Housing Benefit and Financial Returns to Employment for Tenants in the Social Sector

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Abstract

This paper examines the impact of the UK housing benefit system on the financial returns to employment of people in local authority or Housing Association accommodation. It outlines the current structure of housing benefit and examines its effects on the returns to employment using data from the Family Expenditure Survey. It analyses the consequences of a number of reforms to the current system — lowering social rents, increasing the levels of housing benefit received in work and restricting the amount of rent covered by housing benefit payments. This analysis highlights the trade-offs involved in various strategies available for restructuring the present system.

JEL classification: H3, H4, J3.

I. INTRODUCTION

Currently, about 24 per cent of households are social tenants, living either in local authority accommodation (20 per cent) or the Housing Association (HA) sector (4 per cent). The size, relative income, economic and demographic compositions of these groups have changed dramatically in the past 20 years. Social tenants are

more than twice as likely as the average to be out of work. Nearly half of male household heads under the age of 65 in the social sector are unwaged. Over three-quarters of social tenant families are in the poorest two quintiles of the population income distribution.

That social tenants are so much poorer than families in other tenures is a relatively recent phenomenon. Up until the end of the 1970s, social tenants had incomes slightly below the average. The relative decline in social tenants' incomes has resulted, in part, from richer tenants leaving the sector as a result of government 'right-to-buy' policies; in part, because it has become a requirement of entry to the social sector to have low income; and, in part, because of other changes in the economy, in particular the increase in unemployment in the early 1980s.[1]

Low levels of employment participation amongst social tenants have been accompanied by rapid increases in rent levels, as government policy pushed council and HA rents up towards market levels. Higher rents also caused higher housing benefit (HB) payments. The result was that HB was one of the fastest-growing elements of social security spending: payments of rent rebates to local authority tenants were expected to reach £5.47 billion in 1995–96, up from £0.84 billion in 1980–81.[2]

Rent increases reduced the effective returns to employment of a group that already faced low earnings levels. It resulted in a growing potential for unemployment traps and poverty traps because, as social tenants' incomes rise, HB payments are withdrawn. The higher the rent level, the higher must gross earnings be to escape the HB taper.

In this paper, we concentrate on the financial returns to work in the social rented sector. This work moves beyond simply looking at the effect of the benefit system on hypothetical families. Rather, we attempt to quantify the financial returns to work using survey data on a representative sample of the social renting population. We use this framework to examine the effects of a number of possible reforms to the benefit system.

We start in Section II by describing the structure of housing benefit. We show how this structure has a large impact on the net returns to work. Section III discusses a number of possible ways of quantifying these effects for the population of social tenants. Section IV applies these measures to several years of Family Expenditure Survey data, using the IFS tax and benefit model (see Giles and McCrae (1995)) to estimate the relationship between incomes in and out of work. In Section V, we consider the effects of a number of possible reforms to the benefit system, and we conclude in Section VI with a discussion of the merits of different policy directions.

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[1]For a full discussion of the changes in the incomes of social renters over the last 30 years, see Giles, Johnson, McCrae and Taylor (1996, ch. 2).
[2]Sources: Department of Social Security, 1993; Wilcox, 1996.

II. THE STRUCTURE OF HOUSING BENEFIT

Housing benefit is means-tested and is designed to pay some or all of a tenant's rent when out of work or on low income. It is payable to private tenants as well as Housing Association and local authority tenants. In what follows, we concentrate on HB as it affects social tenants, though most of the discussion would also be valid for tenants in the private sector. The main difference for private sector tenants relates to the rules for the proportion of rent that is allowable for HB. In the private sector, this can often be below 100 per cent as a result of changes to private sector HB regulations which were tightened in an effort to contain spending on HB.

The actual rules for determining HB eligibility are detailed and complex, but the basic formula for its calculation is relatively straightforward:

(1) $HB = Rent - (Taper \times Excess\ income) - Non\text{-}dependant\ deduction$

where *excess income* is defined as follows:

(2) $Excess\ income = (Earnings - Disregard) + Other\ income - Needs.$

Earnings are *net* of income tax and National Insurance contributions. The *disregard* is £5 for a single person, £10 for a couple and £25 for a lone parent. *Other income* includes most social security benefits, such as child benefit and family credit, but also pension payments which, considering the number of pensioners in receipt of HB, is an important consideration. *Needs* are set by statute at levels that vary by family composition, number of children and so on; they are generally set at the same level as the rate of income support so that for people on income support, excess income equals zero and full rent is paid.

The *taper* in equation (1) has been set equal to 65 per cent since the introduction of the current HB system in 1988. Some of the effects of this way of calculating HB should be clear immediately. An increase in rent, for anyone currently on HB, results in an increase in HB of the same amount as the rent increase. An increase of £1 in net earnings results in a fall of 65 pence in HB entitlement. So, taking into account the income tax and National Insurance systems, a basic-rate taxpayer receiving HB would need to earn £1.51 to see a 35 pence rise in their income.

There are some other complications, the most notable being *non-dependant deductions* (NDDs) and capital limits. A NDD is an amount that is deducted from housing benefit when there are other people besides the claimant's partner and dependent children living in the household. It is assumed that this represents the contribution to the rent that this person makes, whether or not this contribution is actually made. For many families, these NDDs are an important consideration in calculating their HB entitlements. They have an effect both on their living standards and on their financial returns from employment.

In addition, capital limits operate such that any HB claimant with capital in excess of £16,000 is ineligible for HB, and a claimant with capital lower than £16,000 but greater than £3,000 will have their weekly HB entitlement reduced by £1 for every £250 of capital over £3,000.

The main features of the system that it is important to notice are, first, that for anyone on HB, any rise in rent is fully covered by a rise in the HB payment and, second, that for every extra pound of take-home pay (after tax and National Insurance), net income will rise by only 35 pence because of the 65 per cent taper.

Housing Benefit and Returns to Work

There are many ways of illustrating the effects of HB on returns to work, and we illustrate one of them here using the budget constraint for an example family with two children, rent of £40 per week and one partner earning £6 per hour.

In Figure 1, the total height of each bar represents total net income at that number of hours of work. The constituent parts of each bar represent a particular type of income. In each case, the bottom chunk represents child benefit whose level never varies with hours of work. The solid black area represents income support which runs out at 16 hours of work per week. Just below this is take-home pay and above it is HB. The white bars from 16 hours on represent family credit. For ease of interpretation, we ignore council tax benefit.[3]

FIGURE 1

**Decomposition of Income for Example Household
on £6 per Hour with Rent of £40 per Week**

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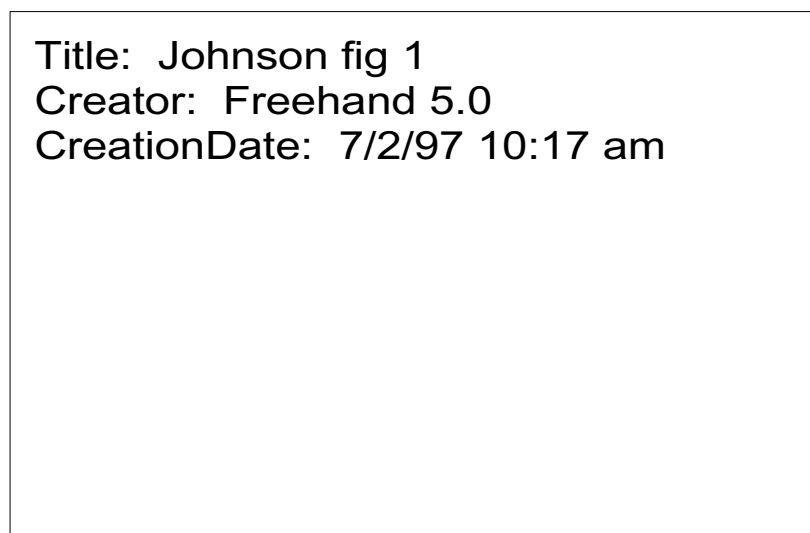
[3]The effect of council tax benefit is taken into account in our empirical results.

At zero hours, the couple receive £107.05 in income support, £19.60 in child benefit and £40 in housing benefit. This HB covers the whole of their rent, so in effect they face a net rent of zero. If one partner were to work 16 hours or more, then the family becomes ineligible for income support. As there are children, at this point it becomes entitled to family credit. If the worker has a job that pays £6 per hour, then at 16 hours the family receives nearly £59 in family credit. If we ignore HB for the moment, the family's net income would jump by £37.92 between 15 hours of employment and 16 hours, as the amount of family credit it becomes entitled to exceeds the amount of its lost income support.

This is the point of family credit — to create a jump in income when individuals work 16 hours per week.[4] But there is one complication. Family credit counts as income in the HB means test. While on income support, the family had the whole of its rent covered by HB. But once one adult works 16 hours, HB only covers £13.40 of the rent. The remaining £26.60 must be paid from the family's other income. Taking account of this extra rent that has to be paid, the household's net income only increases by £11.32. So the existence of HB limits the impact of family credit on the family's budget constraint.

The potential problem of limited rewards from further hours of work is amply illustrated by this example. Despite a gross wage of £6 per hour, 40 hours of work a week make this family only about £40 better off than no work at all — an effective wage rate of just £1 per hour.

The importance of the wage rate is illustrated in Figure 2. In this case, instead of assuming wages of £6 per hour, we assume a wage of £12 per hour, rather above the national average. The returns from work in this case are much higher since eligibility for HB runs out at about 16 hours of work.

We could present infinite numbers of alternative example budget constraints with different levels of rent, different earnings or different family structure. But it would not be an adequate way to proceed. First, the representations depend upon the particular situation of the example family chosen. More importantly, such diagrams give no clear representation of the population as a whole. For instance, only 6 per cent of families in the UK are comprised of two adults, only one of whom works, with children. Yet this is often referred to as the typical or average family type.

Better is to consider summary measures of the effects of the benefit system on a representative sample of the social renter population. We draw this sample from the Family Expenditure Survey (FES) — an annual survey of a representative sample of the UK population. We describe their financial returns to employment through the use of a number of common measures of the impact of the benefit system, the properties of which are described in the next section.

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[4]See Duncan and Giles (1996) on family credit design and incentive issues.

FIGURE 2

**Decomposition of Income for Example Household
on £12 per Hour with Rent of £40 per Week**

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III. MEASURES OF WELFARE DEPENDENCY

Before we explain the calculation of simple summary measures of welfare dependency, it is necessary to consider the appropriate measure of income.

1. Measuring Income

The measures of welfare dependency used in this paper depend on comparing incomes in and out of work. Naturally, the appropriate comparison is between net incomes (after tax and National Insurance contributions). But we also need to use a measure of income that is net of housing costs. In principle, this is because the rent level is set by government decision and housing expenditure is a necessity for individuals, so rent acts very much like a tax that has to be paid regardless of other consumption choices. To see the need for this treatment, consider the situation of a household receiving £100 in income support and getting full housing benefit to cover its rent of £30 per week. The household's before-housing-cost (BHC) income is £130 per week, while its after-housing-costs (AHC) income is £100 (£100 + £30 HB – £30 gross rent). Now suppose the household's rent increased to £50. It would now receive £50 in HB which increases its BHC income to £150. Its AHC income would remain the same, at £100. So, on a BHC measure, the rent increase appears to make the household better off, while an AHC measure suggests that the increase has no effect on its well-being.

The household is indeed unaffected directly by this rent increase. It is still living in the same accommodation for which it pays no net rent, as gross rent is met in full by HB. Additionally, it still has £100 to spend on other consumption. Of course, if the household were not on HB, the rent increase would make it worse off. Again, we require an AHC measure to capture this, as the household's BHC income would be unaffected by the rent increase. Rent policy can be seen as an extension of the government's benefit policy as well as an integral part of its housing policy.

A second issue that arises is the sharing of income and housing costs within households and families. We assume that families share all income within their immediate family unit. We take the same definition of a person's immediate family as is used by the benefit system — that is, the person, their partner (if any) and any dependent children.

Where there is more than one family unit in a household, there is an issue about who actually pays the housing costs. One common assumption is that all housing costs are met by the 'main' family unit in the household. However, the benefit system assumes that other family units make contributions to housing costs and this is reflected in non-dependant deductions from benefits. In the absence of any actual data on how housing costs are shared, we assume that each additional family unit pays rent equal to its appropriate non-dependant deduction, with the remainder of the rent being met by the 'main' family unit.[5] For most results, this assumption makes little difference.

2. Measures of Financial Returns to Employment

The average tax rate (ATR) measures the proportion of a person's gross earnings that is taken in direct taxes and lost benefit entitlements. It is calculated as the ratio of the increase in net income from taking up a job to the gross earnings that the job provides. Take, for instance, the example family considered earlier in Figure 1. At zero hours, the family's BHC income is £166.65. With £40 rent, its AHC income is £126.65. Now, were the person to work 40 hours at £6 per hour, their gross earnings would be £240. But after paying income tax and National Insurance contributions and having benefit entitlements reduced, the family's net AHC income would increase by only £42.49 to £169.14. The ATR faced by the family would therefore be 82.3 per cent (i.e. 1 – 42.49/240). In other words, over four-fifths of gross earnings would be lost in tax and reduced benefits. The average tax rate measures the proportion of gross earnings that is effectively withdrawn by the tax and benefit systems.

A related notion is that of the replacement rate (RR). This is the ratio of the net income out of work to the net income in work at a particular hours and wage level. Again, we take our example family and consider the case of one partner working

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[5]'Main' is defined as in the FES data and is self-defined by the household being interviewed.

40 hours at £6 per hour. Its net AHC income will be £126.65 out of work and £169.14 in work. Thus its replacement rate will be 74.9 per cent (126.65/169.14). This can be interpreted as meaning that were the person to give up working, their income would be about 75 per cent of their in-work income.

ATRs are a description of the effective relationship between net and gross returns to work. The most significant difference between these and RRs is that RRs are affected by the *level* of out-of-work income as well as the size of the return to working. In certain situations, particularly where a spouse is working, this will be important. So family income out of work might be quite high because one member of the family works. If that person is earning £300 per week, then the numerator in the RR fraction will be large and the RR will be high as a result. The ATR will not be directly affected. This indicates that RRs pick up *income effects* that are not picked up by ATRs. That is, having a high out-of-work income decreases the incentive to work, even given a low or nil ATR.

Another measure that is often reported is the marginal tax rate (MTR). This measures the amount by which net income would increase were a person to earn an extra £1 of gross income. Suppose somebody is paying income tax and National Insurance and is receiving HB and family credit. Their MTR is calculated as follows:

Gross earnings increase by	*£1*
Income tax rises by	24p
National Insurance rises by	10p
So after-tax earnings rise by	66p
Family credit falls by 70% of 66p =	46.2p
HB falls by 65% of the remaining 19.8p =	12.87p
Final gain is 66 – 46.2 – 12.87 =	*6.93p*
The marginal tax rate is	93.07%

The MTR indicates the change in net income from a small shift in the amount a person works. At high MTRs, there is little gain to a person from working an extra hour. Where very high MTRs exist over a wide range of income, several extra hours of work may yield very little, and reducing hours (sometimes significantly) would result in little loss of net income but a large increase in non-employment time. So, if ATRs are low, indicating high financial returns to enter employment, but MTRs are high, it implies that financial returns to employment would be similar at a lower hours level than the one shown. While these measures do indicate the patterns of incentives that exist, it does not necessarily follow that individuals would prefer to work fewer hours. A full model of labour supply would be required to determine this.

These measures give some impression of the work incentive effects of the benefit system but ignore one important part of the story — the scope of the HB system. So, in the following tables, we also show the proportion of social renters

in work receiving HB, to indicate how far the HB system extends up the income scale and the proportion of tenants who would escape the HB system in work. We also show a related measure, which is the average hours of work needed under different HB systems to come off HB. Clearly, the more generous the HB system is, the higher the number of hours that need to be worked to escape HB.

In conclusion, no one measure provides a complete description of benefit dependency. ATRs, RRs and MTRs are useful measures of the financial gains that a person can expect from moving into employment or changing their hours of employment, although care must be taken in interpreting these measures. They are not an adequate basis for determining how many people will move into or out of work or will change their numbers of hours worked. For that, one needs a model of labour supply decisions which we have not attempted to provide here. In addition, particular care must be taken with the interpretation of these measures for unwaged individuals. The level of the calculated financial returns to work will depend on an assumption of the potential wage of that individual, their potential hours of work and the employment decisions of their spouse. These can only be assumed or estimated, and these assumptions are crucial to the levels shown.

IV. FINANCIAL RETURNS TO EMPLOYMENT FOR SOCIAL RENTERS

Given the structure of the HB system and a series of measures of its impact on work incentives, we need to be able to apply these to a sample of the population to gain some idea of the actual effects on individuals. We have used IFS's tax and benefit model, TAXBEN,[6] to look at measures of returns to employment for a representative sample of the UK population. We have used data from three years of the Family Expenditure Survey, 1991 to 1993, with all incomes uprated to 1995 earnings levels. This gives us a sample of roughly 4,000 households from the social rented sector. We use the 1996–97 tax and benefit system as the basis for calculating our work incentive measures.

For those who are currently in work, we need to calculate the incomes that they would receive out of work. This can be done given what we know about the families' characteristics and the rules of the benefit system. For those currently unemployed, the problem is more difficult. We need to know what their in-work income would be. This involves estimating an hourly wage[7] that they would receive and specifying the hours that they would work. In general, we will

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[6]See Giles and McCrae (1995).

[7]Throughout this paper, wage is taken to refer to average gross hourly earnings. We do not consider any overtime premiums etc., principally because these are not recorded in the data.

TABLE 1

**Summary Statistics of the Actual Hourly Wage Distribution
among Employed Social Renters and Predicted Wages for the Non-Employed**

£ per hour

	Men (actual)	*Men (predicted)*	*Women (actual)*	*Women (predicted)*
Mean	6.60	5.97	4.61	4.25
Median	6.10	5.93	4.00	3.97
10th percentile	3.75	4.64	2.61	3.50
90th percentile	9.74	7.22	7.02	5.25

calculate our results at 40 hours, which roughly proxies the decision to work full-time.[8]

To estimate wages for those out of work, we ran regressions that used data on those in work to predict the wages based on such variables as age, education and region of residence. The results from this simple procedure will not be exactly 'correct' but they are our best estimates of the potential wages that could be earned by unwaged social tenants.[9] The general tenor of our results is robust to the exact method used for predicting wage levels. The actual distribution for employees and the estimated distribution for those not in work is shown in Table 1.

This shows, most importantly, that the wages earned by social renters are low. The mean for male social tenants is £6.60 per hour, and 10 per cent of men in this tenure group receive less than £3.75 per hour. Even at the top end of the distribution, male wages are still relatively low: the 90th percentile wage is less than £10 an hour, little more than the 1995 male mean wage of £8.91[10] across the whole population. That almost the entire distribution of wage levels in the social rented sector is below the economy-wide average is an indication of how concentrated in low-wage jobs social renters are. Women's wages in this sector are also very low. Half earn less than £4 per hour.

1. Employed Social Renters

Using the gross weekly income and the hours of employed individuals in the FES, we calculated the levels of replacement rates, average tax rates, the proportion of

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[8]In Giles et al. (1996), we also consider the returns to working 20 hours, to capture the financial returns to part-time working.

[9]In particular, we make no correction for selection bias. The use of a two-step estimator with family composition as the identifying restriction produced insignificant selection terms. However, our feeling is that this result is probably due to lack of information in the FES rather than that it demonstrates the non-existence of selection in the labour market. See Giles et al. (1996, appendix H).

[10]Source: New Earnings Survey 1995.

tenants with high ATRs, the proportion with high marginal tax rates, the proportion on housing benefit and the average number of hours that would have to be worked to come off HB. The results are shown in Table 2, where men and women are split into categories that represent reasonably homogeneous groups. Some of the groups are not mutually exclusive and the sum of the population totals for men and women will exceed the total. It is important to recognise that all of the social tenants represented in Table 2 are in employment. Even if they appear to face severe disincentives to employment, by virtue of the fact that they are waged, they must derive greater benefit from employment than from being unwaged.

Table 2 shows that the mean average tax rate for male social tenants is just over 50 per cent while the mean replacement rate is just under 50 per cent. Forty-four per cent of our male sample had ATRs in excess of 60 per cent. The highest ATRs are faced by men with children and men with an unwaged spouse (clearly some men fall into both these categories). Both of these groups are entitled to relatively high out-of-work benefit levels, either because their children confer greater needs for the family or their unwaged spouse provides little other income. Entitlement to high levels of benefit out of work increases the range of income over which benefit is withdrawn for a given wage level. This reduces the net gain from employment.

Marginal tax rates follow a similar pattern, though only 15 per cent of the employed sample have a MTR greater than 60 per cent because most earned enough to escape from means-tested benefits. But this low average hides certain groups that have much higher MTRs. Again, we see that men with children or those with unwaged partners are more likely to have high MTRs because their income is not high enough to escape the reach of means-tested benefits altogether. This pattern is confirmed by the column showing the average number of hours of work required to escape HB. Overall, an average of 17 hours of work is required, but this rises to an average of 27 hours for men with an unwaged partner.

Many of the patterns we observe for employed male social renters are repeated for women. ATRs and RRs are highest for women with an unwaged spouse — though there are relatively few such families. We also see that single women and employed lone parents face high ATRs. In general, ATRs are lower for employed women than for employed men because a large proportion of them will be secondary earners with partners on incomes that would not entitle them to any means-tested benefits even if they were to leave waged employment.

It is interesting, though, to compare the pattern of replacement rates with that of average tax rates. Women with waged spouses have rather high RRs and low ATRs. This reflects exactly the difference between the two measures discussed in the previous section. Replacement rates measure an income effect that is not picked up by average tax rates and their high level is an indication that women with working spouses would have a relatively high income level out of work.

TABLE 2

Summary Statistics for Employed Social Renting Population

		Average replacement rate	*Average level of ATR*	*Percentage with ATR over 60%*	*Percentage with MTR over 60%*	*Percentage in work on HB*	*Hours of work to escape HB*	*Population count*
Men	Single	31%	52%	44%	5%	10%	20	189
	Unwaged spouse	59%	67%	73%	34%	15%	27	345
	Waged spouse	47%	44%	23%	5%	2%	9	484
	No children	41%	41%	18%	3%	4%	11	331
	With children	58%	60%	58%	27%	9%	20	498
	All men	*48%*	*53%*	*44%*	*15%*	*8%*	*17*	*1,020*
Women	Single, no children	45%	56%	51%	17%	19%	20	185
	Unwaged spouse	71%	57%	53%	54%	54%	30	181
	Waged spouse	62%	20%	7%	6%	3%	2	535
	No children	58%	26%	11%	10%	12%	9	343
	With children	69%	31%	24%	26%	18%	10	373
	Lone parent	68%	42%	34%	77%	71%	37	168
	All women	*61%*	*36%*	*27%*	*27%*	*25%*	*16*	*1,073*

ATRs do not pick up this effect and are very low for this group because they are generally entitled to no benefits when out of work and so none are withdrawn when work is entered.

Compared with men, women with an unwaged spouse have to work more hours to escape HB as their wages are typically lower, but those with a waged spouse have to work fewer hours because their partner's earnings are likely to be higher. On average, women in couples with or without children have to work fewer hours, for precisely the same reason. But perhaps the most striking feature of this column is that lone parents already on average have to be employed 37 hours a week to escape HB.

2. Unwaged Social Renters

We now consider what effect the current tax and benefit system would have on the incomes of unwaged social renters if they were to take up employment. This we do using their estimated wages, as described above, and we assume that they are working 40 hours at this wage.

Again, the direct measures of the financial return from employment are the ATRs and RRs, but the other figures in Table 3 are also instructive. Very high MTRs at the particular hours level chosen indicate that these individuals would lose little income by working fewer hours. Hence, if ATRs are low but MTRs are high, it indicates that there would be a similar financial incentive for an individual to enter waged employment at a lower hours level than the one chosen here. The same is equally true if the proportion on HB in work is high or the hours of employment needed to escape HB are high. On the other hand, if the ATR *and* the other measures of welfare dependency are high, it indicates there is little financial net gain from employment.

We look first at the incentives faced by unwaged men. Table 3 shows the results for the unwaged social renters that correspond to Table 2 for employed social renters. The imposition of 40 hours in work differentiates these results from the employed sample above, where we can observe hours levels. For men, this is a relatively unimportant problem because the vast majority work in a small range of hours around 40 hours per week. But it does complicate some simple comparisons between the tables which might well be driven by varying hours levels as well as other features.

For nearly all groups of unwaged men, ATR levels and the proportion with ATRs greater than 60 per cent exceed those for the corresponding group in the employed sample. This reflects two factors. First, currently unwaged men would expect lower earnings than currently waged men. Second, they might have particular characteristics that entitle them to more income out of work than the in-work group would get. In Table 4, we compare the actual out-of-work income of unwaged social renters with the modelled out-of-work income of social

TABLE 3

Summary Statistics for Unwaged Social Renting Population

		Average replacement rate	Average level of ATR	Percentage with ATR over 60%	Percentage with MTR over 60%	Percentage in work on HB	Hours of work to escape HB	Population count
Men	Single	35%	58%	41%	6%	1%	19	171
	Unwaged spouse	68%	75%	88%	48%	10%	26	380
	Waged spouse	56%	54%	33%	5%	—	10	83
	No children	51%	60%	58%	—	—	19	117
	With children	71%	75%	85%	54%	11%	25	346
	All men	*58%*	*67%*	*68%*	*32%*	*6%*	*22*	*638*
Women	Single, no children	44%	61%	62%	6%	6%	22	123
	Unwaged spouse	76%	74%	86%	74%	40%	35	479
	Waged spouse	64%	34%	15%	8%	3%	4	319
	No children	66%	55%	50%	27%	27%	22	165
	With children	73%	59%	59%	53%	25%	23	633
	Lone parent	62%	58%	52%	96%	36%	37	466
	All women	*66%*	*58%*	*56%*	*60%*	*27%*	*27*	*1,390*

TABLE 4

Out-of-Work Income for Employed and Unwaged Social Renters

£ per week

		Modelled out-of-work income for employed	*Actual income of unwaged*
Men	Single	70.74	79.58
	Unwaged spouse	149.70	162.03
	Waged spouse	154.93	183.76
	No children	124.10	126.80
	With children	168.75	178.92
Women	Single, no children	73.57	85.12
	Unwaged spouse	283.53	307.53
	Waged spouse	402.07	412.15
	No children	339.80	297.56
	With children	402.08	362.99
	Lone parent	137.77	143.56

renters in employment. In most cases, we do indeed find that the out-of-work income of the employed would be lower than the actual income of the unwaged.

It is particularly striking that the ATRs for men with children and those with unwaged spouses are much higher than those for the corresponding men already in employment. More of these men face very low financial returns to work than the men we observe in employment. The pictures for the measures of MTRs and dependence on benefits in work show the same story. Relative to the employed group, the unwaged men face higher MTRs and would have to work more than five more hours to escape HB than the group already in employment. Overall, then, unwaged men face smaller net financial gain from waged employment, but the pattern between different types of unwaged men is very similar to that of waged men.

The figures are much more dramatic if we restrict the number of hours worked to 20. At this hours level, the average ATR for all unwaged men is 79 per cent, 68 per cent of men would have a MTR greater than 60 per cent and 53 per cent of men would still be in receipt of HB in work. Consequently, part-time work will seem especially unattractive to these social renters, particularly if they are the primary earners in a couple.

The figures for unwaged women show similar results to those for men. ATRs are higher across the board as wages are, on average, lower than for employed women. The difference between relatively low ATRs for women with a waged partner and very high ATRs for women with an unwaged partner is striking. It serves to highlight much previous work indicating how relatively financially

unrewarding it is for many women married to unemployed men to work themselves (Kell and Wright, 1990).

Nearly all lone parents would have a MTR greater than 60 per cent, although nearly two-thirds would no longer receive HB in work at 40 hours. The average number of hours needing to be worked to escape HB for this group, though, is 37. The high MTRs for nearly all lone parents imply that their earnings would not be high enough to float them off family credit even at full-time hours.

Restricting the hours worked by women to 20 produces some interesting results. As we would expect, the proportion with high MTRs is even greater at lower hours levels for all groups of women, but the average ATR for lone parents is 10 percentage points lower. This is entirely a reflection of the earnings disregards in the means-tested benefit system that allow a little paid work before benefits are withdrawn. These can increase the gain from employment but only up to the level of the disregard; any employment in excess of this suffers from exceedingly high withdrawal rates.

V. REFORMS

With current wage and rent levels and the current HB system, it is evident that there are many social tenants who do indeed face rather low returns to work. We need now to consider possible policy responses that might ameliorate this situation. Here, we consider three possible policies, and, to make them comparable, we assume that we have £1 billion to spend on each. The three policies we consider are

1. reducing rents by 25 per cent to return them to their real level in 1988 — the net cost of this is £1 billion and the gross cost more than £2.7 billion;
2. reducing the HB taper from 65 per cent to 30 per cent;
3. increasing earnings disregards by £50 per week.

To make the reforms comparable, the costings of options (2) and (3) assume that the reform is only made in the social rented sector. In addition, we consider the impact of restricting the proportion of rent eligible for HB, again in the social rented sector.

We can consider each reform in turn, using a simplified version of the budget constraint. In Figure 3, the line EFGD is the simplified budget constraint of a family. For the range EF, the family is on income support and faces a 100 per cent withdrawal rate. After F, its gross income is sufficiently high that housing benefit starts to be withdrawn. At point G, all housing benefit has been tapered away, and the only withdrawals from additional gross income come through the tax and National Insurance systems. Note that this is the budget constraint for a *family*. In a couple, if a person's partner is working, then the individual's zero hours point will not be at E.

FIGURE 3

Simplified Impact of a Rent Decrease

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The effect of a rent decrease is to shift the point G, at which the individual comes off housing benefit, to the left (i.e. fewer hours of work). For those in the range EH, this has no effect on their after-rent income. They continue to pay the same amount of rent net of housing benefit, which is zero for those in the range EF. For those in the range HG, the reduction in rent removes their entitlement to housing benefit. However, their after-rent income will have increased, as the amount that they actually pay in rent will have been reduced. For those beyond G (i.e. those not receiving housing benefit before the reform), the effect is to increase their income by the full amount of the rent decrease.

It is clear from Figure 3 that ATRs at hours greater than at point H will be reduced as after-rent incomes rise. Equally, the range of high MTRs is reduced as housing benefit, covering lower rent levels, runs out more quickly. It is also worth noting, though, that lowering rent levels has an *income effect* for anyone above the point H. Beyond this point, the reduction in rent might provide some incentive to reduce hours in the knowledge that living standards could be maintained with fewer hours of employment.

The effect of cutting rents is compared directly with the effect of cutting the housing benefit taper in Figure 4. Here, the original budget constraint lies along the line EFGD. Remember that the effect of cutting rents is to shift the point at which housing benefit is escaped down from G towards H, at which point the steeper section of the budget constraint now begins.

The effect of cutting the taper is rather different. The flatter part of the budget constraint starts at the same point but is less flat, with the consequence that it is longer, stretching from F to I. Two effects are obvious. Anyone currently on

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FIGURE 4

Comparison of Rent Reduction with Lowering Taper

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housing benefit is made better off by this reform, and many of them will do better from this than from a cut in rents. But the hours of work required to escape housing benefit are raised from those at G to those at I. By comparison with a cut in rents, it is clear that a taper reduction gives more help to those on relatively low incomes. Whereas nobody working more hours than at I gains from the taper cut, everybody in this range gains from the rent reduction.

While MTRs for those in the range FG are reduced, MTRs for those in the range GI are increased. More hours of work are required to take someone off housing benefit altogether, but the returns to working are reduced for each extra hour past G.

Finally, bear in mind the effects on second earners. If the first earner is already working — at G, say — the effect of a reduced taper will be to cut the return to work by the second earner. The family income is higher at G, but this is tapered away as the second earner works more hours. This person's RR will have been increased as the reform has increased their out-of-work income.

The third reform we consider is to increase the earnings disregards. At an initial cost of £1 billion, these disregards could be increased by £50 each. This would mean that a couple could earn £110 per week before any of this income would be counted in the formula for determining housing benefit. The reason this number is so large relative to the size of the rent reduction that could be afforded at a similar cost is just that among all social renters — above and below pension age — only a small proportion are currently in work. And this is the only group on which more money would be spent in the first instance if earnings disregards were increased.

FIGURE 5

Simplified Impact of Raising Earnings Disregards

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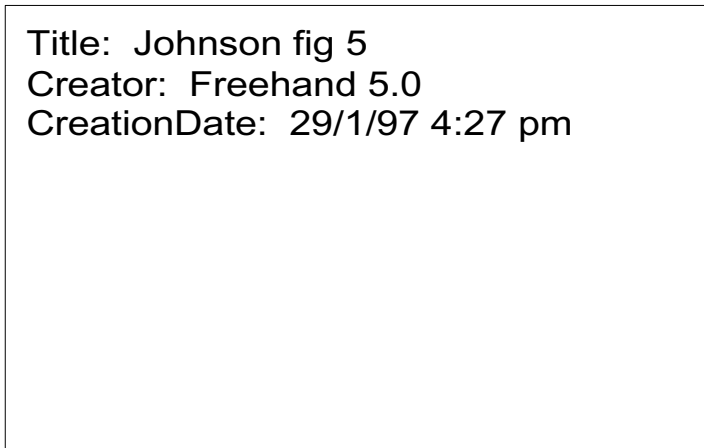
The effect is essentially to increase the range over which the person receives full housing benefit. Consider the formula for calculating excess income:

Excess income = (Earnings – Disregard) + Other income – Needs.

An increase in the disregard allows earnings to be higher before the person has positive excess income. This shifts the point at which the person's housing benefit starts to be tapered. In terms of Figure 5, this can be interpreted as a shift in the line FG to F*G*. In the range FF*, people continue to receive full housing benefit while their earnings rise. At F*, all of the increase in the disregard has been used up, and housing benefit begins to be tapered until, at G*, it has all been tapered away.

The potential impacts are fairly clear. Again, more people will be brought within the housing benefit system as more money needs to be earned in order to escape it. For those working above G*, there is no effect on any of our measures. For those originally in the range FG, incomes in work, and therefore the return to work, will rise. MTRs will be reduced only for those in the range FF*. But note the shape of the new budget constraint. There is a convex kink at F*. An incentive is certainly created for people to move from no work to this point, but there is also an incentive created for movements down the budget constraint. The returns to working above F*, relative to F*, are cut back significantly.

Again, second earners are more likely to start on the housing benefit taper as a result of this reform and their work incentives are therefore likely to be reduced.

A summary of the actual effects of these three reforms is shown in Table 5.[11] A number of patterns against which to judge the policies can be discerned in the results.

First, it is clear that the cut in rent levels affects the greatest number of people. Nearly 90 per cent of currently unwaged men would see their predicted ATRs fall. The one group for which only a minority would have reduced ATRs from this policy is women currently in work. This is because most women in work have a spouse who is also in work. In that case, a cut in rent effectively increases their out-of-work income by as much as it increases their in-work income. But while most people do see a reduction in their ATR as a result of a reduction in rent, the falls in their ATRs are only rather small, averaging just four percentage points.

On the other hand, the rent reduction does have a positive effect on the depth of benefit dependency. The average number of hours of work required to escape HB would be fewer than 20 for all these groups, though for single parents by themselves the average hours required would be 25. The reason that a high proportion of waged women are still on HB in work is just because many of them work only part-time. Again, note that these figures are not directly comparable with those for unwaged women because, for the unwaged group, we have assumed that 40 hours are worked per week. The results are significantly altered if we assume that they would only work 20 hours per week. In this case, only a third would see a fall in their ATRs, and nearly half would still be on HB at these hours levels.

Overall, a cut in rent levels has positive but rather thinly-spread benefits, with average improvements in ATRs only rather small. The other two reforms have bigger but less widespread effects. In both cases, those who benefit gain more than was the case with lower rents, but escaping the HB system becomes much more difficult. The very fact that so many people have their ATRs reduced by a lowering of the taper is evidence that they are still on the HB taper following this reform because, as can be seen from Figure 4 above, it is only in this case that the ATR can be affected.

For some groups, the last two reforms would make it virtually impossible to escape from HB. More than 90 per cent of lone parents would still be on HB even at 40 hours of work, as would three-quarters of currently unwaged men with children. Given results from qualitative surveys (see, for example, Ford, Kampson and England (1995)), which suggest that many people do not realise that HB is available in work, the potential positive effects of such a policy are probably less than a formal description of the system would suggest.

The effects of having higher earnings disregards would be similar on these measures, though the ATR reductions would be more dramatic. As can be seen from Figure 5, the incentive to work at the earnings disregard level would be

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[11]A more detailed breakdown is available in Giles et al. (1996).

TABLE 5

Effect on Financial Returns to Employment of Reforms to Social Renting Subsidies

		Percentage with lower ATR	Average reduction in ATR	Percentage with higher ATR	Average increase in ATR	Percentage in work on HB	Hours of work to escape HB	Percentage with MTR over 60% in work
Lower rent	Waged men	70%	–4%	—	—	5%	13	14%
	Waged women	28%	–6%	—	—	21%	11	26%
	Unwaged men	89%	–4%	—	—	2%	17	31%
	Unwaged women	69%	–4%	—	—	8%	19	58%
Lower taper	Waged men	29%	–7%	22%	5%	34%	3 4	14%
	Waged women	22%	–11%	23%	13%	45%	34	21%
	Unwaged men	52%	–6%	9%	5%	54%	41	31%
	Unwaged women	67%	–10%	16%	7%	70%	57	58%
Higher disregards	Waged men	35%	–14%	24%	10%	43%	41	33%
	Waged women	25%	–20%	27%	24%	51%	37	35%
	Unwaged men	60%	–14%	6%	11%	61%	46	48%
	Unwaged women	69%	–18%	16%	17%	72%	59	68%

FIGURE 6

Impact of Reducing Eligible Rent versus Lowering Rent

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very substantial. This is not picked up by any of our measures, though the high proportions with high marginal tax rates are indicative of this problem.

One final possibility that is worth considering is restricting the amount of rent that would be covered by housing benefit. So instead of 100 per cent of rent being eligible for HB, only 75 per cent, say, might be covered. This would obviously make tenants worse off. The effects on our ATR measures would be exactly the same as the effects of a rent reduction.

Figure 6 shows the impact of both reforms on an example family. For ease of comprehension, this figure is somewhat different in style from those shown earlier but it demonstrates the same points. As before, hours of work are on the horizontal axis and net income is on the vertical. The lower line shows the effect of the lower eligibility, the higher line the effect of the lower rent. The difference between the two is simply that the net after-housing-costs income for restricted eligibility is £7.50[12] below that for reduced rent at all hours levels. This is due to the fact that HB is affected in the same way by the reforms: they both reduce the rent eligible for HB by 25 per cent, either by reducing gross rents by 25 per cent or, in this reform, by simply deeming rents to be 25 per cent lower when they have not in fact changed. Therefore the only difference felt by households is that, in this reform, they will always have higher housing costs and hence lower incomes at all levels.

As the budget constraint has simply been shifted downward, the ATRs are the same at every point. The ATR is the ratio of the change in net income to the change in gross income. As the lines have the same shape, the *difference* in net

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[12]This is the amount by which the family's rent would be reduced — that is, £30 × 0.25.

income between any two points will be the same even if the line is shifted downward.

While ATRs and MTRs are the same under both reforms, we would not expect the labour supply responses to be necessarily identical. We have seen above that the difference in after-housing-costs income will be identical under each reform between any two hours points. However, in the case of lowering rent, this change is produced by an *increase* in after-housing-costs income when not on HB. For the restricted eligibility case, the difference is caused by a *fall* in after-housing-costs income while on HB. If additional income is more valuable when other income is lower, restricting eligibility will have a greater effect on incentives than reducing rent. But to determine whether this is significant at current rent levels, a full labour supply model is needed.

Although this reform gives the same results as reducing rent and saves the exchequer money, its costs are obvious. If the benefit system currently provides a minimum standard of living acceptable to society, restricting rent in HB will force living standards below this minimum.

VI. CONCLUSIONS

A combination of low actual and potential earnings, high rents and the current housing benefit system leads to a situation in which a large number of council and Housing Association tenants are in a position to enjoy only small net financial benefits from work. We have shown not only that this is possible in theory but that these problems are faced in reality by many individuals.

The policy conclusions are not clear-cut. If potential wages for these groups were higher, the problem would be greatly mitigated. The government has no power to increase wages to the required extent. A minimum wage of £3.50 or £4 per hour would not do the trick. The obvious policy response is to cut rents in the social sector. We have shown that this would be a move in the right direction in terms of increasing the available returns to work, but the overall effects on returns would only be small. Furthermore, in a sector where access, in many parts of the country at least, is rationed, there are other issues of equity at stake. With a rent much lower than private sector alternatives, the benefits from being an 'insider' could be greater.

Larger effects on returns for particular individuals can be secured by adjusting the housing benefit system. We considered two possible changes — reducing withdrawal tapers and increasing earnings disregards. For a similar net cost, each had greater effects on potential returns to work for those affected than did cutting rents. The downside of these policies is that they might 'trap' a large majority of social tenants on housing benefit for ever, if there is no real scope for higher earnings. In addition, high earnings disregards provide strong incentives for people to earn at particular levels. If the main aim of policy is to give people adequate

returns to doing *some* work, and continued dependence on benefit is not of serious concern, then these might be appropriate policies; but these are strong conditions.

Other policies which involve reducing the eligibility of tenants for HB are clearly cheaper and could have positive labour supply effects, but they will also have damaging effects on the living standards of the poorest. A combination of rent reductions and restrictions in HB eligibility might be worth considering, but the direct effects would be regressive, making relatively well-off social tenants better off and the poorest social tenants worse off.

As is often the case in such circumstances, the benefit system offers a number of directions in which policy can be moved. Unfortunately, it does not offer a single 'solution' to a problem whose causes spread well beyond the reach of the benefit system.

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