

**The Economic Impact of Extending the Living Wage to all  
Employees in the UK**

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## Introduction

UNISON has commissioned Landman Economics to carry out an economic analysis of the potential impact of extending the living wage to all employees in the UK. The living wage is defined as “the [hourly] wage rate that is necessary to provide workers and their families with a basic but acceptable standard of living” (Lawton and Pennycook, 2013). The appropriate rate of the living wage at any particular time is calculated by researchers at the Greater London Authority (for London) and the Centre for Research in Social Policy at the University of Loughborough (for regions outside London). The rate depends on the costs of living in London and other regions as well as other factors which affect living standards such as the level of in-work support available to employees on low earnings. As of November 2012, the living wage rates applying to the UK were £8.55 per hour in London and £7.45 per hour outside London, reflecting the fact that costs of living in London are significantly higher than other parts of the UK. This compares with a current statutory National Minimum Wage level of £6.31 per hour for workers aged 21 and over.

Traditionally, most advocates of a living wage for the UK have recommended a voluntary approach to the adoption of the living wage with expansion of coverage driven by groups of workers negotiating with individual employers and procurers of employment contracts for service provision, in contrast to the statutory nature of the National Minimum Wage. This is because of fears about possible adverse employment impacts if a living wage were introduced across the board on a statutory basis. However, although living wage campaigners have had some high-profile successes over recent years in persuading employers to adopt the living wage, coverage is still extremely patchy. There are still several million employees paid less than the living wage in the UK – and the overall trend is that the number of people paid at less than living wage rates is increasing rather than falling. Recent research from the Resolution Foundation estimates that the number of employees paid at hourly rates less than the living wage rose from 3.4 million (14 percent of the workforce) in 2009 to 4.8 million (20 percent of the workforce) in 2012 (Resolution Foundation, 2013).

An alternative to the current voluntary approach would be to introduce the living wage on a statutory basis for all employees – raising the National Minimum Wage to the Living Wage level, bringing those 4.8 million people on hourly pay rates currently below the living wage up to the living wage. This report asks whether fears of large scale employment losses from extending the coverage of the living wage in this way are justified, or whether they have been overstated. There are in fact two reasons why extending the living wage might not have the adverse employment impacts claimed in some of the previous literature on this subject. Firstly, even in the standard microeconomic model of labour markets and employment determination, the employment impact of a wage floor depends crucially on assumptions about the competitive structure of the labour market and on assumptions about employer

behaviour. Under certain conditions (explained in more detail later in the paper) the employment impact of a minimum wage can actually be positive or zero rather than negative. Secondly, most previous studies of the employment impact of the minimum wage and/or the living wage ignore the potential macroeconomic impacts of increasing wages in terms of increased net incomes for workers leading to increased demand for goods and services, and also the improvement in the public finances arising from higher tax receipts and lower benefit and tax credit expenditure. This stimulus to demand should produce a boost to employment which may offset (or more than offset) any reductions in employment resulting from microeconomic factors. The macroeconomic stimulus effect of increasing the minimum wage becomes particularly important in the current depressed economic environment, with the employment rate considerably lower than its pre-2008 peak level.

The aim of this report is to make a realistic assessment of the employment impact of an across-the-board introduction of a statutory living wage, taking into account the two factors mentioned above. The report is structured as follows: Section 1 below looks at the evidence on the microeconomic effects of the living wage (drawing on evidence on the employment impact of minimum wages in the UK and elsewhere), while Section 2 looks at the potential macroeconomic stimulus impacts of a living wage. Section 3 concludes.

## **1 The microeconomic effects of extending the living wage**

### **Theoretical models of the effect of minimum wages on employment**

The predictions from economic theory about the potential employment effect of a wage floor depend on the assumptions made about the way the labour market works.

The most simplistic economic model of the labour market assumes 'perfect competition', whereby each worker is paid the value of what he or she produces. This model predicts that a minimum wage will either have no effect on the labour market whatsoever (if set at a level below what the lowest-paid worker in the labour market is paid) or will reduce employment (if set above this level). In this view, the higher the minimum wage is, the higher unemployment will be. Any worker for whom the minimum wage is greater than the value of their hourly productivity will lose their job when the minimum wage is introduced in this model.

Alternative models based on 'imperfect competition' in the labour market (e.g. Manning 2003) suggest that due to features of real-world labour markets such as employers' market power and the costs to employees of moving jobs, it is quite possible that many workers are being paid less than the value of what they produce.

In this situation, it is possible for a minimum wage to raise wages without having any adverse effect on employment. In fact, in certain models there may be a positive impact on employment (Card and Krueger, 1995). There is still a certain critical level of minimum wage above which we would expect to encounter adverse employment effects, but it is an empirical question as to where that level is.

Kaufman (2009) suggests that there is an additional rationale for minimum wages that goes beyond arguments about the structure of the labour market. This is the inequality of bargaining power between workers and employers. Bargaining inequality arises partly from the fact that labour is a perishable good which cannot be inventoried like most other production goods. Most workers' bargaining power in employment negotiations is limited by the fact that they cannot afford to live for long without working – in other words they are likely to have 'shallower pockets' than employers. This is particularly the case for workers on very low wages who are unlikely to be able to save large amounts. Also, in countries with relatively weak employment protection, unskilled workers are easier to substitute with alternative sources of labour in the event of industrial action (because employers do not need to spend a lot on training up new workers if they dismiss the strikers). Hence, the particular conditions of low-wage labour markets tilt bargaining power in favour of employers and results in low-wage workers having to accept lower average wages than they would do if bargaining strength of employers and workers were equal.

### **Empirical research on minimum wage employment effects**

Theory, then, suggests that the employment impact of a minimum wage is an open question. What does the empirical evidence suggest? The debate has swung wildly between defenders and opponents of minimum wages ever since 1995, when two eminent American labour economists, David Card and Alan Krueger, produced results from micro-studies on US data<sup>1</sup> which seemed to overturn the standard orthodoxy, showing that the best estimate of the effects of the minimum wage on US employment using micro-data from the 1980s and early 1990s was zero (Card and Krueger, 1995). This conclusion has since been challenged: Neumark and Wascher (2007) argued, based on a meta-analysis of findings from micro-studies in the US and other countries, that there is a significant negative impact of increases in the minimum wage on employment, averaging across all studies.

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1 In the US there is a national (federal) minimum wage but each individual state can choose to set a state-level minimum wage in excess of the national minimum. Most of the US studies are based on “difference-in-differences” estimates which look at the change in employment levels in a state or states where the minimum wage was increased and compare this with the change in employment levels in a state or state where the minimum wage was held constant. Often, the studies look at matched workplaces in each state (for example, fast food outlets).

However, more recent analysis by Doucouliagos and Stanley (2009) using a meta-study of 1,474 empirical estimates of the effect of minimum wages on employment from 64 studies using US data finds that the results of Neumark and Wascher – at least for the US – are entirely driven by publication bias. This is the tendency, well-documented in empirical academic publications in a host of subjects, for empirical research which produces an outcome of an intervention or policy significantly different from zero to be more “interesting”, and hence more likely to be published, than research which shows no effects of the policy or intervention (Sackett, 1979). In a minimum wage context, this gives two implications:

1. Studies which find a negative impact of minimum wages on employment are more likely to be published than studies which find no effects.
2. Where researchers conduct an empirical study which produces several different results<sup>2</sup>, there is a tendency to focus on the results which are statistically significant and different from zero, as this will make the paper more likely to be published (publication being the immediate objective of most researchers).

Once publication bias is controlled for using appropriate statistical techniques<sup>3</sup>, the estimated average effect of minimum wages on employment in the United States from the meta-analysis is almost exactly zero.

The evidence from the UK is smaller in quantity but of comparable quality to the US. The Low Pay Commission (LPC) regularly commissions empirical work on the labour market effects of the UK's National Minimum Wage (NMW). The two most recent major LPC studies are as follows:

- Dickens, Riley and Wilkinson (2009) use data from the UK Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE), and local area-level data to examine the impact of rises in the NMW between 2001 and 2006 on the wage distribution and on UK employment and unemployment. In terms of wage impacts, Dickens et al find little evidence of 'spillover' or 'knock-on' impacts on wages further up the wage distribution<sup>4</sup> –

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2 Most empirical research, whether based on macro or micro data, produces several different estimates of the impact of the policy intervention being studied. The reason is that there are many different specifications that can be used for a regression (in terms of which variables are included and which are left out, the sample period, the particular econometric estimation technique used, etc.)

3 The techniques are based around the idea that in the absence of publication bias, the probability distribution of the estimated effects of a policy should follow a symmetric distribution around the average. If the estimated effects are asymmetrically distributed (as is the case for the minimum wage studies examined by Doucouliagos and Stanley) then it is clear evidence of publication bias, and the 'real' average effect has to be estimated from the 'truncated' distribution.

4 Prior to the introduction of the NMW in 1999 there was some concern that it would prompt knock-on wage increases for workers further up the wage distribution in a bid to maintain differentials

the effects of the minimum wage are mainly confined to the lowest paid 10 percent or so of wage-earners. The impacts on employment are mixed, but small. There is some evidence of reductions in hours for adult men resulting from upratings of the NMW in 2001 and 2003, but these are small in magnitude. In general there is no statistically significant evidence of reductions in employment or increases in unemployment arising from the uprating of the minimum wage in the UK. This is consistent with earlier evidence on the initial introduction of NMW which found no employment or unemployment effects.

- Bryan, Salvatori and Taylor (2012) estimate the employment impact of the NMW during the recent recession using data from 2008 to 2011 and compare these results with impacts estimated for the years before the recession (1999 to 2007). The analysis uses two methods: (1) difference-in-difference (DID) methods applied to data from the UK Labour Force Survey (LFS), comparing workers earning the minimum wage with workers just above the minimum wage; (2) methods based on the extent to which the NMW affects earnings in different geographical areas, derived from the Annual Survey of Hours and Earnings (ASHE). This is based on the idea that the NMW has a large “bite” in low pay areas but a smaller bite in high pay areas. The results suggest that the NMW had no adverse effect on employment retention, hours worked or the probability of unemployed people finding a job either before or after the recent recession.

In summary, there is no evidence that the recent levels of minimum wage in the UK have produced any adverse effects on employment. This conclusion also tallies with recent evidence for the United States (where the most research on this topic has been done).

### **Recent research on the potential employment effects of the living wage**

While there is no evidence that the minimum wage has caused adverse employment effects in the UK, moving the minimum wage up to the Living Wage would be a significant increase - £1.14 per hour outside London and £2.24 in London at current NMW and living wage rates. Putting macroeconomic effects to one side for now, is there any reason to expect a significant reduction in employment if a living wage were implemented across the board with immediate effect in the UK?

Because the UK does not have a statutory living wage, estimates of the potential employment effect of the policy have to be done by simulation rather than by evaluation of recent labour market data. The most recent such estimate is from a report by the Institute for Public Policy Research and the Resolution Foundation, *Beyond the Bottom Line: The Challenges and Opportunities of a Living Wage*

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between the lowest paid workers and those slightly further up the distribution. However, this does not seem to have happened (for earlier evidence see Dickens and Manning (2004)).

(Lawton and Pennycook, 2013). This report argues for a voluntary rather than a statutory approach to extending living wage coverage, at least in the private and voluntary sectors.

The IPPR/Resolution Foundation research uses estimates from the National Institute for Economic and Social Research (NIESR) – one of the UK’s leading independent macroeconomic forecasters – of how many jobs would be lost if the living wage were introduced across the board in the private and voluntary sectors. The NIESR model estimates 160,000 job losses. Against overall UK employment levels of 29.8 million<sup>5</sup> this implies a reduction of around 0.5 percent in overall UK employment – not a large impact, but not negligible.

As the authors of the IPPR/Resolution Foundation point out, the NIESR research should not be taken (and is not intended to be presented) as a definitive estimate of the employment impacts of introducing a statutory living wage, because:

*“The analysis... only provides estimates of the impact of a wholesale move to the living wage pay floor on labour demand. This provides a valuable insight into the employment trade-offs associated with a move to a living wage economy but it is not a prediction of the direct employment effects of such a move... The labour demand effects calculated in the paper are conditional on both the scale of output, labour force participation and labour efficiency. This means that the labour demand effects discussed here do not necessarily provide estimates of the employment effects of the living wage... The modelling does not account for possible endogenous changes such as any increases in labour efficiency or a change in the scale of production that might occur as a result of a move to a living wage pay floor and is therefore not, and was not intended to be, indicative of a general equilibrium change in employment.”*

The key point to note from this research is that if a similar exercise had been conducted prior to the introduction of the National Minimum Wage in 1999 it would also have predicted significant job losses from the introduction of the policy. The NIESR estimates assume an orthodox model of the labour market where any kind of wage floor reduces employment (unless the wage floor is set so low that it is below the level of the lowest paid worker in the labour market). But, based on the evidence reviewed above on the employment impact of the minimum wage, there is no reason to believe that the UK labour market conforms to this paradigm.

This does not mean that the minimum wage could be raised to any arbitrary level without any adverse employment effects; even in alternative models of the labour market there is *some* level above which increases in the minimum wage would result in unemployment. But it is far from clear that the living wage level is sufficiently high to cause reductions in employment.

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<sup>5</sup> Total UK employment figure of 29.84 million as reported in ONS *Labour Market Statistics*, September 2013. <http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/september-2013/index.html>



In addition, recent research from the UK<sup>6</sup> and the US<sup>7</sup> finds evidence of positive benefits in many cases where firms have introduced the living wage, including improved worker retention, and thus lower recruitment and training costs and lower absenteeism rates, as well as increased output per worker. These additional factors would also help mitigate any adverse employment effect.

Based on the LPC-commissioned evidence on the impact of the National Minimum Wage, and the IPPR/Resolution Foundation research reviewed in this chapter, it seems likely that – abstracting from any macroeconomic impacts - the employment impact of a statutory minimum wage would be somewhere between zero and a reduction of 160,000 jobs.

## **2 The macroeconomic impact of extending living wage coverage**

This second part of the report looks at the potential for positive employment impacts from an extension of the living wage to all employees arising from the macroeconomic stimulus effects of increasing wages for the low-paid on consumer demand and on the public finances.

### **The initial effect of extending the living wage on wages, profits and the public finances**

Introducing a statutory living wage would result in the following effects:

#### *An increase in gross wages for the low paid*

Research by the author for the TUC in summer 2013 found that introducing a statutory living wage – in effect, moving the National Minimum Wage up to the living wage floor – would increase the total gross wage bill in the UK by approximately £6.6 billion. This also tallies with the results from Lawton and Pennycook (2013).

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<sup>6</sup> For example, a study by the Greater London Authority found that more than 80 percent of employers believe that the living wage had enhanced the quality of work of their staff, while absenteeism had fallen by a quarter. Two thirds of employers reported a significant impact on recruitment and retention (GLA, 2012). Reed and Lansley (2013) also present evidence of positive productivity effects following the adoption of the living wage by firms such as KPMG, PWC and Linklaters.

<sup>7</sup> See, for example: evidence from the US which suggests that a living wage can boost productivity, not by firms substituting higher-skilled for lower-skilled employees, but by raising work effort following higher wages (Brenner, 2005; Chapman and Thompson, 2006).

### *An increase in net wages for the low paid and a boost to the public finances*

Low-paid workers only get a proportion of the living wage as an increase in disposable income; some of the increase goes to the government in the form of higher income tax and employee National Insurance Contribution payments, and reduced payments of tax credits and means-tested benefits. There is also an additional boost to the public finances from increased employer National Insurance Contribution payments.

Based on model estimates by the author for the TUC in summer 2013, extending the living wage to all employees would result in improvements to the public finances as shown in Table 1 below.

**Table 1. Estimated impact on public finances of the introduction of a living wage**

Increased income tax receipts	£0.92 bn
Increased employee NICs receipts	£0.56 bn
Increased employer NICs receipts	£0.65 bn
Reduced means-tested benefit payments	£0.28 bn
Reduced tax credit payments	£0.83 bn
<b>Total</b>	<b>£3.26 bn</b>

Source: calculations by author for TUC, summer 2013.

This implies that the boost to net wages is equal to the overall increase in gross wages minus the improvement in the public finances (excluding increases in employer NICs): i.e. £6.59bn – £2.58bn = £4.01bn.

So, the statutory living wage results in an increase of around £4bn in net incomes, with the government receiving a net boost to the public finances equal to £650m of employer NICs plus £2.58bn in increased employee NICs and income tax plus reduced benefit and tax credit payments. Thus, the total improvement in the public finances is around £3.3bn.

### *An increase in the wage bill for employers*

The flipside of the increase in gross wages for employees is an increase in the wage bill for employers. Some of these employers will be in the public sector: Lawton and Pennycook (2013) estimate that the cost of introducing a living wage across the public sector would be approximately £1.3 billion. Given that the overall increase in gross wage bill resulting from a statutory living wage is estimated at around £6.6 billion, this means that the increase in the wage bill for private sector employees is around £5.3 billion. In the short run this would result in a reduction in profits, an increase in product prices or a reduction in wages for workers further up the earnings distribution. In this report we have assumed that the statutory living wage results in a

decrease in profits in the short term. In the longer term, the boost in demand may lead to an *increase* in profits through higher volumes of sales of goods and services.

## The macroeconomic impacts of changes to wages and profits and the public finances

To estimate the impacts of the living wage on the UK macroeconomy it is necessary to make assumptions about the size of the fiscal **multiplier**. The fiscal multiplier is a number which measures the impact of a change in fiscal policy (e.g. a tax cut or an increase in public spending) on GDP. If the multiplier for public spending is (for example) 0.5, then an increase of £1 billion in public spending results in an overall boost to GDP of £0.5 billion. The multiplier captures the extent to which increases in net incomes and the improvement in the government's fiscal balance arising from the introduction of a statutory living wage feed through into increases in GDP through increased economic activity among UK-based companies and workers. Sometimes a set of multipliers is used (corresponding to different types of tax cut and/or spending increase) rather than a single number<sup>8</sup>.

The introduction of a statutory living wage has three potential multiplier impacts on UK GDP:

- The *wages* impact: the increase in net incomes arising from the increase in gross wages should lead to increased consumer demand which has a positive multiplier impact on GDP.
- The *profits* impact: the reduction in net incomes arising from a decrease in profits may lead to reduced consumer demand which would have a negative multiplier impact on GDP.
- The *public finances* impact: the increase in income tax and NICs receipts and the reduction in benefit and tax credit spending leads to an improvement in the public finances which means that government spending does not need to be cut as badly as current plans suggest. If the improvement in the public finances is matched by an increase in government departmental and investment spending – so that the overall government fiscal position is unchanged – then there should be a positive multiplier impact on GDP.

The UK's Office of Budget Responsibility makes the following assumptions about the size of the multiplier in the UK in its economic forecasting model<sup>9</sup>, with the size of the multiplier depending on where the increase (or decrease) in demand comes from. Table 2 below shows the OBR's multiplier assumptions. In general the multiplier impact of increases in public spending is higher than the multiplier

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<sup>8</sup> For more details on the concept of the fiscal multiplier see IMF (2012), Box 1.1, p41.

<sup>9</sup> The OBR model is the same model that HM Treasury uses.

impact of tax cuts or benefit increase, largely because consumers tend to save rather than spend a portion of the extra disposable income which they gain from the tax cut, which reduces the multiplier effects.

**Table 2. OBR multiplier assumptions**

<b>Source of demand increase (decrease)</b>	<b>multiplier</b>
Reduction (increase) in VAT	0.35
Reduction (increase) in personal tax and NICs	0.3
Increase (reduction) in benefit/tax credit spending	0.6
Change in government spending on departments	0.6
Change in government capital investment spending	1.0

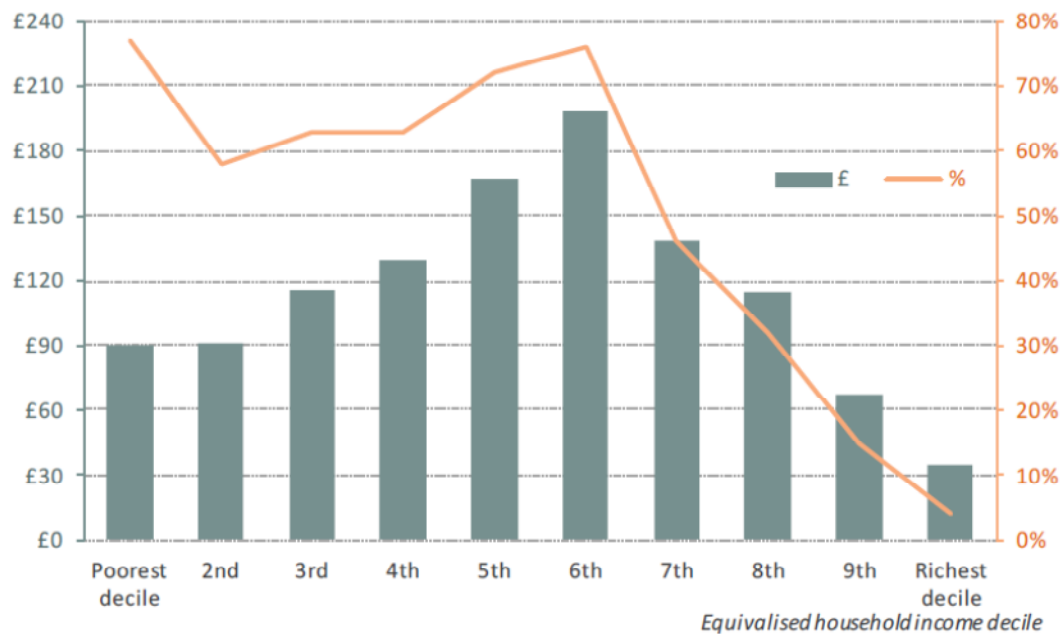
Source: HM Treasury (2010), Table C8

The calculation of macroeconomic effects of a statutory living wage in this report proceeds in two stages. Firstly I estimate the change in GDP arising from all three of these channels using the OBR multipliers. Secondly I examine recent criticism of the OBR's multiplier assumptions from the International Monetary Fund (IMF) and re-estimate the change in GDP using the IMF's alternative assumptions which imply that the true multipliers are larger than those used by the OBR.

**The wages impact:** As explained previously the statutory living wage leads to an increase in net incomes of around £4 billion. In terms of the multiplier effects, these are likely to depend to a large extent on how much the income of poorer households is boosted compared to richer households. Recent research from the Bank of England (Bank of England, 2012, pp338-339) suggest that the marginal propensity to consume out of income is higher for lower income households than for high income households<sup>10</sup>. Meanwhile, calculations by Landman Economics for Lawton and Pennycook (2013) suggest that most of the gain from a statutory living wage (in cash terms) would go to the the middle of the household income distribution, as shown below in Figure 1. There are two reasons why households in the middle of the distribution benefit more than those at the bottom of the distribution. Firstly, many of the households at the lower end of the distribution do not have anybody in work and so cannot benefit from the living wage unless someone in the household enters work. Secondly, some low-paid employees live in a two-earner household where the other earner is on higher earnings which is enough to move the household into the middle or upper parts of the income distribution.

<sup>10</sup> Specifically, the Bank of England research (based on a household survey carried out by NMG Consulting for the Bank) suggest that the reduction in consumption for a negative income shock is around 78 pence for every pound by which income reduces for households with gross incomes of less than £9,500 compared with 45 pence for every pound of reduced income for households with gross incomes of more than £50,000 per year. These estimates of the marginal propensity to consume cannot be applied directly to estimate the impact of the living wage on consumption because the Bank of England estimates apply to falls in income rather than increases in income and also the survey includes both temporary and permanent changes in income (economic theory suggests that the effect of a temporary change in income on consumption should be lower than the effect of a permanent change in consumption.)

**Figure 1. Distributional impact on UK household incomes of a statutory living wage for all employees**



Source: calculations by Landman Economics for Lawton and Pennycook (2013).

The OBR multiplier estimates suggest that increases in demand arising from income tax and National Insurance Contribution cuts have a multiplier effect of 0.3 whereas increases in demand arising from benefit and tax credit increases have a multiplier effect of 0.6. Given that the distributional effect of increases to the living wage is more progressive than the effect of income tax and NICs cuts but less progressive than the impact of benefit and tax credit increases, it makes sense to use a value for the multiplier impact of living wage increases that is somewhere in between the OBR's multiplier estimates for tax cuts and its estimates for benefit increases. Therefore, I assume that the multiplier impact of increases in the living wage is 0.45.

This means that, using the OBR estimates, the multiplier impact of increased net wages is  $0.45 \times \text{£}4\text{bn} = \text{£}1.8\text{bn}$ .

**The profits impact:** the impact of reduced profits on consumer demand is likely to be relatively minor, at least in the short run. A proportion of profits is paid out to shareholders as dividends and it is likely that reductions in profits will result in reduced dividend payments. However, most company shares are held by institutional investors such as pension funds; in most cases there will be a considerable time lag between the dividends being paid and the accumulated pension funds being used by the relevant policyholder to purchase an annuity. Furthermore, a substantial proportion of UK company shares are held by institutions or individuals who are not

based in the UK. For these two reasons, I have assumed here that the short-run impact of reduced profits on consumer demand is zero. However, there is likely to be an impact on UK Government revenues from corporation tax, which is levied as a percentage of profits. Data from the ONS national accounts and HMRC for 2012 suggests that corporation tax receipts amounted to around 9 percent of total operating surplus in the UK economy<sup>11</sup>. In line with this I have assumed that a reduction of £5.3bn<sup>12</sup> in profits in the private sector resulting from the adoption of a statutory living wage results in a reduction in corporation tax receipts of £500m.

**The impact of improved government finances:** the living wage results in an increase of around £1.5 billion in the public finances (receipts minus expenditure), taking account of:

- (a) the increase in income tax and NICs receipts (increased revenue of around £2.1bn),
- (b) decreased benefit and tax credit expenditure (reduced expenditure of around £1.1bn),
- (c) an increased public sector wage bill (increased expenditure of around £1.3bn),
- (d) reduced corporation tax receipts (reduced revenue of around £500 million)

If this extra income is used to increase public spending relative to current government plans, according to the OBR the multiplier impact depends on what the extra resources are spent on. I assume here that half of the improvement in the public finances is spent on capital investment (e.g. infrastructure) with the other half being used to increase other aspects of departmental spending<sup>13</sup>. This implies a multiplier impact of 0.9 (halfway between the OBR's estimate for investment spending and its estimate for other departmental spending) which means that the overall increase in GDP resulting from the improvement in the public finances arising from a statutory living wage is equal to:

**£1.5bn x 0.9 = £1.35 billion.**

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<sup>11</sup> Data from HMRC (source: Table T11.1A, <http://www.hmrc.gov.uk/statistics/ct-receipts/corporation-tax-statistics.pdf> p23) shows that total corporation tax receipts for 2012-13 were around £39bn. Total operating surplus in the economy for 2012 was approximately £422 billion (source: ONS Blue Book).

<sup>12</sup> This figure is calculated as follows: total increase in wage bill of £6.6bn **minus** the £1.3bn cost of introducing the living wage in the public sector.

<sup>13</sup> Another option would be for some of the improvement in the public finances to be used to reduce net government borrowing, but the recent IMF evidence on the size of the fiscal multipliers in the post-2008 global economic downturn suggests that this would be a poor use of the extra government funds because the negative impact of spending reductions is so much higher in a period of economic depression like the current situation than in normal economic circumstances. See Weldon (2012) and Reed (2013) for more on this.

This implies that the statutory living wage results in a total GDP increase (via multiplier effects) of £1.8bn + £1.35bn = **£3.15bn**.

How many jobs is this macroeconomic stimulus likely to lead to? The most recent currently available estimates of the share of wages in GDP suggest that it is around 54 percent – implying that the increase in the total wage bill arising from the macroeconomic stimulus provided by the living wage is around £1.7 billion. Given current average (full-time) wages of around £26,500 per year<sup>14</sup>, this implies (£1.7 billion / 26,500) = approximately 64,000 extra full-time equivalent jobs. This would partially offset the maximum job loss estimate of up to 160,000 jobs from the microeconomic modelling detailed in Section 1, but overall a macroeconomic effect of this magnitude would still imply up to 95,000 aggregate job losses from the living wage.

However, the OBR multiplier estimates do not take any account of the general state of the macroeconomy. There is good evidence from the International Monetary Fund that multiplier effects are larger – and perhaps much larger – when national economies are operating well below full employment (which is certainly the case in the UK's current situation).

The IMF's *World Economic Outlook 2012* gives estimates based on the IMF's own empirical research across countries suggests that fiscal multipliers (taking an average of the multipliers for public spending changes and tax and benefit changes) averaged around 0.5 in advanced economies in the three decades leading up to 2009. However, in the current global economic downturn which followed the financial crisis of 2008 and the subsequent weak recovery, the IMF's new research suggests that multipliers are much higher: between 0.9 and 1.7 (IMF, 2012: see also Weldon, 2012).

Taking an average of the OBR's tax and public spending multipliers as shown in Table 2 shows that they are similar to the IMF's pre-2009 estimate of 0.5. If instead we scale up the OBR's multiplier estimates to be in line with the IMF's new estimates, the estimated positive GDP impact of the living wage is much higher, and the estimates of number of jobs created correspondingly higher as shown in Table 3 below.

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<sup>14</sup> See ONS, "Statistical Bulletin: Annual Survey of Hours and Earnings, 2012 Provisional Results", 22 November 2012. <http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/2012-provisional-results/stb-ashe-statistical-bulletin-2012.html>

**Table 2. Estimates of number of jobs created by stimulus impact of living wage: OBR estimates compared with new IMF estimates**

Multiplier estimates	OBR (0.5)	IMF lower bound (0.9)	IMF upper bound (1.7)
GDP impact (£bn)	3.15	5.67	10.71
Increase in wage bill (£bn)	1.70	3.06	5.78
Number of jobs created (at average full-time wage)	64,000	115,000	218,000
Number of jobs (net of IPPR/Resolution Foundation estimate of job losses)	-96,000	-45,000	+58,000

This implies that even if the microeconomic jobs impact of a statutory living wage is as severe as 160,000 jobs lost, based on the most recent multiplier estimates from the IMF the macroeconomic impact is likely to at least offset this. Under current depressed economic conditions, it is more likely than not that the overall impact of a statutory living wage will be a small increase in aggregate employment. The mid-point between the scenarios using the IMF lower bound and upper bound multiplier estimates suggests a net employment gain of around 7,000 jobs. It should also be borne in mind that the microeconomic impact of the living wage is unlikely to be as severe as 160,000 job losses, which means that aggregate job gains in excess of 7,000 are the most likely outcome of a statutory living wage.

It is important to note two additional considerations regarding this result. Firstly, this is a *net* job gain figure rather than a gross job gain figure. It is quite possible that extending the living wage to all employees would cause job losses in certain low-wage sectors but these would be more than offset by job gains in other sectors<sup>15</sup>.

Secondly, to the extent that the new jobs created are at wage rates closer to the living wage than the average wage, the net job gains arising from a statutory living wage could be greater than the central estimates in this report. Someone working 40 hours a week at the living wage would earn around £15,500 per year (at the rate applicable outside London) and around £17,800 per year (in London). Both of these figures are lower than the average earnings figure of £26,500 used in this report and so to the extent that extending the living wage causes a 'churn' of employees out of jobs paid below the living wage and into living wage jobs, there is greater scope for job gains than if the new jobs created are (on average) paid at average full-time earnings. Just as an illustration, if the new jobs created were paid at £17,800 per year rather than £26,500 per year, the number of extra jobs created would be 57,000 greater in the IMF lower bound scenario, and 106,000 greater in the IMF upper

<sup>15</sup> Lawton and Pennycook (2013) find that private sector employees working in four particular industrial subsectors are more likely to be paid at hourly rates below the living wage than elsewhere in the economy: manufacturing (food and beverages, tobacco, textiles and recycling, wholesale and retail trade, hotels and restaurants, and community and personal social service activities.



bound scenario – leading to a central estimate of overall net job gains of 89,000 rather than 7,000.

### 3 Conclusion

This research report has shown that, using reasonable assumptions about the structure of the labour market and the current scope for economic stimulus in the UK economy, it is unlikely that the extension of the living wage to all UK employees would result in any substantial aggregate employment losses. In fact, it is quite plausible that adopting the living wage on a statutory basis could actually increase overall employment in the UK.

This is for two reasons. Firstly, previous research from the IPPR/Resolution Foundation which estimated that the immediate an across-the-board living wage would result in 160,000 job losses is almost certainly an overestimate (as the authors of the research themselves admit). Realistic assumptions about the structure of labour markets and the potential for the living wage to induce productivity gains and reduce turnover costs to businesses imply that the number of job losses arising from a statutory living wage would most likely be considerably less than that, even if there were no scope for the living wage to stimulate the macroeconomy.

The second reason – ignored in most of the previous discussions about the living wage in the UK, but critically important – is that there *is* considerable scope for the living wage to stimulate the economy. Unemployment and under-employment in the UK economy are at historically high levels, and recovery from the “Great Recession” of 2008-09 has been weak and patchy at best. Using recent estimates from the IMF of the effectiveness of fiscal stimulus in the recent economic depression and combining them with the UK Office for Budget Responsibility’s own multiplier estimates, this report has shown that once the potential macroeconomic stimulus effects of extending the living wage to all employees are taken into account, it is more likely than not that a statutory living wage would result in a modest boost to aggregate employment.

A statutory living wage would therefore result in an economic ‘win-win’ on a number of levels. It would boost demand and economic growth, reduce earnings inequality, increase the share of wages in national income, and reduce the extent to which the benefit and tax credit system has to prop up low wages to reduce in-work poverty. By insisting on a voluntary approach to extending coverage, current proponents of a living wage are being unnecessarily cautious. This report finds that a policy of extending the living wage to all employees on a statutory basis – effectively making the National Minimum Wage a “National Living Wage” – should be a priority for policymakers.



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