



cutting through complexity

The Living Wage: an economic impact assessment

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Executive Summary



1

The national Minimum Wage is currently £6.50. The Living Wage Foundation has set the Living Wage at £7.85 across the UK except for London, where it is £9.15. We estimate that around 6 million people in the UK over the age of 21 currently earn less than the Living Wage.

2

Universal voluntary adoption, that is, raising the income of all those currently earning less than the Living Wage up to the Living Wage, would add £11.1bn, or 1.3% to the national wage bill. The cost to employers would include an additional £1.3bn in employer National Insurance Contributions (NICs), making the total cost £12.4bn. The difference between the Minimum Wage and the Living Wage is 24% (average of London and rest of UK) and the average increment needed to bring all those with lower wages up to the Living Wage would be 15%.

3

The costs of paying a Living Wage vary widely across different employers. For large firms with a small proportion of low paid staff (e.g. cleaners), the cost would be much less than 1.3% of their wage bill. Firms with a large proportion of unskilled workers on their payroll (such as fruit pickers, shelf packers, check-out staff and waiters) will face much larger percentage increases.

4

The cost of paying the Living Wage may not be limited to raising the wages of the lowest paid. It may be necessary to pay more to those above them in the wage hierarchy in order to maintain pay differentials which reward tenure and the associated incentives to strive for promotion.

5

An important beneficiary of any general increase in wages is the Government, who stand to receive more income tax and NICs (both employer and employee) on the extra income. They will also save through reduced benefit payments, and receive additional revenues from greater VAT and excise duties as the extra income is spent.

6

The average Marginal Effective Rate of Tax (METR) measures the extra cash the Government receives for every additional pound added to the wages of the low paid. Drawing on work by the Low Pay commission and Citizens UK, KPMG have used an average METR of 59% (40% for income tax, employee NICs and benefit withdrawal, plus 7.4% for indirect taxes and 11.8% average employer NICs).

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Applying the METR of 59% to the £11.1bn increase in the wage bill will generate £6.6bn in additional government revenue. But this figure is offset by the revenue lost if employers recoup the £12.4bn cost from their other employees, or if shareholders bear the cost (as a result of lower profits). In addition, the public sector could face a £1.8bn increase in its own wage bill and £1.1bn higher procurement costs as contractors pass on their higher wage costs.

8

KPMG has taken account of the offsetting revenue losses listed above and made four separate, independent calculations of the net effect on government revenue under four alternative sets of assumptions, in which the £12.4bn required to pay the Living Wage comes (respectively) from:

- reducing the number and/or pay of other employees by £12.4bn, in which case the national wage and salary bill is unchanged and there is no additional revenue;
- reducing profits by £12.4bn, in which case the Government's £6.6bn revenue gain is offset by £2.6bn of lost corporation tax and £0.2bn of lost income tax on dividends, leaving a net increase of £3.9bn;
- increasing prices, in which case the Government would enjoy £6.6bn of additional revenue with no offset; or
- increasing productivity, in which case the Government would again enjoy £6.6bn of additional revenue with no offset.

9

KMPG simulated the effect of a wage increase using the macroeconomic model build by the National Institute of Economics and Social Research (NiGEM), which represents the current macroeconomic conventional wisdom and is used by HM Treasury for its own policy simulations. This macroeconomic analysis suggested that the increase to the Living Wage would be funded in part by reducing employment and in part by an increase in prices, leading to a net increase in government revenue of £4.6bn. Our simulation does not include any impact of increasing wages on productivity, which is assumed not to change in NiGEM.

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Some £2.9bn of this revenue would be absorbed in paying the Living Wage to the Government's own employees and meeting higher procurement costs, leaving some £1.7bn available to help employers facing the sharpest increase in wage costs.

11

Around one fifth of the workforce are employed by companies with up to nine employees and the cost of paying the Living Wage for these companies would be £2.4bn, assuming they employ a proportional number of low paid workers.

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There are limitations to this simple analysis and it is not intended to represent an accurate forecasting exercise, but instead to provide indicative figures to inform the debate. We have listed our assumptions in the Appendix and more detailed analyses of these assumptions and the sensitivity of our findings to them would be required to provide accurate estimates.

The Living Wage: an economic impact assessment

Introduction

Most of us would find it very hard to live on the UK national minimum wage of £6.50. We also believe people should be treated with dignity and paid a sufficient amount to live on. So we instinctively agree with the idea of paying the Living Wage. Higher wages would mean that the working poor are better off and some of the burden of relieving poverty is assumed by the corporate sector, to the relief of the hard-pressed public finances. This seems preferable to the rest of society having to subsidise low pay through tax credits. What's not to like?

Some of the firms who have led the Living Wage movement claim it makes commercial sense. For example, those who have increased the pay of their cleaners and other support staff find that their staff are more motivated, with less absenteeism, lower turnover – and the offices are cleaner.

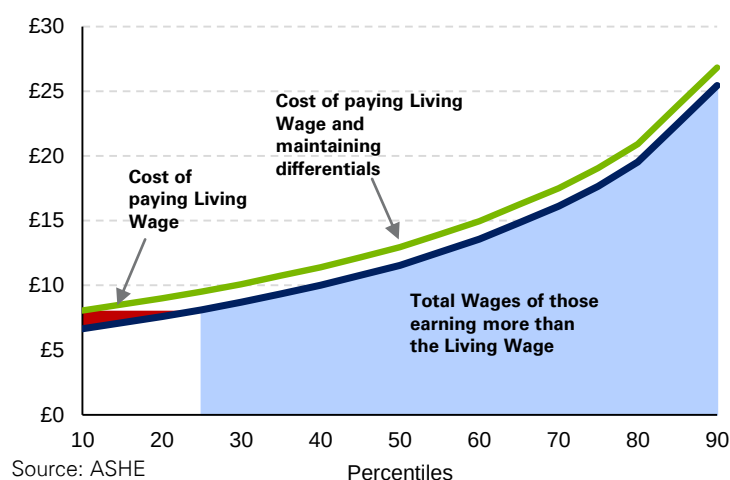
But would this be true for everyone? Those early to the Living Wage movement enjoy a first mover advantage. The latecomers could find themselves paying higher wages without any increase in productivity. And as the Living Wage becomes the norm, the early adopters could find that those who were originally highly motivated by it (for fear of dropping back to the minimum wage) become less well motivated.

Maintaining differentials

Some of the organisations who have implemented the Living Wage report that raising the wage levels of their cleaners created a problem with cleaning supervisors, who found themselves being paid no more than the cleaners themselves, despite having greater responsibility. The solution: increase the wages of the supervisors. The moral? Increasing the salaries of the lowest paid has a relatively low cost. But if you pay them more you compress differentials, reduce incentives and upset those immediately above them. Dealing with these problems costs money.

Experts on welfare and the relief of poverty all understand this fundamental point: relieving poverty is relatively cheap. To do so while maintaining incentives is much more expensive (see Figure 1). The cost is affordable when you are talking about cleaning staff, who account for a small proportion of the wage costs of a large financial institution. The same may not be true of baristas, bartenders or shelf stackers who account for a much larger proportion of the wage bill of firms in the catering and retail trades.

Figure 1: UK Hourly Wage Percentiles



Affordable in aggregate but not for some kinds of business

These commercial realities explain the opposition to the notion that everyone should pay the Living Wage, or, a fortiori, that the minimum wage should be raised to the level of the Living Wage, even though such an increase is not expensive in macroeconomic terms.

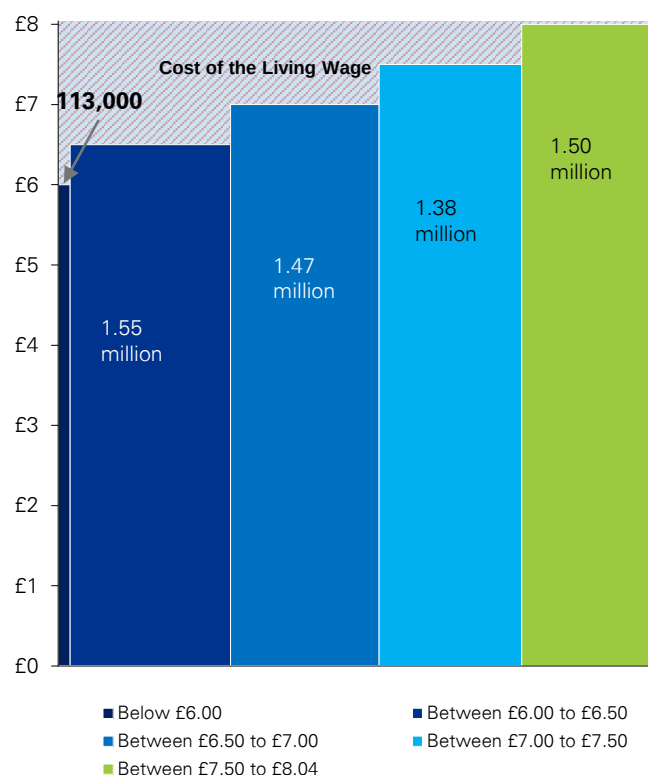
Universal voluntary adoption of the Living Wage would raise pay by an average of around 15% for those with incomes below the Living Wage (and by 24% for those currently paid the minimum wage). It is affordable because the wages of the low paid account for a small proportion of the national wage and salary bill. Paying the Living Wage to all of the low paid would raise the total national pay bill by only 1.3% (see shaded red area in Figure 1). Table 1 provides a breakdown of costs associated with the universal adoption of the Living Wage.

Table 1: Costs of Paying the Living Wage

Employee Category	Cost
Full-time employees	£9.5bn
Part-time employees	£1.7bn
Total wage increase	£11.1bn*
Employer NICs	£1.3bn
Total cost	£12.4bn
* Differences due to rounding	

However, that national average conceals a very wide divergence between different companies. For a large financial services company, for whom low-paid employees (mainly cleaners and security staff) represent a tiny proportion of the payroll, a 15% increase for the low paid will push up the total wage and salary bill by much less than 1.3%. By contrast, more labour-intensive businesses, especially those heavily dependent on cheap labour (e.g. to serve coffee or stock supermarket shelves) will see much larger – and in their eyes unaffordable – increases in their overall wage bill. That is why there are very different attitudes to the Living Wage across the business community. Figure 2 illustrates the distribution of employees under the weighted-living wage for the UK. The cross hatched area shows the cost of raising all wages up to the Living Wage.

Figure 2: Distribution of Wages



Source: ASHE

A key beneficiary: the government finances

If firms choose to increase wages, the Government benefits because revenues from tax and NICs increase. Since many of the low-paid also receive income-contingent benefits, welfare payments will fall. So could the extra revenue that accrues to the Government be used to subsidise those firms who find it difficult to pay the higher costs? And would a (subsidised) increase in the minimum wage not be a very effective way of relieving poverty?

The rest of this paper attempts to answer this question, by quantifying the cost of paying the Living Wage, quantifying the additional revenues that might consequently flow to government, and by identifying the size of subsidy that might be needed for those firms that would find it difficult to implement the Living Wage.

Raising minimum wages as a way of tackling poverty

The debate about the efficacy of minimum wages as a way of combating poverty has been running for over a century. Opponents of the idea argue that any lower limit on wages imposed by governments is inherently bad because it restricts the freedom of workers and employers to negotiate a deal that suits them both. If the hourly minimum wage is raised from (say) £7 to £8, some of those employed at £7 will lose their jobs. From this perspective, a minimum wage increases unemployment.

Supporters of the idea argue that firms have more bargaining power than individuals and, absent government intervention, will use it to drive wages down to levels that are socially unacceptable. In practice, most of those earning £7 per hour will see their wages rise to £8. Few, or none, will lose their jobs. The workers will enjoy a more acceptable living standard. The firm will benefit from a happier and more productive work force and the Government will gain extra tax revenue and pay out less in welfare.

The arguments in favour of a minimum wage have carried the day in the majority of countries around the world. But there is no consensus about the correct level at which the minimum wage should be set, mainly because the analysis of the costs and benefits of raising the minimum wage is fiendishly complicated.

Poverty, and Marginal Effective Tax Rates, depend on family circumstances as well as on income

We have a benefit system designed to relieve poverty. As such it takes account of family circumstances – families with children need more money than those without. Raising wages of the low paid, therefore, affects the recipients differently according to their family circumstance, as some individuals with dependents will lose some of their entitlement to various benefits as their incomes increase.

They will face a much higher Marginal Effective Tax Rate (METR) – the amount of additional tax paid and/or benefits withdrawn per pound of additional income. Research by the Low Pay commission showed that, in 2007-08, the average METR was close to 40%.

The METR is important, because it determines how much of the additional income paid to those on the minimum wage will flow to Government.

On top of income tax and savings on benefits, the Government also receives a further 11.8% in employers National Insurance Contribution (less than the 13.8% marginal rate because some of the low paid are below the threshold). This is paid by employers on top of the higher wages, so recipients with a 40% METR receive 60% of the higher wages, whilst the Government receives 51.8% (40% METR plus 11.8% employer NICs).

In addition, assuming that the 60% of wages received post-tax is spent by individuals, the Government will receive expenditure taxes worth 12.4% (of the 60%) in VAT and duties on alcohol, tobacco and gambling (see Table 2). This equates to 7.4% of gross wages.

Table 2: Deriving the indirect rate of tax

Calculation of Indirect Tax Rates	
Tax receipts	£bn
VAT	104.7
Alcohol	10.4
Tobacco	9.5
Gambling	2.1
Total	126.8
Total Domestic Consumption	1,025.3
Implied Tax Rate	12.40%

Source: HMRC

How much of the money spent raising wages will accrue to Government?

If companies universally adopted the Living Wage, how much additional revenue would the Government receive? And would it be enough to compensate those firms who would struggle the most to pay the Living Wage?

In this analysis we started from the average 40% rate (across all family types) estimated by the Low Pay Commission and added in the average 11.8% rate of employer NICs and the average 7.4% indirect tax rate to reach a total marginal effective tax rate (TMETR) of 59.2%.

Based on a analysis of the ASHE data base, KPMG estimate that there are 6 million employees currently earning less than a Living Wage (23% of the workforce), against last year's estimate of 5.3 million or 22% (see Appendix). The cost of bringing their incomes up to the Living Wage is £12.4bn (£11.1bn of additional pay plus £1.3bn of additional employer contributions).

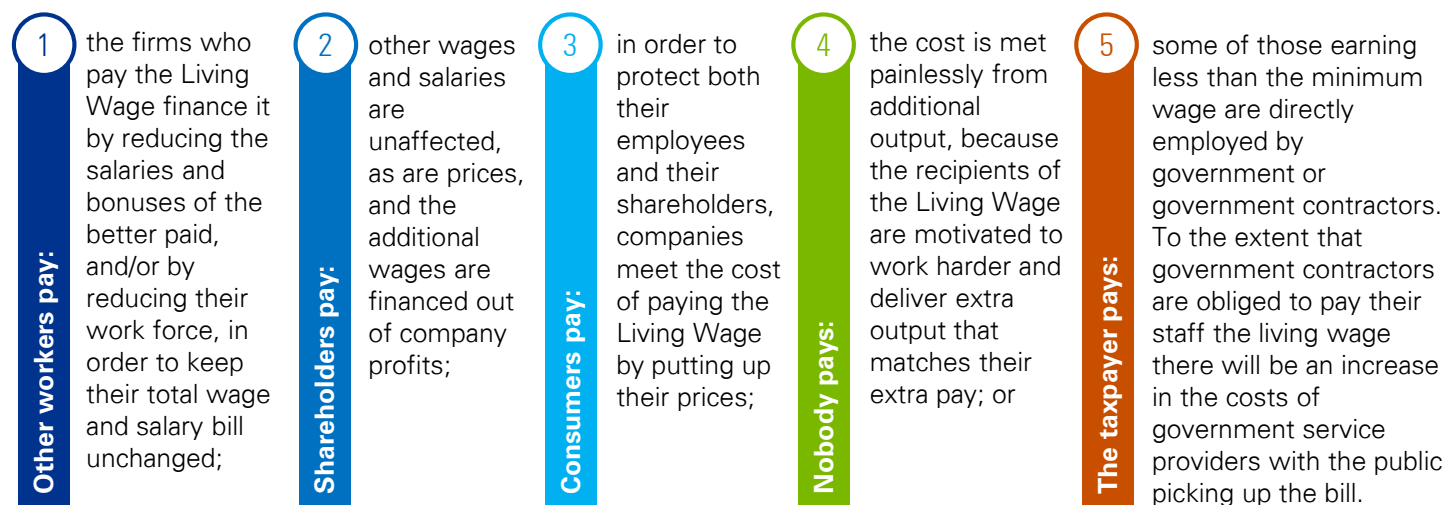
Applying an TMETR of 59.2% to the £11.1 increase in wages implies a revenue increase of £6.6bn to Government. Table 3, below, shows the breakdown.

Table 3: Fiscal Benefit Breakdown

Source of Revenue	Fiscal Benefit
Income tax, employee NICs and benefit savings	£4.4bn
Employer NICs	£1.3bn
VAT and Excise Duties (Tobacco, Alcohol and Gambling)	£0.8bn
Total amount to the Exchequer	£6.6bn

Where does the money come from to pay the Living Wage?

The £12.4bn cost of paying the living wage must come from somewhere and make some people worse off. It is not sufficient to say it comes from companies. In the end it is only people (households) who matter. Companies are legal entities whose behaviour affects the people who are their employees, their shareholders and their customers. Assuming that the Government will also pay the Living Wage, the taxpayer also comes into the equation. Any hit to company finances must be passed through to some or all of these stakeholders. There are five possible outcomes:



We examine the tax and benefit implications of each of these scenarios in turn.

1. Other workers pay; nil or negative effect on public finances

If the Living Wage is financed by cutting the workforce, the Government will lose tax revenue, and have to pay benefits to those who become unemployed. Since those who are let go are likely to be the lower paid, with similar characteristics to those now receiving the Living Wage, this is likely to be a zero sum game.

If the money is found not by letting people go but by cutting the incomes of the existing workforce, there will be a similar outcome. The better off face a 45% marginal tax rate, but only a 2% rate on National Insurance contribution on income over £817 per week. Their employers pay a further 13.8%, so the METR for direct tax in this example is 60.8%. If we factor in some indirect tax receipts then the TMETR is much greater than the 59.2% assumed for the low paid. Overall, it seems that in this scenario there will be little net benefit to Government.

2. Shareholders pay: net £5.5bn benefit to public finances

If the Living Wage is paid entirely out of profits, the Government will lose corporation tax worth 20% of the £12.4bn cost, or £2.5bn. On average, 48% of profits are paid out in dividends, of which roughly a quarter accrues to households and incurs income tax at a blended rate of around 13%, implying a further loss of tax revenue of £0.2bn.

Overall, in this scenario the Government would gain £6.6bn in additional taxes and benefit savings, and lose £2.6bn in corporation dividend taxation, a net increase of £3.9bn.

3. Consumers pay: net £6.6bn gain to public finances

If companies decide to meet the cost of the Living Wage by putting up prices, then consumer prices will rise by around 1% in order to maintain profit margins. As before, the Government will gain £6.6bn in extra tax and benefit savings.

In this scenario there are two effects on expenditure taxes. Higher prices will reduce real income, and hence the volume of real consumption. But the rise in prices will increase the Government revenue from VAT and the ad valorem duties. The net effect on tax revenue resulting from the increase in prices is close to zero (1% less consumption but at 1% higher prices), leaving the Government with a net gain of £6.6bn.

4. Higher productivity: net £6.6bn gain to public finances

There is a fourth possibility: the receipt of higher wages makes the recipients more productive, so there is more output. In this case the payment of the Living Wage is not a zero sum game but a positive sum game.

The economy grows by an amount just sufficient to pay the £12.4bn increased costs, and the Government collects £6.6bn of additional tax revenue from income tax, National Insurance contributions and indirect tax.

Summary of Scenarios 1 – 4

The above analysis suggests that the effect on the public finances of a universal move to paying Living Wage in place of minimum wage could range from a small loss (if the main effect was to create more unemployment among those currently paid below the Living Wage) to a £6.6bn benefit, if higher wages were matched by higher productivity.

5. Taxpayer pays: cost of higher public wages and procurement is £2.9bn

The public sector wage bill accounts for £138bn of the £316bn of current spending by Government departments and an increase of 1.3% in this figure, to bring public sector wages up to the Living Wage, would cost £1.8bn. The balance of departmental current spending consists of the procurement of goods and services from the private sector, the price of which will go up as a result of payment of the Living Wage. The resulting increase in the cost of public spending is £1.1bn.

Table 4: Effect on Government Revenue of Paying the Living Wage

The Four Scenarios, £ billion			
Assuming revenue needed to pay Living Wage comes entirely from source shown			
	Gains from additional wages	Offsetting losses	Net gain
Other workers pay	6.6	6.6	0
Consumers pay	6.6	0	6.6
Shareholders pay	6.6	2.6	3.9*
Nobody pays	6.6	0	6.6
Average	6.6	1.9	4.3

* Differences due to rounding

The overall effect of the Living Wage: using NiGEM

The revenue gains to Government will depend on the extent to which the higher wage bill is met by cutting employment, or putting up prices, or increasing productivity. In the absence of any empirical information about the relative size of these likely effects we could take a straight average of the four scenarios, a net revenue gain of £4.7bn.

Any policy decision about the Living Wage will be closely examined by the Treasury, whose view of the likely outcome will be driven by conventional macroeconomic wisdom. NiGEM, a macroeconomic model created by the National Institute of Economic and Social Research (funded by the Economic and Social Research Council), embodies the best current macroeconomic thinking. It is publicly available for use by its subscribers, which include KPMG.

In order to understand what the Treasury might conclude from this kind of analysis we ran a NiGEM simulation of the effect of a 1% increase in wages after one year, in order to determine the effect on employment, prices and company profits. We found that the effect was to reduce employment and to increase prices.

The simulations suggest that about 70% of the cost would come through increases in prices and 30% through a reduction in employment. There was no effect on profits. NiGEM does not link wages to productivity, so our simulation does not include any impact of increasing wages on productivity.

Although the Living Wage Commission presents micro-level data that companies moving to the Living Wage saw some increases in productivity, it is unclear whether these could be achieved at scale. Employees may be more productive if higher pay reduces worry, facilitates practicalities, such as child care and transport, and motivates staff. Conversely, current Living Wage employers may be benefiting from a first mover advantage – their jobs are more valued because they pay more than other low pay jobs, which is boosting motivation and productivity – in which case, benefits may dissipate with wider adoption.

We used these results to inform our judgement of the likely fiscal effects. We assumed that the fiscal effect of the change in employment would be nil (it could easily be negative) and that there would be no effect on productivity (though many believe there could be a positive effect).

The outcome then lies between the £6.6bn that would accrue with full pass on and the £2.7bn associated with zero pass on (i.e. the additional wages paid out of profits). On this basis, a reasonable central estimate of the additional revenue accruing to Government as a result of universal payment of the Living Wage is around £4.6bn.

However, the Government may also face increased costs of £2.9bn, resulting from paying the Living Wage to its own employees and higher procurement costs resulting from pass-on of the extra wage costs by the private sector. So the net benefit to the public finances is £4.6bn of extra revenues, less £2.9bn of extra costs, leaving a fiscal windfall of £1.7bn.

Table 5: Effect on Government Revenue of Paying the Living Wage

The Four Scenarios, £ billion			
Assuming revenue needed to pay Living Wage comes entirely from source shown			
	Net Gain	NiGEM Weights	Contribution
Other workers pay	0	0.3	0
Consumers pay	6.6	0.7	4.6
Shareholders pay	5.5	0	0
Nobody pays	6.6	0	0
Average			4.6
Effect on Government Spending of Paying the Living Wage			
Higher public sector wages			-1.8
Higher procurement costs			-1.1

* Differences due to rounding

Helping small companies

It has been suggested that smaller companies, many of which pay low wages, could be disproportionately affected by adoption of the Living Wage.

Around a fifth of the work force are employed by companies with up to nine employees, and in these companies the average number of employees is three.

The cost of the Living Wage to those employers, if they employed an average number of low-paid workers, would be £2.4bn.

These figures suggest that the Government could consider using the fiscal windfall it would enjoy as a result of universal voluntary adoption of the Living Wage to ease the burden on those companies who face the biggest increase in their wage bills.



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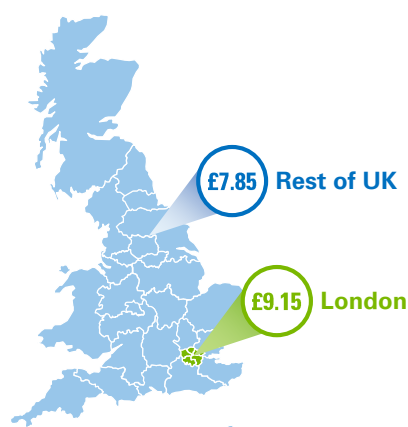
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Appendix

1. Deriving the weighted Living Wage used in the analysis

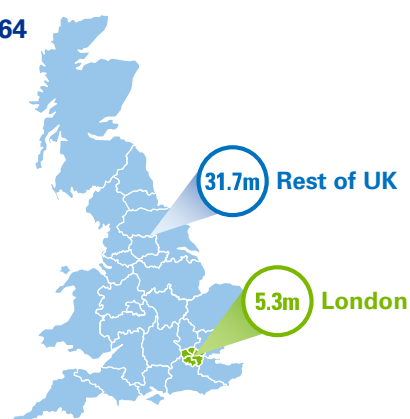
When computing the cost of raising employees to the Living Wage, we have derived a weighted Living Wage based on the working-age population of London and the rest of the UK. The Living Wage Foundation has published two regional figures for the Living Wage:

Living Wage



We use the following working-age population for London and the rest of the UK to derive a weighted-average Living wage.

Population aged 21-64



We calculate a weighted-average Living wage of £8.04.

2. Number of low paid people

We used both the low pay dataset and the ASHE to calculate the number of people below the Living Wage. We interpolated between data points in each set to estimate the number of people below the Living Wage and took the average of the two figures.

Relevant tax rates and threshold

Source	Tax rate up to initial threshold	Threshold (£/year)	Relevant tax rate applicable above threshold	Threshold (£/hour) working a full-time week
Income Tax	0%	£10,000	20%	£5.00
Employee NICs	0%	£7,956	12%	£3.97
Employer NICs	0%	£7,956	13.80%	£3.97

Assumption 1: All workers over the age of 21

We consider the total number of employees over the age of 21. This will include some apprentices and explains some of the people who earn below the minimum wage.

3. Costing the Living Wage

Assumption 2: Part time workers

We use the national split of full-time employees and part-time employees and apply it to the ASHE dataset at each wage interval. If part time workers are more likely to be lower paid then we will have overestimated the costs and Government revenues.

Work type	Share of Employees
Full-time employees	74%
Part-time employees	26%

Assumption 3: working hours

We assume full-time employees work, on average, 38.5 hours, and part-time employees work exactly half that (19.25 hours). If actual working hours are lower than this assumption, we will have overestimated the costs and Government revenues.

Assumption 4: impact of increasing prices

We have assumed that, if prices rise in order to recoup the costs of the higher wages, total household expenditure is unchanged. Any substitution in favour of imports, for example, may lower tax revenues for the Government. Any increase in expenditure to maintain real consumption may increase tax revenues for the Government.

Assumption 5: cost to Government

We have assumed that the cost to Government of paying the Living Wage is the same, relative to its overall wage bill, as for the rest of the economy, i.e. an increase of 1.3%.

All other assumptions are contained in the body of the report.

4. Number of people below the Living Wage

Our estimates are higher than Markit's estimates, which were based on 2013 data, as the number of people in employment was higher in 2014. The Living Wage has also been increased in 2015.

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