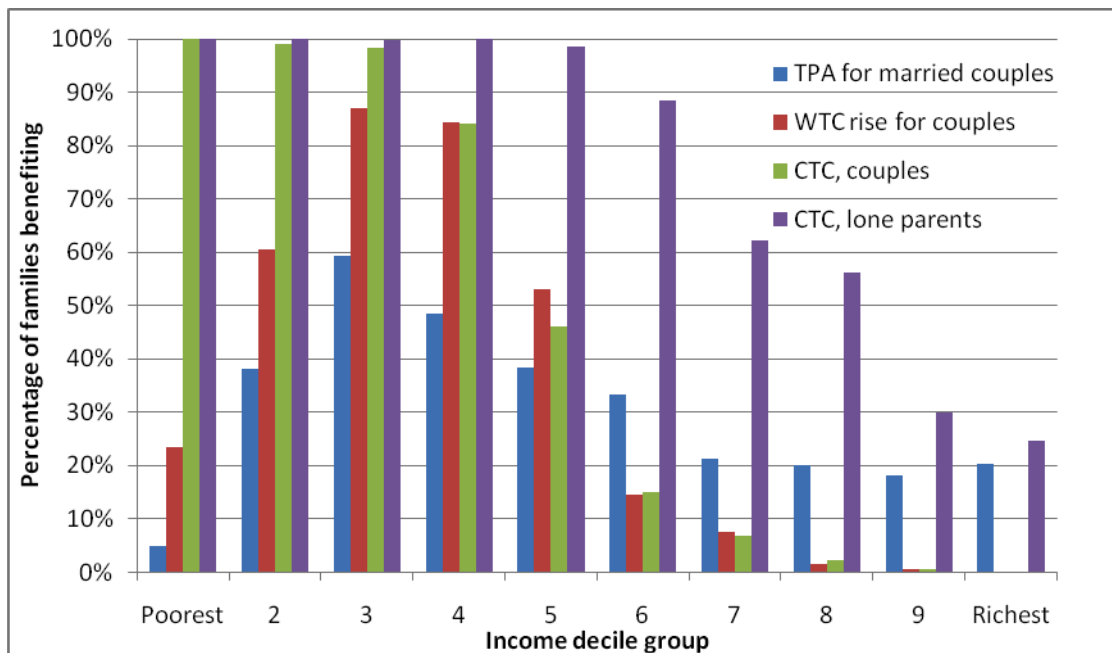
**Figure A1. Distributional analysis across families with children: the large reforms**



Notes: Income decile groups are derived by dividing all households into 10 equal-sized groups according to income adjusted for household size using the McClements equivalence scale. Decile group 1 contains the poorest tenth of the population, decile group 2 the second poorest, and so on up to decile group 10, which contains the richest tenth.

Source: Authors' calculations using the Family Resources Survey 2006–07 and the IFS tax and benefit model, TAXBEN.

**Figure A2. Proportion who would benefit, by family type and income decile group**



Notes: Income decile groups are derived by dividing all households into 10 equal-sized groups according to income adjusted for household size using the McClements equivalence scale. Decile group 1 contains the poorest tenth of the population, decile group 2 the second poorest, and so on up to decile group 10, which contains the richest tenth.

Source: Authors' calculations using the Family Resources Survey 2006–07 and the IFS tax and benefit model, TAXBEN.