Understanding the rent-restructuring formula for housing association target rents

Rent Briefing paper 4

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This Briefing Paper seeks to give a better understanding of how the rent-restructuring formula works in practice. It examines the three elements of the rent restructuring formula – relative property values, relative average earnings, and the bed size weighting – and shows how they cause target rents to vary.

Key findings

• There is far higher variation in relative property values than relative average county earnings. Moreover, whereas relative property values vary between individual properties, the relative earnings figure applies to every property of the same bed size within the same county. This means that much of the variation in target rents across properties and districts is the result of variation in property values.

• Housing association target rents are calculated using a formula that is based on a 70/30 split between relative local earnings and relative property values. However, it does not follow that 30% of a target rent produced by the formula is made up of the property value component - the proportion can and does vary. It tends to increase as the relative property value figure increases and, therefore, also tends to increase with bed size.

• At the district level, the proportion of the average target rent that is derived from the relative property value element varies from 2.1% for bed sits in Erewash (East Midlands) to 65.1% for four-plus bed properties in Kensington and Chelsea (Greater London). The average proportion is 26.1% for bed sits, 29.6% for one-bed, 31.8% for two-bed, 34.4% for three-bed and 36.3% for four-plus bed properties.

• There is an adverse effect on affordability in areas where property values are relatively high, but average earnings are relatively low in that target rents will take a larger proportion of average incomes. In three of the Housing Corporation regions higher property values are associated with higher average county earnings, but in the other seven regions there is either no relationship or a negative relationship.

• The effect on a target rent (in 2003/04) of a change in either average earnings or the property value can be quantified. For every £10 increase or decrease in average county earnings the target rent changes by approximately £1.05 for bed sits, £1.20 for one-bed properties, £1.30 for two-bed properties, £1.40 for three-bed properties, and £1.45 for four-plus bed properties. For every £10,000 increase or decrease in the property value the target rent (for any bed size) changes by approximately £3.60.
The ODPM’s three-year review of rent restructuring reported that average housing association valuations used to calculate actual target rents are significantly higher than those estimated in the English House Condition Survey (EHCS) exercise used in the target rent formula. This suggests that the national average property value of £49,750 used in the formula is understated. The effect of this has been to raise the level of all target rents, and the effect has been greater on properties of higher value.
Background

In the Housing Green Paper, *Quality and choice: A decent home for all* (DETR, 2000) the Government identified the problem of inconsistency of rents between similar properties in similar areas owned by social landlords of all types. The incoherence was seen as unfair and confusing for tenants, as well as an impediment to implementing a policy of choice based lettings and reforming housing benefit in favour of a local housing allowance (LHA). The existing pattern of rents reflected many factors, including when and where social housing had been built, changes in the subsidies given to social landlords, and the individual rent policies pursued by different landlords, as well as by Government.

It was in this context that the Government decided that it was necessary to introduce a new system that could provide a coherent baseline. There were a wide range of objectives: to make it possible to explain to tenants how their rents were set; to bring rents across a growing number of landlords into line; to introduce a market element into rent setting and therefore make it easier to move towards a system that ultimately integrated private and social rents; and to continue to support the fundamental of sub-market rents that provided for those in need (notably larger households with larger numbers of dependants). The decision about rent structures was formally separated from that of rent levels by requiring the formula to keep the overall rent take constant.

Following consultation the Government opted for a target rent formula that is based on a 70/30 split between relative county earnings and relative property values, together with a bed size weighting to help maintain differentials between property sizes. From 1 April 2002 most housing associations (HAs) have been required to calculate a target rent for each property and to adjust the actual net rent to meet the target rent in real terms over a ten-year period. At the end of the ten-year period rents on individual properties should normally be within a band of five percent either side of the target rent. In order to mitigate the effect of the rent restructuring formula on a small proportion of properties in high value areas, target rents are subject to a rent cap that varies by property size. Both target rents and rent caps are set in relation to net rents, i.e., exclusive of service charges.

The three-year review of rent restructuring

In 2004 the Office of the Deputy Prime Minister (ODPM) undertook a review of various aspects of the Government’s policy of rent restructuring and made a number of recommendations for policy change. The review recommends increasing the bed size weighting for three and four bed properties and introducing an additional weighting for five-plus bed properties.

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1 *Three-year review of rent restructuring: consultation* (ODPM, July 2004) and *Analysing the impact of rent restructuring: informing the 3 year review* (ODPM, December 2004).
The review also highlighted concerns about the overall capital valuations of housing association stock, which were found to be significantly higher than both the estimates based on the 1999 English House Condition Survey used to develop the target rent formula and higher than the capital valuations of local authority stock.

Overall, there was general support for the principle of rent restructuring among the housing associations and local authorities used as case studies in the review. There were some concerns over ‘some technical issues, including the transparency and difficulty of explaining rent increases to tenants’, as well as concerns about the differences between actual local earnings and county earnings levels used in the formula.

**Aims of this briefing paper**

This paper seeks to give a better understanding of how the rent restructuring formula produces target rents and addresses the following issues:

1. To what extents do the three elements of the rent restructuring formula – relative property values, relative average earnings, and the bed size weighting – cause variation in target rents?

2. What is the relationship between the relative property value element and the relative earnings element and how does it vary?

3. What are the possible effects on target rents if one or more of the components in the rent restructuring formula are modified?

Further analysis can be found in the accompanying Dataspring Discussion Paper, ‘the spatial comparison of target rents and their relationship with capital values and average earnings, 2003/04’.

**Methodology**

**The target rent formula**

The target rent for an individual property is set at:

- 70 % of the average net rent for the HA sector
  - Multiplied by the relative county earnings
  - Multiplied by the bedroom weighting for property size
  - Plus

- 30 % of the average net rent for the HA sector
  - Multiplied by the relative value of the individual property

Over the ten-year restructuring period (from 1 April 2002) target rents are being increased each year by RPI + 0.5%. The average net rent for the HA sector used in the formula is based upon the 2000 national average (£53.50) increased each year by the Housing Corporation’s guideline limit for rent increases (RPI + 1% from 1 April 2000 and RPI + 0.5% from 1 April 2002, see Table 1).
Table 1: National average net rent increase for HA sector from 2000

<table>
<thead>
<tr>
<th>Year (at 31 March)</th>
<th>National Average Rent</th>
<th>Increase to be applied to the following year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>£53.50</td>
<td>increase by 2.1%</td>
</tr>
<tr>
<td>2001</td>
<td>£54.62</td>
<td>increase by 4.3%</td>
</tr>
<tr>
<td>2002</td>
<td>£56.97</td>
<td>increase by 2.2%</td>
</tr>
<tr>
<td>2003</td>
<td>£58.23</td>
<td>increase by 2.2%</td>
</tr>
<tr>
<td>2004</td>
<td>£59.51</td>
<td></td>
</tr>
</tbody>
</table>

The property value element of the formula is based on market valuations produced by each social landlord. This in turn reflects the attributes of the individual property such as location, size, design, age and state of repair.

The relative county earnings element of the formula is based on the county average gross weekly earnings of full-time male and female manual workers. An adjustment is made for each bed size by the inclusion of a bedroom weighting in the earnings part of the formula to create differentials between property sizes.

Formula for calculating average property values from target rents

For the purposes of this analysis district average property values are calculated from the average target rents reported by HAs in the 2004 Regulatory and Statistical Return (RSR) using the following formula:

$$\text{Property value} = \frac{\left(\text{\£49,750} \times \text{target rent}\right) - \left(\frac{\text{county earnings}}{\text{England Earnings}} \times 0.7 \times \text{national average rent} \times \text{bedsize weighting} \times \text{\£49,750}}{0.3 \times \text{national average rent}}\right)}$$

£49,750 = average house price in England (January 1999) given in the ODPM guidance.

Data

Data are taken from Part I of the 2004 Regulatory and Statistical Return (RSR), which includes data on rents, service charges, and target rents for general needs (including sheltered) housing. Non-self contained stock has been excluded from the analysis. All rent data are expressed in pounds per week.

HAs calculate target rents for individual properties and report average target rents by bedsize for each local authority area in the RSR. These data can be aggregated to produce an average target rent (by bedsize) for each local authority area (district

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2 Based upon a January 1999 valuation date and an Existing Use Value, assuming continued residential use and vacant possession.
3 ‘Relative county earnings’ are derived by the DTLR (now ODPM) from the New Earnings Survey (ONS) and represent the average gross weekly earnings of full-time male and female manual workers over the 1997-99 period, updated to 1999 prices.
4 Bedsit=0.80, one bed =0.90, two bed =1.00, three bed =1.05, four+ bed =1.10.
5 In general those HAs that own or manage more than 250 homes and/or bedspaces, including shared ownership dwellings, complete the long version of the RSR. LSVT HAs registered during the period April 1999 to 31 March 2001 were not required to report target rents in the 2004 RSR.
average). The analysis in this study uses and reports district averages. All averages are weighted by stock.

**Variation in relative average earnings and relative property values**

Variation in target rents is caused by the interplay of two factors – variation in average earnings (including the bedsize weighting) and variation in property values.

**Relative average earnings**

The relative earnings figure applied in the formula is calculated by dividing the average earnings for the county by the average earnings for England. The relative earnings figure ranges from 0.808 for Cornwall (the county with the lowest average earnings) to 1.119 for Greater London (the county with the highest average earnings).

- **County average earnings for Cornwall**: £255.50
- **Average earnings for England**: £316.40

- **County average earnings for Greater London**: £354.10
- **Average earnings for England**: £316.40

The component of the weekly target rent (for two-bedroom properties) that is derived from relative earnings thus can vary between £33.66 and £46.61, giving a range of £12.95.

- \[0.808 \times 70\% \times £59.51 \text{ (average rent for the HA sector in 2004)} \times 1.0 \text{ (two-bed weighting)} = £33.66\]
- \[1.119 \times 70\% \times £59.51 \text{ (average rent for the HA sector in 2004)} \times 1.0 \text{ (two-bed weighting)} = £46.61\]

The minimum (Cornwall) and maximum (London) values for other bedsizes are shown in columns 2 to 3 of Table 2. The range (in column 4) increases as bedsize increases, from £10.39 for bedsits to £14.28 for properties with four-plus bedrooms. The increase in range is wholly explained by the bedsize weighting in the formula.

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6 The term ‘district’ will be used throughout to denote local authority area (local authority, unitary authority and London borough).
Table 2: Range of values from the relative earnings and relative property value components of district average target rents, by bedsize

<table>
<thead>
<tr>
<th>Bedsize</th>
<th>Relative earnings component of district average target rents</th>
<th>Relative property value component of district average target rents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum £</td>
<td>Maximum £</td>
</tr>
<tr>
<td>Bedsit</td>
<td>26.91</td>
<td>37.30</td>
</tr>
<tr>
<td>One bed</td>
<td>30.28</td>
<td>41.96</td>
</tr>
<tr>
<td>Two bed</td>
<td>33.66</td>
<td>46.61</td>
</tr>
<tr>
<td>Three bed</td>
<td>35.32</td>
<td>48.95</td>
</tr>
<tr>
<td>Four+ bed</td>
<td>37.00</td>
<td>51.28</td>
</tr>
</tbody>
</table>

Relative property value
The relative property value figure is calculated by dividing the property value for an individual property by the national average HA property value. Using district averages to summarise, the relative property value (for two-bedroom properties) ranges from 0.348 for Vale Royal (the district with the lowest average property value) to 3.340 for Kensington and Chelsea (the district with the highest average property value).

Average 2-bed HA property value for Vale Royal £17,293 = 0.348
Average HA property value for England £49,750

Average 2-bed HA property value for Kensington and Chelsea £166,166 = 3.340
Average HA property value for England £49,750

The range is much wider for relative property values than for relative earnings, even when the relative property values are averaged by district. The range of relative property values for individual properties will be even greater. This wide range produces large variations in the component of the weekly target rent that is derived from relative property values. For two-bedroom properties the (district average) property value component varies from £6.21 for Vale Royal to £59.63 for Kensington and Chelsea, giving a range of £53.42.

0.348 x 30% x £59.51 (average rent for the HA sector in 2004) = £6.21

3.340 x 30% x £59.51 (average rent for the HA sector in 2004) = £59.63

The minimum and maximum values⁷ for other bedsizes are shown in columns 5 to 6 of Table 2. The range (in column 7) increases as bedsize increases, from £37.62 for bedsits to £90.99 for properties with four or more bedrooms.

⁷ Vale Royal has the lowest average property value for one and two bed properties. Barrow-in-Furness (North West) has the lowest average property value for three and four-plus bed properties. Kensington and Chelsea has the highest average property value for every bedsize category.
The variation both between and within bedsizes is far greater for the relative property value component of the target rent than for the relative earnings component. Moreover, whereas the relative property value figure varies between individual properties, the relative earnings figure applies to every property of the same bedsize within the same county. For example, the relative earnings component of the target rent for all three-bed properties in Greater London is £48.95. The relative property value element, then, despite being restricted to thirty percent of the rent-restructuring formula, is able to produce far greater variation in target rents than the relative earnings element.

The ratio between the relative earnings component and the relative property values component of target rents

The Guide to social rent reforms states that:

‘30% of a property’s rent should be based on relative property values; 70% of a property’s rent should be based on relative local earnings and; a bedroom factor should be applied so that, other things being equal, smaller properties have lower rents.’

Although the rent formula uses a 70/30 split, variation in the relative earnings figure and the relative capital value figure mean that this ratio cannot be maintained in the target rents produced by the formula. The proportions of the target rent that are derived from relative property values and relative earnings can and do vary.

Proportion of the target rent derived from the relative property value by bedsize

The average proportion of the target rent that is derived from the relative property value component tends to rise as bedsize increases. Table 3 shows that, on average, the percentage of target rent that is derived from the relative property value component rises from 26.1% for bedsits up to 36.3% for four-plus bed properties (see column 2). However, there is considerable variation across the country - the relative property value component is as low as 2.1% of the average target rent for bedsits in Erewash in the East Midlands and as high as 65.1% for four-plus bed properties in Kensington and Chelsea.

Table 3: Percentage of the district average target rent that is derived from the relative property value component, by bedsize

<table>
<thead>
<tr>
<th>Bed size</th>
<th>Percentage of the target rent that is derived from relative property values</th>
<th>Mean</th>
<th>Minimum</th>
<th>Median</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Bedsits</td>
<td></td>
<td>26.1</td>
<td>2.1</td>
<td>25.8</td>
<td>52.8</td>
</tr>
<tr>
<td>One bed</td>
<td></td>
<td>29.6</td>
<td>9.1</td>
<td>29.7</td>
<td>59.5</td>
</tr>
<tr>
<td>Two bed</td>
<td></td>
<td>31.8</td>
<td>12.8</td>
<td>32.1</td>
<td>57.4</td>
</tr>
</tbody>
</table>

8 Guide to Social Rent Reforms (DTLR, December 2000)
The box plots in Figure 1 illustrate the distribution of the relative property value component, expressed as a percentage of district average target rents, for each bedsize. The box plots show the trend increase in the percentage of the target rent that is derived from the relative property value component as bedsize increases.

Since property values tend to be higher for larger sized properties, this suggests that it is the property value element, rather than the earnings element that largely determines the balance of the split between property value and earnings observed in individual target rents, which is in fact the case. Higher property values tend to increase the proportion of the target rent that is based on the relative property value. Consequently, in parts of the country where property values are high, the percentage of the target rent that is derived from the relative property value element is also likely to be high.

**Figure 1: Relative property value component by bedsize**

<table>
<thead>
<tr>
<th>Bedsize</th>
<th>34.4</th>
<th>13.3</th>
<th>34.6</th>
<th>60.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three bed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four+ bed</td>
<td>36.3</td>
<td>9.3</td>
<td>36.6</td>
<td>65.1</td>
</tr>
</tbody>
</table>

Notes:

1. The middle bar of each boxplot represents the median (the middle of the distribution; half the rents are above the median and half are below), the box represents the interquartile range (the range of the second and third quartiles), and the ‘whiskers’ represent the range of rents that are not outliers. The small circles represent outliers (values between 1.5 and 3 box lengths from the upper or lower edge of the box).

2. N= the number of districts (some districts do not have any bedsits or 4+ bed properties).

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9 The Discussion Paper quantifies the nature of the relationship and demonstrates a high positive correlation between property values and the ratio between the capital value component and the earnings component observed in target rents.
3. The outlier values, depicted by circles are: for bedsits, Erewash in the East Midlands (2.1%), Kensington and Chelsea in London (49.7%), Carrick in the South West (49.7%), and Maldon in the East of England (52.8%); for one-bed properties, Kensington and Chelsea (52.2%), and Isles of Scilly in the South West (59.5%); and for two-bed properties, Kensington and Chelsea (56.1%), and Isles of Scilly (57.4%).

Proportion of the target rent derived from the relative property value by region

On average, the percentage of target rent (for two-bed properties) that is derived from the relative property value component varies by region from an average of 21.7% for districts in Merseyside up to an average of 42.0% for districts in London (see Table 4, column 3). However, there is considerable variation across districts - the relative property value component is 12.8% of the average target rent for Vale Royal in the North West and 57.4% for the Isles of Scilly in the South West.

Table 4: Percentage of the target rent (for two-bed properties) that is derived from the relative property value component, by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Districts</th>
<th>Percentage of the district average target rent that is derived from relative property values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (%)</td>
</tr>
<tr>
<td>London</td>
<td>33</td>
<td>42.0</td>
</tr>
<tr>
<td>South East</td>
<td>67</td>
<td>38.1</td>
</tr>
<tr>
<td>South West</td>
<td>45</td>
<td>34.8</td>
</tr>
<tr>
<td>East Midlands</td>
<td>40</td>
<td>26.9</td>
</tr>
<tr>
<td>East of England</td>
<td>48</td>
<td>33.7</td>
</tr>
<tr>
<td>West Midlands</td>
<td>34</td>
<td>29.0</td>
</tr>
<tr>
<td>Yorkshire &amp; the Humber</td>
<td>21</td>
<td>26.3</td>
</tr>
<tr>
<td>North East</td>
<td>23</td>
<td>23.5</td>
</tr>
<tr>
<td>North West</td>
<td>34</td>
<td>23.4</td>
</tr>
<tr>
<td>Merseyside</td>
<td>9</td>
<td>21.7</td>
</tr>
</tbody>
</table>

The boxplots in Figure 2 illustrate the regional distribution of the relative property value component, expressed as a percentage of the district average target rent for two-bed properties. The boxplots show that the relative property value component tends to form a higher proportion of the target rent in the southern regions where average property values are high – East of England, the South East, the South West, and, London in particular.
Figure 2: Relative property value component for two-bedroom properties, by region

Notes:
1. The middle bar of each boxplot represents the median (the middle of the distribution; half the rents are above the median and half are below), the box represents the interquartile range (the range of the second and third quartiles), and the ‘whiskers’ represent the range of rents that are not outliers. The small circles represent outliers (values between 1.5 and 3 box lengths from the upper or lower edge of the box) and asterisks represent extreme cases (values that are more than 3 box lengths from the upper or lower edge of the box).

2. N= the number of districts.

3. E = East of England; EM = East Midlands; L = Greater London; M = Merseyside; NE = North East; NW = North West; SE = South East; SW = South West; WM = West Midlands; YH = Yorkshire and the Humber.

4. The extreme values, depicted by asterisks are: in Merseyside, West Lancashire (33.8%); and in the South West, the Forest of Dean (20.1%) and the Isles of Scilly (57.4%).
The relationship between earnings and property values

The exact balance of the ratio between the relative earnings component and relative property value component observed in target rents appears to be strongly influenced by the level of property values. The percentage of the target rent that is derived from relative property values tends to be higher for larger bed sizes than for smaller sized dwellings and higher in districts where property values are high. This is largely explained by the higher variation in relative property values compared to relative average earnings. However, the ratio is also affected by the extent to which average earnings and property values co-vary (move together).

The relationship between the two components is not the same across all regions. At the national level the relationship is moderate and positive across all the bed sizes, i.e., higher property values tend to be associated with higher earnings. However, if the district averages (for two-bed properties as an example) are plotted for each region (see Figure 3) it appears that not all of the regions share this positive correlation:

1. A positive relationship is observed for the South East (Figure 3a), East of England (Figure 3b) and North West (Figure 3c).
   As district average property values increase, so do the average county earnings applied to each district.

2. In the South West (Figure 3d), East Midlands (Figure 3e), and West Midlands (Figure 3f) the relationship is neutral.
   There is no pattern – average district property values do not vary in line with average earnings.

3. For districts within Greater London (Figure 3g) and Merseyside (Figure 3h) there is no variation in the earnings element.
   The same relative earnings figure applies to every property of the same bed size within Greater London: this is also the case for Merseyside. This means that within these two regions all the variation in target rents is determined by property values.

4. In the North East (Figure 3i) and Yorkshire and the Humber (Figure 3j), the relationship is negative.
   As district average property values increase, the average county earnings applied to each district decrease. Within these regions there are some districts with relatively high average property values and relatively low average local earnings and some districts with relatively low average property values combined with relatively high average local earnings.
Figure 3: Scatter plots showing the relationship between district average property values (two bed properties) and average county earnings by region.

The dotted lines indicate the national average property value (£49,750 all property types) and national average earnings (£316.40) used in the rent restructuring formula.
Implications of a negative relationship between property values and earnings

There is an adverse effect on affordability in areas where property values are relatively high, but average earnings are relatively low. In these districts the impact of the earnings element on the target rent is insufficient to offset the influence of high property values. Average target rents will seem high relative to earnings, especially in comparison to other districts that have relatively low property values and relatively high average earnings.

For example, District A (in Table 5) has a relatively high average property value that produces a high average target rent (with a relative property value component that is in excess of 30%), despite having average earnings that are low in comparison to the national average. This makes the average target rent for District A less affordable than District B, which has a relatively low average property value and average earnings that are above the national average (see Table 5).

Table 5: Examples of the effect on target rents of high property values/low earnings and low property value/high earnings

<table>
<thead>
<tr>
<th>District</th>
<th>District average property value for two-bed properties (£s)</th>
<th>(County) average earnings (£s)</th>
<th>District average target rent (£s)</th>
<th>Relative property value component</th>
</tr>
</thead>
<tbody>
<tr>
<td>District A</td>
<td>£52,051</td>
<td>£276.10</td>
<td>£55.03</td>
<td>33.9%</td>
</tr>
<tr>
<td>District B</td>
<td>£28,172</td>
<td>£318.40</td>
<td>£52.03</td>
<td>19.4%</td>
</tr>
</tbody>
</table>
The average county earnings for District A are £42.30 a week less than the average county earnings for District B, and yet the average target rent is £3.00 a week higher in District A and the proportion of the target rent derived from the relative property component is also higher.

By contrast, in areas where average earnings and property values are positively correlated, differences in the affordability of target rents are less marked. For example, District C has relatively low average earnings and a relatively low average property value, whereas in District D both average earnings and the average property value are relatively high (see Table 6). The average earnings for District C are £34.50 a week less than the average earnings for District D. However, since average property values are also lower, the average target rent for District C is also £11.91 a week less. Thus there is less of a difference in affordability between these two districts.

Table 6: Examples of the effect on target rents of low property values/low earnings and high property value/high earnings

<table>
<thead>
<tr>
<th>District</th>
<th>District average property value for two-bed properties</th>
<th>(County) average earnings</th>
<th>District average target rent</th>
<th>Relative property value component</th>
</tr>
</thead>
<tbody>
<tr>
<td>District C</td>
<td>37,266</td>
<td>286.70</td>
<td>51.12</td>
<td>26.2%</td>
</tr>
<tr>
<td>District D</td>
<td>57,797</td>
<td>321.20</td>
<td>63.03</td>
<td>32.9%</td>
</tr>
</tbody>
</table>

Possible effects on target rents if one or more of the components in the rent restructuring formula are modified

In its 2004 review of rent restructuring the ODPM recommended making modifications to only one of the elements of the formula. This is to increase the bedsize weighting for three bed properties from 1.05 to 1.10; for four bed properties from 1.10 to 1.20; and for five-plus bed properties from 1.10 to 1.30. There were no proposals for making any changes to either the relative earnings or relative property value elements. However, the review did report that the overall capital valuations of housing association stock were found to be significantly higher than the estimates based on the 1999 English House Condition Survey used to develop the target rent formula. It also noted that concerns had been expressed about the differences between actual local earnings and the county earnings levels used in the formula.

The effect on target rents of changing relative county earnings

The effect of using a different average earnings value in the formula can be quantified. Assuming the relative property value element is held constant, for every £10 increase or decrease in the earnings figure, the target rent for a two-bed property would change by approximately £1.30. Table 7 shows the change in target rent for every £10 change in average earnings for each bed size.

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10 Three-year review of rent restructuring: consultation (ODPM, July 2004) and Analysing the impact of rent restructuring: informing the 3 year review (ODPM, December 2004).
Table 7: Approximate change in target rent for every £10 change in average earnings

<table>
<thead>
<tr>
<th>Bed size</th>
<th>Approximate change (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed sits</td>
<td>£1.05</td>
</tr>
<tr>
<td>One bed</td>
<td>£1.20</td>
</tr>
<tr>
<td>Two bed</td>
<td>£1.30</td>
</tr>
<tr>
<td>Three bed</td>
<td>£1.40</td>
</tr>
<tr>
<td>Four-plus bed</td>
<td>£1.45</td>
</tr>
</tbody>
</table>

The effect on target rents of changing relative property values

The effect of changing the relative property value in the formula can also be quantified. Assuming that relative earnings are held constant, for every £10,000 increase or decrease in the property value, the target rent (for any bedsize) changes by approximately £3.60. For example, within the same county, a property with a value of £69,750 has a target rent that is approximately £10.80 lower than a property valued at £99,750.

The rent-restructuring formula uses relative (to the average for England) property values. If the 1999 estimates used to develop the formula are lower than the actual valuations then the estimated national average of £49,750 used in the formula is also understated. The effect of using an average that is too low can be illustrated using the example of the two districts with the lowest and highest average property values (Vale Royal and Kensington and Chelsea).

The £49,750 HA sector average currently used in the formula produces a property value component for two-bed properties of £6.21 for Vale Royal and £59.63 for Kensington and Chelsea. If the formula is recalculated using a higher average property value for England of £54,750 then the property value component of the target rent is reduced to £5.64 and £54.18, respectively.

Average 2-bed HA property value for Vale Royal £17,293 = 0.316
Average HA property value for England £54,750

Average 2-bed HA property value for Kensington and Chelsea £166,166 = 3.035
Average HA property value for England £54,750

0.316 x 30% x £59.51 (average rent for the HA sector in 2004) = £5.64
3.035 x 30% x £59.51 (average rent for the HA sector in 2004) = £54.18

Thus the effect of using a higher HA sector average property value figure in the formula would be to reduce all target rents and the effect is greater for higher value properties. If the national average used in the formula were to be increased by £5,000 then the average target rent for two-bed properties in Vale Royal would be £0.57 lower, whereas in Kensington and Chelsea the calculated target rent would be £5.45 lower (although the rent cap would come into effect for many properties in this district so the actual reduction, if any, would be small).
Proposed change to the bedsize weighting

The proposed changes to the bedsize weighting will increase target rents for all larger sized properties. Table 8 shows how the range of the relative earnings component will change for each bedsize. Increases in individual target rents would be modest. For example, for three-bed properties in Cornwall (the county with the lowest average earnings) the relative earnings component of the target rent would increase from £35.32 to £37.00, an increase of £1.68. For three-bed properties in Greater London (the county with the highest average earnings) the relative earnings component of the target rent would increase from £48.95 to £51.28, an increase of £2.33, although any increases for individual properties may be limited by the application of the rent cap.

Table 8: The range of the relative earnings component of target rents using the existing and proposed bedsize weightings

<table>
<thead>
<tr>
<th>Bed size</th>
<th>Existing bed size weightings</th>
<th>Proposed bedsize weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum £</td>
<td>Maximum £</td>
</tr>
<tr>
<td>Bedsit</td>
<td>26.91</td>
<td>37.30</td>
</tr>
<tr>
<td>One bed</td>
<td>30.28</td>
<td>41.96</td>
</tr>
<tr>
<td>Two bed</td>
<td>33.65</td>
<td>46.61</td>
</tr>
<tr>
<td>Three bed</td>
<td>35.32</td>
<td>48.95</td>
</tr>
<tr>
<td>Four bed</td>
<td>37.00</td>
<td>51.28</td>
</tr>
<tr>
<td>Five+ bed</td>
<td>37.00</td>
<td>51.28</td>
</tr>
</tbody>
</table>

However, while this solution would go some way to solving the problem of compressed differentials in rents of differently sized properties, it will also have the effect of increasing the overall rent take, which was not an aim of the rent-restructuring policy. This problem could be overcome by also lowering the bedsize weighting for one-bed properties and bedsits. Sector Study 37,\textsuperscript{11} which examined progress toward target rents, reported that smaller sized properties, particularly bedsits, were more likely to have an actual rent that was lower than target by more than 10% compared to larger sized properties. A small decrease in the bedsize weighting for bedsits and one bed properties would moderate increases in actual rents and help widen rent differentials between bedsizes, whilst meeting the policy objective of maintaining the overall rent take.

Conclusion

The rent-restructuring formula has sought to strike a balance between achieving rents that reflect market values, whilst remaining affordable. The formula’s 70/30 split between relative local earnings and relative property values allows the wide variation that exists in property values (which reflects attributes such as number of rooms, quality, existence of a garden, and location) to have a strong influence on the structure of rents in relation to each other. However, this is balanced by the larger weight of the relative earnings element so that properties with very high capital values still have below market rents.

The higher variation in relative property values compared to relative local earnings leads to the balance of the ratio between the earnings component and property value component observed in target rents being largely influenced by the level of property values. This feature matters less if the assumption holds that higher property values are associated with higher local earnings. However, target rents will be less affordable in those parts of the country where there is a combination of low local earnings and high property values or if local earnings, despite being high relative to the rest of the country, are not sufficiently high to compensate for high property values.

The 70% weight given to the earnings element in the formula dampens the effect of the relative property value element. The bedsize ratio applied to earnings is therefore important for maintaining the differential between properties of different sizes. The current bedsize ratio of the formula has a fairly flat gradient, i.e., the difference between bedsizes is small in comparison to the ratio observed in property values. The proposed changes to the bedsize weighting will serve to increase rent differentiation between bedsizes. However, they will also increase the level of target rents for larger sized properties and the overall rent take.

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