

Couple Penalties and Premiums in the UK Tax and Benefit System

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Executive Summary

Introduction and definitions

This report analyses the distribution of couple penalties and premiums in the tax and benefit system using a large, statistically representative sample of households. It defines ‘couple penalties and premiums’ in the tax and benefit system as the change in entitlements to benefits and tax credits and in liability to taxes that occurs when two single people marry, or start to live together as husband and wife. Two adults can almost certainly save on living costs by living together, but unlike some past studies, this study does not attempt to measure the overall financial or non-financial benefits or costs to living as a couple compared with living apart. This study cannot tell us whether couples would be better off living apart than living as a couple, but simply measures how taxes and benefits vary by family situation, an issue of more direct public policy concern. In general, our analysis is not always consistent with past studies of couple penalties and premiums, some of which have tried to measure not just couple penalties and premiums from the tax and benefit system, but also the inherent financial advantage that arises when living as a couple (by comparing equalised net incomes after housing costs).

The report uses the phrase ‘net state support’ to refer to entitlements to benefits and tax credits less liability to taxes. If net state support rises when a couple splits up, then this is called a ‘couple penalty’; if net state support falls, this is called a ‘couple premium’. In some cases, net state support does not change when a couple splits up, and we say that the tax and benefit system is neutral towards relationship status in these cases. The words ‘penalty’ and ‘premium’ are unfortunate, because they suggest that couple penalties are undesirable and couple premiums desirable. Although policymakers may make that judgement, they may also make alternative judgements.

Causes of couple penalties and premiums in the tax and benefit system

Taxes, tax credits and benefits that depend upon the circumstances of a couple often lead to couple penalties and premiums. Taxes and benefits that depend only upon the individual taxpayer’s or claimant’s own circumstances never lead to couple penalties or premiums.

Couple penalties in the current UK tax and benefit system arise mostly through income support, jobseeker's allowance, pension credit and child tax credit, but also winter fuel payments. The clearest case of a couple penalty in the tax and benefit system arises because these benefits provide support to single adults with no income of their own, but take all or most of it away if they live with a partner with an income, because the benefits depend upon the combined income of the couple. Another set of penalties in the tax and benefit system exist because, for most means-tested benefits, the maximum entitlement for a couple is less than twice that for a single adult. Finally, those parts of the tax and benefit system that are explicitly designed to offset certain living costs, such as housing benefit and winter fuel payments, can give rise to a 'living together' penalty. Because a couple can make savings on rental costs and heating compared with two single adults, those benefits that support living costs are consequentially worth less to them. For example, housing benefit for those who rent privately is designed around the assumption that a couple need spend no more in rent than a single person.

Couple premiums in the tax and benefit system are caused by the few remaining non-means-tested benefits that pay extra amounts for adult dependants, such as the state pension and incapacity benefit, and by the existing married couple's allowance for those born before 1935. Also, two adults can usually save on council tax by living together rather than apart.

The tax and benefit system will be neutral for a couple if neither adult would be entitled to benefits or tax credits as a single adult. This is more likely to occur for well-off adults than for those with low incomes. It is also more likely to occur for working-age couples without children than for those with children or those aged 60 or over, because means-tested benefits and tax credits are less generous for them than for those with children or those aged 60 or over.

The only way to have a tax and benefit system that is always neutral to family composition is for all taxes and benefits to be entirely individually assessed. As the income tax system is almost all individual, achieving this in the UK would require 'individualising' the benefit and tax credit system.

Calculating couple penalties and premiums in the tax and benefit system

Couple penalties and premiums in the tax and benefit system are calculated in this report as the change in entitlements to benefits and tax credits, and in liability to taxes, that occurs when a couple divorce or stop living together as husband and wife. The report looks at the couple penalty or premium in the tax and benefit system for around 14,000 couples in a representative sample of the UK population. It also estimates the hypothetical couple penalty or premium in the tax and benefit system facing around 15,000 single adults were they to marry or live with a partner. Two scenarios are examined. In the first, two adults living in a couple are assumed to stop 'living together as husband and wife', and divorce (if previously married), but nothing changes except their relationship: for example, they continue to live in the same household; both adults then claim benefits and tax credits as single people. This therefore isolates the penalty or premium that arises in the tax and benefit system purely by virtue of being a couple. In the second scenario, the two adults living in a couple are assumed to split up, and each forms their own single-person household, holding all other behaviour unchanged. This therefore adds in any additional penalty or premium that arises because of the change in living arrangements and housing costs associated with being in a couple. These scenarios are reversed to calculate couple penalties and premiums in the tax and benefit system for existing single people were they to find a partner.

Empirical results

Considering those penalties and premiums that are directly related to the relationship between the adults (the first scenario described above), 68% of existing couples in the UK face a penalty in the 2010–11 tax and benefit system, 27% face neutrality and 4% face a premium. The mean penalty/premium is a penalty of £44.70. The median penalty/premium is a penalty of £26.05, or one representing 5% of the net income of the couple, but 10% of couples have penalties of at least 20% of net income. The sum of all couple penalties amounts to £34.7 billion a year, and the sum of all couple premiums amounts to £0.6 billion a year; the aggregate net couple penalty is £34.3 billion a year. The mean net penalty comprises a very small premium through the married couple's allowance (for those born

before 1935) and a much larger penalty from benefits and tax credits. The largest contributors, on average, to the mean penalty/premium are income support/JSA/pension credit, child tax credit and working tax credit. The non-means-tested benefits lead to small premiums, on average.

By family type, almost all (95% of) couples with children have a couple penalty, as do 81% of pensioner couples and 41% of working-age couples without children. Pensioners are the most likely to have a couple premium (9%), with working-age couples with and without children less likely (3%). Working-age couples without children are the most likely to face neutrality (56%). The median penalty/premium is a penalty of £85 a week for couples with children, £48 for pensioner couples and £0 (i.e. neutrality) for working-age couples without children.

In general, the distribution of couple penalties and premiums that we estimate for existing single people are similar to those for couples.

In the scenario where a couple splits up and each adult forms a new single-adult household (Scenario B), the average penalty/premium is a larger penalty than in a world where the two adults remain in the same household but stop living together as husband and wife (Scenario A). The couple penalties and premiums are different because some taxes and benefits (such as winter fuel payments, housing and council tax benefits, and council tax) depend upon the composition of the whole household, not just the tax and benefit unit of the claimant, and some parts of the benefit system (notably housing and council tax benefits and ISMI – income support for mortgage interest) depend upon the level of housing costs and council tax liability of the household. The average couple penalty/premium is a penalty that is roughly £7 a week higher under Scenario B than under Scenario A, thanks to penalties that are almost £14 a week higher in HB, £6 a week higher in CTB, and £0.56 a week higher in the winter fuel payment, but offset by a premium of £13.61 a week, on average, from council tax, as a couple generally pays less council tax living together than apart.

Tax and benefit changes since 1997–98 have increased the chance that a couple faces a penalty in the tax and benefit system, increased the chance that a couple faces neutrality and reduced the chance that a couple faces a premium. This result is driven by couples without children and pensioners; tax and benefit changes have actually reduced the incidence of

penalties amongst couples with children, which were almost universal in 1997–98 thanks to one parent benefit. The average penalty/premium is a considerably higher penalty under the actual 2010–11 system than under hypothetical 1997–98 systems in which all benefits, tax credits and tax allowances were increased with growth in either prices or average earnings: across all couples, it is more than twice as high compared with a system indexed to prices, and it is over 50% higher than a system indexed to earnings. There are three main causes of the changes. In 1997–98, income tax provided a couple premium, on average, because of the married couple's allowance. On the other hand, one parent benefit provided a near-universal couple penalty for those with children. These two policies have since been scaled back dramatically or abolished. The expansion of means-tested benefits and tax credits, with entitlements for those with children and for pensioners having grown faster than average earnings for these groups, has increased the size of couple penalties for all groups.

Should we be concerned about couple penalties and premiums in the tax and benefit system?

There is evidence that family formation decisions are affected by the structure of welfare, including couple penalties in the tax and benefit system, but it is not overwhelming, and any impacts are small. There is more convincing evidence that, whether through error or intentional fraud, the government is paying out money to some couples who are claiming state support as lone parents; incentives to conceal the presence of a second adult would not arise were there no couple penalties in the benefit and tax credit system. These points provide weak arguments in favour of a tax and benefit system with no couple penalties and premiums.

One can also use arguments around fairness – and, specifically, the principle of horizontal equity that equals should be treated equally – to analyse the desirability of couple penalties and premiums and the design of the tax and benefit system for couples relative to that for single adults. A strict view of horizontal equity between *individuals* implies that the tax and benefit system should be individually assessed, which would lead to a system that was neutral for all families. But a view of horizontal equity between *families*, or a view of horizontal equity that recognises that an individual's needs and resources depend upon the characteristics of their partner, is consistent with those features of the UK tax and benefit system

that lead to couple penalties and premiums not necessarily being unfair. These features include assessing support against the combined income of a couple, and setting benefit rates for couples at less than twice those of single adults.

But horizontal equity – which is about equal treatment for equals – does not give much guidance on how to set the level of net state support for couples compared with single people, mostly because single adults and couples are clearly not identical (or equal) to each other. One approach would be to vary support by need, but this is not necessarily a universally-accepted approach and would require a robust estimate of different families' needs. The current UK tax and benefit system does not take a consistent approach to varying net state support by needs, primarily because benefit and tax credit entitlement is assessed on the circumstances of the couple, and income tax is individually assessed. There is also a difference in approach between tax credits for those with children (which do not distinguish between the number of adults) and tax credits for those without children and all means-tested benefits (which do). This inconsistency probably reflects the difficulties governments have in pursuing multiple objectives with the tax and benefit system.

Impact of policies to reduce or remove couple penalties and premiums in the tax and benefit system

Setting maximum entitlements to means-tested benefits and tax credits for couples equal to twice the existing rate for single adults would reduce both the proportion of couples facing a penalty, and the aggregate value of penalties (by just over a third, or by just over a half if tax credit thresholds are also increased for couples), but would also lead to considerably more couples facing a premium in the tax and benefit system. It also fails by some way to remove all couple penalties; those penalties remaining are due to the fact that benefits and tax credits are jointly assessed. For example, an adult with no private income married to a millionaire would never receive means-tested support for plausible values of benefits for couples relative to those for single adults, and thus would always face a couple penalty in the tax and benefit system. At current levels of benefit entitlement for single adults, individualising the tax and benefit system (and thus removing all couple penalties and premiums) would cost an estimated £34.3 billion a year, but behaviour responses would almost certainly increase this cost (by definition, removing all couple penalties

and premiums must cost an amount equal to the size of the aggregate net couple penalty). Making this reform revenue neutral by reducing entitlements to means-tested benefits would transfer about £13.5 billion a year from single people to couples.

Whether the tax and benefit system is currently fair to couples compared with single adults, and whether it would be any fairer if there were fewer or more couple penalties, depends on one's view of fairness. But a tax reform that reduces couple penalties might lead to different distortions, or unfairness elsewhere in the tax and benefit system.

1. Introduction

Deciding how personal taxes, tax credits and means-tested benefits should treat adults in different family structures is an extremely difficult policy design issue. The difficulty arises because governments face conflicting objectives. As well as the usual trade-offs between redistributing from the rich to the poor and preserving work incentives, governments have to decide what is a fair level of support to give to couples relative to single people, and to what extent they are prepared to accept so-called ‘couple penalties’ or ‘couple premiums’ in the tax and benefit system.

Couple penalties arise when the tax and benefit system pays a married or cohabiting couple less financial support than if the partners lived (or claimed to live) apart, and couple premiums arise when couples would get more financial support living together than apart (we give a fuller definition, and details on how we calculate these, in Chapters 2 and 4). But, as we discuss later, avoiding couple penalties and premiums in the tax and benefit system – thereby achieving neutrality towards whether adults are living as single adults or in a couple – is possible only under a very particular circumstance which is rarely, if ever, encountered in practice (when entitlement to financial help through benefits and tax credits, or liability to income tax, is assessed according to the circumstances of the claimant only).

The aim of our work is to analyse the distribution of couple penalties and premiums in the UK tax and benefit system using a large, statistically representative sample of households. We calculate this under the 2010–11 UK tax and benefit system, and examine what it would look like if there had been no tax and benefit changes since 1997–98. This work builds upon and extends previous reports in the following ways (see also Box 4.1):

- Analysis regularly published by CARE² (and a similar, one-off, analysis by Kirby (2005)) examines whether couples are better off living together or apart for a set of hypothetical households. Although there is no reason to suspect that CARE has deliberately chosen unrepresentative households, it is obviously much more powerful to be able to say something about the average size and distribution of the

² See Draper (2009).

couple penalty across the UK population, which requires the use of a representative household survey.

- This report provides more up-to-date analysis than past studies that have analysed couple penalties in a representative sample of UK couples (Anderberg, Kondylisy and Walker (2008) used data from 1994–95 to 2004–05, and analysis by the Centre for Social Justice (2009) used data from 2006–07). This report uses data from 2006–07 and analyses the situation in the 2010–11 tax and benefit system.
- Most past studies of the couple penalty analyse couple penalties and premiums for existing couples (by simulating how much more/less benefits and tax credits they would be entitled to if they split up). A fuller picture of the couple penalty can be obtained by combining this with an analysis of the potential couple penalty facing people who currently live alone. Anderberg (2008) attempts this for women, but we go further than that by doing it for men as well, and by allowing for variation not just in earnings but in all of the characteristics of the potential partner (as we describe in Chapter 4).
- This report takes care to isolate that part of couple penalties and premiums that is due to changes in housing costs (including council tax) when couples split up or form; past studies have sometimes combined these together.

But our work is different from all these previous reports because we do not claim to address whether couples would be better off living apart or together; we simply measure how taxes and benefits vary by family situation, an issue of more direct public policy concern. Couples form and separate for all sorts of reasons, with financial considerations probably low down on the list. Many of the costs and benefits to being in a couple are not financial, the financial ones are very hard to quantify, and sometimes there is some substitutability between the financial and non-financial benefits (for example, a working lone parent might need to pay for childcare that a one-earner couple would not need to purchase).

The rest of this report is arranged as follows:

Chapter 2 discusses how we define couple penalties and premiums in the tax and benefit system. Chapter 3 discusses how features of the tax and benefit system lead to couple penalties and premiums, and Chapter 4 explains how we measure couple penalties and premiums in the tax and

benefit system in practice. Chapter 5 presents the results, where we show couple penalties and premiums for existing couples under the 1997–98 tax and benefit system and the 2009–10 tax and benefit system. Chapter 6 discusses whether we should be concerned about couple penalties and premiums in the tax and benefit system. Chapter 7 examines the implications of a system that increases benefit entitlements for couples as a method to reduce couple penalties. It also looks at the impact of a fully individualised tax and benefit system, as that is the only way that neutrality could be achieved for all families. Chapter 8 concludes.

There are many related issues that this report does not examine. As we discuss in Chapter 2, our aim is to analyse couple penalties and premiums caused by the tax and benefit system, and not any inherent financial (or other) advantages to living as a couple or to getting married (such as those that arise through simple economies of scale in household expenses, the rules in private pensions, or divorce law). We also do not consider the role of maintenance payments. The report does not provide any new evidence on the impact of couple penalties or premiums on the behaviour of individuals and couples, but we provide a summary of the literature in Section 6.1.

2. What do we mean by ‘couple penalties and premiums’ in the tax and benefit system?

This chapter discusses how one could define couple penalties and premiums in the tax and benefit system, and then sets out the approach taken by this paper.

Studies of couple penalties and premiums usually measure the following:

- the change in {SOMETHING} that occurs when a couple start or cease to ‘live together as husband and wife’ (LTHAW; see Box 2.1).

Box 2.1. Living together as husband and wife (LTHAW)

‘Living together as husband and wife’ is the phrase used in social security legislation; for example, claim forms and guidance notes for tax credits state that ‘you are a couple if you are married and not separated, or a man and a woman living together as if you are married’; two adults living together who are not defined as couples in this way would be counted as two single adults.

For unmarried couples, there is no set of unambiguous rules that determines what it means to ‘live together as husband and wife’ for tax credit or benefit purposes, and the concept of ‘living together as husband and wife’ has developed through social security case law and practice. For more details, see Child Poverty Action Group (2009, p. 720). In particular, CPAG states that there are six factors that are used as ‘signposts’ to determine whether or not you are cohabiting. No one factor need, in itself, be conclusive, as it is your ‘general relationship’ as a whole that is of paramount importance. These six factors are: whether a couple live in the same household, whether they have a sexual relationship, their financial arrangements, whether the relationship is stable, whether they have children together, and how they appear in public.

For married couples, the only test is whether they live in the same household.

But not all past studies have measured the same {SOMETHING}. For example, one could measure the change in:

1. net income (which could be measured before or after housing costs, and which could be measured in cash terms or as equivalised income).³
2. entitlement to benefits and tax credits, less liability to taxes (which we refer to as 'net state support').⁴

These have their advantages and disadvantages.⁵

Two adults can almost certainly save on living costs by living together, but, unlike some past studies, this study does not attempt to measure the overall financial or non-financial benefits or costs to living as a couple compared with living apart. In principle, an assessment of how net income changes when couples split up or form might tell us whether couples are better off together or apart, at least in pure financial terms.⁶ But it is not clear to us that this is an interesting public policy issue: for example, it is not clear to us whether we should be pleased or disappointed if the extent to which couples were better off together than apart changed over time. It is also unclear whether one could ever reliably assess whether couples were better off together or apart. Couples form and separate for all sorts of reasons, with financial considerations probably low down on the list. Many of the costs and benefits to being in a couple are not financial, the financial ones are very hard to quantify, and sometimes there is some substitutability between the financial and non-financial benefits (for example, a working lone parent might need to pay for childcare that a one-earner couple would not need to purchase). All three factors mean that we doubt one could ever reliably assess whether couples were better off

³ 'Equivalised income' is a measure of income that has been adjusted for the household size and composition in order to allow for more meaningful comparisons of income between households of different sizes. Essentially, it is an attempt to reflect that there are economies of scale in living costs, whereby two adults living together can live more cheaply than if they were living apart. See Box 2.2 for more discussion.

⁴ US studies of the so-called marriage tax penalty typically measure income tax liability.

⁵ Sometimes, these concepts will give identical impressions of couple penalties and premiums to each other.

⁶ This is precisely what has been claimed by some past studies on couple penalties; see, for example, Draper (2009).

together or apart (although equivalence scales are often used to try to quantify some of the difference; see Box 2.2).

Box 2.2. Equivalisation and equivalence scales

If a single person living alone had an income of £20,000, and a couple also had a total income of £20,000, it would be reasonable to expect that the single person was materially better off. However, we might also reasonably expect that the couple with a joint income of £20,000 was better off than a single adult on £10,000, even though both had the same per-capita income.

Equivalisation is a technique used to adjust the incomes of households of different sizes or compositions to allow for a more meaningful comparison of living standards. Equivalence scales usually reflect that larger households have greater needs than smaller households, but that there are economies of scale in living costs (and so it would not be appropriate simply to divide total income by the number of people in the household).

The equivalence scale used in *Households Below Average Income*, the government publication that examines the household income distribution, is the 'modified OECD' scale. Households have their incomes scaled by a factor that reflects their assumed needs relative to a couple with no children. For example, the income of a single person is divided by 0.67 and the income of a couple with two children under 15 is divided by 1.4.

The implication of this particular equivalence scale is that if a single person has more than 67% of the income of a couple with no children, then he or she is better off. Similarly, if a lone parent with two children has more than 74% of the income of a couple with two children, then he or she is better off.

However, there is considerable disagreement over what is the correct equivalence scale, reflecting that there is no universally-accepted and robust method for estimating such scales.

But a more legitimate public policy issue is the way that, through the tax and benefit system, the government affects the costs and benefits of living together rather than living apart.⁷ This can be achieved by measuring how net state support changes when a couple forms or splits up. This provides a tight focus on the impact of the tax and benefit system, and disregards from the calculation of the couple penalty and premium any change in housing costs or labour supply behaviour except to the extent that these alter entitlements to benefits and tax credits.

In this study, we therefore define ‘a couple penalty or premium’ as the change in entitlements to benefits and tax credits and in liability to taxes that occurs when two single people marry, or start to live together as husband and wife (or a couple divorce, or stop living together as husband and wife). This is definition 2 listed at the beginning of this chapter.

Having set out what we are trying to measure, we shall say that if net state support falls when a couple splits up, there is a couple penalty in the tax and benefit system; if net state support rises, it seems natural to call this a couple premium in the tax and benefit system. In some cases, net state support does not change when a couple splits up, and we shall say that the tax and benefit system is neutral towards relationship status in these cases.

The words ‘penalty’ and ‘premium’ are unfortunate (and we use them mostly because past studies have used the same terms), since they suggest that couple penalties are undesirable and couple premiums desirable. Although policymakers may make that judgement, they may also make alternative judgements. At this stage, we do not seek to argue that penalties are necessarily undesirable or premiums desirable; we discuss this issue more in Chapter 6.

⁷ This is not to say that there are not other, financial or non-financial, ways in which public policy affects the costs and benefits of being in a couple.

3. What causes couple penalties and premiums, and how could they be eliminated?

This chapter discusses what features of the tax and benefit system cause couple penalties and premiums, the couple penalties and premiums that exist in the 2010–11 UK tax and benefit system, and what changes would need to be made to remove them.

3.1 What causes couple penalties and premiums?

Couple penalties and premiums are caused by those parts of the tax and benefit system that depend on the income and circumstances of both adults in a couple, rather than on those only of the individual claimant or taxpayer. This section describes three structural features of tax or benefit systems that can lead to either penalties or premiums:

- (i) jointly-assessed income tax systems;
- (ii) benefit or tax credit entitlements that depend on the characteristics of the couple;
- (iii) benefits or tax credits that are means-tested on the joint income of a couple.

We discuss these in turn below.

(i) Jointly-assessed income tax systems

In income tax systems that depend on the joint income of a couple and have marginal income tax rates that rise as income rises, tax allowances and thresholds can lead to penalties or premiums, depending on the difference between the allowance and thresholds for couples and single people and on how equally the couple's income is shared between the adults. For example:

- If the allowances and thresholds are the same for couples and single people, then the result is a penalty (for couples where both have an income) or neutrality (for couples where only one has an income).
- If the allowances and thresholds for couples are twice those for single people, then the result is a premium (for couples where only one has an income, and possibly for couples where both have an income but it is

not shared equally) or neutrality (for couples with near-identical incomes).⁸

- The result is more likely to be a premium, and less likely to be a penalty, the higher are the allowances and thresholds for couples and the more unequal is the share of income within the couple.

However, in an income tax system that depended upon the joint income of a couple and had marginal income tax rates that fell as income rises, tax allowances and thresholds would have the opposite impact on penalties or premiums to that described above. That is, equal allowances and thresholds for single people and couples would lead to neutrality or premiums (but not penalties), and double allowances and thresholds for couples would lead to neutrality or penalties (but not premiums).

Clearly, if there are tax allowances that are available only to couples (such as the married couple's allowance or a transferable personal allowance), or only to single adults, then these will lead to couple premiums or penalties, respectively.

(ii) Benefit or tax credit entitlements that depend on the characteristics of the couple

The way that benefit and tax credit entitlements are calculated for couples compared with single people can lead to couple penalties or premiums (on top of any penalty or premium that might arise if the benefit is means-tested against joint income, as discussed below).

Benefits will lead to a couple premium if couples get more than single people and one adult of the couple would not be entitled if assessed as an individual. For example:

- a low-earning single man and a non-working single woman, each with no dependent children, can get more working tax credit as a couple than if they were assessed as individuals;
- a man aged 65 or over with full entitlement to the basic state pension, and a single woman with no or low entitlement to the basic state

⁸ Note that a system where all allowances and thresholds for couples are double those of single people is equivalent to a system of income-splitting, where the average income of the partners in a couple is assessed against the single person's tax schedule and the resulting tax bill then doubled.

pension and no or low other sources of income, will be entitled to more basic state pension as a couple than if they were assessed as individuals.

The opposite can also apply: there used to be a benefit called one parent benefit (and a higher rate of child benefit) which was paid only to lone parents. A couple with children would clearly get less (i.e. none) one parent benefit if assessed as a couple than if assessed as individuals.

But couple penalties can arise if couples are entitled to less than twice the amount that single people get, and if both adults would qualify if assessed as individuals. For example:

- for most means-tested benefits in the UK, two adults will have a lower maximum entitlement if assessed as a couple than if assessed as individuals.

(iii) Benefits or tax credits that are means-tested on the joint income of a couple

Means-testing benefits and tax credits against the joint income of a couple can result in couple penalties or premiums (on top of the way that the basic entitlements are set, as discussed above). Typically, benefits and tax credits measure income above some threshold (or disregard) and use that to reduce entitlements. The higher is the threshold or disregard for couples relative to single adults, the less likely are penalties, and the more likely are premiums or neutrality.

The overall impact of benefits and tax credits that depend on the income and circumstances of the couple depends on two things: (a) the size of the basic entitlement for couples relative to the sum of the basic entitlement for the two single people (which will be partly determined by whether each of the two single adults is entitled to the benefit in their own right); and (b) the size of the threshold or disregard for couples relative to its size for single people. In general, the higher is the basic entitlement for couples relative to the sum of the basic entitlements for the single people, and the higher is the size of the threshold or disregard for couples relative to its size for single people, then the less likely it is that the benefit leads to couple penalties and the more likely it is that it leads to couple premiums.

3.2 Couple penalties and premiums in the 2010–11 tax and benefit system in the UK

How do these general principles apply to the current UK tax and benefit system? As income tax and National Insurance contributions are assessed on an individual's circumstances, case (i) is not relevant in the UK at present.⁹ In the current UK tax and benefit system, couple penalties and premiums are caused by tax credits, means-tested social security benefits, winter fuel payments and some non-means-tested benefits (notably the basic state pension, and existing recipients of contributory incapacity benefit, which is due to be phased out over the next few years). Benefits that depend only on the income and circumstances of the claimant (such as disability living allowance, child benefit, contributory jobseeker's allowance, and contributory employment and support allowance) do not lead to couple penalties or premiums.¹⁰ Annex A provides a benefit-by-benefit assessment of whether penalties and premiums are likely to occur (and why) and Annex B provides some numerical examples.

3.3 Are couple penalties and premiums inevitable?

Couple penalties or premiums are almost inevitable by-products of tax and benefit systems. To eliminate them, we would have to design a tax and benefit system with none of the three features described in points (i) to (iii) above.

One route is to have a tax and benefit system that is entirely individual-based. In other words, liability to all taxes, and entitlement to all benefits and tax credits, would have to be based on the income and other characteristics of the individual alone. As the income tax system is almost all individual, achieving this in the UK would require 'individualising' the benefit and tax credit system (and we examine this further in Section 7.2).

The only jointly-assessed tax and benefit system that achieves neutrality always is one with a single marginal tax and benefit withdrawal rate, and

⁹ Apart from for those born before 1935, for whom the married couple's allowance, and the reduced rate of National Insurance contributions that married women could elect to pay, can provide a couple premium.

¹⁰ In addition, some benefits and taxes lead to 'living together' penalties or premiums because they depend upon the level of housing costs in some way. Penalties are caused by housing benefit, council tax benefit, mortgage interest support in IS/JSA, and Mortgage Interest Relief at Source (MIRAS), and premiums are caused by council tax.

no tax allowance or disregard, so that the amount of tax paid is a constant proportion of income; if such a system has cash benefits, the entitlement of a couple has to be twice that of a single person.¹¹ For couples, such a system would lead to identical (joint) tax liabilities and (joint) benefit entitlements if assessed as single adults or couples. Achieving this in the UK would require dramatic changes, given that the combined tax and benefit system leads to marginal effective tax rates that vary considerably between family types and with income.¹²

These are both fairly extreme cases of tax and benefit systems: the first has no form of joint assessment whatsoever, and the pattern of redistribution that can be achieved by the second is limited, as there are only two parameters that can be altered (the size of any universal benefit and the level of the tax rate).

So achieving neutrality may be unrealistic, but a government has a great deal of choice over whether it wants a tax and benefit system to have, for example, mostly penalties and few premiums, or mostly premiums and few penalties. In the current UK system, increases in the basic entitlement to benefits and tax credits for couples relative to the sum of the basic entitlements for the single people, and increases in the size of the threshold or disregard in benefits and tax credits for couples relative to its size for single people, would both tend to reduce the size and number of penalties, and increase the size and number of premiums, as would new tax allowances or credits available only to couples.¹³ We explore one of these options further in Section 7.1.

¹¹ This can be thought of as a universal, non-means-tested, citizen's income, combined with a pure flat tax.

¹² See, for example, Brewer, Saez and Shephard (2010). See also Adam and Browne (2006) on flattening tax credits and income tax.

¹³ Note that this could be done in a way that costs the government money, saves the government money or is revenue-neutral, as couple penalties could be reduced, and couple premiums increased, by any combination of increasing entitlements and thresholds for couples (which costs money) or cutting entitlements and thresholds for single people (which saves money).

4. Measuring couple penalties and premiums: details

This chapter discusses the details of our modelling, the results of which are reported in the next chapter. It can be omitted for those primarily interested in our results.

Chapter 2 set out that we are measuring couple penalties and premiums in the tax and benefit system as the change in entitlements to benefits and tax credits and in liability to taxes that occurs when two adults living apart marry, or start to live together as husband and wife (or a couple divorce, or stop living together as husband and wife). We do this because we want to study how the tax and benefit system depends on relationship status, rather than any inherent financial (or non-financial) advantages or disadvantages that might arise when living as a couple (through economies of scale in living costs, for example).

Section 4.1 discusses several scenarios that one could perform in order to measure couple penalties and premiums, and sets out the ones we use in this report. Section 4.2 discusses how we calculate couple penalties and premiums in the tax and benefit system in practice for this report.

4.1 How could one measure couple penalties and premiums in the tax and benefit system?

Having decided what we mean by a couple penalty or premium in the tax and benefit system, there are several different scenarios that could be performed in order to measure it. For example, we could study any of the following scenarios:^{14,15}

- A. Two adults living in a couple stop (or claim to stop) 'living together as husband and wife', and divorce (if previously married), but continue to co-reside. Both adults then claim benefits and tax credits as single people.

¹⁴ These have all been expressed as if a couple is becoming or claiming to become two single people, but they can all be reversed.

¹⁵ We also considered a scenario where a couple decides to behave fraudulently by pretending that only one adult is present, and that adult claims benefits and tax credits as a single person, but this would analyse the incentives to behave fraudulently rather than being a meaningful comparison of the net state support paid to single adults and couples. Section 6.1 cites government estimates on how much net state support is wrongly paid to couples who are claiming to be single adults.

- B. Two adults living in a couple split up, each forming their own single-person household, but their labour supply and other behaviour remains unchanged.
- C. Two adults living in a couple split up, each forming their own single-person household, and their behaviour alters to reflect their new circumstances.

All of these scenarios could potentially alter net state support, and, in principle, all could lead to different estimates of the couple penalties and premiums in the tax and benefit system. Each has attractive and unattractive features.

Scenario A may not be a realistic description of how couples form and split up, but it allows for a clean focus on the impact of the tax and benefit system and the way it depends upon the relationship between the two adults, because the only thing that changes is the relationship between the two adults. Another way of looking at this experiment is that it compares the tax and benefit position of a married or cohabiting couple with, say, an otherwise-equivalent brother and sister who are co-residing, or any other two adults who are not LTHAW.

Scenarios B and C are more realistic than A in some ways, in the sense that they are closer to the way in which most couples are formed and split up. But when couples form and separate, there are often many associated lifestyle changes: the most obvious is their living arrangements, but the list may also include work patterns, fertility, use of childcare and so on. Many of these could also affect the couple's entitlement to net state support. So an assessment of couple penalties and premiums in the tax and benefit system based on Scenario C would capture not only how the tax and benefit system depends upon the relationship between the two adults, but also the extent to which the tax and benefit system varies with housing, work patterns, fertility, use of childcare and so on. A practical problem with Scenario C is that it would require us to specify how these lifestyle choices would change when couples form or split. This would be hard to do in a transparent manner, and there is a risk that the results might be overly sensitive to arbitrary assumptions we had made.

These criticisms are less relevant for Scenario B, in which the couple penalties and premiums in the tax and benefit system are allowed to depend upon the change in living arrangements that occurs when a couple

splits up or forms. This scenario is of interest partly because there are several parts of the tax and benefit system that do explicitly depend on housing choices, but also because, of all the possible lifestyle changes that might occur when couples split up or form, housing choices are the most closely associated with the relationship change. However, Scenario B still requires assumptions to be made as to the form and cost of housing for the single people and the couple; this may be hard to do in a convincing fashion, and the assumptions will in principle affect the resulting couple penalty or premium.

In this report, our focus is on the role played by the tax and benefit system. We have already said, in Chapter 2, that we wish to define the couple penalty or premium in the tax and benefit system as the change in entitlements to benefits and tax credits, and liability for taxes, when two single people marry or start to live together as husband and wife, or when the two adults in a couple divorce or stop living together as husband and wife.

In our empirical analysis (reported in Chapter 5), we will use Scenarios A and B. In Scenario A, a couple ceases to live together as husband and wife, but the two people remain in the same household. As previously stated, the advantage of this scenario is that the only thing that changes is the nature of the relationship between the two adults, and this allows for a clear focus on the way in which the tax and benefit system depends upon relationship status. On a more practical note, the scenario means that it is not necessary to make assumptions about how housing costs would change.¹⁶ The numbers reported in Chapter 5, then, answer the question ‘How much more net state support would a couple receive if they continued to live in the same household, but stopped living together as husband and wife?’ or ‘How much would net state support change if a married couple or one living together as husband and wife were replaced with an otherwise-equivalent couple who were not living together as husband and wife?’.

As we discuss in Chapter 5, the main difference between the resulting couple penalties and premiums from Scenarios A and B is due to the way

¹⁶ We will compare unequivalised values, as we are trying to calculate the difference in the amount of net state support, and not necessarily how much this support might be ‘worth’ to single adults and couples.

that changes in housing costs (including council tax) affect net state support. Scenario B is also closer to the previous studies that we summarise in Box 4.1 (see also Annex C).

Box 4.1. Past work on couple penalties and premiums

Anderberg, Kondylisy and Walker (2008) analysed couple penalties in 2004–05 using, like this study, data from the Family Resources Survey (FRS). They estimated that 93% of couples experienced a penalty, with a mean of £46.60, and that 5% of couples experienced a bonus, with a mean of £13.90. The analysis in this paper followed a variant of Scenario B (the men were assumed to form a new single-person household in rental accommodation, the women remained in the couple’s former house).

Draper (2009) found that 75 out of 98 hypothetical couples would have been better off living apart than together in the 2007–08 tax and benefit system, with a mean penalty of £69 a week. This study used Scenario B, and chose a number of hypothetical couples, rather than estimating couple penalties and premiums for a representative sample of couples.

The Centre for Social Justice (2009) analysed how the sum of equivalised net income changed when a couple split up^a using, like this study, data from the FRS and using Scenario B. They estimated that 1.8 million couples experienced a material couple penalty and that the average penalty was £26 a week. The penalties seem lower than in the other studies because this study is a comparison of equivalised net income.

a. They used the phrase ‘material couple penalty’ to refer to a comparison of the equivalised net income of a couple with that of the two single people.

4.2 Calculating couple penalties and premiums in the tax and benefit system

Rather than calculate couple penalties and premiums for hypothetical couples, we calculate couple penalties and premiums in the tax and benefit system for a representative sample of the UK population, by combining data from the Family Resources Survey (FRS) with the IFS tax and benefit microsimulation model, TAXBEN, and using the supplied grossing weights.

Couple penalties and premiums in the tax and benefit system are analysed separately for existing couples and existing single adults. We calculate ‘the

sum of net state support paid to the two single adults minus net state support paid to the couple'. This produces a number where positive values reflect couple penalties and negative values are couple premiums. For both single adults and couples, couple penalties and premiums were calculated under Scenarios A and B.

To split up couples for Scenario A, one of the adults was placed into a new 'tax/benefit unit' within the same household. Any children were assumed to stay with the woman.¹⁷ No other changes were made to the characteristics of the individuals or the sources of income or ownership of assets (the FRS already splits jointly-held assets equally between the individuals in the couple).

To split up couples for Scenario B, both adults were placed in a new single-adult household. Again, any children were assumed to stay with the woman. No other changes were made to the characteristics of the individuals or the sources of income or ownership of assets. For the two new households, housing costs and other household-level characteristics were chosen from an existing single-person household with similar characteristics, subject to the constraint that each new single person's housing costs were at least half those of the couple's, but less than those of the couple (however, if the couple owned their house outright – and thus had no housing costs – we did not place an upper bound on the housing costs of the two single people).

To pair up single people, the following algorithm was used:

¹⁷ An alternative, which was considered, is to assume that, after splitting up, the couple collaborate when arranging their affairs so as to maximise their total entitlement to net state support; this is equivalent to maximising the couple penalty. Amongst couples with children, 60% would be better off (after splitting up) allocating the children to the woman, 22% would be better off (after splitting up) allocating the children to the man, and for 18% it would not matter. Note that it is not always the case that the family would be better off after splitting up by allocating the children to the lower earner, as the structure of tax credits means that some low earners would gain more state support from having children than some non-workers, because working tax credit rates are higher for lone parents than for single adults, whereas rates of income support and jobseeker's allowance are identical (for those aged 25 and over). However, average couple penalties and premiums calculated under this assumption were only very slightly higher than under the scenario where children always stay with the woman after separation, and so we used the latter scenario, as the overwhelming majority of lone parents are women.

1. Choose a single woman (Miss A).
2. Find a woman in a couple (Mrs B) who is similar to the single woman.
3. Find a single man (Mr C) who is similar to Mrs B's partner (Mr B).
4. Pair up Miss A and Mr C.
5. Put Mr C back in the pool of available single men, and go back to (1) until potential partners have been found for all single women.
6. When all single women have hypothetical partners, go back to (1) and repeat for all single men.

As a result of this, every single person in the FRS is allocated a hypothetical partner. The set of matches is not mutually consistent: we have not paired up all single people in the FRS with each other (which would, in any case, be impossible, as there are considerably more single women than single men), but instead we have found every single person a potential or hypothetical partner from the existing stock of single adults, and the same hypothetical partner could be chosen as a match for more than one person.

Having done this, the new couple are then allocated housing costs and other household characteristics by choosing some based on an existing couple household with similar characteristics, subject to the constraint that the new couple's housing costs are less than the sum of those of the single people's but more than those of each of the single people (with the second constraint not applying if one of the single people owned their house outright, and thus had no housing costs). No other changes were made to the characteristics of the individuals or the sources of income or ownership of assets.

For Scenario A, the newly-formed couples were placed in the same household, but in separate tax/benefit units, and then this situation compared with the case where they were LTHAW. For Scenario B, the situation where each lived in a separate household was compared with the situation where they were LTHAW in their new household.

In the methods described above, we had to decide how to define 'similar' adults or households. The precise method used was propensity score matching, which allows the researcher to combine several different dimensions into a single real-valued number. Three different specifications of the propensity score were used. When matching single adults to adults of the same sex in couples, the dimensions used were age

(a fifth-order polynomial), education (in three bands), region or country of the UK and whether a full-time student.¹⁸ When choosing a similar household from which to assign housing costs for the newly-formed single-adult households, the dimensions used were age and education (interacted), earnings decile, whether a full-time student and number of children. When choosing a similar household from which to assign housing costs for the newly-formed couple households, the dimensions used were education of man interacted with education of woman, earnings decile of man interacted with that of woman, age of woman, age of man, whether the man, woman or both was a full-time student and number of children. Tables 4.1–4.6 compare some of the characteristics of actual couples in the FRS with the characteristics of these hypothetical couples by examining the joint distributions of age, education and earnings. They show that the hypothetical couples are similar to the actual couples on the dimensions that we used to pick similar adults (such as age and education), but not necessarily on the dimensions that we did not use (such as earnings and employment status).

All modelling is based on the 2006–07 Family Resources Survey, uprated to 2010–11 prices. The modelling uses simplifications and assumptions that are typically made when doing tax and benefit microsimulation. In particular, we assume full take-up of all benefits and tax credits, and we assume that all adults who meet the income and asset conditions would be entitled to claim jobseeker’s allowance. We ignore the temporary disregards in tax credits, and we ignore support for mortgage interest in income support and jobseeker’s allowance.¹⁹ We dropped same-sex couples from our analysis, and we assumed existing single adults all form mixed-sex couples.

¹⁸ Employment status and earnings were not used in this specification, as they are highly likely to be affected by whether or not an adult is living in a couple.

¹⁹ Support for mortgage interest is payable only after an IS/JSA recipient has been on benefit for a given period of time, and it is unclear how to reflect these sorts of rules in the modelling. In principle, support for mortgage interest can lead to couple penalties, both because it increases the amount of support that is means-tested against a joint income and because it can be paid once per household.

Table 4.1. Age differences**Simulated matches for men (row percentages)**

Male age (down)/Female age (across)	Under 30	30–39	40–49	50–59	60–69	70+	All
Under 30	94%	5%	0%	0%	0%	0%	100%
30–39	27%	63%	10%	1%	0%	0%	100%
40–49	2%	30%	59%	8%	0%	0%	100%
50–59	0%	6%	28%	60%	6%	0%	100%
60–69	0%	0%	3%	30%	61%	5%	100%
70+	0%	0%	0%	3%	23%	74%	100%

Actual couples (row percentages)

Male age (down)/Female age (across)	Under 30	30–39	40–49	50–59	60–69	70+	All
Under 30	86%	13%	1%	0%	0%	0%	100%
30–39	24%	67%	9%	1%	0%	0%	100%
40–49	2%	26%	64%	7%	0%	0%	100%
50–59	0%	3%	26%	64%	6%	0%	100%
60–69	0%	0%	3%	31%	60%	5%	100%
70+	0%	0%	0%	3%	28%	68%	100%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07.

Table 4.2. Age differences**Simulated matches for women (column percentages)**

Male age (down)/Female age (across)	Under 30	30–39	40–49	50–59	60–69	70+
Under 30	75%	5%	0%	0%	0%	0%
30–39	23%	61%	10%	1%	0%	0%
40–49	2%	29%	62%	7%	0%	0%
50–59	0%	5%	24%	63%	8%	0%
60–69	0%	0%	4%	26%	60%	4%
70+	0%	0%	0%	2%	31%	96%
All	100%	100%	100%	100%	100%	100%

Actual couples (column percentages)

Male age (down)/Female age (across)	Under 30	30–39	40–49	50–59	60–69	70+
Under 30	61%	6%	0%	0%	0%	0%
30–39	35%	63%	8%	1%	0%	0%
40–49	4%	27%	65%	8%	1%	0%
50–59	0%	3%	24%	65%	8%	0%
60–69	0%	0%	2%	24%	65%	8%
70+	0%	0%	0%	2%	26%	92%
All	100%	100%	100%	100%	100%	100%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07.

**Table 4.3. Education differences
Simulated matches for men (row percentages)**

		Female education		
		Low	Medium	High
Male education	Low	75%	21%	4%
	Medium	30%	54%	16%
	High	6%	27%	67%

Actual couples (row percentages)

		Female education		
		Low	Medium	High
Male education	Low	75%	21%	5%
	Medium	33%	50%	17%
	High	11%	25%	64%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07. Low = left education at or before age 16. Medium = left education after age 16 and at or before age 19. High = left education at or after age 20.

**Table 4.4. Education differences
Simulated matches for women (column percentages)**

		Female education		
		Low	Medium	High
Male education	Low	86%	46%	14%
	Medium	11%	41%	28%
	High	2%	12%	58%

Actual couples (column percentages)

		Female education		
		Low	Medium	High
Male education	Low	82%	43%	16%
	Medium	14%	42%	24%
	High	3%	14%	60%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07. Low = left education at or before age 16. Medium = left education after age 16 and at or before age 19. High = left education at or after age 20.

Table 4.5. Earnings differences
Simulated matches for men (row percentages)

		Female earnings					
		Not working	1	2	3	4	5
Male earnings	Not working	57%	17%	11%	6%	5%	3%
	1	43%	25%	19%	6%	4%	3%
	2	37%	21%	21%	11%	6%	4%
	3	30%	18%	22%	14%	10%	7%
	4	36%	14%	16%	13%	11%	10%
	5	30%	14%	15%	12%	14%	15%

Actual couples (row percentages)

		Female earnings					
		Not working	1	2	3	4	5
Male earnings	Not working	78%	9%	5%	3%	3%	2%
	1	41%	28%	11%	8%	7%	4%
	2	32%	23%	23%	12%	6%	4%
	3	24%	22%	23%	18%	9%	5%
	4	21%	22%	20%	17%	14%	7%
	5	22%	19%	15%	13%	13%	17%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07. Numbered columns and rows show earnings quintiles for women and for men respectively, derived by dividing all earning women/men into five equal-sized groups according to earnings.

**Table 4.6. Earnings differences
Simulated matches for women (column percentages)**

		Female earnings					
		Not working	1	2	3	4	5
Male earnings	Not working	69%	36%	32%	32%	32%	27%
	1	6%	9%	9%	7%	6%	7%
	2	6%	15%	17%	15%	12%	11%
	3	7%	18%	19%	16%	14%	15%
	4	7%	12%	15%	15%	15%	16%
	5	5%	10%	9%	16%	20%	24%

Actual couples (column percentages)

		Female earnings					
		Not working	1	2	3	4	5
Male earnings	Not working	57%	15%	10%	9%	9%	9%
	1	7%	10%	5%	5%	5%	4%
	2	7%	11%	14%	9%	6%	5%
	3	8%	17%	22%	22%	15%	10%
	4	9%	23%	26%	28%	30%	17%
	5	12%	24%	24%	26%	35%	54%

Notes: See text for details of simulated couples. Actual couples taken from FRS 2006–07. Numbered columns and rows show earnings quintiles for women and for men respectively, derived by dividing all earning women/men into five equal-sized groups according to earnings.

5. Couple penalties and premiums in 2010–11

This chapter analyses the extent of couple penalties and premiums in the 2009–10 tax and benefit system for a representative sample of existing couples in the UK.

As discussed in Chapters 2 and 4, our preferred definition of couple penalties and premiums used in this report is *the change in entitlements to benefits and tax credits, and liability to council tax and income tax, when two single people start to live together as husband or wife, or when the two adults in a couple divorce or stop 'living together as husband or wife'*.²⁰ Our preferred scenario is that *the two adults living in a couple stop 'living together as husband and wife', divorce (if previously married) but continue to live in the same household (Scenario A)*, but we also present results where *the two adults living in a couple stop 'living together as husband and wife', divorce (if previously married) and both move to new single-adult households (Scenario B)*.

The estimated numbers from Scenario A answer the question 'How much more net state support would a couple receive if they continued to live in the same household, but stopped living together as husband and wife?'. The estimated numbers from Scenario B answer the question 'How much more net state support would a couple receive if they moved to new single-adult households and stopped living together as husband and wife?'. As we said in Chapter 2, this study's findings cannot tell us whether couples would be better off living apart than living as a couple; they simply report how net state support varies by family situation.

The results are shown in a series of tables, which report:

The results are shown in a series of tables, which report:

- the proportions of couples who face penalties, face premiums and for whom the tax and benefit system is neutral;
- the mean net penalty overall (we express penalties as positive numbers and premiums as negative numbers);

²⁰ This is *not* the same as a situation where a couple who are currently cohabiting (i.e. living together as husband and wife) decide to marry; such a scenario would be relevant for calculating marriage penalties and premiums, as is common in the US, for example.

- the mean penalty for those with a penalty and the mean premium for those with a premium;
- various points in the distribution of penalties and premiums, measured in pounds per week and as a percentage of the couple's net income;²¹
- a breakdown of the average penalty or premium to show which taxes or benefits are contributing to it.

The tables break down the population into different groups:

- by family type – couples without dependent children, couples with dependent children and couples where one is over the state pension age (with or without children, although very few have dependent children);
- by family type and number of workers;
- by total family earnings;
- by male earnings interacted with female earnings.

Results are presented separately for Scenarios A and B, and for existing couples and existing single people. They are discussed below.

5.1 Couple penalties and premiums in the 2010–11 tax and benefit system

5.1.1 Couple penalties for existing couples: Scenario A

All (Table 1)

Under Scenario A – where we assume that couples stop LTHAW but remain in the same household – 68% of existing couples in the UK face a penalty, 27% face neutrality and 4% face a premium (see Table 1 at the end of the report).

Overall, the mean penalty of those facing a penalty is £66.49 and the mean premium of those facing a premium is £18.62. Overall, the mean penalty/premium (expressing premiums as negative numbers and penalties as positive numbers) is a penalty of £44.70, and the median penalty/premium is a penalty of £26.05. Table 2 shows that the median

²¹ This answers the question 'By what proportion would the income of the couple rise (thanks to higher net state support) if they were to no longer live together as husband and wife (with no other changes to their circumstances)?'.

penalty/premium is a penalty of 5% of net income (of the couple), but 10% of couples have penalties of at least 20% of net income.

As was suggested by the discussion in Chapter 3:

- Penalties tend to arise where at least one adult, when assessed as a single adult, would be entitled to means-tested benefits or tax credits that are assessed on the joint income of the couple. The main programmes are income support, jobseeker's allowance, pension credit, housing benefit, council tax benefit, child tax credit and working tax credit.
- Neutrality tends to arise where each adult, when assessed as a single adult, would not be entitled to means-tested benefits or tax credits.
- Premiums tend to arise where one of the adults is entitled to a non-means-tested benefit that pays dependants' additions (such as the basic state pension, incapacity benefit and carer's allowance), or where the couple qualifies for the married couple's allowance for those born before 1935.

Table 3 shows that the mean penalty/premium, on average, comprises a very small premium (£0.27) through income tax (the married couple's allowance for those born before 1935) and a much larger net penalty from benefits and tax credits. By programme, the largest contributors, on average, to the mean net penalty are, in decreasing order, income support (IS) / jobseeker's allowance (JSA) / pension credit (PC) – which are reported together as 'income support' – child tax credit and working tax credit. The non-means-tested benefits (such as the basic state pension, incapacity benefit and carer's allowance) lead to small premiums on average.

Calculations based on the numbers in Table 1 show that the aggregate net penalty is £34.3 billion a year.²² One way of interpreting this is how much more net state support the government would have to pay if every couple split up (but remained in the same household). And, as we discuss in Section 7.2, it can also be thought of as an approximate guide to the cost of eliminating all couple penalties and premiums in the existing tax and

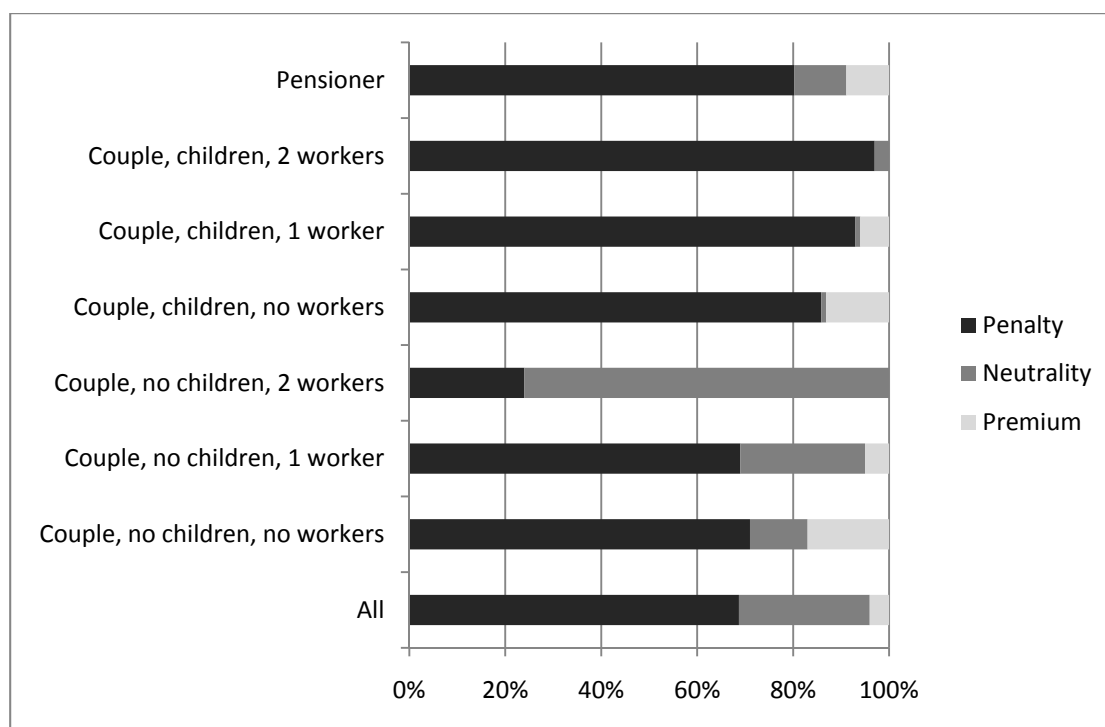
²² This comprises an aggregate penalty amongst those with penalties of £34.7 billion and an aggregate premium amongst those with premiums of £0.6 billion (which do not sum to give a net penalty of £34.3 billion because of rounding).

benefit system at the existing rates of benefits and tax credits for single people.

By family type (Tables 1–3)

Table 1 (part of which is summarised in Figure 5.1) shows that almost all (95% of) couples with children, 81% of pensioner couples and 41% of working-age couples without children have a couple penalty. The average net penalty, and the average penalty amongst those with a penalty, follow the same pattern. Couple premiums are far less likely: pensioners are the most likely to have a couple premium (9%), with working-age couples with and without children less likely (3%). Working-age couples without children are the most likely to face neutrality (56%).

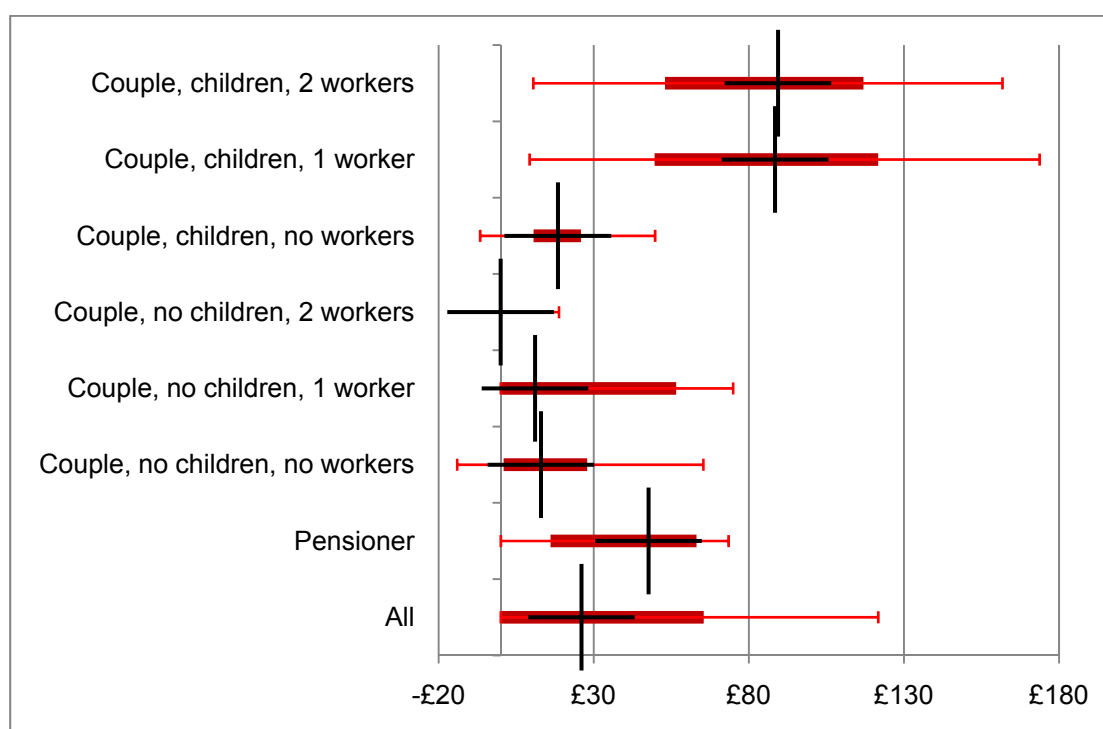
Figure 5.1. Couple penalties and premiums by family type and number of workers, 2010–11



Notes: See text for detail. Numbers are from Tables 1 and 4.

Table 2 shows that the median net penalty (i.e. counting premiums as negative penalties) is £85 a week for couples with children, £48 for pensioner couples and £0 (i.e. neutrality) for working-age couples without children (also see Figure 5.2). As a percentage of income, the median net penalty is 12% for couples with children and 11% for pensioner couples. At least 10% of couples with children and pensioner couples face a couple penalty of at least 20% of their net income.

Figure 5.2. Distribution of couple penalties and premiums by family type, 2010–11



Notes: Large cross shows median. Thick bar shows 30th and 70th centiles; thin bar shows 10th and 90th centiles. Positive numbers are penalties; negative numbers are premiums. Numbers are from Tables 2 and 5.

Table 3 shows that IS/JSA/PC together form the single largest contributor to the mean couple penalty for working-age couples without children and for pensioner couples, followed by council tax benefit and winter fuel payments for pensioner couples, and council tax benefit and working tax credit for working-age couples without children. For couples with children, child tax credit and IS/JSA provide the largest penalties, on average. The basic state pension provides, on average, a couple premium for pensioners of £8 a week: this will be amongst couples where one adult is entitled to little or no state pension as an individual, but qualifies for the dependants' addition when in a couple. Very small couple premiums are provided by the other non-means-tested benefits for which dependants' additions are payable (mainly incapacity benefit and carer's allowance), because these recognise the presence of another adult. For non-pensioners, income tax provides very small couple penalties where it partially offsets the couple premiums provided by the taxable non-means-tested benefits. For pensioners, income tax provides a couple premium through the married couple's allowance if one adult was born before 1935.

By family type and number of workers (Tables 4–6)

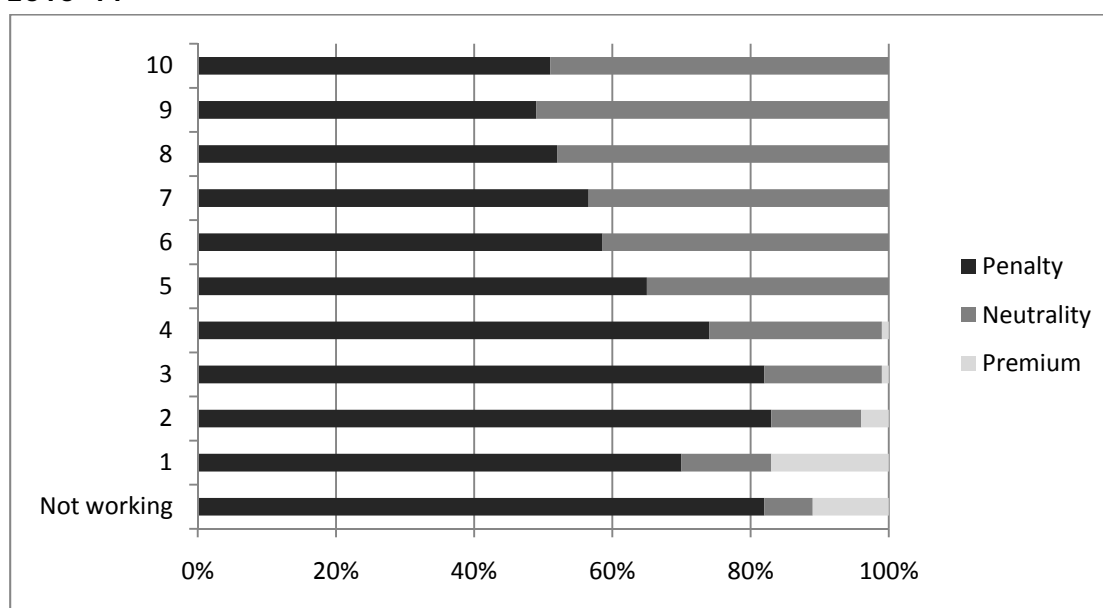
Looking first at working-age couples without children, Table 4 shows that the likelihood of having a couple premium goes down, and the likelihood of facing neutrality goes up, with the number of workers. The relatively high incidence of premiums amongst no-earner couples is mostly due to incapacity benefit (see Table 6). The mean (conditional and unconditional) penalty is highest for one-earner couples. Table 6 shows that the penalties amongst no-earner and one-earner couples are almost all attributable to IS/JSA, although working tax credit provides small (on average) couple premiums. Of the very small average penalties amongst two-earner couples, over half (by value) are attributable to working tax credit.

Turning to couples with children, Table 4 shows that net penalties are smallest for those with no workers, and much larger for those with one or two earners. The median penalties amongst one- and two-earner couples are £88 and £89 a week respectively, or 13% and 12% of their net income (Table 5). These penalties arise, on average, mostly from IS/JSA and child tax credit for one-earner couples, and from child tax credit and working tax credit for two-earner couples (Table 6). A small fraction of no-earner couples with children experience a couple premium, mostly due to incapacity benefit.

By joint family earnings (Tables 7–9)

Tables 7–9 split couples into those where no adult is in work (which will include a lot of pensioner couples) and then 10 equal-sized decile groups depending on the value of joint earnings of the couple. Table 7 (part of which is shown in Figure 5.3) shows that the fraction facing a penalty exceeds 70% for the non-workers and decile groups 1–4, and then (broadly) falls with earnings. However, the average net penalty rises and then falls as we move up the joint earnings distribution. The fraction facing a premium declines with joint earnings (but is higher amongst the lower earners than amongst the non-working couples). Table 8 shows that, as a percentage of income, the largest net penalties are in the third decile group of joint earnings (the median penalty in this group is 13%).

Figure 5.3. Couple penalties and premiums by decile group of joint earnings, 2010–11



Notes: See text for details. Numbers are from Table 7.

As previously discussed, the benefits providing premiums are mostly received by non-workers. Table 9 shows that, for couples with low joint earnings, penalties mostly arise from IS/JSA, because many such couples are single-earner couples and the non-working adult would probably be entitled to IS/JSA as a single adult. As earnings rise, the working tax credit becomes an important source of penalties. In the top half of the joint earnings distribution, the child tax credit becomes by far the most important source of couple penalties.

By male and female earnings together (Table 10)

Table 10 shows the average net couple penalties according to the earnings of the man and the woman (with non-workers included as a separate line). For example, the column marked 'Not working' shows couple penalties for couples where the woman is not working, with the rows denoting which earnings decile group the man falls into (with an extra row for non-working men).²³ The largest penalties are amongst couples with non-working or low-earning women and high-earning men, and the lowest penalties are amongst couples with high-earning men and high-earning women.

²³ For each sex, there are equal numbers in the decile groups (plus a group of non-workers), but there are not equal numbers in each of the 121 cells shown in the table, nor in the 100 cells corresponding to the two-earner couples.

5.1.2 Couple penalties for existing single people: Scenario A (Tables 11–23)

In general, the distribution of couple penalties and premiums for existing single people is similar to that for couples. Comparing Tables 1 and 2 with Tables 11 and 12, penalties are slightly less likely than for existing couples, premiums are slightly more likely than for existing couples, and the mean and median penalties/premiums are smaller net penalties than for existing couples. This pattern is driven by couples with children; for the other two family types, penalties are more common amongst existing singles than existing couples, and mean penalties generally higher.

There are many reasons for these differences. Clearly, they all relate to the fact that there are differences in the characteristics of the adults who currently live in a couple from those who currently live as single adults; for example, single adults are more likely to be younger or older than those in couples (with the latter meaning that more would face a couple premium thanks to the married couple's allowance, for example), and there are differences in the employment rates of those in couples and single adults conditional on their age.

As a variant, Tables 21–23 analyse couple penalties and premiums by the family type of the single person (single adult, lone parent, pensioner).

5.1.3 Couple penalties for existing couples: Scenario B (Tables 24–33)

Comparing Tables 24 and 1 shows that the average penalty/premium under Scenario B (where a couple splits up, with each forming a new single-adult household) is a larger penalty than under Scenario A (where the two adults remain in the same household, but stop living together as husband and wife).

These tables also show that, in general, couples are less likely to face a penalty, and more likely to face a premium, under Scenario B than under Scenario A. However, where penalties do exist under Scenario B, they are larger than under Scenario A. The differences vary considerably by family type, though: the fewer the workers, the larger the difference in penalties between Scenarios A and B, such that net penalties are smaller for couples with two earners under Scenario B than under Scenario A (Tables 4 and 27). A similar pattern is seen if we compare the pattern of couple penalties and premiums by earnings (Tables 7 and 30): couples with no or low joint

earnings have larger penalties under Scenario B than under Scenario A, but couples in the top half of the earnings distribution have lower net penalties under Scenario B than under Scenario A (indeed, more than half of couples in the top three earnings deciles face net premiums under Scenario B).

It is worth considering why there are different couple penalties under the two scenarios. Most taxes and benefits do not depend on the composition of the household, but depend only on the composition of the family or tax unit. For these taxes and benefits, it does not matter whether the two adults in a couple, after splitting up, live together in the same household or form new households (and this can be seen by comparing the columns in Tables 3 and 26, many of which are identical). Some taxes and benefits, though, depend on the composition of the whole household, not just the tax and benefit unit of the claimant (these include winter fuel payments, housing and council tax benefits, and council tax), and some parts of the benefit system depend upon the level of housing costs and council tax liability of the household (notably housing and council tax benefits, and income support for mortgage interest, although we do not model entitlements to ISMI²⁴). The couple penalty that arises from these benefits will, therefore, depend on whether a couple that splits up forms two new single households or remains in the same household but not LTHAW. A comparison of Tables 3 and 26 shows that the average couple penalty is roughly £7 a week higher under Scenario B than under Scenario A, and that this £7 is due to penalties that are almost £14 a week higher in HB, £6 a week higher in CTB and £0.56 a week higher in the winter fuel payment, but offset by a premium of £13.61 a week, on average, from council tax.

Why do these particular differences arise?

1. Council tax is levied per household, not per person (or per tax/benefit unit). There is a discount for single-adult households, but only of 25%. This means that two single adults living apart will be liable for 50% more council tax than a couple living together (if they all live in households in the same council tax band). This is not the full story – because those living in smaller properties in general have lower liabilities than those who live in larger properties – but Table 26 shows

²⁴ Section 5.2.3 describes how MIRAS (Mortgage Interest Relief at Source), which was scrapped in 1999–2000, used to lead to couple penalties for similar reasons.

that under Scenario B, couples, on average, are liable to less council tax together than if the adults lived in separate households, leading to a couple premium. On the other hand, the council tax liability of a couple household does not, in general, depend on whether they are LTHAW or not, and so council tax is neutral in Scenario A. If council tax is viewed as a tax on residential property, then it is entirely sensible for it to lead to couple premiums in this way.

2. Winter fuel payments are, for some pensioner households, a household benefit, not a per-person (or per-tax/benefit-unit) benefit.²⁵ In general, the rules for this benefit mean that winter fuel payments are more likely to (but do not always) lead to couple penalties under Scenario B than under Scenario A. One way of viewing this is that heating costs would generally be lower for a couple living together than for two adults living apart, and that some or all of that saving is captured by the government.
3. Housing benefit and council tax benefit are each more likely to lead to couple penalties under Scenario B than under Scenario A. There are two reasons:
 - The means tests in HB and CTB effectively take account of the income of all adults in the household, and not just those in the tax/benefit unit of the claimant. This means that an HB/CTB claimant will in general receive higher awards of HB/CTB if he or she lives alone than if they live with another adult (even if not LTHAW), holding rent and council tax liability constant.
 - Entitlements to CTB vary directly with a household's liability to council tax (CT). This means that if two adults are liable to more (combined) CT when living apart than when living together, then their (combined) entitlement to CTB will rise to reflect this, leading to a couple penalty. This finding reflects how a feature of the benefit system – that CTB can potentially rebate all of a household's CT liability, irrespective of its size and the number of people in the household – interacts with an empirical difference between couples and single people; if it were the case that couples had higher liability

²⁵ The detailed rules of winter fuel payments mean that this benefit is somewhere between a family-level benefit and a household-level benefit.

to CT when living together than when living apart, then this feature of CTB would act as a couple premium. Essentially, two single adults living alone can save on CT liability if they share a household, and the rules in CTB mean that some or all of that saving is captured by the government, so any penalty here is offsetting a premium described in point 1.

- Housing benefit works in a similar way to CTB, as described above. In particular, if two adults in social housing are paying more (overall) in rent when living apart than when living together, then their combined entitlements to HB will rise to reflect this, leading to a couple penalty. Essentially, because a couple can make savings on rental costs and heating compared with two single adults, those benefits that support living costs are consequentially worth less to them. In the private sector, this feature is exaggerated because Local Housing Allowance rates are identical for single adults aged 25 or over (without children) and couples with no children: rates for both are based on the rent of single-bedroom accommodation. The rules in LHA are designed around the assumption that a couple need spend no more in rent than a single person.

One of the reasons for estimating couple penalties and premiums under both Scenarios A and B is to show how assumptions about housing and council tax that need to be made under Scenario B are important in determining the size of couple penalties and premiums. The main differences in couple penalties and premiums between Scenarios A and B are not due to how taxes and benefits depend upon relationship status, but depend on how taxes and benefits treat characteristics – the choice of housing – which often change when relationship status changes.

5.1.4 Couple penalties for existing single adults: Scenario B (Tables 34–46)

Compared with existing couples under Scenario B (Tables 24 and 25), existing single adults under Scenario B (Tables 34 and 35):

- are more likely to face a couple penalty and less likely to face a couple premium;
- have a mean penalty/premium that is a higher net penalty, but have a median penalty/premium that is a lower net penalty.

The differences are mostly due to two factors (compare Tables 36 and 26):

- Existing single people are more likely to be renters than existing couples, particularly amongst pensioners and families with children. As a consequence, housing benefit leads to larger couple penalties under Scenario B for existing single people than for existing couples.
- Some existing single people do not live as single-adult households, and some are full-time students. Either of these will mean that they have a relatively low (or zero) council tax liability, and this means that CT is less likely to (or not at all likely to) act as a couple premium for these people than for existing couples (where we assumed that the adults all formed single-adult households upon separation).

5.2 How have tax and benefit changes affected the distribution of couple penalties and premiums?

This section analyses the extent to which tax and benefit changes under the current government have altered couple penalties and premiums. To do this, we have calculated couple penalties and premiums in 2010–11 under two hypothetical tax and benefit systems:²⁶

- the 1997–98 system, but with benefit entitlements, and allowances, disregards and thresholds, all increased in line with inflation (the retail price index, RPI);
- the 1997–98 system, but with benefit entitlements, and allowances, disregards and thresholds, all increased in line with growth in average earnings (the average earnings index, AEI).

5.2.1 Couple penalties for existing couples under Scenario A: changes over time (Tables 47–52)

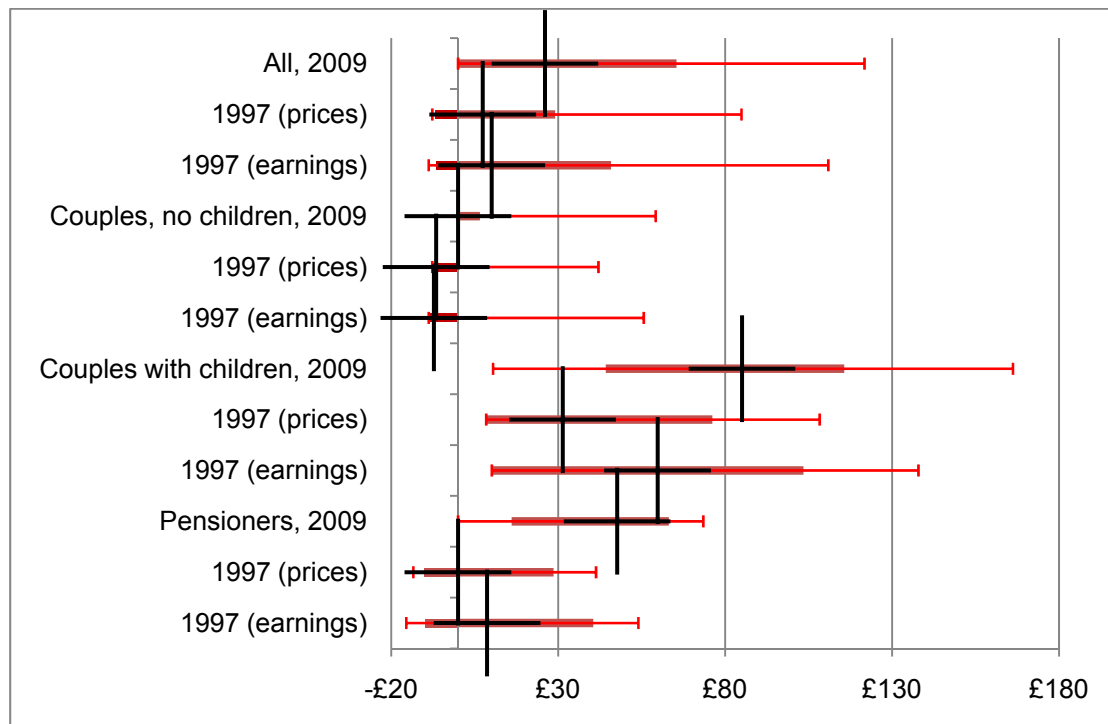
Tables 47 and 50 show that, under Scenario A, penalties and neutrality are more common under the actual 2010–11 tax and benefit system (Table 1), and premiums a lot less common, than under either of the hypothetical systems. This result is driven by couples (of any age) without children; by contrast, penalties amongst couples with children would have been almost universal under the hypothetical tax and benefit systems.

²⁶ It should be noted that neither of these uprating assumptions is the same as that usually followed by the government (in 1997), but the system that has been uprated with the RPI will be the closer.

The same tables show that the average net penalty/premium under the actual 2010–11 system is a larger penalty than under either of the hypothetical systems: across all couples, it is more than twice as high compared with a system indexed to prices and it is over 50% higher than a system indexed to earnings.

Tables 48 and 51 show that, at the median, a small premium for couples without children in the hypothetical 1997–98 systems has become neutrality in the actual 2010–11 system (Table 2), and the net penalties for couples with children and for pensioners have both increased. However, amongst families with children, some penalties are lower under the 2010–11 system than under the hypothetical system which is indexed to earnings (but not prices): the tenth of couples with children with the highest penalties had penalties in excess of 21% of their income under the 2010–11 system, but this would have been in excess of 24% of their income under the hypothetical system that is indexed to earnings. Figure 5.4 shows the changes in the distribution of couple penalties and premiums by family type.

Figure 5.4. The impact of tax and benefit changes since 1997–98 on the distribution of couple penalties and premiums



Notes: Large cross shows median. Thick bar shows 30th and 70th centiles; thin bar shows 10th and 90th centiles. 1997 (prices) and 1997 (earnings) mean the 1997–98 tax and benefit system uprated respectively with inflation to 2010–11 or with average earnings growth to 2010–11. Numbers are from Tables 2, 48 and 51.

What has caused these changes? Some insight comes from analysing the composition of the mean net penalty in Tables 49 and 52, and how this has changed over time. The main changes are as follows:

- In the updated 1997–98 systems, income tax provided a couple premium, on average, thanks to the married couple’s allowance (and, for some one-earner families with children, the additional personal allowance).
- In the updated 1997–98 systems, one parent benefit provided a universal couple penalty for those with children.
- In the updated 1997–98 systems, the main means-tested benefits (FC and IS) led to net penalties, on average, but these are considerably smaller than under the actual 2010–11 system for couples with children and for pensioner couples.²⁷ This reflects the expansion of these means-tested benefits and tax credits, with entitlements for families with children and for pensioners having grown faster than average earnings for these groups. It is important to note that these benefits expanded equally for couples and single adults: it was the rise in the level of support that is means-tested against family income which led to the rise in couple penalties.
- Certain benefits that lead to net penalties, on average, in the 2010–11 system did not exist in 1997–98 (such as winter fuel payments; there was a maternity grant in 1997–98, but it was considerably smaller in value than SSMG, and is not reflected in our tax and benefit model).

5.2.2 Couple penalties for existing single adults under Scenario A: changes over time (Tables 53–58)

Changes over time in couple penalties and premiums for existing single adults under Scenario A (where the adults in a couple each form a new tax/benefit unit in the same household after splitting up) follow a similar pattern to those for couples. In particular, Tables 53 and 56 show that penalties are less common, and premiums more common, under the hypothetical 1997–98 systems than under the actual 2010–11 system (Table 11) for couples without children and pensioners, but not for

²⁷ This compares the sum of the columns marked FC and IS in Table 49 or 52 with the sum of the columns marked CTC, WTC and IS in Table 3.

couples with children. The mean (and median, for pensioners) penalties/premiums under the hypothetical 1997–98 systems are smaller net penalties than under the actual 2010–11 system, for all family types. But Tables 54 and 57 show that the tenth of couples with children with the highest penalties would have faced higher penalties under the hypothetical systems than under the 2010–11 system.

5.2.3 Couple penalties for existing couples under Scenario B: changes over time (Tables 59–64)

Tables 59 and 62 show that changes over time in couple penalties and premiums for existing couples under Scenario B (where the adults in a couple each form a new single-adult household after splitting up) follow a similar pattern to those under Scenario A. In particular, penalties are less common, and premiums more common, under the hypothetical 1997–98 systems than under the actual 2010–11 system (Table 24) for couples without children and for pensioners, but not for couples with children. The mean penalties/premiums under the hypothetical 1997–98 systems are smaller net penalties than under the actual 2010–11 system, for all family types, but the pattern for median penalties is more complicated. Tables 60 and 63 show that the tenth of couples with children with the highest penalties would have faced higher penalties under the hypothetical systems than under the 2010–11 system (Table 25). Tables 61 and 64 reveal that MIRAS (Mortgage Interest Relief at Source) could lead to couple penalties under the 1997–98 systems. MIRAS was a subsidy for mortgage interest cost, so, if a couple split up and ended up with higher (combined) mortgages, they would receive more MIRAS.

5.2.4 Couple penalties for existing single adults under Scenario B: changes over time (Tables 65–70)

Tables 65 and 68 show that changes over time in couple penalties and premiums for existing single adults under Scenario B follow a similar pattern to those for couples. In particular, penalties are less common, and premiums more common, under the hypothetical 1997–98 systems than under the actual 2010–11 system (Table 35) for couples without children and pensioners, but not for couples with children.

The mean and median penalty/premiums under the hypothetical 1997–98 systems are smaller net penalties than under the actual 2010–11 system, for couples without children and for pensioners. For couples with children,

the mean and median penalty/premiums under the hypothetical 1997–98 system updated with prices are smaller net penalties than under the actual 2010–11 system, but they are larger net penalties for the hypothetical 1997–98 system updated with earnings. As described above, MIRAS could lead to couple penalties under the 1997–98 systems.

5.3 Summary

This chapter has shown the distribution of couple penalties and premiums under the 2010–11 tax and benefit system, and how tax and benefit changes since 1997–98 have affected this. The key results were:

- Under Scenario A, where couples are assumed to stop LTHAW but remain in the same household, 68% of existing couples in the UK face a penalty, 27% face neutrality and 4% face a premium. The mean penalty/premium is a penalty of £44.70. The median penalty/premium is a penalty of £26.05, or one representing 5% of the net income of the couple, but 10% of couples have penalties of at least 20% of net income. The sum of all couple penalties amounts to £34.7 billion a year and the sum of all couple premiums amounts to £0.6 billion a year; the aggregate net couple penalty is £34.3 billion a year.
- The mean penalty comprises a very small premium through the married couple's allowance (for those born before 1935) and a much larger penalty from benefits and tax credits. The largest contributors, on average, to the mean penalty/premium are income support/JSA/pension credit, child tax credit and working tax credit. The non-means-tested benefits lead to small premiums, on average.
- By family type, almost all (95% of) couples with children have a couple penalty, as do 81% of pensioner couples and 41% of working-age couples without children. Pensioners are the most likely to have a couple premium (9%), with working-age couples with and without children less likely (3%). Working-age couples without children are the most likely to face neutrality (56%). The median penalty/premium is a penalty of £85 a week for couples with children, £48 for pensioner couples and £0 (i.e. neutrality) for working-age couples without children.
- Couple penalties and premiums vary with the number of adults in work and the couple's joint earnings. Amongst working-age couples without

children, the likelihood of having a couple premium goes down, and the likelihood of facing neutrality goes up, with the number of workers, and the mean penalty/premium is highest for one-earner couples. Amongst couples with children, the mean penalty/premium is a small penalty for those with no workers, and much larger penalties for those with one or two earners. As a percentage of income, the largest net penalties are in the third decile group of joint earnings (13% at the median), but in cash terms the largest penalties are amongst the richest.

- In general, the distribution of couple penalties and premiums that we estimate for existing single people are similar to those for couples. The differences relate to the fact that the characteristics of the adults who currently live in a couple are different from those of people who currently live as single adults; for example, single adults are more likely to be younger or older than those in couples.
- In Scenario B, where a couple splits up and each partner forms a new single-adult household, the average penalty/premium is a larger penalty than in a world where the two adults remain in the same household but stop living together as husband and wife. The couple penalties and premiums are different because some taxes and benefits (such as winter fuel payments, housing and council tax benefits, and council tax) depend on the composition of the whole household, not just the tax and benefit unit of the claimant, and some parts of the benefit system (notably housing and council tax benefits, and ISMI – income support for mortgage interest) depend upon the level of housing costs and council tax liability of the household. The average couple penalty/premium is a penalty that is roughly £7 a week higher under Scenario B than under Scenario A, thanks to penalties that are almost £14 a week higher in HB, £6 a week higher in CTB and £0.56 a week higher in the winter fuel payment, but offset by a premium of £13.61 a week, on average, from council tax, as a couple generally pays less council tax living together than apart.
- Tax and benefit changes since 1997–98 have increased the likelihood that a couple faces a penalty or neutrality and reduced the incidence of premiums. This result is driven by couples without children and pensioners; tax and benefit changes have actually reduced the incidence of penalties amongst couples with children, which were almost universal in 1997–98 thanks to one parent benefit. The average

penalty/premium is a considerably higher penalty under the actual 2010–11 system than under either of the hypothetical 1997–98 systems: across all couples, it is more than twice as high compared with a system indexed to prices, and it is over 50% higher than a system indexed to earnings.

- There are three main causes of the changes. In 1997–98, income tax provided a couple premium, on average, because of the married couple's allowance. On the other hand, one parent benefit provided a near-universal couple penalty for those with children. These two policies have since been scaled back dramatically or abolished. The expansion of means-tested benefits and tax credits, with entitlements for those with children and for pensioners having grown faster than average earnings for these groups, has increased the incidence of couple penalties for those without children and the size of couple penalties for all groups.

6. Should we be concerned about couple penalties and premiums in the tax and benefit system? How do we judge what is the appropriate level of couple penalties and premiums in the tax and benefit system?

The previous chapter has clearly shown that the tax and benefit system is not neutral to relationship status for most people. But is it necessarily a bad thing that the current tax and benefit system is non-neutral for so many couples? And how could we judge what is the appropriate level of couple penalties and premiums in the tax and benefit system?

When considering tax and benefit design issues such as this, it is helpful to think about both distortions (or efficiency costs) and fairness (or equity):

- Efficiency costs exist where people's behaviour is distorted by the tax and benefit system, and so the choices people make are not the ones that they would have made in the absence of taxes and benefits.
- Equity issues are about fairness. In the context of couple penalties and premiums, the equity issues involve consideration of what would be a fair level of net state support for a couple relative to that for a single person and relative to that of the two single people in the couple.

Ordinarily, it is reasonable to assume that the choices people make are the ones that they think best for them, and so, if people are induced to make different choices by the tax and benefit system, then this will make people worse off, and should be avoided without a good reason.²⁸ In the context of couple penalties and premiums in the tax and benefit system, if decisions about family formation are sensitive to financial considerations, then the existence of the couple penalties and premiums in the tax and benefit system shown in Chapter 5 would mean that fewer people are living in couples than would be the case if there were no couple penalties and premiums in the tax and benefit system. Unless there is reason to think that, in the absence of couple penalties and premiums in the tax and benefit system, too many people from the point of view of society as a

²⁸ The two obvious 'good reasons' are when people do not make choices that are in their best interest and where people do not make choices that are in society's best interest. As an example of the latter, fuel duty causes people to use less fuel than they would if fuel were not subject to duty, but arguably this does not cause a cost to society because they would have been using too much fuel, from society's point of view, in the absence of the tax.

whole would choose to live in couples, then this would be undesirable. But if decisions about family formation are insensitive to financial considerations, then there would be less reason to be concerned about departures from neutrality in the tax and benefit system. And if there are good reasons to think that the choices people would make in the absence of taxes and benefits would lead to too few (or many) couples, then this might justify having couple premiums (or penalties) in the tax and benefit system.

Efficiency and equity need not lead to the same conclusions; indeed, they frequently conflict with each other. For example, to preview the discussion of efficiency costs in Section 6.1: if there are no reasons to think that, in the absence of couple penalties and premiums in the tax and benefit system, too many or few people, from the point of view of society as a whole, would choose to live in couples, then the efficiency of the tax and benefit system will be improved if the system always exhibits neutrality towards whether a couple is living together or not. But, as we argued in Section 3.2 (and show empirically in Chapter 7), such a system has strong implications for the level of support for couples relative to single people and for rich families relative to poor families, and it might not be perceived as being fair or equitable (horizontally or vertically). Equivalently, a fair tax and benefit system – judging ‘fairness’ with respect to the level of support for couples relative to single people – might turn out to be one that exhibited couple penalties and premiums. It is up to the government to balance its notion of fairness against the resulting efficiency costs of couple penalties and premiums in the tax and benefit system, as well as other objectives it might have for the tax and benefit system.

The rest of this chapter discusses what the efficiency and equity arguments each mean for assessing the level of couple penalties and premiums in the tax and benefit system.

6.1 Efficiency costs of couple penalties and premiums: what evidence is there that couple penalties and premiums in the tax and benefit system influence behaviour?

An efficiency cost may arise if couple penalties and premiums in the tax and benefit system alter (or distort) people’s behaviour. The existence of couple penalties or premiums in the tax and benefit system could potentially affect two sorts of decisions:

- decisions about whether to marry or live together as husband and wife;²⁹
- decisions about whether to declare to the authorities administering taxes and benefits that one is living together as husband and wife, regardless of a couple's actual position.

The more responsive these decisions are to financial considerations, the greater the distortions that arise from the existence of couple penalties and premiums in the tax and benefit system. This report has no new evidence on either of these factors, but we present below an overview of past work that has addressed these issues.

6.1.1 Decisions about whether to marry or live together as husband and wife

There are few studies from the UK about the link between couple penalties and premiums in the tax and benefit system and the formation of couples, but two relevant pieces of work are Anderberg (2008) and Francesconi and van der Klaauw (2007); Stafford and Roberts (2009) provided a recent review of international evidence on the link between welfare systems and family structure (although their review did not cover Anderberg (2008)).

Anderberg (2008) examined explicitly whether couple penalties affected the likelihood that a woman had a partner. He found that the size of the couple penalty in the tax and benefit system (the actual couple penalty for women in couples, and the potential couple penalty for women not living in a couple) was related to the likelihood that a woman was living in a couple. On average, he found that a £100 a week couple penalty in the tax and benefit system reduced the probability that a woman was in a couple by 7 percentage points.

Francesconi and van der Klaauw (2007) found that working families' tax credit (WFTC) resulted in a 'substantial' reduction in the partnership rates of single mothers, with their estimates implying that WFTC meant that single parents were 2.4 percentage points less likely to form a union over a 12-month period, on average (which is a large effect, as the baseline is just 8.5%). However, although WFTC did increase the couple penalty in the tax

²⁹ We are not arguing that financial considerations are uppermost in people's minds when making these decisions, but it is possible that they have some role to play.

and benefit system for some (and increase the potential couple premium in the tax and benefit system for some lone parents), it also meant that working lone parents were considerably better off, and this may also have affected their partnership rates through an income effect.³⁰ This means we cannot use the Francesconi and van der Klaauw study to conclude that the size of the couple penalty affects the likelihood of forming a union.

Stafford and Roberts (2009) reviewed the evidence on the influence of financial incentives in the welfare system on partnering, separating and childbearing. They conclude that ‘whilst there are some studies showing a welfare effect on marriage/cohabitation typically for sub-groups, there is, overall, no consistent evidence for a large and significant impact on union formation’ (page 4) and also that ‘there is no overwhelming evidence that welfare systems have had a major impact on union dissolution’ (page 5). That is not to say that the literature was conclusive that there were no impacts; instead, the review found that ‘The actual impact that financial incentives have on family structure is contested. Analysts across countries and over time report mixed findings’ (page 6).

6.1.2 Decisions about whether to report living together as husband and wife

The existence of couple penalties in the tax and benefit system means that there are incentives for couples receiving means-tested benefits or tax credits to claim (fraudulently or not) to be a lone parent. Brewer and Shaw (2006) presented circumstantial evidence that this was actually occurring by comparing estimates of the number of lone parents thought by the Office for National Statistics to be living in the UK and the number of lone parents to whom the government is paying child tax credit or equivalent. This work was updated by Brewer et al. (2009) – see Figure 6.1.

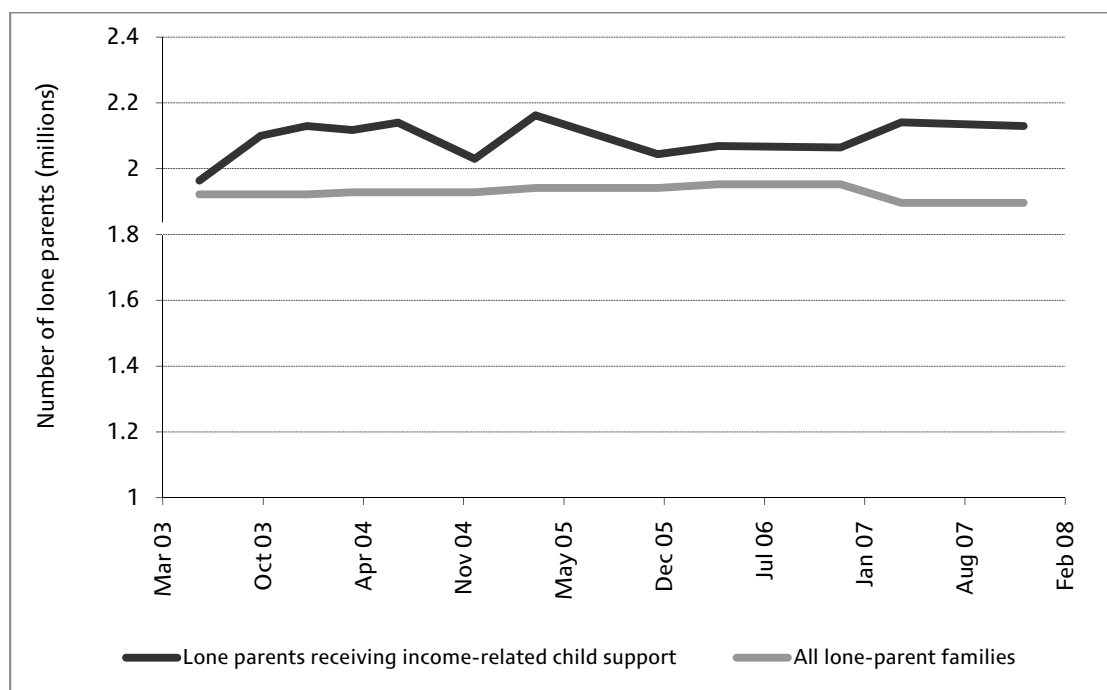
Brewer et al. (2009) also pointed to a peculiar finding from the Family Resources Survey, in that the number of couples with children in the FRS reporting receipt of tax credits (excluding those on the family element) was close to the number of couples to whom HMRC thought it was paying tax credits, but the number of lone parents in the FRS reporting receipt of

³⁰ An income effect might operate here if the greater generosity of WFTC over its predecessor meant that lone parents felt less financial need to cohabit with a partner, irrespective of the size of any couple penalty or premium in the tax and benefit system.

tax credits (excluding those on the family element) was over 20% lower than the number of lone parents to whom HMRC thought it was paying tax credits. The authors suggested that ‘this pattern of under- and over-recording can be reconciled if there are some families who appear as couples in the FRS but are receiving child-related support as lone parents’ (page 64).

The government has produced estimates of the extent of fraud and error in this area: Department for Work and Pensions (2009) estimated it wrongly paid out £71 million in housing benefit, and £116 million in income support, jobseeker’s allowance and pension credit, to claimants not reporting the presence of a co-resident partner (April 2008 to March 2009) and HM Revenue & Customs (2009) estimated it wrongly paid out £455 million in tax credits (2007–08) due to claimants not reporting the presence of a co-resident partner. These sums are quite large, but considerably smaller than the aggregate couple penalty for existing couples with children suggested by the analysis in Chapter 5.

Figure 6.1. Comparing estimates of the number of lone parent families in UK



Note: Numbers for lone parents receiving income-related child support are numbers of lone parents receiving the child tax credit plus lone parents receiving IS/JSA and not receiving the child tax credit in the UK; there should be no double-counting.

Sources: Taken from appendix D of Brewer et al. (2009). Original data sources are as follows: all lone-parent families – derived from grossing factors supplied with various years of *Households Below Average Income* data; lone parents receiving income-related child support – HM Revenue & Customs (2008).

Overall, then, it is possible that family formation decisions are affected by the structure of welfare, but the evidence is not overwhelmingly convincing that any such effects are entirely due to the couple penalty in the tax and benefit system. But there is much better evidence that, whether through error or intentional fraud, the government is paying out money to some couples who are claiming state support as lone parents. As Brewer and Shaw (2006, p. 13) concluded:

Because it is very hard to produce an unambiguous definition of 'living together as husband and wife', it seems unlikely that such fraud can ever be eliminated, and it is a troubling aspect of the design of tax credits (and out-of-work benefits) that this ambiguity should exist when there are considerable financial penalties inherent in tax credits and out-of-work benefits to living together as husband and wife.³¹

So there is some reason to think that couple penalties in the tax and benefit system do impose efficiency costs as a result of fraudulent claims. Policies that reduced couple penalties in the tax and benefit system in favour of neutrality – such as moves towards individual assessment of benefits – would therefore reduce these inefficiencies. But policies that reduced couple penalties in the tax and benefit system in favour of premiums would not necessarily reduce these inefficiencies. For example (and as we show in Section 7.1), a system that increased entitlements to benefits and tax credits only for couples might reduce the extent of penalties, but would in principle lead some couples to face premiums, and this would also lead to distortions in behaviour; it is not clear that, on efficiency grounds, this would represent an improvement.³² If decisions to live together are affected by the size of couple penalties and premiums, then a couple premium would mean that people faced too large a financial incentive to live as a couple. Thinking about fraud, such a policy would reduce the reward for someone in a couple to claim falsely that they were

³¹ On the other hand, participants at a seminar about this work argued that it would be extremely difficult for a couple who had previously declared to the authorities that they were LTHAW to later argue that they were not, unless they had moved into separate households.

³² It could be argued that a system with no net penalties (i.e. where penalties offset premiums) is more desirable, on efficiency grounds, than one with a net penalty in aggregate (but this would depend upon whether the distortion increased linearly with a penalty or premium, or with the square of the penalty or premium).

a lone parent, but it might increase the reward (or lead to one) for a lone parent to claim falsely that they were living in a couple.

6.2 Are couple penalties and premiums inequitable?

The previous section argued that having a tax and benefit system with neutrality would minimise distortions, and so be preferable on efficiency grounds to one with couple penalties and premiums. But would such a system be fair? More generally, how do we decide what would be a fair level of net state support for a couple relative to that for a single person and relative to that for the two single people in the couple?

When talking about the fairness or otherwise of government policies, economists often think in terms of vertical equity and horizontal equity.³³ Vertical equity is about the extent to which the tax and benefit system redistributes from the rich to the poor (and a strong form of vertical equity requires that the tax and benefit system be progressive, or that the net tax rate increases with pre-tax income). This principle helps one think how the tax and benefit system should vary by income for a given family type, but does not particularly help one think about how the tax and benefit system should vary by family type given income.

Horizontal equity is achieved if similar individuals are treated similarly by government policies. The justification for horizontal equity is that individuals should not be discriminated against *arbitrarily*; equivalently, if two individuals are treated differently by government policies, then this should be because they are different from each other in a *meaningful* – and not arbitrary or irrelevant – way.

The next two subsections ask what sort of tax and benefit system would result from applying the principle of horizontal equity, and whether the current UK tax and benefit system – and particularly those parts that lead to couple penalties and premiums – is horizontally equitable.

6.2.1 What does horizontal equity mean for the design of a tax and benefit system?

It turns out that horizontal equity can provide some assistance when deciding how to design a tax and benefit system for single adults and couples, but it is not necessarily a complete guide. The main problem is

³³ This section draws on Duclos (2008) and Alm (2008).

that the definition given above is too loose to be very prescriptive; if a government wishes to use the principle of horizontal equity to help design the tax and benefit system, it will therefore have to decide:

- whether it wants the principle of horizontal equity to apply to *individuals* or *families* (where we use ‘families’ to mean couples who are married or LTHAW, or single adults who are not married or LTHAW);
- whether a given difference between individuals (or families) counts as ‘meaningful’ or ‘arbitrary’ (in the sense in which we used the words above);
- whether it thinks that income is the only relevant consideration of an individual’s ability to pay taxes, or whether it is considering both income and needs (or welfare, in some sense).

For example, if one applied the principle of horizontal equity to individuals, and if one considered that an individual’s marital status was not a meaningful feature on which one could condition taxes or benefits, then the only horizontally-equitable tax and benefit system would be one that operated at the individual level. It would be horizontally equitable because two individuals with the same pre-tax, private income would receive the same net state support; as a by-product, it would also have no couple penalties or premiums (as we argued in Chapter 3). Similarly, horizontal equity (in the sense of the same level of net state support for the same combined level of pre-tax income) between two adults who are married or LTHAW and an otherwise-identical two adults who are not married or LTHAW can only be achieved with a tax and benefit system with no couple penalties or premiums, which would require an individualised tax and benefit system, or a jointly- or individually-assessed flat tax system (as described in Chapter 3).

Alternatively, one could apply the principle of horizontal equity to families.³⁴ If this is interpreted as meaning that families with the same

³⁴ The rationale for taking this view might relate to the fact that people in couples LTHAW often do share resources and split living costs, or it might reflect that governments think that couples LTHAW ought to pool resources (i.e. have a responsibility to support each other). In reality, adults who are not LTHAW sometimes pool resources and split living costs, but this is usually disregarded by the tax and benefit system, perhaps because it would be very hard to measure.

joint pre-tax income should receive the same level of net state support (or face the same net tax rate), then this can never be achieved for all families with an individual tax and benefit system. An individual tax and benefit system can be designed under which a single adult will receive the same net state support as a one-earner couple, but this will not, in general, be the same level of net state support as would be received by a two-earner couple with the same pre-tax combined income.³⁵ But horizontal equity could be achieved between families with a tax and benefit system that is jointly assessed throughout. However, as we argued in Chapter 3, such a tax and benefit system could not avoid having couple penalties and premiums for at least some families (unless it had a single marginal tax rate).

6.2.2 Is the current UK tax and benefit system horizontally (in)equitable?

This section discusses whether the current UK tax and benefit system – and particularly those parts that lead to couple penalties and premiums – is horizontally (in)equitable.

Section 3.1 argued, and Section 5.1.1 showed, that couple penalties and premiums in the UK tax and benefit system are mostly caused by the benefits and tax credits that depend upon the income and circumstances of the couple, and not just of the claimant. In particular, they arise because:

- the basic entitlement for a couple is usually less than twice the basic entitlement for a single person;
- these benefits and tax credits are means-tested against the joint family income (and with identical (for tax credits) or very similar (for means-tested benefits) thresholds or disregards for couples and single adults).

Can one argue that these features are horizontally (in)equitable? As in the previous subsection, this depends on:

- whether one wants the principle of horizontal equity to apply to individuals or families (where we use ‘families’ to mean couples who

³⁵ To use the current (2010–11) income tax system in the UK as an example, a single adult earning £30,000 a year would pay about £4,700 in income tax, as would a one-earner couple with the same earnings, but a couple where each earned £15,000 would pay only around £3,400, as each earner can benefit from their own personal allowance.

are married or LTHAW, or single adults who are not married or LTHAW);

- whether a given difference between individuals (or families) counts as ‘meaningful’ or ‘arbitrary’ (in the sense in which we used the words above);
- whether one thinks that income is the only relevant consideration of an individual’s ability to pay taxes, or whether one is considering both income and needs (or welfare, in some sense).

Specifically, is it horizontally inequitable to set the basic entitlement for a couple as less than twice the basic entitlement for a single person? This is horizontally inequitable if we assess horizontal equity at the individual level, and if we ignore the fact that an adult who is in a couple LTHAW can take advantage of economies of scale in living costs compared with a single adult living alone. But if we consider it meaningful that adults in a couple LTHAW have lower (per-person) living costs than a single adult (and so we are allowed to condition a tax and benefit system on this characteristic), then it is not necessarily horizontally inequitable for the basic entitlement for a couple to be less than twice the basic entitlement for a single person; furthermore, it would be consistent with vertical equity to set the basic entitlement for a couple to be less than twice the basic entitlement for a single person, leading to a couple penalty in the tax and benefit system.^{36,37} It is, though, hard to envisage an argument based on horizontal equity that would justify couple premiums; the existence of couple premiums in the tax and benefit system might reflect that governments have explicit policy goals to encourage people to live in

³⁶ Alternatively, if benefit entitlement were individualised but depended on the circumstances of the family, and if we considered it relevant that adults in a couple LTHAW have lower (per-person) living costs than a single adult, then it would not be horizontally inequitable, and would be consistent with vertical equity, to set the basic entitlement for an adult in a couple LTHAW as less than that of the basic entitlement for a single person living alone.

³⁷ It is not clear whether a tax and benefit system that gives more state support to a couple with no private income than to a single adult with no private income is consistent with horizontal equity at the family level: on the one hand, the couple is receiving more net state support for a given level of income (which seems inequitable), but on the other hand, the couple has greater ‘needs’. We discuss this more in the next subsection.

couples (or as married couples, in the case of policies such as a married couple's allowance).

Second, is it horizontally inequitable to assess entitlement to means-tested benefits and tax credits on the joint income of a couple? Under such a system, a single adult with no private income would receive means-tested benefits, but an adult with no private income married to a sufficiently well-off spouse would receive no means-tested benefits. This would be seen as horizontally inequitable if we assess horizontal equity at the individual level, and if we ignore the fact that the income available to the married adult with no private income of their own is almost certainly affected by the income of his or her spouse through some form of sharing of resources within the couple. But if the fact that the married adult can benefit from the spouse's income is a meaningful difference from the single adult with no income, then means-testing benefits on joint income need not necessarily be horizontally inequitable (and would be consistent with vertical equity), even though it leads to a couple penalty in the tax and benefit system.

6.2.3 Does the UK tax and benefit system take a consistent approach to varying support by a family's 'need'?

The previous subsection argued that the features of the tax and benefit system that lead to couple penalties and premiums might or might not be inconsistent with horizontal equity, depending on how one chooses to apply the principle. But it did not give much guidance on how to set the level of net state support for couples compared with single people, drawing only the following conclusions:

- There are certain conditions under which an individualised tax and benefit system would be horizontally equitable (in which case the level of net state support for a couple will be equal to that received by the two adults if assessed as single adults).
- There are some conditions under which a system that gave couples less than twice the entitlement of single adults would be horizontally equitable.

In its weakest form, horizontal equity – which is about the equal treatment of equals – does not provide much help for this issue, because single adults and couples are clearly not identical (or equal) to each other.

However, if one is assessing horizontal equity between families, and one is prepared to assume that families with the same equivalised pre-tax income are equal, then one could use the horizontal equity principle (and the corollary that, under horizontal equity, the tax and benefit system should not lead to re-ranking of families in the pre- and post- tax income distributions³⁸) to determine net state support for a couple relative to that of a single adult.³⁹ But the idea that families with the same equivalised pre-tax income should be treated identically by the tax and benefit system is a strong assumption – because it is implicitly accepting that the tax and benefit system should incorporate ideas of need, as well as ability to pay, and should always operate at the level of the family, not the individual. And there is the practical difficulty that there are many equivalence scales in existence, and no robust method for calculating the correct one, should that concept actually exist. We therefore do not pursue this idea here.

But we do note that the current UK tax and benefit system does not seem to take a consistent approach to varying net state support by needs (as proxied for by the number of adults) as well as income. For example:

- Couples are entitled to more means-tested benefits than single adults with the same pre-tax income, and, for a given level of gross earnings, a one-earner couple without children is entitled to more working tax credit than a single adult. However, a low-income (one-earner) couple with children will receive identical net state support to a lone parent with the same level of earnings, because entitlement to working tax credit and child tax credit for those with children does not depend on the number of adults.
- At high incomes, net state support for a one-earner couple will be identical to that for a single adult with the same pre-tax income (with or without children). This is because the income tax system is entirely individual, and so cannot recognise any additional ‘needs’ of couples

³⁸ Duclos (2008) wrote that horizontal equity has the corollary that ‘government interventions should not reverse the ranking of individuals in the distribution of welfare, unless it can be shown that the initial ranking was unjust’.

³⁹ This approach was discussed by Muellbauer and van de Ven (2005), who reversed the logic of this to estimate the equivalence scale for which a given tax and benefit system is horizontally equitable between families, given that the government cares about families’ equivalised income.

over single adults. This is not the case, though, when comparing a two-earner couple and a single adult with the same pre-tax income. For incomes high enough that neither family is entitled to any means-tested support, the two-earner couple will receive more net state support (i.e. face a lower tax bill) than the single adult, because the couple benefits from two income tax allowances and National Insurance thresholds.

The inconsistency primarily arises because benefit and tax credit entitlement is assessed on the circumstances of the couple, and income tax is individually assessed, although there is also a difference in approach between tax credits for those with children (which do not distinguish between the number of adults) and tax credits for those without children and all means-tested benefits (which do).⁴⁰

On the other hand, the UK tax and benefit system could be regarded as having a consistent approach to varying net state support by needs if the assessment of a family's needs also takes into consideration the value of home production for couples. In other words, the tax and benefit system could be regarded as horizontally equitable if the non-working adult in the couple represents an additional resource (or additional opportunities to earn income) as well as additional needs, in the sense of an extra mouth to feed and body to house.⁴¹

6.3 Conclusions

This chapter has discussed reasons why we might care about the presence of couple penalties or premiums, and how to decide whether the structure of the tax and benefit system is fair.

There is evidence that family formation decisions are affected by the structure of welfare, including couple penalties in the tax and benefit

⁴⁰ As well as the home production point, mentioned in the next paragraph, the structure of tax credits for those without children might reflect that the objective to vary support with need is less important than another objective the UK government has for the tax credit system (such as strengthening work incentives for lone parents).

⁴¹ This draws on arguments made in Muellbauer and van de Ven (2005). The fact that conventional equivalence scales assign no value to home production (particularly for families with children) has been pointed out by one of the current authors before, in work that showed that, for a given level of equivalised income, one-earner couples with children seemed to enjoy a higher standard of living than working lone parents (Brewer et al., 2008).

system, but it is not overwhelming, and any impacts are small. There is more convincing evidence that, whether through error or intentional fraud, the government is paying out money to some couples who are claiming state support as lone parents; incentives to conceal the presence of a second adult would not arise were there no couple penalties in the benefit and tax credit system. These points provide weak arguments in favour of a tax and benefit system with no couple penalties and premiums.

One can also use arguments around fairness – and, specifically, the principle of horizontal equity that equals should be treated equally – to analyse the desirability of couple penalties and premiums and the design of the tax and benefit system for couples relative to that for single adults. A strict view of horizontal equity between *individuals* implies that the tax and benefit system should be individually assessed, which would lead to a system that was neutral for all families.

But a view of horizontal equity between *families*, or a view of horizontal equity that recognises that an individual's needs and resources depend upon the characteristics of their partner, is consistent with those features of the UK tax and benefit system that lead to couple penalties and premiums not necessarily being unfair. These features include assessing support against the combined income of a couple, and setting benefit rates for couples at less than twice those of single adults.

But horizontal equity – which is about equal treatment for equals – does not give much guidance on how to set the level of net state support for couples compared with single people, mostly because single adults and couples are clearly not identical (or equal) to each other. One approach would be to vary support by need, but this is not necessarily a universally-accepted approach and would require a robust estimate of different families' needs. Although we do not pursue this strategy further, it is clear that the current UK tax and benefit system does not take a consistent approach to varying net state support by needs, primarily because benefit and tax credit entitlement is assessed on the circumstances of the couple, and income tax is individually assessed. There is also a difference in approach between tax credits for those with children (which do not distinguish between the number of adults) and tax credits for those without children and all means-tested benefits (which do). On the other hand, it may be that the UK tax and benefit system has been designed with the needs of families in mind, but also taking into consideration the value

of home production for couples. This inconsistency probably reflects the difficulties governments have in pursuing multiple objectives with the tax and benefit system.

7. Impact of policies to reduce or remove couple penalties and premiums in the UK tax and benefit system

This chapter shows the implications of large-scale reforms to the tax and benefit system that would reduce the incidence of couple penalties. We show three reforms:

- setting maximum entitlements to means-tested benefits and tax credits for couples equal to twice the existing rate for single adults, with and without doubling thresholds in the tax credit system for couples;
- individualising the UK tax and benefit system.

As should be clear from the text, the fact that these reforms are included in this chapter does not mean that the authors are necessarily advocating them as desirable changes.

One of the IFS Election Briefing Notes analyses the impact of policies proposed during the 2010 UK general election (Adam et al., 2010). Annex D analyses the impact of four small reforms on the distribution of couple penalties, all of which cost £700–800 million; three of these reforms were analysed in Brewer, Browne and Joyce (2010).

7.1 Setting maximum entitlements to means-tested benefits and tax credits for couples equal to twice the existing rate for single adults

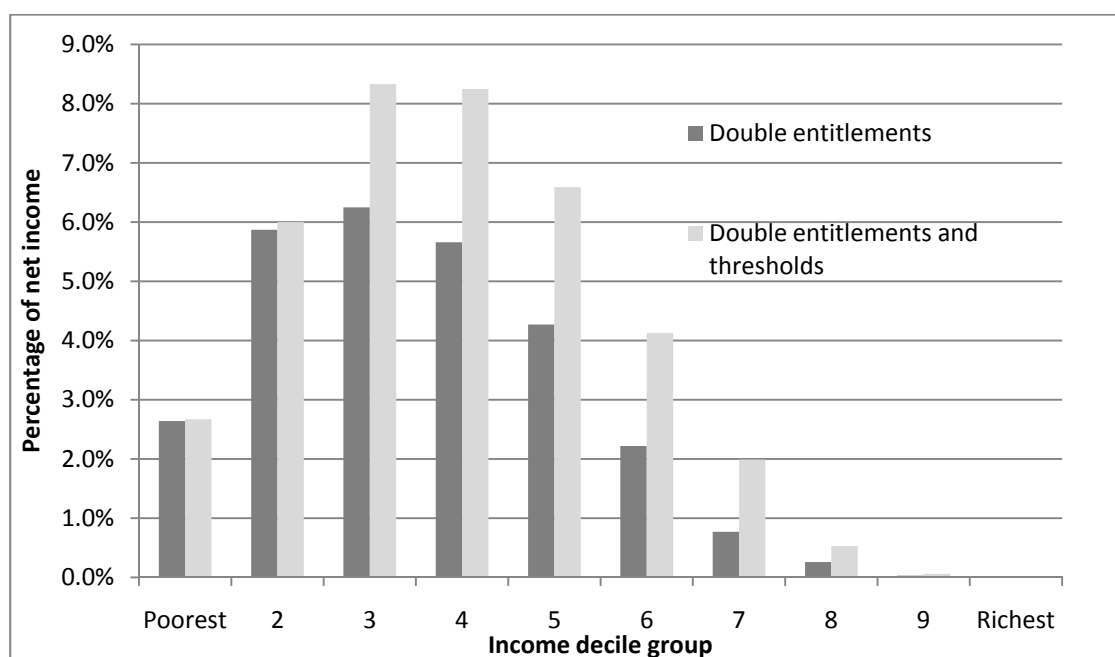
This section shows the implications of a tax and benefit system in which maximum entitlements to means-tested benefits and tax credits for couples are set to twice the existing rate for single adults, and of one that also doubles thresholds in the tax credit system for couples. Such systems would exhibit lower net penalties, overall, than the current tax and benefit system.

The beneficiaries would be couples receiving means-tested benefits or tax credits, or couples currently too rich to receive means-tested benefits or tax credits but who become entitled thanks to this reform. In the system where entitlements to means-tested benefits and tax credits for couples are set to twice the existing rate for single adults, a working-age couple on IS/JSA would gain up to £28 a week, a working-age couple without children on WTC would gain less than £1 a week, a working-age couple with children on WTC or CTC would gain up to £73 a week, and a

pensioner couple would gain up to £63 a week.⁴² Where thresholds in tax credits are doubled as well, maximum gains will be considerably larger.

Setting entitlements to means-tested benefits and tax credits for couples at twice the existing rate for single adults would cost around £12 billion a year more than the current system, and doubling thresholds in tax credits would cost a further £6 billion a year, both assuming (unrealistically) no behavioural change.

Figure 7.1. Distributional analysis across all families of setting entitlements to benefits and tax credits for couples at twice the rate for single adults, and of doing that and doubling tax credit thresholds for couples



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.

⁴² The reform is intended to be illustrative. At present, entitlement to WTC for couples without children is almost twice that of singles without children, and so they hardly gain. By contrast, the rate of WTC for lone parents is identical to that for couples with and without children, so this reform doubles the rate of WTC for couples with children.

All the extra spending on benefits and tax credits goes to existing couples (by definition). The distributional impact of each reform is shown in Figure 7.1 under the (implausible) assumption that the reforms have no impact on people's behaviour. If entitlements to means-tested benefits and tax credits for couples are set at twice the existing rate for single adults, then the largest gains in cash terms (not shown) are in deciles 3 and 4, but as a percentage of net income, the reform is strongly progressive from decile 3 onwards.⁴³ If thresholds in tax credits are also doubled, then the gains are larger for decile groups 3 and above.

Tables 71 and 72 at the end of the report show the incidence of couple penalties and premiums for existing couples after these reforms under Scenario A (that a couple ceases to live together as husband and wife, but the two people remain in the same household).

If entitlements to means-tested benefits and tax credits for couples are set at twice the existing rate for single adults (Table 71):

- The fraction of existing couples facing a couple penalty in the tax and benefit system would fall from 68% to 59%, and the fraction facing a premium would rise from 4% to 13%.
- The mean penalty/premium would fall from a penalty of £45 to a penalty of £29.
- Because the reform benefits only couples, the aggregate value of penalties or premiums for existing couples falls by an amount identical to the cost of the reform to the Exchequer, from £34 billion to £22 billion. However, of this £12 billion of extra spending, the aggregate value of couple premiums rises by about £2 billion to around £2.5 billion, and the aggregate value of couple penalties falls by about £10 billion to around £25 billion a year.

If, in addition, tax credit thresholds for couples are doubled (Table 72):

- The fraction of existing couples facing a couple penalty in the tax and benefit system would fall from 68% to 54%, and the fraction facing a premium would rise from 4% to 18%. A third of couples with children

⁴³ The bottom decile group contains more single adults than the other decile groups, and this explains why the average impact across all families in the bottom decile is smaller than that in the second decile group.

would see a couple premium, and 10% of couples with children would see a very large premium of at least £50 a week (11% of their income, although this is not shown in the table).

- The mean penalty/premium would fall from a penalty of £45 to a penalty of £21.
- Because the reform benefits only couples, the aggregate value of penalties or premiums for existing couples falls by an amount identical to the cost of the reform to the Exchequer, from £34 billion to £16 billion. However, of this £18 billion of extra spending, the aggregate value of couple premiums rises by about £4 billion to around £4.5 billion, and the aggregate value of couple penalties falls by about £14 billion to around £21 billion a year.

Both reforms reduce the incidence of couple penalties and their size, but also increase the incidence of couple premiums and their size.

Perhaps the surprising aspect of both reforms is that they still leave the majority of existing couples facing a couple penalty in the tax and benefit system, and an average penalty or premium in the tax and benefit system of over £21 a week. For the vast majority of couples, these remaining couple penalties are due to the fact that benefits and tax credits are means-tested on a couple's joint income. Obviously, one could set thresholds and entitlements to benefits and tax credits for couples at more than twice the rate for single adults, and this would reduce the fraction of existing couples facing a couple penalty and the aggregate value of couple penalties in the tax and benefit system further. But such a reform would not necessarily take the tax and benefit system closer to neutrality, and would be extremely hard to justify on equity grounds.

This analysis shows that seeking to reduce couple penalties by increasing entitlements to benefits and tax credits for couples will work, but only up to a limit. If one has the goal of removing all couple penalties and premiums from the tax and benefit system, then ultimately one has to reduce the amount of support that is means-tested against the joint income of a couple. We therefore explore the implications of individualising all taxes and benefits in the next section.⁴⁴

⁴⁴ This is not the only way of reducing the amount of support that is means-tested against the joint income of a couple (and hence giving a system with fewer couple

7.2 Individualising the UK tax and benefit system

This section shows the implications of individualising the UK tax and benefit system. As argued in Chapter 3, such a system exhibits neutrality for all couples. At current levels of entitlement for single adults, such a regime would be much more costly than the current tax and benefit system, and so we also show the impact of making this reform in a revenue-neutral fashion.

In fact, when seeking to simulate a world where all benefits and tax credits are assessed on the circumstances of the claimant only, we have taken a short cut and used the following simulation: for each couple, we split the adults into separate, single-adult benefit units (but in the same household) and applied the existing tax and benefit rules, and we then summed net state support for the two adults.

The advantage of this calculation is that it is identical to the one we performed in order to calculate the distribution of couple penalties and premiums for existing couples under Scenario A (as reported in Chapter 4). The disadvantage is that it does not perfectly reflect a pure individually-assessed tax and benefit system, as the estimated liability to council tax and entitlements to winter fuel payments, housing benefit and council tax benefit have been calculated based upon the characteristics of the household, and not just the individual claimant.

At current levels of benefit entitlement for single adults, and under the (highly-implausible) assumption that the reform has no impact on people's behaviour, such a system would cost an estimated £34.3 billion a year (this is, by definition, the size of the existing average net couple penalty multiplied by the number of couples; it is the aggregate net couple penalty).⁴⁵ However, the subsequent behavioural response would almost certainly increase the cost to the government, perhaps substantially, because many more individuals would be receiving means-tested benefits or tax credits, weakening incentives to work.

penalties and premiums); another would be to turn all means-tested benefits into benefits that were paid with no means test. We do not explore this reform further, though.

⁴⁵ In fact, this figure includes the savings from eliminating those benefits that currently act to provide couple premiums: the cost of eliminating all penalties but preserving premiums would be higher.

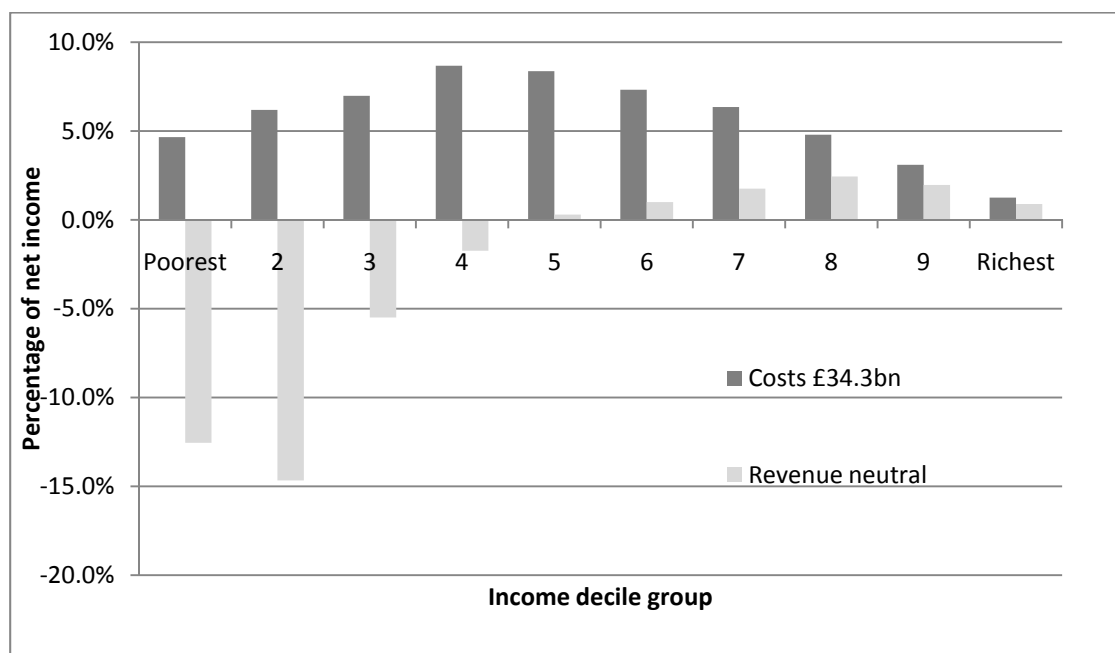
We can make this reform revenue neutral by reducing entitlements to those benefits that have effectively been individualised. Specifically, we reduce maximum entitlements to benefits for single adults in IS/JSA, HB/CTB, pension credit, working tax credit and winter fuel payments by the same proportion. It turns out that these rates have to be halved to achieve revenue neutrality.⁴⁶ Of course, it is important to note that there are other ways of making this reform revenue neutral without affecting couple penalties and premiums. For example, having individualised benefits and tax credits, one could redistribute more from the rich to the poor, without affecting couple penalties and premiums, by increasing income tax rates and increasing the individualised entitlements to benefits and tax credits.

The distributional impacts of individualising benefits and tax credits with and without halving maximum entitlements to means-tested benefits are shown in Figure 7.2, assuming no change in behaviour.⁴⁷ The graph shows that individualising benefits and tax credits at existing levels – a reform that should benefit only existing couples – has a hump-shaped impact on net incomes, with the largest proportional impact on net incomes in decile groups 4 and 5; the smallest impacts are in decile groups 9 and 10. Making this reform revenue neutral by halving entitlements to the means-tested benefits leads to single adults losing or being unaffected (49% are unaffected and 50% are worse off) and to couples either winning, being unaffected or losing (48% are better off, 23% are unaffected and 29% are worse off). Compared with the status quo, the reform transfers about £13.5 billion a year from single people to couples. The distributional impact looks regressive: the bottom four decile groups lose, on average, and the top six gain, on average.

⁴⁶ Halving these rates within the existing tax and benefit system would save an estimated £12.9 billion a year, but halving these rates having individualised benefits and tax credits would save an estimated £34.1 billion, because many more people would be entitled under an individualised system.

⁴⁷ It should be noted, though, that this distributional analysis has ranked families according to their equivalised net income (using the before-housing-costs McClements equivalence scale), and so has taken an implicit view over what levels of income a single adult and a couple need to have to be considered equally well off.

Figure 7.2. Distributional analysis across all families of individualising benefits and tax credits



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.

7.3 Conclusions

This chapter has shown the implications of two large-scale reforms to the tax and benefit system that would reduce the incidence of couple penalties. It has shown that setting maximum entitlements to means-tested benefits and tax credits for couples equal to twice the existing rate for single adults (possibly with a similar rule for the tax credit thresholds) would reduce the proportion of couples facing a penalty, and the aggregate value of penalties, but would also lead to more couples facing a premium. Such a reform would fail to remove couple penalties completely, with the remaining penalties being due to the fact that benefits and tax credits are jointly assessed. At current levels of benefit entitlement for single adults, individualising the tax and benefit system (and thus removing all couple penalties and premiums) would cost an estimated £34.3 billion a year, but behaviour responses would almost certainly increase this cost (by definition, removing all couple penalties and premiums must cost an amount equal to the size of the aggregate net couple penalty). Making this

reform revenue neutral by reducing entitlements to means-tested benefits would transfer about £13.5 billion a year from single people to couples.

8. Conclusions

Deciding how personal taxes, tax credits and means-tested benefits should treat adults in different family structures is an extremely difficult policy design issue. The difficulty arises because governments face conflicting objectives. As well as the usual trade-offs between redistributing from the rich to the poor and preserving work incentives, governments have to decide what is a fair level of support to give to couples relative to single people, and to what extent they are prepared to accept so-called 'couple penalties' or 'couple premiums' in the tax and benefit system unless they are prepared to accept the considerable constraints of having a tax and benefit system that depends only on an individual's circumstances.

Two adults can almost certainly save on living costs by living together, but unlike some past studies, this study does not attempt to measure the overall financial or non-financial benefits or costs to living as a couple compared with living apart. This study cannot tell us whether couples would be better off living apart than living as a couple; it simply measures how taxes and benefits vary by family situation, an issue of more direct public policy concern.

In Chapter 5, we showed the distribution of couple penalties and premiums in the 2010–11 UK tax and benefit system, and the extent to which tax and benefit changes since 1997–98 have altered these: Section 5.3 provided a summary of the findings, and we do not repeat that here.

Couple penalties in the current UK tax and benefit system arise mostly through income support, jobseeker's allowance, pension credit and child tax credit. The clearest case of a couple penalty in the tax and benefit system arises because these benefits provide support to single adults with no income of their own, but take all or most of it away if they live with a partner with an income, because the benefits depend upon the combined income of the couple. Another set of penalties in the tax and benefit system exist because, for most means-tested benefits, the maximum entitlement for a couple is less than twice that for a single adult. Finally, those parts of the tax and benefit system that are explicitly designed to offset certain living costs, such as housing benefit and winter fuel payments, can give rise to a 'living together' penalty. Because a couple can make savings on rental costs and heating compared with two single adults, those benefits that support living costs are consequentially worth less to them. For

example, housing benefit for those who rent privately is designed around the assumption that a couple need spend no more in rent than a single person.

Couple premiums in the tax and benefit system are caused by the few remaining non-means-tested benefits that pay extra amounts for adult dependants, such as the state pension and incapacity benefit, and by the existing married couple's allowance for those born before 1935. Also, two adults can usually save on council tax by living together rather than apart.

We argued that there are possibly some costs to having couple penalties, in the sense that people's decisions about whether to live together (or admit to be living together) might be affected, but the evidence suggests these distortions are, at most, small. Policies that reduce couple penalties in favour of neutrality – such as moves towards individual assessment of benefits – would reduce these tax-benefit distortions, but policies that replaced penalties in the tax and benefit system with premiums would simply create new tax-benefit distortions and incentives to behave fraudulently.

But a tax reform that reduces couple penalties might lead to different distortions, or unfairness elsewhere in the tax and benefit system.

Removing all couple penalties and premiums can be achieved by individually assessing all benefits and tax credits. In principle, this would mean that a single adult with no income of his or her own would be paid benefits even if married to a millionaire. This would cost at least £34 billion a year at current levels of benefits and tax credits for single adults, although the subsequent behavioural response would increase the cost, perhaps substantially, because many more individuals would be receiving means-tested benefits or tax credits, weakening incentives to work. There are many ways of making this reform revenue neutral: if this were done by cutting benefits and tax credits for single adults, it would transfer £13.5 billion a year from single people to couples, and lead to the bottom four decile groups losing, on average, and the top six gaining, on average.

Whether the tax and benefit system is currently fair to couples compared with single adults, and whether it would be any fairer if there were fewer or more couple penalties, depends on one's view of fairness. Under a strict view that the tax and benefit system should treat similar individuals

similarly, disregarding whether they live alone or in a couple, then the current system is not fair, and should be replaced by an individualised tax and benefit system (which would then have no couple penalties and premiums). But under the view that the amount of support an adult receives from the state should take into account whether he or she is living alone or with a partner, and the income of any partner, then those aspects of the current tax and benefit system that cause couple penalties – such as assessing support against the combined income of a couple, and setting benefit rates for couples at less than twice those of single adults – are not necessarily unfair. On the other hand, the current tax and benefit system is inconsistent in its approach, paying out benefits and tax credits according to family circumstances but levying income tax according to an individual's income. This inconsistency probably reflects the difficulties governments have when they try to pursue multiple objectives with the tax and benefit system.

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Annex A. A programme-by-programme assessment of couple penalties and premiums in the UK tax and benefit system

Income support, income-related jobseeker's allowance and pension credit

These benefits almost always lead to couple penalties, because the amount paid to couples is less than twice the amount paid to single people (the earnings disregard for couples is higher than for single people, but it is so low that it has little discernible impact on the size of couple penalties). In addition, they are means-tested against the joint income of a couple.

Housing benefit and council tax benefit

Like income support and income-related jobseeker's allowance, these benefits often lead to couple penalties, because the amount paid to couples is less than twice the amount paid to single people. An exception to this is if one of the adults would not be entitled to the benefit as a single person: in this case, these benefits can act as a couple premium if that adult has a very low income.

Note that housing benefit has a further impact on the couple penalty if one is comparing a couple living together with two adults living apart, because the maximum amount of rent that housing benefit will cover for a couple is less than twice that for a single person. Similarly, if one is comparing a couple living together with two adults living apart, then council tax benefit can in principle provide a couple penalty (although one that only reduces the couple premium inherent in council tax): as the two adults living apart would be liable to more council tax than when living as a couple, so would total entitlement to council tax benefit be greater apart than when living as a couple.

Child tax credit

This tax credit almost always leads to couple penalties. This is because the amount payable does not depend upon the number of adults, and it is means-tested against the joint income of a couple and the thresholds are identical for couples and single people.

Because child tax credit pays more for the first child than for subsequent children, there would also be a couple penalty from the child tax credit in

the unusual circumstance where two lone parents formed a couple, even if neither had any income.

Working tax credit

This tax credit can lead to couple penalties and couple premiums. Premiums can arise because the amount payable to couples is higher than the amount payable to single people without children. Penalties can arise because it is means-tested against the joint income of a couple, and the thresholds for couples are the same as for single people, and because the amount payable to couples with children is the same as the amount payable to lone parents.

Basic state pension and incapacity benefit (for existing claimants)

These benefits can lead to couple premiums. Premiums arise because these benefits pay additional amounts for adult dependants who have a low income; if these dependants would not be entitled to the state pension or incapacity benefit when assessed individually, a premium can result.

The same considerations led to couple premiums from other non-means-tested benefits that used to pay dependants' additions.

Winter fuel payments

This benefit is payable at the same rate for couples and single people, and therefore, when comparing a couple with two single-adult households, will lead to couple penalties if both adults would be entitled to it as single people (in other words, if both are aged 60 or over).⁴⁸

Married couple's allowance

When it existed, this tax allowance led to a couple premium amongst married couples, as the allowance is not available to single people. However, there was a linked allowance known as the additional person allowance, payable to an adult who was not married but who was caring for a dependent child; it was not possible to be entitled to both. This meant that the combination of the married couple's allowance and the additional person allowance led all couples with children to experience neutrality but married couples without children to experience a premium.

⁴⁸ The rules for winter fuel payments are particularly complex for households that contain more than one benefit unit that qualifies for a winter fuel payment.

One parent benefit

This benefit, abolished for new claimants in 1998, led to a couple penalty for all couples with children, as it was available only to lone parents.

Annex B. Examples of couple penalties and premiums in 2010–11 values

Table B.1 shows some examples of couple penalties and premiums in the 2010–11 tax system. The examples are not intended to be representative: they have been chosen to highlight particular features of the tax and benefit system that lead to couple penalties and premiums.

The table does not record tax liabilities, as these never lead to couple penalties or premiums in the example cases. It also ignores council tax and housing benefit.⁴⁹

⁴⁹ As Chapter 5 discussed, council tax is neutral if we compare a couple LTHAW with one that is not LTHAW but where the adults are living in the same household, but council tax leads to premiums, on average, if we compare a couple LTHAW with two single-adult households. Housing benefit rarely leads to premiums, and often leads to penalties, for those families entitled to it.

Table B.1. Examples of couple penalties and premiums in 2010–11

		Entitlement to benefits and tax credits, £/wk		Net couple penalty (premiums are negative), £/wk
		Together	Apart	
Workless couple	JSA/IS	£102.75	£130.90	£28.15
Couple, one in work on low earnings (£13,000), no children	JSA/IS	£0	£65.45	£65.45
	WTC	£39.11	£2.77	-£36.34
	Total	£39.11	£68.22	£29.11
Couple, one in work on low earnings (£20,000), one child ^a	JSA/IS	£0	£65.45	£65.45
	WTC	£0	£0	£0
	CTC	£41.32	£54.71	£13.39
	Total	£41.32	£120.16	£78.84
Couple, one in work on high earnings (£40,000), one child ^a	JSA/IS	£0	£65.45	£65.45
	WTC	£0	£0	£0
	CTC	£10.48	£54.71	£44.23
	Total	£10.48	£120.16	£109.68
Couple, both in work on high earnings (£30,000), no children		None	None	None
Couple, both in work on high earnings (£30,000), children	CTC	£0	£10.48	£10.48
Couple, both in work on very high earnings (£60,000), children		None	None	None
Couple, both aged over state pension age, one has no contributions record, no private income	PC	£46.25	£167.55	£121.30
	BSP	£156.15	£97.65	-£58.50
	WFP ^b	£4.81	£9.62	£4.81
	Total	£207.21	£274.82	£67.61
Couple, both aged over state pension age, both have full contributions record, some private income (£40 a week)	PC	£13.93	£53.45	£39.52
	BSP	£195.30	£195.30	£0
	WFP ^b	£4.81	£9.62	£4.81
	Total	£214.04	£258.37	£44.33

a. Assumes child goes with non-worker on separation.

b. Annual payment divided by 52.

Annex C. Assumptions used in other people's work

Draper (2009):

Approach is to **split up hypothetical couples**. Assumptions are as follows:

1. Which adult do the children stay with?	Mother
2. Employment status and earnings of each adult	Unchanged
3. Spending on formal childcare	One-earner couples assumed not to pay money on childcare Working lone mothers assumed to use same childcare as two-earner couple
4. Housing costs and council tax liability of each adult would change	Mother stays in couple's home Single man rents, using levels given in Tax and Benefit Model Tables for private rental sector
5. Child support (maintenance) payments	Man makes payments following CSA rules Has variant where man does not make payments
6. Savings/investment income	Families have none (the families are mostly low-income families)
7. What was compared?	Unequalised net income less housing costs (and less childcare costs?)

Kirby (2005):

1. Which adult do the children stay with?	Mother
2. Employment status and earnings of each adult	Man always works Woman never works
3. Spending on formal childcare	Woman never works, so assumed to be no childcare spending
4. Housing costs and council tax liability of each adult would change	Various assumptions about the housing costs of the couple Assumes single man rents in private rental sector
5. Child support (maintenance) payments	Has variants with and without CSA-level payments
6. Savings/investment income	Assumes families have none
7. What was compared?	Per-capita net income (less housing costs) (i.e. an equivalence scale of N , where N is number of adults and children in household; this assumes no economies of scale)

Anderberg, Kondylisy and Walker (2008):

Aim is to **split up women in couples in FRS**. Assumptions are as follows:

1. Which adult do the children stay with?	Mother
2. Employment status and earnings of each adult	Unchanged
3. Spending on formal childcare	Ignored (i.e. assumes no family spends money on childcare)
4. Housing costs and council tax liability of each adult would change	Both adults move into rented accommodation; HOWEVER, calculation of couple penalty ignores entitlement to HB/CTB
5. Child support (maintenance) payments	Not made
6. Savings/investment income	The sum of the couple's assets is split between the two adults
7. What was compared?	The woman's entitlement to benefits and tax credits as a single woman with the family's entitlement to benefits and tax credits if she partners A variant also acknowledges that single men may get working tax credit

Sample selection: drop retired, long-term sick, self-employed, missing labour supply information.

Anderberg (2008)

Aim is to **partner single women in FRS and split up women in couples in FRS**. Assumptions are as follows:

Who partners whom?	Men are created synthetically as partners for the women in the FRS. Assumes single men are not lone fathers, always work 16+ hours and are all aged 25+. Men may be entitled to working tax credit when single, but nothing else.
1. Which adult do the children stay with?	Mother
2. Employment status and earnings of each adult	Man's labour supply unaffected Woman's labour supply changes so that same as 'similar' women (see note below) with opposite partnership status
3. Spending on formal childcare	Ignored (i.e. assumes no family spends money on childcare)
4. Housing costs and council tax liability of each adult would change	Ignored, because ignores entitlement to HB/CTB
5. Child support (maintenance) payments	Not made
6. Savings/investment income	Families have none
7. What was compared?	The woman's entitlement to benefits and tax credits as a single woman with the family's entitlement to benefits and tax credits if she partners A variant also acknowledges that single men may get working tax credit

Defines women as 'similar' to each other if the same discrete variables, and continuous variables reasonably close (defined in the paper). Uses 'similar' women to work out what the man would earn, and how the woman's labour supply would change. Assumes that, given observable X , whether a woman has a partner is random.

Centre for Social Justice (2009)

1. Which adult do the children stay with?	Mother
2. Employment status and earnings of each adult	Unchanged
3. Spending on formal childcare	Ignored (i.e. assumes no family spends money on childcare)
4. Housing costs and council tax liability of each adult would change	Both parties maintain same housing tenure Couple's housing costs split proportionate to number of (equalised) people in each group
5. Child support (maintenance) payments	Assumed not to be made
6. Savings/investment income	Split equally between two adults
7. What was compared?	The sum of net income of the two adults with the couple's net income A variant compared equalised net income

Sample selection: drop retired.

Annex D. Impact of small reforms on the distribution of couple penalties and premiums and on the distribution of (equivalised) income

This annex simulates the impact of some potential tax and benefit reforms on the distribution of couple penalties and premiums and on the distribution of (equivalised) income. We show the impact of four reforms that all cost the Exchequer around the same amount (£700–800 million a year, if implemented in the 2010–11 tax and benefit system):

- a rise in the working tax credit (WTC) of £10.50 a week for couples with children;
- a fully-transferable income tax personal allowance for married couples with children aged under 5, restricted to the basic rate of income tax;
- a rise of £2.25 a week in the child elements of the child tax credit;
- a second-earner disregard in WTC equal to 60% of the value of the existing earnings threshold.⁵⁰

The distributions of couple penalties and premiums under each reform are shown in Tables D.1–D.4. The first three reforms were analysed in Brewer, Browne and Joyce (2010).

These policies will affect couple penalties and premiums in the following ways:

- An increase in the WTC for couples with children has no impact on net state support for a couple that has split up, but will increase net state support for a couple by up to £10.50. Net couple penalties fall, then, by up to £10.50 a week for couples entitled to more than just the family element of child tax credit.
- A transferable personal allowance for a married couple with young children has no impact on net state support for a couple that has split up, but will increase net state support for a married couple by up to

⁵⁰ In April 2010, the earnings threshold in tax credits is £6,420. Under this reform, the higher earner would apply a disregard of £6,420, and the lower earner would apply a disregard of 60% of this, or £3,852, to his or her earnings. Unused disregards would not be transferable between partners. This policy is usually suggested by people or organisations seeking to strengthen the incentive to work of potential second earners in families with children.

£24.90 a week. Net couple penalties fall, then, by up to £24.90 a week for married couples who qualify for the transferable personal allowance (TPA).

- An increase in the child element of the child tax credit increases the generosity of the means-tested element of tax credits. This will tend to increase net penalties for families with children. The largest impact would be to increase net penalties by exactly £2.25 per child; this would apply to one-earner couples who are entitled to no more than the family element of child tax credit.
- A second-earner disregard in WTC for couples with children has no impact on net state support for a couple that has split up, but will increase net state support for a two-earner couple by up to just under £29. Net couple penalties fall, then, by up to £29 a week for two-earner families entitled to more than just the family element of child tax credit.

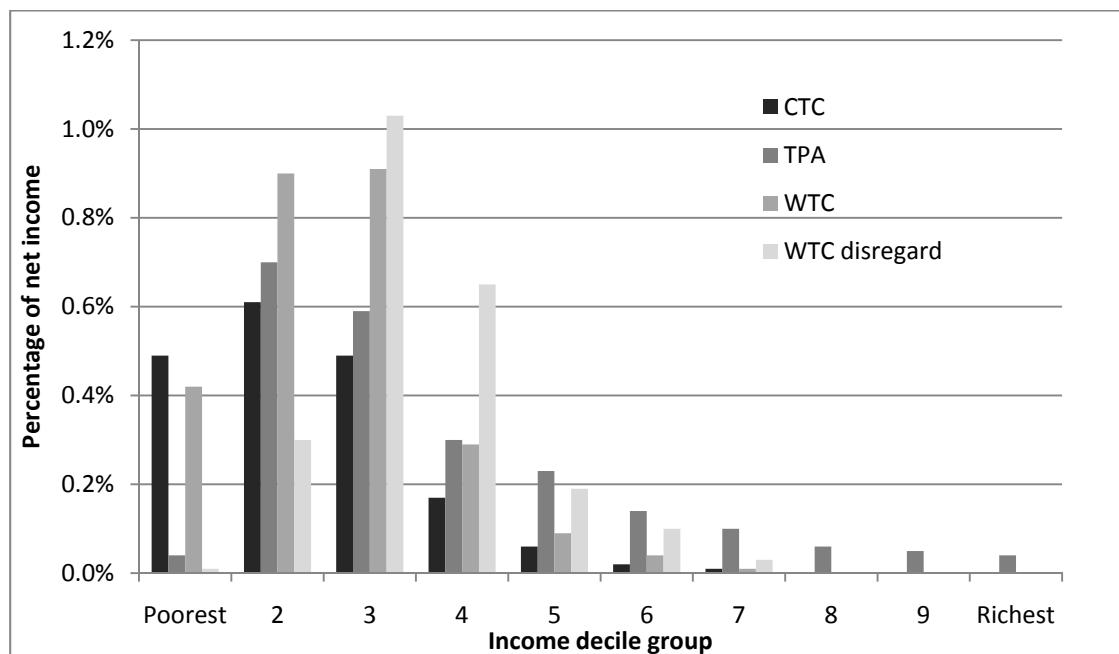
All these policies affect families with children only (although some pensioners in our classification have dependent children). The key points from Tables D.1–D.4 are that:

- The increase in the child element of the child tax credit of £2.25 per child per week increases the mean net penalty by just under £2 a week, with the rise in the net penalty being larger for those with large existing penalties than it is for those with small existing penalties. Net couple penalties rise because this reform increases the generosity of the means-tested element of tax credits.
- The other three policies reduce the mean net penalty by just under £3 a week, or around 3% of the existing average net penalty. The three policies all reduce net couple penalties in different ways and for different families, and so they have slightly different impacts on the distribution of net penalties, with the TPA doing the most to reduce the largest existing penalties, the WTC disregard doing the most to reduce net couple penalties at the median, and the TPA and the WTC doing the most to reduce the smallest existing penalties.

It is worth highlighting that the proposed reforms are very small given the extent of the existing couple penalties. Partly because of this, the proportion of couples with children facing a net penalty or net premium hardly changes (i.e. it changes by, at most, 1 percentage point after rounding) under these reforms.

Figure D.1 shows how each reform would affect net incomes of couples, on average, across 10 income decile groups.⁵¹ It is clear that the impact of the reforms on the distribution of income does vary: the rise in WTC does the most to benefit low-income couples, and the TPA does the most to benefit high-income families. This highlights that a reform that is intended to reduce couple penalties must also be evaluated according to how it fits with other government objectives for the tax and benefit system, such as redistributing from rich to poor, reducing poverty and ensuring strong incentives to work. (The impact of the WTC rise, the TPA and the higher CTC on work incentives was analysed in Brewer, Browne and Joyce (2010).)

Figure D.1. Distributional analysis across couples with children: four 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.

⁵¹ The increase in the child tax credit also increases the incomes of lone-parent families, which is not reflected in Figure D.1.

Table D.1. Higher WTC for couples, existing couples, scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	Percentiles of couple penalty and premiums (negative numbers are premiums) (£/wk)					No. of couples
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.41	0.03	0.56	13.22	34.28	20.53	0	0	0	6.59	59.18	6395524
Couple, children	0.94	0.04	0.02	82.39	88.45	17.73	10.12	41.04	80.35	114.24	164.15	5386965
Pensioner couple	0.81	0.09	0.11	39.22	50.62	18.17	0	16.06	47.67	63.11	73.43	2990696
All	0.68	0.05	0.27	43.71	65.42	18.78	0	0	25.47	65.02	119.28	14773185

Table D.2. Fully-transferable personal allowance for married couples with children under 3, existing couples, scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	Percentiles of couple penalty and premiums (negative numbers are premiums) (£/wk)					No. of couples
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.41	0.03	0.56	13.22	34.28	20.53	0	0	0	6.59	59.18	6395524
Couple, children	0.94	0.03	0.02	82.19	87.68	16.87	10.39	41.87	81.85	112.11	161.73	5386965
Pensioner couple	0.81	0.09	0.11	39.21	50.61	18.17	0	16.06	47.67	63.11	73.43	2990696
All	0.68	0.04	0.27	43.63	65.09	18.58	0	0	25.85	65.31	118.63	14773185

Table D.3. Higher CTC, existing couples, scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	Percentiles of couple penalty and premiums (negative numbers are premiums) (£/wk)					No. of couples
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.41	0.03	0.56	13.22	34.28	20.53	0	0	0	6.59	59.18	6395524
Couple, children	0.95	0.03	0.02	87.03	92.3	16.93	10.48	46.01	86.46	118.15	169.88	5386965
Pensioner couple	0.81	0.09	0.11	39.22	50.62	18.17	0	16.06	47.67	63.11	73.43	2990696
All	0.68	0.04	0.27	45.39	67.47	18.65	0	0	26.33	65.45	124.31	14773185

Table D.4. Higher WTC disregard for couples, existing couples, scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	Percentiles of couple penalty and premiums (negative numbers are premiums) (£/wk)					No. of couples
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.41	0.03	0.56	13.22	34.28	20.53	0	0	0	6.59	59.18	6395524
Couple, children	0.95	0.03	0.02	82.35	87.63	16.18	10.32	44.23	77.72	113.02	164.02	5386965
Pensioner couple	0.81	0.09	0.11	39.22	50.62	18.17	0	16.06	47.67	63.11	73.43	2990696
All	0.68	0.04	0.27	43.69	65.09	18.42	0	0	25.85	65.24	118.49	14773185

Tables for Chapters 5 and 7

Chapter 5

Tables 1–10: 2010–11, couples, Scenario A

Tables 11–23: 2010–11, singles, Scenario A

Tables 24–33: 2010–11, couples, Scenario B

Tables 34–46: 2010–11, singles, Scenario B

Tables 47–52: changes over time, couples, Scenario A

Tables 53–58: changes over time, singles, Scenario A

Tables 59–64: changes over time, couples, Scenario B

Tables 65–70: changes over time, singles, Scenario B

Chapter 7

Table 71: 2010–11, couples, Scenario A – doubling entitlements

Table 72: 2010–11, couples, Scenario A – doubling entitlements and thresholds

Note that the column ‘All’ in the category ‘Benefits and tax credits’ is sometimes very slightly greater than the sum of the other columns, reflecting a very small couple penalty arising from some minor benefits, which are not listed explicitly.

Abbreviations

HB	housing benefit	SSMG	Sure Start maternity grant
CTB	council tax benefit	WFP	winter fuel payments
CTC	child tax credit	BSP	basic state pension
WTC	working tax credit	CT	council tax
IS	income support	IT	income tax
IB	incapacity benefit	MIRAS	Mortgage Interest Relief at Source
SDA	severe disablement allowance	FC	family credit (1997–98 systems only)
CA	carer’s allowance	OPB	one parent benefit (1997–98 systems only)

Table 1. Couple penalties and premiums for existing couples, 2010–11, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.41	0.03	0.56	13.22	34.28	20.53	6395524
Couple, children	0.95	0.03	0.02	85.11	90.37	16.85	5386965
Pensioner couple	0.81	0.09	0.11	39.22	50.62	18.17	2990696
All	0.68	0.04	0.27	44.7	66.49	18.62	14773185

Table 2. Distribution of couple penalties and premiums for existing couples, 2010–11, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	0	0	6.59	59.18	0	0	0	0.01	0.13	6395524
Couple, children	10.48	44.23	85.07	115.68	166.17	0.01	0.07	0.12	0.16	0.21	5386965
Pensioner couple	0	16.06	47.67	63.11	73.43	0	0.03	0.11	0.16	0.21	2990696
All	0	0	26.05	65.45	121.70	0	0	0.05	0.13	0.20	14773185

Table 3. Mean penalty/premium by benefit and tax for existing couples, 2010–11, by family type, Scenario A

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	13.22	0.60	1.31	0	1.28	12.37	-1.66	-0.10	-0.34	0	0.15	-0.63	12.98	0.01	0.24	6395524
Couple, children	85.11	-0.41	1.85	50.71	11.15	22.32	-0.76	-0.07	-0.25	0.48	0	0	85.02	0	0.09	5386965
Pensioner couple	39.22	0.02	3.04	0.06	0.10	44.00	-0.19	-0.16	-0.35	0	2.58	-7.90	41.20	0	-1.98	2990696
All	44.70	0.12	1.86	18.50	4.64	22.40	-1.03	-0.10	-0.31	0.17	0.59	-1.87	44.96	0	-0.27	14773185

Table 4. Couple penalties and premiums for existing couples, 2010–11, by family type and number of workers, Scenario A

	No. of workers	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0	0.71	0.17	0.12	18.84	31.94	22.07	724489
	1	0.69	0.05	0.26	30.26	45.25	19.94	1624960
	2	0.24	0	0.76	5.37	22.74	10.66	4046075
Couple, children	0	0.85	0.13	0.01	20.40	26.90	19.49	309115
	1	0.93	0.06	0.01	90.59	98.55	15.66	1753181
	2	0.97	0	0.03	88.24	91.44	19.32	3324669

Table 5. Distribution of couple penalties and premiums for existing couples, 2010–11, by family type and number of workers, Scenario A

	No. of workers	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
		10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	-14.05	0.95	13.00	27.86	65.31	-0.04	0	0.04	0.10	0.21	724489
	1	0	0	11.09	56.59	74.91	0	0	0.03	0.11	0.19	1624960
	2	0	0	0	0	18.77	0	0	0	0	0.04	4046075
Couple, children	0	-6.65	10.61	18.45	25.85	49.75	-0.02	0.02	0.05	0.06	0.13	309115
	1	9.30	49.61	88.46	121.70	173.71	0.02	0.09	0.13	0.18	0.23	1753181
	2	10.48	52.95	89.40	116.92	161.73	0.01	0.06	0.12	0.16	0.20	3324669

Table 6. Mean penalty/premium by benefit and tax for existing couples, 2010–11, by family type and number of workers, Scenario A

		All	Benefits and tax credits											Taxes		No. of couples	
			HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	0	18.84	0.63	2.14	0	-0.06	34.12	-14.06	-0.77	-2.95	0	0.87	-2.96	16.95	0.01	1.88	724489
	1	30.26	0.20	2.88	0	-2.03	30.47	-0.26	-0.06	-0.03	0	0.18	-1.17	30.17	-0.01	0.10	1624960
	2	5.37	0.76	0.53	0	2.86	1.21	0	0	0	0	0	0	5.36	0.01	0	4046075
Couple, children	0	20.40	-0.90	-0.87	0.87	-0.19	37.71	-12.32	-1.18	-4.28	0.03	0.05	0	19.04	0	1.36	309115
	1	90.59	-1.96	3.74	41.97	-7.83	53.82	-0.16	-0.01	-0.02	1.02	0	-0.01	90.55	0.01	0.03	1753181
	2	88.24	0.46	1.10	59.95	22.21	4.28	0	0	0	0.24	0	0	88.24	0	0	3324669

Table 7. Couple penalties and premiums for existing couples, 2010–11, by decile group of joint earnings, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Not working	0.82	0.11	0.07	35.77	46.05	19.64	3528581
1	0.70	0.17	0.13	21.47	35.00	16.89	1124537
2	0.83	0.04	0.13	40.28	49.62	16.95	1128845
3	0.82	0.01	0.17	58.92	72.10	15.99	1129339
4	0.74	0.01	0.25	60.76	81.88	19.80	1120591
5	0.65	0	0.35	57.80	89.29		1131489
6	0.58	0	0.41	55.12	94.39		1113447
7	0.56	0	0.43	51.94	92.11		1129397
8	0.52	0	0.48	44.98	86.44		1121683
9	0.49	0	0.51	39.22	79.26		1123183
10	0.51	0	0.49	44.47	86.83		1122093
All	0.68	0.04	0.27	44.70	66.49	18.62	14773185

Table 8. Distribution of couple penalties and premiums for existing couples, 2010–11, by decile group of joint earnings, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Not working	-1.48	14.35	38.92	60.70	71.60	0	0.03	0.10	0.15	0.21	3528581
1	-10.22	0	13.61	35.36	65.45	-0.03	0	0.04	0.10	0.19	1124537
2	0	8.96	38.78	63.17	88.16	0	0.02	0.09	0.15	0.19	1128845
3	0	17.93	64.35	93.12	119.68	0	0.04	0.13	0.18	0.22	1129339
4	0	2.01	48.58	102.02	149.28	0	0	0.09	0.17	0.23	1120591
5	0	0	31.23	100.27	154.95	0	0	0.05	0.15	0.21	1131489
6	0	0	27.91	89.16	158.94	0	0	0.04	0.12	0.19	1113447
7	0	0	11.20	84.51	157.04	0	0	0.01	0.10	0.17	1129397
8	0	0	3.46	62.54	146.14	0	0	0	0.07	0.15	1121683
9	0	0	0	37.37	138.09	0	0	0	0.03	0.12	1123183
10	0	0	4.19	56.59	156.95	0	0	0	0.03	0.09	1122093
All	0	0	26.05	65.45	121.70	0	0	0.05	0.13	0.20	14773185

Table 9. Mean penalty/premium by benefit and tax for existing couples, 2010–11, by decile group of joint earnings, Scenario A

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Not working	35.77	-0.10	2.42	0.10	-0.10	44.75	-4.02	-0.39	-1.26	0	2.24	-6.75	36.91	-0.01	-1.13	3528581
1	21.47	-1.07	1.08	0.39	-9.46	33.11	-0.96	-0.12	-0.14	0	0.38	-1.73	21.48	0.01	-0.02	1124537
2	40.28	-0.63	3.00	2.67	1.36	34.28	0.04	0	0	0.01	0.13	-0.56	40.30	0.03	-0.05	1128845
3	58.92	0.68	3.14	16.99	12.82	25.37	-0.05	0	0	0.17	0.06	-0.30	58.89	0.03	-0.01	1129339
4	60.76	0.49	2.15	28.13	12.36	17.63	0	0	0	0.27	0.05	-0.36	60.72	0.01	0.03	1120591
5	57.80	0.50	1.53	32.90	13.11	9.56	0	0	0	0.28	0.02	-0.11	57.78	0.01	0.02	1131489
6	55.12	0.05	1.36	33.70	9.64	9.98	0	0	0	0.43	0.02	-0.06	55.11	0	0.01	1113447
7	51.94	1.15	1.05	34.61	8.79	6.08	0	0	0	0.32	0.01	-0.08	51.92	0.02	0.01	1129397
8	44.98	0.14	1.07	32.13	5.77	5.74	0	0	0	0.23	0.01	-0.13	44.95	0	0.03	1121683
9	39.22	0.56	0.92	28.85	4.00	4.72	0	0	0	0.24	0.01	-0.08	39.21	0.01	0	1123183
10	44.47	0.01	1.48	32.57	2.85	7.28	0	0	0	0.36	0	-0.04	44.51	-0.05	0.01	1122093
All	44.70	0.12	1.86	18.50	4.64	22.40	-1.03	-0.10	-0.31	0.17	0.59	-1.87	44.96	0	-0.27	14773185

Table 10. Couple penalties and premiums for existing couples, 2010–11, by earnings decile group of each partner, Scenario A

		Female earnings										
		Not working	1	2	3	4	5	6	7	8	9	10
Male earnings	Not working	35.77	20.60	23.05	29.93	25.82	26.27	35.56	36.05	40.34	43.71	29.08
	1	17.85	16.40	34.25	42.73	46.60	40.40	39.68	53.19	33.25	22.40	23.72
	2	34.22	22.86	43.61	46.39	43.52	33.70	27.90	23.18	22.17	10.89	12.05
	3	52.82	49.61	67.03	55.25	45.88	22.66	30.73	17.71	16.21	9.49	3.56
	4	62.86	55.80	63.44	57.19	61.46	45.12	24.52	22.70	13.82	8.33	4.00
	5	81.17	76.69	74.27	72.85	43.05	49.45	29.18	19.60	17.12	7.92	3.41
	6	92.05	75.28	85.98	91.31	64.79	43.48	37.45	33.21	12.29	10.03	5.62
	7	92.60	92.35	82.42	84.15	81.22	57.72	46.95	37.82	20.08	17.09	3.04
	8	105.65	75.48	96.18	84.06	85.44	55.62	42.54	38.19	25.07	14.82	3.55
	9	95.55	126.34	90.95	94.57	77.87	74.40	43.62	24.80	24.71	21.71	6.13
10	120.82	89.00	126.20	94.78	77.50	95.29	64.22	51.63	30.23	16.79	4.50	

Table 11. Couple penalties and premiums for existing singles, 2010–11, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.46	0.05	0.49	18.97	43.26	17.27	8323398
Couple, children	0.93	0.05	0.02	79.22	86.42	20.73	4105628
Pensioner couple	0.83	0.10	0.07	44.40	54.95	11.19	4500780
All	0.67	0.07	0.26	40.34	61.58	15.46	16929806

Table 12. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	0	0	15.63	70.55	0	0	0	0.04	0.18	8323398
Couple, children	6.39	33.22	69.47	108.73	170.06	0.01	0.07	0.12	0.18	0.24	4105628
Pensioner couple	-0.58	23.65	44.61	57.91	92.95	0	0.05	0.10	0.14	0.20	4500780
All	0	0	23.13	55.33	110.72	0	0	0.05	0.13	0.21	16929806

Table 13. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type, Scenario A

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	18.97	5.95	2.49	0	0.12	12.40	-1.91	-0.19	-0.09	0	0.07	-0.06	18.77	0	0.20	8323398
Couple, children	79.22	6.94	3.38	30.92	8.03	32.29	-2.44	-0.19	-0.42	0.13	0.02	0	78.96	0	0.26	4105628
Pensioner couple	44.40	8.10	7.36	0.14	0.09	30.79	-0.07	-1.44	-0.02	0	3.04	0.48	48.47	0	-4.07	4500780
All	40.34	6.76	4.00	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	0.85	0.09	41.26	0	-0.92	16929806

Table 14. Couple penalties and premiums for existing singles, 2010–11, by family type and number of workers, Scenario A

	Number of workers	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0	0.55	0.16	0.29	16.80	37.65	23.10	1073177
	1	0.64	0.07	0.29	30.48	48.72	13.34	3313575
	2	0.28	0.01	0.71	9.87	35.66	13.32	3936646
Couple, children	0	0.89	0.10	0.01	21.59	26.58	19.52	621778
	1	0.91	0.07	0.01	85.30	95.26	21.46	2058029
	2	0.97	0	0.02	95.57	98.28	12.87	1425821

Table 15. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type and number of workers, Scenario A

	Number of workers	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
		10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	-12.08	0	2.99	22.75	57.91	-0.06	0	0.02	0.09	0.26	1073177
	1	0	0	9.29	47.41	86.18	0	0	0.02	0.12	0.22	3313575
	2	0	0	0	0	31.77	0	0	0	0	0.06	3936646
Couple, children	0	-0.39	7.81	15.38	25.43	52.52	0	0.02	0.05	0.07	0.18	621778
	1	3.79	43.05	71.97	113.67	180.70	0.01	0.08	0.14	0.20	0.26	2058029
	2	10.48	62.96	96.03	122.38	169.89	0.01	0.09	0.14	0.17	0.22	1425821

Table 16. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type and number of workers, Scenario A

		All	Benefits and tax credits											Taxes		No. of couples	
			HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	0	16.80	5.67	0.85	0	-0.01	24.88	-14.27	-1.48	-0.61	0	0.48	-0.22	15.29	0	1.51	1073177
	1	30.48	6.17	4.65	0	-2.01	21.94	-0.19	-0.01	-0.02	0	0.02	-0.09	30.46	0	0.02	3313575
	2	9.87	5.85	1.12	0	1.94	0.96	0	0	0	0	0	0	9.88	0	0	3936646
Couple, children	0	21.59	-0.41	-1.31	1.37	-0.04	38.44	-14.94	-1.15	-2.40	0.01	0.11	0	19.99	0	1.60	621778
	1	85.30	10.67	5.74	24.89	-5.69	49.62	-0.35	-0.03	-0.11	0.20	0.01	0	85.26	0	0.04	2058029
	2	95.57	4.78	2.02	52.49	31.35	4.59	0	0	0	0.10	0	0	95.57	0	0	1425821

Table 17. Couple penalties and premiums for existing singles, 2010–11, by decile group of joint earnings, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Not working	0.80	0.12	0.08	37.67	49.25	15.15	5580137
1	0.51	0.17	0.32	21.79	47.89	15.70	1141720
2	0.70	0.14	0.17	30.10	46.32	16.13	1133310
3	0.73	0.09	0.18	36.92	52.40	16.06	1143149
4	0.78	0.01	0.21	46.38	59.72	5.57	1134202
5	0.77	0.01	0.23	55.48	72.32	19.25	1128720
6	0.69	0	0.30	57.38	83.01		1137194
7	0.60	0	0.40	53.42	89.32		1129479
8	0.56	0	0.44	52.95	95.07		1133750
9	0.42	0	0.58	35.17	84.42		1134828
10	0.33	0	0.67	27.18	81.46		1133317
All	0.67	0.07	0.26	40.34	61.58	15.46	16929806

Table 18. Distribution of couple penalties and premiums for existing singles, 2010–11, by decile group of joint earnings, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Not working	-4.25	12.25	35.83	51.86	86.46	-0.01	0.03	0.09	0.13	0.2	5580137
1	-8.61	0	1.95	32.47	73.59	-0.03	0	0	0.09	0.21	1141720
2	-4.31	0	22.93	44.98	78.37	-0.02	0	0.06	0.13	0.22	1133310
3	0	2.18	31.37	56.72	92.29	0	0.01	0.08	0.14	0.22	1143149
4	0	4.23	39.95	72.22	106.73	0	0.01	0.09	0.16	0.22	1134202
5	0	3.28	40.83	92.80	132.76	0	0.01	0.08	0.17	0.23	1128720
6	0	0	34.59	93.13	150.42	0	0	0.06	0.15	0.24	1137194
7	0	0	9.95	80.60	159.87	0	0	0.02	0.13	0.22	1129479
8	0	0	5.98	72.26	164.51	0	0	0.01	0.10	0.21	1133750
9	0	0	0	21.04	133.17	0	0	0	0.02	0.15	1134828
10	0	0	0	10.48	116.75	0	0	0	0.01	0.09	1133317
All	-4.25	12.25	35.83	51.86	86.46	-0.01	0.03	0.09	0.13	0.20	16929806

Table 19. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by decile group of joint earnings, Scenario A

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Not working	37.67	6.70	5.25	0.20	-0.01	31.69	-4.43	-1.56	-0.39	0	2.44	0.38	40.31	0	-2.64	5580137
1	21.79	3.46	1.01	0.66	-2.76	21.07	-1.23	-0.12	-0.29	0	0.32	-0.08	22.12	0	-0.34	1141720
2	30.10	4.81	2.75	2.36	-5.28	25.65	-0.08	0	0	-0.02	0.07	-0.02	30.30	0	-0.21	1133310
3	36.92	4.57	5.11	2.84	-4.77	29.13	0	0	-0.05	0	0.06	-0.05	36.95	0	-0.03	1143149
4	46.38	5.90	5.76	4.54	4.42	25.70	0	0	0	0.01	0.04	-0.03	46.42	0	-0.04	1134202
5	55.48	8.10	5.49	11.85	8.92	21.20	0	0	0	0.02	0.04	-0.14	55.56	0	-0.09	1128720
6	57.38	9.34	4.41	17.71	8.39	17.43	0	0	0	0.09	0.03	-0.10	57.42	0	-0.03	1137194
7	53.42	9.75	3.24	19.45	8.04	12.59	0	0	0	0.14	0.03	0	53.42	0	-0.01	1129479
8	52.95	9.25	3.19	22.53	6.61	11.19	0	0	0	0.14	0	0	52.95	0	0	1133750
9	35.17	7.30	1.68	15.98	4.09	6.02	0	0	0	0.02	0.01	0	35.17	0	0	1134828
10	27.18	5.51	1.25	13.66	2.72	3.89	0	0	0	0.09	0.01	-0.01	27.18	0	0	1133317
All	40.34	6.76	4.00	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	0.85	0.09	41.26	0	-0.92	16929806

Table 20. Couple penalties and premiums for existing singles, 2010–11, by earnings decile group of each partner, Scenario A

		Female earnings										
		Not working	1	2	3	4	5	6	7	8	9	10
Male earnings	Not working	37.67	17.54	36.54	34.27	43.02	36.42	44.02	52.26	53.24	50.60	52.34
	1	19.34	4.04	33.63	39.60	28.95	25.47	29.02	32.99	44.94	67.77	27.50
	2	14.67	17.31	48.30	12.58	32.33	21.71	24.06	21.67	32.42	26.59	36.23
	3	29.65	32.01	49.18	28.23	31.40	21.42	10.56	17.16	33.17	9.02	14.65
	4	40.02	22.28	62.44	52.96	37.05	27.61	8.59	16.83	17.77	19.57	5.58
	5	57.59	32.75	59.29	67.18	39.92	28.71	12.79	22.67	21.20	14.53	16.69
	6	68.47	53.51	84.22	48.30	56.66	17.55	18.79	21.43	14.45	13.63	8.19
	7	78.30	54.80	74.54	86.64	56.48	44.04	23.57	11.35	20.45	4.42	27.24
	8	93.25	75.27	103.83	79.49	58.30	34.72	24.18	21.69	14.57	7.45	3.67
	9	111.28	92.78	96.68	58.80	34.38	17.67	37.87	31.72	19.31	5.28	1.20
	10	111.34	88.10	155.48	82.11	64.49	27.17	48.94	25.53	21.37	9.20	1.92

Table 21. Couple penalties and premiums for existing singles, 2010–11, by family type of original single person, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Single, no children	0.55	0.06	0.39	29.51	55.23	18.17	10488434
Lone parent	0.95	0.03	0.02	89.17	94.76	20.72	1952709
Pensioner	0.83	0.10	0.07	44.41	54.96	11.19	4488663
All	0.67	0.07	0.26	40.34	61.58	15.46	16929806

Table 22. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type of original single person, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Single, no children	0	0	3.56	37.51	97.70	0	0	0.01	0.09	0.20	10488434
Lone parent	6.60	35.02	76.92	125.81	191.27	0.01	0.07	0.13	0.19	0.26	1952709
Pensioner	-0.58	23.60	44.61	57.91	92.95	0	0.05	0.10	0.14	0.20	4488663
All	0	0	23.13	55.33	110.72	0	0	0.05	0.13	0.21	16929806

Table 23. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type of original single person, Scenario A

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Single, no children	29.51	4.91	2.34	6.35	1.56	16.38	-1.94	-0.18	-0.15	0.02	0.06	-0.05	29.30	0	0.21	10488434
Lone parent	89.17	13.58	5.17	30.95	8.98	32.91	-2.85	-0.26	-0.45	0.18	0.05	0	88.85	0	0.31	1952709
Pensioner	44.41	8.12	7.37	0.11	0.08	30.80	-0.06	-1.44	-0.02	0	3.04	0.48	48.50	0	-4.08	4488663
All	40.34	6.76	4.00	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	0.85	0.09	41.26	0	-0.92	16929806

Table 24. Couple penalties and premiums for existing couples, 2010–11, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.37	0.61	0.02	16.91	67.05	13.44	6395524
Couple, children	0.89	0.11	0	95.30	108.38	10.93	5386965
Pensioner couple	0.77	0.23	0	47.05	65.87	16.11	2990696
All	0.64	0.35	0.01	51.59	87.64	13.51	14773185

Table 25. Distribution of couple penalties and premiums for existing couples, 2010–11, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-17.53	-12.27	-9.03	10.10	79.31	-0.02	-0.02	-0.01	0.02	0.20	6395524
Couple, children	-1.72	54.26	90.54	124.00	182.79	0	0.08	0.13	0.18	0.25	5386965
Pensioner couple	-13.58	17.33	51.94	68.03	111.12	-0.02	0.04	0.12	0.18	0.25	2990696
All	-14.72	-6.70	37.13	76.56	144.89	-0.02	-0.01	0.07	0.15	0.24	14773185

Table 26 Mean penalty/premium by benefit and tax for existing couples, 2010–11, by family type, Scenario B

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	16.91	13.44	5.39	0	1.28	12.37	-1.66	-0.10	-0.34	0	0.40	-0.63	30.14	-13.47	0.24	6395524
Couple, children	95.30	17.27	7.85	50.71	11.15	22.32	-0.76	-0.07	-0.25	0.48	0	0	108.70	-13.48	0.09	5386965
Pensioner couple	47.05	9.22	13.60	0.06	0.10	44.00	-0.19	-0.16	-0.35	0	4.80	-7.90	63.18	-14.14	-1.98	2990696
All	51.59	13.98	7.95	18.50	4.64	22.40	-1.03	-0.10	-0.31	0.17	1.15	-1.87	65.47	-13.61	-0.27	14773185

Table 27. Couple penalties and premiums for existing couples, 2010–11, by family type and number of workers, Scenario B

	Number of workers	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0	0.68	0.31	0.01	43.09	72.41	19.87	724489
	1	0.63	0.33	0.04	42.97	75.98	14.78	1624960
	2	0.22	0.77	0.01	1.75	53.62	12.75	4046075
Couple, children	0	0.95	0.04	0.01	92.19	99.05	40.01	309115
	1	0.96	0.04	0	118.64	124.98	17.89	1753181
	2	0.85	0.15	0	83.28	99.51	9.15	3324669

Table 28. Distribution of couple penalties and premiums for existing couples, 2010–11, by family type and number of workers, Scenario B

	Number of workers	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
		10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	-20.36	-1.96	33.45	72.75	116.47	-0.06	0	0.11	0.22	0.35	724489
	1	-17.23	-5.18	21.03	70.22	124.04	-0.03	-0.01	0.04	0.14	0.29	1624960
	2	-17.53	-12.80	-10.81	-7.67	30.45	-0.02	-0.02	-0.01	-0.01	0.06	4046075
Couple, children	0	17.51	65.31	91.16	113.25	174.03	0.05	0.14	0.20	0.24	0.32	309115
	1	29.73	71.68	112.42	151.95	219.47	0.04	0.11	0.17	0.22	0.29	1753181
	2	-5.08	42.97	83.24	113.12	165.92	0	0.05	0.11	0.16	0.21	3324669

Table 29. Mean penalty/premium by benefit and tax for existing couples, 2010–11, by family type and number of workers, Scenario B

		All	Benefits and tax credits											Taxes		No. of couples	
			HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	0	43.09	26.91	12.35	0	-0.06	34.12	-14.06	-0.77	-2.95	0	1.76	-2.96	54.34	-13.12	1.88	724489
	1	42.97	17.75	10.95	0	-2.03	30.47	-0.26	-0.06	-0.03	0	0.71	-1.17	56.32	-13.45	0.1	1624960
	2	1.75	9.29	1.90	0	2.86	1.21	0	0	0	0	0.04	0	15.29	-13.54	0	4046075
Couple, children	0	92.19	69.13	11.18	0.87	-0.19	37.71	-12.32	-1.18	-4.28	0.03	0.06	0	101.12	-10.29	1.36	309115
	1	118.64	29.27	13.77	41.97	-7.83	53.82	-0.16	-0.01	-0.02	1.02	0	-0.01	131.81	-13.19	0.03	1753181
	2	83.28	6.12	4.41	59.95	22.21	4.28	0	0	0	0.24	0	0	97.21	-13.93	0	3324669

Table 30. Couple penalties and premiums for existing couples, 2010–11, by decile group of joint earnings, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Not working	0.80	0.19	0	53.88	71.81	18.63	3528581
1	0.70	0.28	0.02	43.35	67.79	15.23	1124537
2	0.79	0.19	0.01	59.80	78.54	13.65	1128845
3	0.79	0.19	0.02	69.68	90.91	12.16	1129339
4	0.72	0.27	0.01	69.99	101.02	11.09	1120591
5	0.63	0.36	0.01	58.57	99.16	11.44	1131489
6	0.57	0.42	0.01	52.65	100.38	11.92	1113447
7	0.52	0.47	0.01	48.80	103.92	11.90	1129397
8	0.45	0.55	0	37.42	98.99	12.31	1121683
9	0.37	0.62	0	30.37	102.36	12.60	1123183
10	0.37	0.63	0	38.01	128.90	14.57	1122093
All	0.64	0.35	0.01	51.59	87.64	13.51	14773185

Table 31. Distribution of couple penalties and premiums for existing couples, 2010–11, by decile group of joint earnings, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Not working	-13.92	26.51	58.58	72.42	121.92	-0.02	0.06	0.14	0.21	0.28	3528581
1	-14.77	0.26	29.15	63.75	122.32	-0.03	0	0.08	0.16	0.30	1124537
2	-11.21	16.08	54.64	80.88	139.06	-0.02	0.04	0.13	0.18	0.28	1128845
3	-10.51	15.22	70.36	101.40	155.43	-0.02	0.04	0.14	0.19	0.27	1129339
4	-10.97	2.48	62.77	111.61	169.41	-0.02	0.01	0.11	0.18	0.26	1120591
5	-12.6	-7.95	36.77	101.34	160.98	-0.02	-0.01	0.06	0.15	0.22	1131489
6	-13.55	-9.47	23.88	87.81	164.75	-0.02	-0.02	0.03	0.12	0.20	1113447
7	-14.07	-10.55	5.42	76.06	159.92	-0.02	-0.01	0.01	0.10	0.18	1129397
8	-15.02	-11.60	-6.71	57.89	144.52	-0.02	-0.01	-0.01	0.06	0.15	1121683
9	-17.27	-12.54	-9.14	34.00	135.93	-0.02	-0.01	-0.01	0.03	0.12	1123183
10	-20.45	-14.42	-10.37	45.11	167.97	-0.01	-0.01	-0.01	0.03	0.10	1122093
All	0	0	26.05	65.45	121.70	0	0	0.05	0.13	0.20	14773185

Table 32. Mean penalty/premium by benefit and tax for existing couples, 2010–11, by decile group of joint earnings, Scenario B

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Not working	53.88	18.66	13.68	0.10	-0.10	44.75	-4.02	-0.39	-1.26	0	3.92	-6.75	68.61	-13.60	-1.13	3528581
1	43.35	24.15	9.89	0.39	-9.46	33.11	-0.96	-0.12	-0.14	0	1.31	-1.73	56.44	-13.07	-0.02	1124537
2	59.80	23.53	10.43	2.67	1.36	34.28	0.04	0	0	0.01	0.48	-0.56	72.25	-12.40	-0.05	1128845
3	69.68	17.45	9.50	16.99	12.82	25.37	-0.05	0	0	0.17	0.26	-0.30	82.21	-12.53	-0.01	1129339
4	69.99	16.61	7.77	28.13	12.36	17.63	0	0	0	0.27	0.23	-0.36	82.64	-12.68	0.03	1120591
5	58.57	10.30	5.07	32.90	13.11	9.56	0	0	0	0.28	0.13	-0.11	71.24	-12.69	0.02	1131489
6	52.65	7.19	4.81	33.7	9.64	9.98	0	0	0	0.43	0.12	-0.06	65.80	-13.16	0.01	1113447
7	48.80	8.73	3.57	34.61	8.79	6.08	0	0	0	0.32	0.09	-0.08	62.09	-13.30	0.01	1129397
8	37.42	4.20	3.41	32.13	5.77	5.74	0	0	0	0.23	0.07	-0.13	51.42	-14.02	0.03	1121683
9	30.37	4.74	2.87	28.85	4.00	4.72	0	0	0	0.24	0.05	-0.08	45.38	-15.01	0	1123183
10	38.01	8.11	4.11	32.57	2.85	7.28	0	0	0	0.36	0.05	-0.04	55.30	-17.30	0.01	1122093
All	51.59	13.98	7.95	18.50	4.64	22.40	-1.03	-0.10	-0.31	0.17	1.15	-1.87	65.47	-13.61	-0.27	14773185

Table 33. Couple penalties and premiums for existing couples, 2010–11, by earnings decile group of each partner, Scenario B

		Female earnings										
		Not working	1	2	3	4	5	6	7	8	9	10
Male earnings	Not working	53.88	35.69	44.77	40.48	34.82	43.50	52.09	39.40	47.23	58.45	26.03
	1	51.48	34.60	41.34	48.92	58.53	35.51	34.10	52.95	32.15	31.70	12.59
	2	66.59	38.53	54.02	47.29	49.28	41.85	26.74	18.26	16.85	0.48	2.76
	3	74.78	64.99	71.11	66.76	55.74	17.96	24.39	13.20	5.41	-3.30	-10.61
	4	80.22	83.93	69.10	53.09	52.50	42.70	16.61	13.49	25.08	-3.74	-9.84
	5	98.05	89.60	78.39	65.96	44.40	40.41	23.08	17.03	8.27	-5.71	-7.34
	6	113.26	95.06	90.83	91.17	54.52	50.58	30.97	23.01	1.66	-1.37	11.48
	7	106.86	100.60	79.45	77.16	72.29	46.35	50.34	25.14	7.69	5.65	-10.60
	8	115.82	77.32	98.57	81.50	82.33	42.98	34.30	25.98	15.77	-0.08	-11.59
	9	113.79	132.10	94.43	86.46	67.95	62.43	32.15	13.81	21.06	8.32	-10.13
10	137.54	106.36	125.90	84.22	67.93	99.48	49.26	35.90	14.17	0.40	-13.45	

Table 34. Couple penalties and premiums for existing singles, 2010–11, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.66	0.23	0.10	25.28	45.73	21.74	8323398
Couple, children	0.94	0.06	0	112.59	121.72	19.89	4105628
Pensioner couple	0.83	0.17	0	58.13	73.33	13.93	4500780
All	0.77	0.18	0.05	55.19	75.88	19.52	16929806

Table 35. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-14.24	0	14.55	29.90	86.98	-0.02	0	0.03	0.08	0.23	8323398
Couple, children	14.23	66.42	106.64	145.26	217.54	0.02	0.12	0.18	0.24	0.32	4105628
Pensioner couple	-10.78	25.08	53.58	88.08	127.71	-0.02	0.05	0.12	0.18	0.27	4500780
All	-11.29	9.04	36.13	80.8	146.52	-0.02	0.02	0.08	0.17	0.28	16929806

Table 36. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type, Scenario B

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	25.28	9.17	1.76	0	0.12	12.40	-1.91	-0.19	-0.09	0	0.11	-0.06	21.29	3.80	0.21	8323398
Couple, children	112.59	41.83	5.94	30.92	8.03	32.29	-2.44	-0.19	-0.42	0.13	0.02	0	116.40	-4.08	0.26	4105628
Pensioner couple	58.13	26.20	10.67	0.14	0.09	30.80	-0.07	-1.44	-0.02	0	5.38	0.48	72.24	-10.07	-4.08	4500780
All	55.19	21.62	5.14	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	1.49	0.09	57.90	-1.80	-0.92	16929806

Table 37. Couple penalties and premiums for existing singles, 2010–11, by family type and number of workers, Scenario B

	Number of workers	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0	0.6	0.15	0.25	30.84	62.96	49.26	1073177
	1	0.73	0.15	0.12	40.94	62.23	27.27	3313575
	2	0.63	0.32	0.05	10.59	25.14	16.10	3936646
Couple, children	0	0.93	0.06	0.01	76.41	84.30	30.65	621778
	1	0.95	0.05	0	127.59	135.30	27.45	2058029
	2	0.91	0.09	0	106.71	117.88	10.76	1425821

Table 38. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type and number of workers, Scenario B

	Number of workers	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
		10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	0	-19.19	0	14.54	51.85	109.55	-0.05	0	0.07	0.18	0.37	1073177
	1	-10.12	3.50	21.95	67.50	116.33	-0.02	0.01	0.07	0.15	0.27	3313575
	2	-15.25	-3.34	7.55	21.45	35.73	-0.02	0	0.01	0.04	0.08	3936646
Couple, children	0	6.42	28.15	77.91	103.28	145.17	0.02	0.08	0.16	0.23	0.37	621778
	1	29.65	77.99	119.02	164.78	236.72	0.05	0.14	0.21	0.27	0.33	2058029
	2	2.65	62.18	105.79	141.50	201.88	0	0.08	0.15	0.20	0.27	1425821

Table 39. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type and number of workers, Scenario B

		All	Benefits and tax credits											Taxes		No. of couples	
			HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Couple, no children	0	30.84	18.83	1.53	0	-0.01	24.88	-14.27	-1.48	-0.61	0	0.60	-0.22	29.25	0.10	1.52	1073177
	1	40.94	14.71	3.14	0	-2.01	21.94	-0.19	-0.01	-0.02	0	0.08	-0.09	37.55	3.35	0.02	3313575
	2	10.59	1.87	0.65	0	1.94	0.96	0	0	0	0	0	0	5.43	5.19	0	3936646
Couple, children	0	76.41	52.24	2.96	1.37	-0.04	38.43	-14.94	-1.15	-2.40	0.01	0.11	0	76.91	-2.10	1.60	621778
	1	127.59	52.94	8.70	24.89	-5.69	49.62	-0.35	-0.03	-0.11	0.20	0.01	0	130.49	-2.94	0.04	2058029
	2	106.71	21.26	3.25	52.50	31.35	4.59	0	0	0	0.10	0	0	113.29	-6.59	0	1425821

Table 40. Couple penalties and premiums for existing singles, 2010–11, by decile group of joint earnings, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Not working	0.81	0.14	0.05	56.86	73.73	20.18	5580137
1	0.61	0.13	0.26	37.93	68.68	30.69	1141720
2	0.74	0.16	0.11	44.02	68.91	42.48	1133310
3	0.86	0.10	0.04	61.33	73.71	25.16	1143149
4	0.88	0.09	0.03	67.97	79.77	22.58	1134202
5	0.88	0.10	0.02	75.09	87.18	18.48	1128720
6	0.88	0.10	0.02	73.32	86.36	24.99	1137194
7	0.82	0.16	0.02	64.81	82.14	15.61	1129479
8	0.79	0.20	0.02	60.81	80.58	14.09	1133750
9	0.64	0.34	0.02	37.46	66.71	14.51	1134828
10	0.44	0.54	0.01	21.00	63.46	13.24	1133317
All	0.77	0.18	0.05	55.19	75.88	19.52	16929806

Table 41. Distribution of couple penalties and premiums for existing singles, 2010–11, by decile group of joint earnings, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Not working	-8.97	19.35	51.85	87.13	128.72	-0.02	0.05	0.13	0.19	0.29	5580137
1	-5.70	0	15.94	58.82	118.52	-0.01	0	0.06	0.15	0.31	1141720
2	-12.43	6.31	33.79	72.68	123.42	-0.03	0.02	0.09	0.18	0.28	1133310
3	0	19.15	51.52	90.27	139.26	0	0.06	0.13	0.22	0.29	1143149
4	0	20.77	55.45	97.73	160.21	0	0.06	0.13	0.21	0.29	1134202
5	-0.40	20.93	51.50	110.77	193.05	0	0.05	0.11	0.19	0.31	1128720
6	-0.63	19.23	40.88	106.36	201.68	0	0.04	0.08	0.18	0.29	1137194
7	-9.06	13.79	28.14	81.97	191.94	-0.02	0.02	0.05	0.13	0.26	1129479
8	-11.18	6.63	26.39	71.83	192.88	-0.02	0.01	0.04	0.10	0.23	1133750
9	-14.72	-5.64	6.90	31.09	155.22	-0.02	-0.01	0.01	0.04	0.15	1134828
10	-17.99	-12.29	-4.06	9.19	104.23	-0.02	-0.01	0	0.01	0.08	1133317
All	-4.25	12.25	35.83	51.86	86.46	-0.01	0.03	0.09	0.13	0.20	16929806

Table 42. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by decile group of joint earnings, Scenario B

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Not working	56.86	28.37	8.37	0.20	-0.01	31.70	-4.43	-1.56	-0.39	0	4.09	0.38	66.75	-7.28	-2.64	5580137
1	37.93	18.99	1.25	0.66	-2.75	21.07	-1.23	-0.12	-0.29	0	0.82	-0.08	38.39	-0.10	-0.32	1141720
2	44.02	16.48	2.24	2.36	-5.28	25.65	-0.08	0	0	-0.02	0.28	-0.02	41.67	2.57	-0.21	1133310
3	61.33	24.28	4.58	2.84	-4.77	29.13	0	0	-0.05	0	0.18	-0.05	56.25	5.06	-0.04	1143149
4	67.97	24.04	5.31	4.54	4.42	25.70	0	0	0	0.01	0.18	-0.03	64.25	3.80	-0.02	1134202
5	75.09	24.28	5.80	11.85	8.92	21.20	0	0	0	0.02	0.21	-0.14	72.22	2.99	-0.08	1128720
6	73.32	20.79	4.77	17.71	8.39	17.44	0	0	0	0.09	0.13	-0.10	69.33	4.02	-0.03	1137194
7	64.81	18.60	4.05	19.45	8.04	12.59	0	0	0	0.14	0.13	0	63.17	1.70	0.01	1129479
8	60.81	16.85	3.61	22.53	6.61	11.19	0	0	0	0.14	0.05	0	61.02	-0.18	0.01	1133750
9	37.46	11.60	2.24	15.98	4.09	6.02	0	0	0	0.02	0.07	0	40.10	-2.66	0	1134828
10	21.00	7.03	1.74	13.66	2.72	3.89	0	0	0	0.09	0.08	-0.01	29.26	-8.28	-0.01	1133317
All	55.19	21.62	5.14	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	1.49	0.09	57.90	-1.80	-0.92	16929806

Table 43. Couple penalties and premiums for existing singles, 2010–11, by earnings decile group of each partner, Scenario B

		Female earnings										
		Not working	1	2	3	4	5	6	7	8	9	10
Male earnings	Not working	56.86	26.76	57.78	31.25	45.88	57.16	59.15	76.84	77.30	64.40	77.90
	1	39.40	5.43	47.10	47.24	43.97	42.53	24.22	53.78	50.65	68.86	28.87
	2	45.32	26.87	60.13	16.81	44.37	34.84	28.79	29.75	22.51	28.73	15.54
	3	67.85	37.35	75.70	45.63	40.37	27.92	24.22	19.30	18.16	10.98	18.99
	4	71.73	54.12	77.42	74.37	39.46	27.74	19.87	20.65	14.72	2.67	-6.82
	5	87.91	59.16	68.90	89.81	49.23	35.73	18.61	30.20	25.14	8.37	-1.75
	6	90.04	84.69	105.37	64.44	61.01	29.22	23.39	19.12	18.23	1.38	6.07
	7	102.90	73.20	81.68	84.76	64.73	44.71	44.22	12.40	21.38	5.28	0.52
	8	123.67	72.68	116.34	75.33	48.77	43.66	21.35	23.53	12.23	-1.46	5.25
	9	132.00	121.72	108.52	68.82	37.38	18.26	48.90	25.67	7.96	-1.42	-7.72
	10	134.44	110.55	152.57	87.06	61.55	27.62	46.09	11.43	17.11	-4.31	-12.29

Table 44. Couple penalties and premiums for existing singles, 2010–11, by family type of original single person, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Single, no children	0.72	0.20	0.08	43.81	67.23	21.80	10488434
Lone parent	0.95	0.05	0	109.48	115.92	14.96	1952709
Pensioner	0.83	0.17	0	58.16	73.37	13.94	4488663
All	0.77	0.18	0.05	55.19	75.88	19.52	16929806

Table 45. Distribution of couple penalties and premiums for existing singles, 2010–11, by family type of original single person, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% of couple's net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Single, no children	-12.67	2.40	21.30	60.52	139.30	-0.02	0	0.05	0.13	0.27	10488434
Lone parent	15.89	63.37	101.39	142.62	214.07	0.03	0.10	0.16	0.23	0.30	1952709
Pensioner	-10.97	25.00	53.58	88.13	127.86	-0.02	0.05	0.12	0.18	0.27	4488663
All	-11.29	9.04	36.13	80.80	146.52	-0.02	0.02	0.08	0.17	0.28	16929806

Table 46. Mean penalty/premium by benefit and tax for existing singles, 2010–11, by family type of original single person, Scenario B

	All	Benefits and tax credits											Taxes		No. of couples	
		HB	CTB	CTC	WTC	IS	IB	SDA	CA	SSMG	WFP	BSP	All	CT		IT
Single, no children	43.81	16.52	2.43	6.35	1.56	16.38	-1.94	-0.18	-0.15	0.02	0.09	-0.05	41.04	2.58	0.21	10488434
Lone parent	109.48	38.35	6.98	30.95	8.98	32.91	-2.85	-0.26	-0.45	0.18	0.06	0	115.44	-6.28	0.31	1952709
Pensioner	58.16	26.25	10.68	0.11	0.08	30.81	-0.06	-1.44	-0.02	0	5.38	0.48	72.29	-10.07	-4.09	4488663
All	55.19	21.62	5.14	7.53	2.03	22.11	-1.55	-0.52	-0.15	0.03	1.49	0.09	57.90	-1.80	-0.92	16929806

Table 47. Couple penalties and premiums for existing couples, 1997–98 system uprated with prices, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.22	0.59	0.19	3.74	40.13	8.63	6395524
Couple, children	0.99	0.01	0	47.12	47.64	28.15	5386965
Pensioner couple	0.49	0.50	0.02	7.61	31.78	15.78	2990696
All	0.56	0.36	0.08	20.34	43.54	10.78	14773185

Table 48. Distribution of couple penalties and premiums for existing couples, 1997–98 system price-uprated, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-7.73	-7.73	-6.53	0	42.03	-0.02	-0.01	-0.01	0	0.10	6395524
Couple, children	8.45	8.45	31.35	76.18	108.29	0.01	0.01	0.06	0.13	0.21	5386965
Pensioner couple	-13.40	-10.17	0	28.60	41.32	-0.04	-0.02	0	0.08	0.16	2990696
All	-7.73	-6.65	7.42	29.12	84.87	-0.02	-0.01	0.01	0.07	0.17	14773185

Table 49. Mean penalty/premium by benefit and tax for existing couples, 1997–98 system uprated with prices, by family type, Scenario A

	All	Benefits										Taxes		No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	
Couple, no children	3.74	0.86	1.02	-0.21	9.96	0	-1.76	-0.10	-0.35	-0.56	8.90	0	-5.16	6395524
Couple, children	47.12	0.42	1.58	10.00	30.64	8.45	-1.06	-0.10	-0.08	0	49.95	0	-2.82	5386965
Pensioner couple	7.61	0.49	2.43	0.02	21.10	0.04	-0.15	-0.16	-0.38	-8.65	15.06	0	-7.45	2990696
All	20.34	0.63	1.51	3.56	19.76	3.09	-1.18	-0.11	-0.26	-1.99	25.11	0	-4.77	14773185

Table 50 Couple penalties and premiums for existing couples, 1997–98 system uprated with earnings, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.24	0.57	0.19	5.66	46.31	9.90	6395524
Couple, children	0.99	0.01	0	66.30	67.28	22.67	5386965
Pensioner couple	0.55	0.43	0.02	14.65	40.56	17.83	2990696
All	0.58	0.34	0.08	29.59	58.29	12.11	14773185

Table 51. Distribution of couple penalties and premiums for existing couples, 1997–98 system earnings-uprated, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums) (£/wk)					Percentiles of couple penalties and premiums (negative numbers are premiums) (% net income)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-8.80	-8.80	-7.22	0	55.61	-0.02	-0.01	-0.01	0	0.13	6395524
Couple, children	10.10	10.28	59.78	103.43	137.86	0.01	0.02	0.10	0.17	0.24	5386965
Pensioner couple	-15.51	-9.60	8.71	40.49	54.00	-0.04	-0.02	0.02	0.10	0.18	2990696
All	-8.80	-6.43	10.10	45.84	110.88	-0.02	-0.01	0.01	0.10	0.21	14773185

Table 52. Mean penalty/premium by benefit and tax for existing couples, 1997–98 system uprated with earnings, by family type, Scenario A

	All	Benefits										Taxes		No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	
Couple, no children	5.66	0.41	1.11	-0.52	13.72	0	-2.07	-0.12	-0.42	-0.65	11.49	0.01	-5.83	6395524
Couple, children	66.30	-0.18	1.83	17.62	41.69	10.10	-1.22	-0.12	-0.10	0	69.77	0	-3.47	5386965
Pensioner couple	14.65	0.02	2.53	0.03	30.81	0.04	-0.18	-0.20	-0.44	-10.17	22.82	0	-8.18	2990696
All	29.59	0.11	1.66	6.21	27.38	3.69	-1.38	-0.14	-0.31	-2.34	35.04	0	-5.45	14773185

Table 53. Couple penalties and premiums for existing singles, 1997–98 system uprated with prices, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.31	0.62	0.06	10.94	51.47	8.33	8323398
Couple, children	0.96	0.03	0.01	64.51	67.64	27.07	4105628
Pensioner couple	0.53	0.46	0.01	16.71	41.34	11.26	4500780
All	0.53	0.44	0.03	25.46	55.92	9.44	16929806

Table 54. Distribution of couple penalties and premiums for existing singles, 1997–98 system price-uprated, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-7.73	-7.73	-7.73	1.91	61.24	-0.02	-0.01	-0.01	0.01	0.17	8323398
Couple, children	8.45	21.10	54.28	90.85	139.07	0.01	0.05	0.12	0.19	0.28	4105628
Pensioner couple	-13.40	-9.67	2.60	30.37	66.05	-0.03	-0.02	0.01	0.08	0.17	4500780
All	-9.09	-7.73	3.89	37.13	93.38	-0.03	-0.01	0.01	0.09	0.22	16929806

Table 55. Mean penalty/premium by benefit and tax for existing singles, 1997–98 system uprated with prices, by family type, Scenario A

	All	Benefits										Taxes		No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	
Couple, no children	10.94	6.76	1.92	-0.57	11.47	0	-1.98	-0.19	-0.09	-0.06	17.27	0	-6.34	8323398
Couple, children	64.51	9.54	2.94	8.87	41.62	8.60	-3.88	-0.43	-0.32	-0.04	66.98	0	-2.47	4105628
Pensioner couple	16.71	8.59	4.22	0.07	13.36	0.04	-0.06	-1.36	-0.02	-0.31	24.85	0	-8.14	4500780
All	25.46	7.92	2.78	1.89	19.28	2.10	-1.93	-0.56	-0.13	-0.12	31.34	0	-5.88	16929806

Table 56. Couple penalties and premiums for existing singles, 1997–98 system uprated with earnings, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.32	0.62	0.06	10.93	52.95	9.66	8323398
Couple, children	0.95	0.04	0.01	75.36	80.13	30.95	4105628
Pensioner couple	0.59	0.41	0.01	21.73	46.18	13.09	4500780
All	0.54	0.42	0.04	29.43	62.58	11.00	16929806

Table 57. Distribution of couple penalties and premiums for existing singles, 1997–98 system earnings-uprated, by family type, Scenario A

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-8.80	-8.80	-8.80	3.06	68.03	-0.03	-0.02	-0.01	0.01	0.18	8323398
Couple, children	10.10	29.38	70.56	108.26	155.35	0.01	0.07	0.14	0.21	0.28	4105628
Pensioner couple	-15.51	-8.80	9.86	38.54	74.59	-0.03	-0.02	0.02	0.10	0.18	4500780
All	-10.00	-8.80	6.75	44.72	108.45	-0.03	-0.01	0.01	0.10	0.23	16929806

Table 58. Mean penalty/premium by benefit and tax for existing singles, 1997–98 system uprated with earnings, by family type, Scenario A

	All	Benefits										Taxes		No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	
Couple, no children	10.93	4.75	1.93	-1.25	15.25	0	-2.30	-0.23	-0.10	-0.07	18.00	0	-7.07	8323398
Couple, children	75.36	5.12	2.96	11.21	54.28	10.28	-4.61	-0.52	-0.41	-0.05	78.36	0	-3.00	4105628
Pensioner couple	21.73	7.78	5.04	0.12	19.26	0.05	-0.07	-1.61	-0.03	-0.35	30.56	0	-8.83	4500780
All	29.43	5.64	3.00	2.14	25.78	2.51	-2.27	-0.67	-0.16	-0.14	35.98	0	-6.55	16929806

Table 59. Couple penalties and premiums for existing couples, 1997–98 system uprated with prices, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.28	0.71	0.01	12.19	74.43	12.40	6395524
Couple, children	0.90	0.10	0	63.02	70.89	6.43	5386965
Pensioner couple	0.48	0.52	0	11.19	49.00	23.24	2990696
All	0.55	0.45	0.01	30.52	67.82	14.47	14773185

Table 60. Distribution of couple penalties and premiums for existing couples, 1997–98 system price-uprated, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-18.81	-12.96	-8.34	-0.30	71.42	-0.03	-0.02	-0.01	0	0.20	6395524
Couple, children	-0.07	7.11	45.81	95.99	145.92	0	0.01	0.07	0.17	0.30	5386965
Pensioner couple	-26.42	-19.17	-4.69	32.00	78.44	-0.08	-0.04	-0.01	0.09	0.22	2990696
All	-19.35	-9.01	3.75	42.45	113.87	-0.04	-0.01	0	0.09	0.25	14773185

Table 61. Mean penalty/premium by benefit and tax for existing couples, 1997–98 system uprated with prices, by family type, Scenario B

	All	Benefits										Taxes			No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	MIRAS	
Couple, no children	12.19	13.38	3.30	-0.21	9.96	0	-1.76	-0.10	-0.35	-0.56	23.70	-9.26	-5.16	2.91	6395524
Couple, children	63.02	17.88	5.26	10.00	30.64	8.45	-1.06	-0.10	-0.08	0	71.10	-9.32	-2.82	4.06	5386965
Pensioner couple	11.19	8.65	6.95	0.02	21.10	0.04	-0.15	-0.16	-0.38	-8.65	27.98	-9.71	-7.45	0.37	2990696
All	30.52	14.06	4.76	3.56	19.76	3.09	-1.18	-0.11	-0.26	-1.99	41.85	-9.37	-4.77	2.81	14773185

Table 62. Couple penalties and premiums for existing couples, 1997–98 system uprated with earnings, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.33	0.66	0.01	15.58	75.65	14.07	6395524
Couple, children	0.92	0.07	0	84.26	91.70	7.54	5386965
Pensioner couple	0.54	0.46	0	19.42	57.66	26.12	2990696
All	0.59	0.41	0	41.40	81.47	16.38	14773185

Table 63. Distribution of couple penalties and premiums for existing couples, 1997–98 system earnings-uprated, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-21.01	-14.07	-8.41	1.67	86.98	-0.04	-0.02	-0.01	0	0.22	6395524
Couple, children	2.08	17.19	84.35	123.07	171.94	0	0.03	0.13	0.21	0.30	5386965
Pensioner couple	-29.00	-18.75	10.90	47.30	97.60	-0.07	-0.03	0.03	0.12	0.23	2990696
All	-21.01	-8.67	8.66	66.47	138.24	-0.04	-0.01	0.01	0.14	0.27	14773185

Table 64. Mean penalty/premium by benefit and tax for existing couples, 1997–98 system uprated with earnings, by family type, Scenario B

	All	Benefits										Taxes			No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	MIRAS	
Couple, no children	15.58	14.30	4.51	-0.52	13.72	0	-2.07	-0.12	-0.42	-0.65	28.78	-10.80	-5.83	3.43	6395524
Couple, children	84.26	18.60	6.95	17.62	41.69	10.10	-1.22	-0.12	-0.10	0	93.67	-10.84	-3.47	4.90	5386965
Pensioner couple	19.42	8.90	9.15	0.03	30.81	0.04	-0.18	-0.20	-0.44	-10.17	38.55	-11.33	-8.18	0.38	2990696
All	41.40	14.77	6.34	6.21	27.38	3.69	-1.38	-0.14	-0.31	-2.34	54.42	-10.92	-5.45	3.35	14773185

Table 65. Couple penalties and premiums for existing singles, 1997–98 system uprated with prices, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.52	0.44	0.04	15.84	43.54	15.36	8323398
Couple, children	0.94	0.06	0	97.84	105.44	17.00	4105628
Pensioner couple	0.56	0.44	0	25.11	58.02	17.23	4500780
All	0.63	0.35	0.02	38.19	69.24	16.06	16929806

Table 66. Distribution of couple penalties and premiums for existing singles, 1997–98 system price-uprated, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-15.78	-6.22	0.98	11.99	77.41	-0.03	-0.01	0	0.03	0.21	8323398
Couple, children	4.15	44.70	91.79	137.74	198.41	0.01	0.09	0.18	0.27	0.38	4105628
Pensioner couple	-22.15	-13.06	9.84	47.48	97.89	-0.05	-0.03	0.02	0.12	0.25	4500780
All	-17.92	-3.93	9.49	57.72	134.97	-0.04	-0.01	0.02	0.14	0.29	16929806

Table 67. Mean penalty/premium by benefit and tax for existing singles, 1997–98 system uprated with prices, by family type, Scenario B

	All	Benefits										Taxes			No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	MIRAS	
Couple, no children	15.84	9.67	1.41	-0.57	11.47	0	-1.98	-0.19	-0.09	-0.06	19.68	2.61	-6.33	-0.11	8323398
Couple, children	97.84	43.40	4.39	8.87	41.62	8.60	-3.88	-0.43	-0.32	-0.04	102.29	-2.85	-2.48	0.87	4105628
Pensioner couple	25.11	22.74	5.07	0.07	13.36	0.04	-0.06	-1.36	-0.02	-0.31	40.12	-6.93	-8.15	0.04	4500780
All	38.19	21.33	3.10	1.89	19.29	2.10	-1.93	-0.56	-0.13	-0.12	45.15	-1.25	-5.88	0.17	16929806

Table 68. Couple penalties and premiums for existing singles, 1997–98 system uprated with earnings, by family type, Scenario B

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean penalty/premium (£/wk)	Mean penalty of those with penalty (£/wk)	Mean premium of those with premium (£/wk)	No. of couples
Couple, no children	0.53	0.43	0.04	17.56	47.44	17.84	8323398
Couple, children	0.95	0.05	0	114.39	122.14	22.70	4105628
Pensioner couple	0.61	0.39	0	31.76	65.02	19.63	4500780
All	0.65	0.33	0.02	44.81	78.09	18.60	16929806

Table 69. Distribution of couple penalties and premiums for existing singles, 1997–98 system earnings-uprated, by family type, Scenario B

	Percentiles of couple penalties and premiums (negative numbers are premiums)					Percentiles of couple penalties and premiums (negative numbers are premiums)					No. of couples
	10 th	30 th	50 th	70 th	90 th	10 th	30 th	50 th	70 th	90 th	
Couple, no children	-18.46	-7.04	1.94	14.38	83.90	-0.04	-0.01	0	0.04	0.22	8323398
Couple, children	7.46	65.53	112.69	154.98	222.34	0.01	0.12	0.21	0.29	0.38	4105628
Pensioner couple	-25.32	-11.84	18.59	59.15	111.59	-0.05	-0.02	0.04	0.14	0.25	4500780
All	-19.96	-2.90	13.51	70.71	150.08	-0.04	0	0.03	0.16	0.30	16929806

Table 70. Mean penalty/premium by benefit and tax for existing singles, 1997–98 system uprated with earnings, by family type, Scenario B

	All	Benefits										Taxes			No. of couples
		HB	CTB	FC	IS	OPB	IB	SDA	CA	BSP	All	CT	IT	MIRAS	
Couple, no children	17.56	8.87	1.48	-1.25	15.27	0	-2.30	-0.23	-0.10	-0.07	21.70	3.05	-7.07	-0.10	8323398
Couple, children	114.39	43.99	5.34	11.21	54.28	10.28	-4.61	-0.52	-0.41	-0.05	119.62	-3.30	-3.00	1.06	4105628
Pensioner couple	31.76	23.85	6.77	0.12	19.26	0.05	-0.07	-1.61	-0.03	-0.35	48.61	-8.08	-8.84	0.03	4500780
All	44.81	21.37	3.82	2.14	25.79	2.51	-2.27	-0.67	-0.16	-0.14	52.60	-1.45	-6.55	0.21	16929806

Table 71. Couple penalties and premiums for existing couples if maximum benefit and tax credit entitlement for couples set at double existing level for single people, 2010–11, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean	Mean penalty	Mean premium	Percentiles of couple penalties and premiums (negative numbers are premiums)					Count
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.36	0.08	0.56	10.00	32.83	23.81	0	0	0	3.45	52.12	6395524
Couple, children	0.80	0.18	0.03	58.17	79.13	28.35	-17.14	10.48	51.39	94.09	150.12	5386965
Pensioner couple	0.72	0.18	0.11	17.65	29.42	19.54	-10.91	1.81	11.31	24.61	64.83	2990696
All	0.59	0.13	0.27	29.12	54.73	24.85	-8.55	0	6.88	39.19	102.87	14773185

Table 72. Couple penalties and premiums for existing couples if maximum benefit and tax credit entitlement and tax credit thresholds for couples set at double existing level for single people, 2010–11, by family type, Scenario A

	Proportion with penalty	Proportion with premium	Proportion with neither	Mean	Mean penalty	Mean premium	Percentiles of couple penalties and premiums (negative numbers are premiums)					Count
							10 th	30 th	50 th	70 th	90 th	
Couple, no children	0.36	0.08	0.56	10.00	32.83	23.81	0	0	0	3.45	52.12	6395524
Couple, children	0.67	0.31	0.02	36.59	73.01	39.23	-50.89	-1.96	22.31	69.43	133.92	5386965
Pensioner couple	0.72	0.18	0.11	17.65	29.42	19.54	-10.91	1.81	11.31	24.61	64.83	2990696
All	0.54	0.18	0.27	21.25	49.86	32.50	-20.68	0	3.24	27.23	87.12	14773185