

Detailed calculation of out of London Living wage: method, rationale, data sources and figures for the 2010/11 calculation.

by Donald Hirsch

The following account of the process involved in setting the living wage outside London refers to the steps set out in *The Living Wage in the United Kingdom: A National Approach*. The figures used here were collected in early 2011, covering the situation in 2010, for which full data were by then available.

(i) Living cost calculation for each household type

What is being calculated:

Minimum Income Standard identifies minimum costs for each of nine household types, excluding rent, council tax and childcare.

Rationale:

Members of the public have identified what items people need for a minimum acceptable standard of living, and these have been costed at national chain stores.

Source and basis of calculation:

See annual data at www.minimumincomestandard.org. The nine non-pensioner households used in MIS are single-unit households (i.e. single adults or couples living with or without dependent children, but nobody else), with up to three children for lone parents and up to four children for couples. In each case we assume certain ages of children, which makes a difference to cost (see table below). By using a range of ages, balanced across the age range, we produce a balance between figures that would be higher or lower than average compared to different age combinations.

Results:

Family type	Single	Couple	Lone parent+1 (age 0-1)	Lone parent+2 (age 2-4 and primary)	Lone parent+3 (age 2-4, primary, secondary)	Couple +1 (age 0-1)	Couple +2 (age 2-4, primary)	Couple +3 (age 2-4, primary, secondary)	Couple +4 (age 0-1, 2-4, primary, secondary)
MIS excluding housing, childcare, council tax	£161.41	£253.98	£217.48	£292.65	£389.91	£293.71	£381.17	£475.18	£517.41

Source: http://www.minimumincomestandard.org/downloads/spreadsheets/budget_summaries_2008-2010.pdf

(ii): Rent, council tax and childcare calculations

(a) Council rents for families

What is being calculated:

Average council rent for families with children for local authorities outside London.
(This uses simple average for each local authority that still has council housing)

Rationale:

In line with London Living Wage approach, assume that the cheapest available property will be a council letting. Using the average assumes that if you are lucky enough to get a council property you can't expect choice on price.

Source and basis of calculation:

Average council rents in England by region, Scotland and Wales are reported for 2009/10 in the 2010 Housing Finance Survey. These are broken down by number of rooms, and for each family type the number of rooms defined as required by MIS groups was used. The CLG also shows current rents, not broken down by room number, in its 'live tables', and the percentage rises between 2009/10 and 2010/11 were applied to the rents for each room number in order to get an up to date figure. The resulting rents for English regions outside London and for Scotland and Wales were averaged using a weighting based on population. Average council rents in England by region, Scotland and Wales are reported for 2009/10 in the 2010 Housing Finance Survey. These are broken down by number of rooms, and for each family type the number of rooms defined as required by MIS groups was used. The CLG also shows current rents, not broken down by room number, in its 'live tables', and the percentage rises between 2009/10 and 2010/11 were applied to the rents for each room number in order to get an up to date figure. The resulting rents for English regions outside London and for Scotland and Wales were averaged using a weighting based on population.

Results:

Summary

COUNCIL RENT REQUIREMENT -	lp+1	lp+2	lp+3	c+1	c+2	c+3	c+4
FAMILIES WITH CHILDREN	60.56	7.48	75.07	60.56	67.48	75.07	75.07

Detail behind these calculations: are shown in Annex 1 below.

(b) Private rents for singles and couples without children

What is being calculated?

The average of the lower quartile rent in each local housing market area, outside London.

Rationale:

In line with the London Living Wage, it is assumed that people without children will not normally have access to social housing, but that they will be able to rent a home at the cheaper end of the local private rental market. In line with London, we aim to estimate the 25th percentile of the rent distribution.

Source and basis of the calculation

There is no very straightforward way of calculating such a benchmark rent. After considering several possible ways of estimating this, the following basis was used. Estimates are now being made of '30th percentile' rents for each 'Broad Rental Market Area (BRMA)' for the purposes of calculating the Local Housing Allowance (LHA) from April 2011. The private rent levels for singles and couples used here represent unweighted averages of these 30th percentile rents (reported in June 2010, the first time they were reported), in one and two bedroom properties respectively, in England outside London, Scotland and Wales, deflated to an estimate of the 25th percentile level. The deflation factor is based on analysis of data from the Family Resources survey, kindly carried out by David Rhodes at the University of York, showing the 25th and 30th percentile of rents from this survey for properties of these sizes, and hence suggesting a ratio between the two. We considered whether to use

that survey to estimate the rent figure itself, but considered that the more detailed information collected in the LHA data provides a richer primary source, and also that using a rent at the 25th percentile nationally was less appropriate than taking an average of 25th percentile figures estimated for each area. The former can be more heavily influenced by areas where most rents are relatively low, and gives no weight to rents in more expensive areas, so will be more out of line with what is available to tenants in such areas. Another advantage of the LHA figures is that they permit adjustments for local areas where requested.

Results

The following were the resulting rents used:

	Single	Couple
Private rent requirement	81.35	112.09

Details of the calculations are shown in Annex 2 below.

(c) Council tax

What is being calculated?

The average council tax paid across local authorities outside London by a family of each given type, living in basic accommodation.

Rationale:

People in different parts of the country pay different amounts of council tax – this average is the closest estimate of what families have to pay, and follows the London Living Wage practice of taking such an average.

Source and basis of the calculation:

The Government published Band D figures for each local authority, and a simple average of the total council tax bill for a Band D property in each billing authority is used as a baseline. This is then adjusted according to the standard formula to the relevant band, based on which band was observed as relevant to the family type in the MIS research (e.g. a couple without children, in Band A, pays two thirds of the Band D rate). Single adult reductions of 25 per cent are applied.

Results

Family type	Single	Couple	Lone parent+1	Lone parent+2	Lone parent+3	Couple +1	Couple +2	Couple +3	Couple +4
Council tax	13.63	18.17	15.90	15.90	15.90	21.20	21.20	21.20	21.20

Details of the calculations are shown in Annex 3 below.

(d) Childcare

What is being calculated?

Full-time childcare costs, averaged across regions, based on the Daycare Trust survey of regional childcare costs applied to MIS assumptions about how many hours of childcare a working family needs.

Rationale:

For a family with children, in which the parent(s) are working full time, we need to assume that paid-for childcare will be required for young children not at school, including after-school club up to the end of primary school. These costs vary across regions (although outside London and the Southeast not by a huge amount), and the Daycare Trust survey provides a basis for taking an average cost (as it does for the London Living Wage). The range of ages used as examples in the MIS family types enable us to consider a range of childcare costs facing different households, and the final living wage calculations is based on an average of these.

Source and basis of the calculation

Using figures from the Daycare Trust survey published every January, we can calculate (1) the hourly cost of a childminder in each region and (2) the average cost of a session of an after-school club. Across regions outside London, the average hourly cost of the childminder is very close to that used in MIS, while the after-school club is slightly cheaper. On this basis, we have adjusted the MIS figures for childcare costs proportionately to reflect the unit costs measured in the survey.

Results

The following childcare costs were calculated. Details of the calculation are in Annex 4 below.

Family type	Lone parent+1 (age 0-1)	Lone parent+2 (age 2-4 and primary)	Lone parent+3 (age 2-4, primary, secondary)	Couple +1 (age 0-1)	Couple +2 (age 2-4, primary)	Couple +3 (age 2-4, primary, secondary)	Couple +4 (age 0-1, 2-4, primary, secondary)
Childcare	143.09	184.10	184.10	143.09	184.10	184.10	253.88

(iii) Calculating wage requirement for each family type

What is being calculated?

The wage that produces enough income after taxes, benefits and tax credits to cover the expenses specified in (i) and (ii) above. This assumes that families claim everything that they are entitled to. For couples, it shows the wage that both partners would have to earn to reach the minimum.

Rationale

This translates the minimum income standard into a minimum wage requirement. It assumes everyone in the family is able to work full time. Where this is not the case, a higher hourly wage would be needed. In this sense, the Living Wage level, like MIS itself, represents a benchmark which nobody should have to be below, rather than necessarily something that will meet every household's needs.

Basis of the calculation

The Minimum Income Calculator at www.minimumincome.org.uk, is used to derive a gross annual earnings requirement, which is then divided by the number of working hours in the year. We assume 365/7 weeks in the year, and 37.5 hours in a working week (the figure most commonly used in wage bargaining negotiations).

Results

The following summarises the composition of the costs as set out above, and how this translates into wage requirements.

Family type	Single	Couple	Lone parent+1	Lone parent+2	Lone parent+3	Couple +1	Couple +2	Couple +3	Couple +4
MIS excluding housing, childcare, council tax	161.41	253.98	217.48	292.65	389.91	293.71	381.17	475.18	517.41
Rent	81.35	112.09	60.56	67.48	75.07	60.56	67.48	75.07	75.07
Childcare	0.00	0.00	143.09	184.10	184.10	143.09	184.10	184.10	253.88
Council tax	13.63	18.17	15.90	15.90	15.90	21.20	21.20	21.20	21.20
Total: target net income	256.38	384.24	437.03	560.12	664.98	518.56	653.94	755.55	867.57
Annual wage requirement	16585	23455	12257	18087	26813	20664	28484	36135	35898
Hourly wage requirement	8.48	6.00	6.27	9.25	13.71	5.28	7.28	9.24	9.18

(iv) Producing a single Living Wage

What is being calculated?

A weighted average of the wage for different household groups

Rationale

As with the London Living Wage, we deal with the fact that different households have different wage requirements by producing an average requirement, weighted by the number of households of each type. While this is clearly higher than it needs to be for some households and lower for others, in practice over six in ten households in the categories that we consider are covered by a wage very slightly (less than 10p) above the average that we calculate. To cover more categories of household than this would require a much higher wage – over £1 more than the figure being used.

Basis of the calculation

Using information on the number of households in each type from the Expenditure and Food Survey, each of the family type is given a weighting. We then produce a weighted average of the hourly wage requirements calculated above. As with the London Living Wage, we end by rounding to the nearest 5p for ease of use and presentation.

Results

Family type	Single	Couple	Lone parent+ 1	Lone parent+ 2	Lone parent+ 3	Couple +1	Couple +2	Couple +3	Couple +4
Wage requirement	8.48	6.00	6.27	9.25	13.71	5.28	7.28	9.24	9.18
Weighting=number of households of this family type as a percentage of all households of the family types shown here	0.24	0.28	0.06	0.04	0.01	0.12	0.17	0.05	0.01
Wage times weighting	2.08	1.69	0.35	0.39	0.19	0.65	1.25	0.49	0.13

TOTAL of final row: **£7.21**. Rounded to **£7.20**

v) Limiting single-year increases

What is being calculated?

From 2011/12 onwards, two kinds of limit on the amount that the Living Wage as applied can rise in any one year. The first limits the increase in the net income (after taxes and benefits) requirement for each household on which the living wage calculation is based, relative to the rise in net income that would be achieved by someone on average earnings. The second limits the increase in the living wage itself (representing gross income) relative to the increase in average earnings.

Rationale

If the income needed to sustain a minimum acceptable standard of living rises much faster than average earnings, there will be limits to how far it is acceptable for employers to increase wages for the lowest earners to meet their increased needs. Two scenarios arise, requiring the double limit described. One is that due to the rising relative price of necessities and/or the identification of new items that need to go into a minimum household budget, minimum living costs are rising much faster than people's average post-tax income. Setting a limit to this relative increase is a way of saying that in tough times, even if minimum needs are rising fast, it is unrealistic to meet them in full if this means a big increase in net incomes of those on the minimum at a time when everyone else's living standard is stagnating or falling. The second scenario is that, even after this limitation on net income, gross income (i.e. earning) requirements rise much more quickly than the average rise in earnings. This could occur because the tax and benefits system is becoming less favourable, so people need to earn more in order to achieve a given net income. In such a case, it is unreasonable to ask employers immediately to foot the bill of this extra cost imposed by government.

In both cases, the application of the limit would immediately create a gap between the calculation of the living wage requirement in steps (i) to (iv) above and the actual published living wage level. The former would continue to be calculated independently of the cap and, while the cap was operational, represent a 'reference' level to the living wage – the level that should be aspired to. As long as the applied level was below the reference level, it would continue to increase each year by the maximum amount permitted by the cap.

Basis of the calculation

There are a number of different indicators of earnings that could be used to make this calculation. We have chosen the 3-monthly average weekly earnings figure (excluding bonuses) in the Labour Force Survey. The annual rise to April of each year will be used as the benchmark. Other data sources appear to be too out of date to serve as timely indicators of what is currently happening to earnings and incomes. For example, the Annual Survey of Hours and Earnings (ASHE) figure is useful in reporting median as well as mean earnings, but is effectively a year out of date for our purposes. Analysis shows that in the past three years, using the median for this survey would have produced similar results, a year later, as the equivalent period in the Labour Force Survey, but if applied with a year's lag would have only picked up the serious effect of the downturn on earnings a year after they occurred. The reason for selecting an earnings measure not including bonuses is that total remuneration figures fluctuate greatly from quarter to quarter, which would distort the figure chosen in an arbitrary fashion.

For the net income calculation, we will consider, separately for each household type, (A) how much net income would rise as a percentage if each adult were on average earnings. We will compare this to (B) the percentage increase in minimum living costs, net of government help with specific costs (i.e. people's total budget requirement minus any housing benefit, council tax benefit and childcare tax credits). If (B) is more than two percentage points above (A), we will limit it to two percentage points above (A), separately for each household type.

For the gross income calculation, we will compare the percentage increase in average earnings to the percentage that the applied living wage would have to rise by in order to reach the new requirement (calculated on the basis of any net income limitation as described in the previous paragraph. If the required rise exceeds the increase in average earnings by at least two percentage points, we will limit it to two percentage points above average earnings.

In the case of any limitation either on net income or gross earnings, a distinction will be made between the 'reference' living wage and the 'applied' living wage until such

time as these once again become equal. In each year that both of these levels exist, the calculation of a reference living wage will be made from scratch, and the applied living wage will be increased towards this level to the maximum extent possible, constrained by the maximum percentage increases applied to the previous year's applied living wage.

2 Change 2009/10 - 2010/11 without breakdowns by dwelling size - from CLG live table 701

	2009-10	2010-11	Factor rise
North East	54.61	56.39	1.03
North West	57.19	58.51	1.02
Yorkshire and the Humber	55.63	56.89	1.02
East Midlands	57.46	58.96	1.03
West Midlands	61.47	63.27	1.03
East	68.13	69.52	1.02
London	82.43	83.40	1.01
South East	72.99	74.15	1.02
South West	61.44	62.55	1.02

England 66.05 67.36 1.02
 (no data for Scotland or Wales: assume rise same as England)

3 2010/11 estimated values, calculated from factor rise

	North West	North East	Yorkshire & the Humber	West Midlands	East Midlands	East	South East	South West	England	Wales	Scotland
	57.75	55.01	54.97	60.82	57.59	67.81	72.38	59.79	65.32	60.65	48.51
	63.52	59.85	59.62	69.02	62.19	76.63	81.99	68.37	71.71	66.59	53.26
	70.11	64.40	63.02	76.25	68.68	85.84	88.98	76.53	86.60	80.41	64.32

4	Weighted average across regions outside London										Total	
Population estimates (from ONS midyear 2009)	6,897,905	2,584,262	5,258,114	5,431,079	4,451,240	5,766,625	8,435,718	5,231,243		2,999,319	5,194,000	52,249,505
Weighting	0.13	0.05	0.10	0.10	0.09	0.11	0.16	0.10	0.00	0.06	0.10	
Rent times weighting												
Two bedroom	7.62	2.72	5.53	6.32	4.91	7.48	11.69	5.99		3.48	4.82	60.56
Three bedroom	8.39	2.96	6.00	7.17	5.30	8.46	13.24	6.85		3.82	5.29	67.48
Four bedroom	9.26	3.19	6.34	7.93	5.85	9.47	14.37	7.66		4.62	6.39	75.07

Annex 2 Details of private rental calculation

1 Average of 30th percentile rents from LHA statistics outside London (1)

1 bedroom	2 bedroom
AVERAGE: 93.5480226	115.8654237

(1) Taken from June 2010 for England, August 2010 Scotland and Jan 2011 Wales - the first months for which these data reported

2 To get from 30th to 25th percentile, analysis of Family Resources Survey rents (2008/9) supplied by David Rhodes, York University

	25th percentile	30th percentile	Ratio
One bedroom	60	69	1.15
Two bedrooms	89	92	1.033708

3 Translate LHA data in 1 into 25th percentile

1 bedroom	2 bedroom
81.35	112.09

Annex 3 Details of council tax calculations

	Single	Couple	lp+1	lp+2	lp+3	c+1	c+2	c+3	c+4
Average Band D rate(1)	27.26	27.26	27.26	27.26	27.26	27.26	27.26	27.26	27.26
Multiple of band D (2)	0.50	0.67	0.58	0.58	0.58	0.78	0.78	0.78	0.78
Council tax £/week	13.63	18.17	15.90	15.90	15.90	21.20	21.20	21.20	21.20

Notes: 1) Simple average of all billing authorities outside London, 2009-10, times council tax inflation from RPI for 2010/11, translated to weekly

Band D Average 2009	Council tax inflation 2009-10
1,398	1.017

Band D average 2010-11

Annual	Weekly
1421.28	27.26

2) This is standard multiples using national rules for the bands that equate to the relevant family type in MIS. (Includes 25% reduction for single adult.)

Sources

<http://www.communities.gov.uk/documents/statistics/xls/1289054.xls>
<http://www.statswales.wales.gov.uk/TableViewer/tableView.aspx?ReportId=877>
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Local-Government-Finance/DatasetsCouncilTax>

Annex 4 details of childcare cost calculations

CHILDCARE CALCULATION	lp+1	lp+2	lp+3	c+1	c+2	c+3	c+4
Original MIS	143.78	199.07	199.07	143.78	199.07	199.07	269.14
Variation (see below)	-0.69	-14.97	-14.97	-0.69	-14.97	-14.97	-15.26
New	143.09	184.10	184.10	143.09	184.10	184.10	253.88

CALCULATION OF VARIATION (regional out of London average compared to MIS cost assumptions)

1 Calculate unit cost of (a) an hour of childcare and (b) a session of after-school care, regional average outside London

Childcare 2010 - daycare trust	Childminder 25 hrs	Childminder per hour	After school club (weekly)	Weighting: pop of children (from HBAI survey)
London	103	4.12	45	1.6
England	83	3.32	45	10.8
Wales	80	3.2	39	0.6
Scotland	79	3.16	48	1
Pop outside London				10.8
Weighted average England outside London		3.18	45.00	
Weighted average GB outside London		3.18	44.94	

2	Compare to unit cost of original MIS	Basis	MIS	Regional average	Variation
	Childminding per hour (first child)	Original £150/50 hrs, uprated by 6.5% inflation	3.20	3.18	-0.015
	Childminding per hour (additional child)	Half the first child			-0.007
	Out of school club (per child per week)	Original £45 uprated by 6.5% inflation	63.9	44.94	-18.96

3	Apply to family types	Basis	Hours childcare/wk first child	Hours childcare/wk additional children	Fraction of weeks using after school club	Total variation
	One child (infant)	50 hours childcare x 48/52 weeks	46.15384615			-0.692307692
	Two children (pre plus pri)	As infant plus 39/52 after school plus 9/52 second child with childminder	46.15384615	8.65	0.75	-14.97387821
	Three children (pre plus pri plus 2ndary)	As two children	46.15384615	8.653846154	0.75	-14.97387821
	Four children (inf plus pre plus pri plus 2ndary)	As two children plus additional infant half-price	46.15384615	46.15	0.75	-15.25512821