setting a fair pay standard:
the government as a living wage employer

A Smith Institute research paper

The Smith Institute

The Smith Institute is an independent think tank which provides a high-level forum for thought leadership and debate on public policy and politics. It seeks to engage politicians, senior decision makers, practitioners, academia, opinion formers and commentators on promoting policies for a fairer society.

THE SMITH INSTITUTE

setting a fair pay standard:
the government as a living wage employer

A Smith Institute research paper

Published by The Smith Institute

Contents

Foreword

According to David Cameron, the living wage is an idea "whose time has come". Yet despite his backing central government departments have yet to become living wage employers. If the living wage was really a priority for central government then it is not unreasonable to ask why is it not itself a living wage employer? If government aims to promote the case for extending coverage should it not be leading by example? As the recent Buckle review on low pay has noted: "Central government should also learn from the experiments by local authorities to use the power of procurement to encourage more employers in the private sector to pay a living wage."[1]

This research paper aims to show how much (or indeed, how little in the scheme of government spending) it would cost to pay all low paid workers in Whitehall (including those employed indirectly through public procurement) the living wage. It follows on from previous work by the Institute on this topic, including evidence to the 'Making Work Better' inquiry and research for the Living Wage Commission.[2]

By setting out the cost of scaling up living wage coverage the paper hopes to add to the increasing body of evidence about the living wage. It also adds to the debate about using living wages as a social policy instrument to tackle low pay. Introducing living wages clauses, for example, when contracting-out services could be a critical plank in a future government's policies to reverse the trend of in-work poverty.

The evidence is clear – the headline cost of paying all 31,413 Whitehall staff in the UK the living wage would be £18.3 million pa (including a contribution from the contractor), a fraction of government spending (equivalent to 0.002%). Indeed, paying the living wage to all staff would be only slightly above the £15 million the Foreign Office spends each year on boarding school fees for diplomats' children. Even at a time of fiscal austerity this seems a small price for HM Treasury and a significant gain for the cleaners and other low paid staff who work for government departments.

Paul Hackett
Director, the Smith Institute

1 Buckle, A *Low Pay: The nation's challenge* (2014)
2 Papers include: *The living wage: context and key issues* (2013)*; The living wage: what it covers and how it is calculated* (2013); *Understanding the challenge of meeting a living wage target* (2014)

Executive summary

Executive summary

Set against the backdrop of the government's commitment to reduce low pay and Labour's pledge to extend the living wage, this paper aims to show: how many staff in government departments are currently paid below the living wage; and what the cost would be of paying the living wage to Whitehall (in-house and contracted-out) staff. It also highlights the action government can take through public procurement to encourage more employers in the private sector to pay a living wage.

The findings in this report show that:

- 1,618 directly employed staff in Whitehall are paid below the living wage. Around 5,650 contracted workers are paid below the living wage – 87% of which are in the Department for Work and Pensions. For all those providing services to government through Whitehall procurement some 29,795 workers are paid below the living wage. The total number paid under the Living Wage is 31,413.
- The analysis shows what it would cost to move all directly employed staff up to the living wage; those hired through contractors by central government departments; and staff employed by contractors for a range of services.
- For each category the report calculates the gross cost to government; the net cost when including potential tax and benefit savings; and the net cost to government if employers absorb 21% of the cost of meeting the Living Wage.
- For all Whitehall staff (directly employed or working in Whitehall on contract) the net cost to government of meeting the living wage would be £7m pa, covering 7,268 workers.
- For all staff employed directly and indirectly (including those contracted through Whitehall procurement) the net cost (assuming an employer contribution of 21%) would be £18.3m pa, covering 31,413 workers.

Whitehall and the Living Wage: Summary

Number of workers	Cost	Tax & Benefit Savings	Net Cost to Government
A: 1,618 (directly employed)	£2m	£0.9	£1.1m
B: 5,650 (hired contracted staff in Whitehall)	£11m	£5.1	£5.9m
C: 29,795 (all contract staff incl. B)	£43.4m	£20m	£23.4m
D: 29,795 (all contract staff incl. B, but with contractor paying 21% towards cost of LW)	£37.2m	£20m	£17.2m
E: 31,413 (all direct A and all indirect D)	£39.2m	£20.9m	£18.3m

Introduction

Introduction

It is now well over a decade since a group of low paid employees in London, trade unions and community and faith organisations embarked upon their campaign for a living wage. Despite being in work (and often having more than one job) these low paid workers struggled to make ends meet. Moreover the long hours worked to get by meant they had little time for family and community life.

The idea of the living wage campaign was simple: those in work should be paid a wage that allows them to afford a socially acceptable, if basic, standard of living; and their income should allow them to access to goods and services deemed necessary to participate fully in society.

Since its inception, the campaign for a living wage has grown in strength. Public awareness has risen and the Living Wage Foundation (with Citizens UK and others) has run very successful high profile campaigns, including Living Wage Week. The living wage campaign has also extended beyond London to the rest of the UK. From early success in hospitals, the campaign has delivered benefits to workers in private sector firms across a range of industries.

However, despite the campaign the numbers of people paid below the living wage has increased in recent years. The fall in real wages, widening income inequality and rising rates of in-work poverty have undoubtedly strengthened the case for the living wage. Nevertheless overall numbers of people benefiting remain small (around 40,000 workers) compared with the scale of the problem (around 5 million workers are paid below the living wage).

One of the living wage movement's biggest breakthroughs came when all the main candidates in the 2004 London Mayoral election pledged to champion the living wage. This resulted in the successful candidate, Ken Livingstone, establishing the Living Wage Unit at the GLA which has calculated the London living wage since 2005. Moreover the GLA themselves became a living wage employer. The support for the living wage in London has been cross-party and the GLA's support has continued under Boris Johnson's mayoralty. This direct endorsement by the GLA (setting and paying the living wage) has given the living wage legitimacy and has also meant that mayors have been able to actively champion the idea.

Similar cross-party support for the living wage could apply to central government but on a bigger scale. By paying the living wage central government would be, like the GLA,

endorsing the idea and campaign with actions rather than just words. It would also be setting a fair pay standard which could be replicated across the economy as a means of tackling low pay.

This paper focuses on how much it would cost central government departments to pay the living wage. Specifically, the report considers the costs associated with raising the LW for:

- All government employees;
- All indirect government employees hired through contractors; and
- All employees of government contracting companies.

Section 1

Background and assumptions

Background and assumptions

Before examining the cost to Whitehall of paying the living wage this section analyses the potential employment effects of increasing pay (not least to understand the impact of making the living wage a minimum requirement for services that are contracted out by government departments). By looking at the possible employment impacts and profitability of firms who deliver outsourced contracts an assessment can be made about the scope for these firms to absorb some of the costs of an increased wage floor.

National minimum wage and the living wage

The living wage is distinct from the National Minimum Wage (NMW). Firstly, the NMW (on advice from the Low Pay Commission) is notionally set at the highest level consistent with no negative effects on employment. It is also important to note that the NMW is simply a wage floor. It is not, and was never, designed to be a comprehensive strategy for the reduction and elimination of low pay. Nor is it intended to achieve distributional goals like the reduction of poverty and it is not linked to changes in the cost of living.[3]

The living wage is different, with the emphasis on the lives of employees beyond the workplace, as parents and members of the community. As such the living wage is set at a rate which ensures employees do not have to work excessive hours to earn an adequate income (something which if not achieved impacts on home and community life). When the rate is set employment effects are largely ignored. In addition, the living wage is voluntary. Employers adopt the living wage, largely after a campaign or through dialogue with living wage representatives. Employers are free to adopt the living wage if they so choose, not least because of fears surrounding the impact it could have on levels of labour they could afford. The NMW, meanwhile, is a universal, legislated wage floor, which is not optional.

Becoming a living wage employer

In 2011, the Living Foundation created a living wage employer kite mark. To become a living wage employer, organisations must:

- Pay all directly employed staff the appropriate living wage
- Pay all contracted staff, such as cleaners and security staff the living wage.
- If contractors can't or refuse to pay the living wage, organisations can still be

3 Lawton, K and Pennycock, M *Beyond the bottom line: The challenges and opportunities of a Living Wage* (IPPR/ Resolution Foundation, 2013) and Wills, J with Kakpo, N and Begum, R *The business case for the Living Wage: The story of the cleaning service at Queen Mary, University of London* (Queen Mary, University of London, 2009)

accredited if there is a commitment to reward a renewed contract to a company paying the living wage rate. The milestones for achieving this then need to be agreed with the Living Wage Foundation.
- Once the above has been proven, the organisation can be accredited as a living wage employer and use the kite mark.

Living wage employers must also make a contribution to the Living Wage Foundation. The level of support depends of the number of employees and is graduated with annual fees of between £50 and £1,000. This not only supports the campaigning work of the Living Wage Foundation but also its role of ensuring accredited employers are meeting the terms set out above.

For central government to become a living wage employer it would therefore need to pay all its directly employed staff and contracted staff the living wage.

Employment effects

One of the main arguments deployed by critics of the living wage is that it causes unemployment. If the living wage was proven to reduce employment if paid at scale, then it would weaken campaigners' argument that wages are better than benefits. Moreover increases in unemployment would be costly to the Treasury.

How wages impact on employment levels (and business profitability and competitiveness) remains contested. It is however reasonably clear the NMW had no adverse impact on employment since it was introduced in 1999.[4] However, there may still be variation in impacts across industries. This is consistent with the so-called "new economics" of minimum wages developed since the early 1990s.[5]

In conventional economic theory it is assumed that all wages are fixed at the "market clearing" level. This means that workers are paid the rate for the job given the output that they produce. If the employer is compelled to pay a higher wage rate then they will reduce their demand for labour – workers will lose their jobs. The "new economics" approach does not reject the conventional model completely but observes that some

4 For an analysis of employment effect of minimum wage raises in the US literature see: Doucouliagos H, and Stanley T.D. (2009), 'Publication selection bias in Minimum Wage research? A Meta-regression analysis', *British Journal of Industrial Relations*. For an analysis of UK literature see: Linde Leonard M., Stanley T.D. and Doucouliagos H. (2013) "Does the UK Minimum Wage Reduce Employment? A Meta- Regression Analysis", *British Journal of Industrial Relations*. The Low Pay Commission has sponsored an extensive independent research programme and all papers published to date have produced a consistent finding that there are no statistically significant adverse employment effects. See also Metcalf, D *Why Has the British National Minimum Wage Had Little or No Impact on Employment?* (Centre for Economic Performance, LSE, 2007)
5 Card and Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton University Press, 1995)

workers are being paid *less* than they could be – the employers can afford to pay more but do not do so because the employees have relatively weak bargaining power. A conventional free-market economist might say that the workers could look elsewhere for work, but not everybody would need to be fully informed about the alternative employment opportunities available and workers may find the risk of moving to a new job too great. Equally, it may not be possible to find alternative employment with a pattern of hours that suits the worker's domestic circumstances.

The argument that follows is that wages can be increased with no adverse impact on jobs as long as the level of the minimum wage does not exceed the "real" market clearing level. The corollary of this argument, however, is that minimum wages could have an adverse impact on employment if they were set at too high a level. This is particularly apparent when comparing the NMW rate with the London living wage - employees paid the national minimum would experience a wage rise of around 40% if paid the London living wage. The differences in rates are presented below alongside the low pay rate (those paid two-thirds of the median hourly pay).

Table 1: Low pay rates

	Hourly wage rate
NMW (for adult employees)	£6.31
London living wage (LLW)	£8.80
Living wage (LW) (Rest of UK)	£7.65
Low pay wage	£7.71

The analysis in the report is based on the assumption that employment effects are likely to be minimal. Firms are likely to increase productivity, some or most of the costs would be met by the state and the sectors most sensitive to wage rises are largely not procured by Whitehall departments (e.g. retail).

This assumption is based on evidence from the Low Pay Commission which has examined the impact of the introduction of the NMW and how firms adjust to having a higher wage bill for low paid workers. Following its introduction, firms adopted a range of strategies to cope with higher wage bills, many of which were positive and could lead to greater efficiency. Around 40% of firms affected by the NMW made some changes to the way work was organised and a similar proportion increased investment in training and development. A third made some improvements in the quality of

service, and a quarter increased the use of technology.[6]

There is some evidence that the NMW led to firms increasing productivity. The CBI noted "the national minimum wage may have led some companies to replace inefficient systems of work organisation and to introduce practices such as multi-skilling or team working practices."[7] The cause of increased productivity could have come from greater satisfaction from employees, less staff turnover, greater training or changes in management systems.[8]

In the short term, for small and medium sized firms, the main impact of the introduction of NMW was a rise in prices and a reduction in profits. Three quarters of firms with a high proportion of low paid staff increased prices and around a half of such firms reported reduced profits. A significant minority also sought to cope by tighter control of labour costs.[9]

Price rises varied by sector and depended on how competitive the sector was and the ability of consumers to afford higher prices.[10] The impact was most evident in sectors most affected by the introduction of the NMW. The top nine minimum wage goods and services sectors, such as the take away food outlets, hairdressers, pubs, and restaurants and hotels saw prices rise around 0.8% above inflation.[11] However, for Whitehall departments many of these services are unlikely to feature widely in central government procurement.

Key assumptions

In order to understand the impact of increasing pay to the living wage the analysis in the report makes a number of important assumptions. As such the figures presented should be considered approximations. These assumptions include:

- The analysis only considers the direct impacts and direct cost to government. Indirect effects are not considered. An increase in wages would likely have 'ripple' effects on the UK economy, as the workers receiving higher wages would

6 Low Pay Commission *The National Minimum Wage: Making a Difference - Third Report of the Low Pay Commission* (2001)
7 Ibid
8 Lawton, K and Pennycock, M *Beyond the bottom line: The challenges and opportunities of a Living Wage* (IPPR/ Resolution Foundation, 2013)
9 Low Pay Commission *The National Minimum Wage: Making a Difference - Third Report of the Low Pay Commission* (2001)
10 Ibid
11 Wadsworth, J *Did the Minimum Wage Change Consumption*

spend at least part of the extra pay buying UK goods and services. There is potentially increased government tax revenue through both increased income taxes and consumption tax, and potentially a decrease in benefits payments as the incomes of the lowest paid workers rise. However, these depend on household specific variables.[12]

- The framework for the minimum wage analysis only identifies the most likely dominant impact, but there could potentially be an impact across prices, profits and employment - albeit of different magnitudes.

- A rise in the NMW could have an impact on the labour to capital ratio and consequently on labour productivity that is not considered in the analysis. Moreover, the analysis of the employment effects of the policy only takes into account the impact on job destruction, ignoring any impacts on future job growth. Even if an industry does not exhibit job destruction, it is possible that as a result of the policy, firms reduce new hires, effectively impacting negatively on the number of new jobs created in the industry.

- For the purposes of this analysis, changes to the wage paid are assumed to only affect workers in the interval between the NMW and the Low Pay wage or LW. In practice, a change to the NMW may also affect the distribution of wages above the higher threshold, and this requires further investigation, which is beyond the scope of this report, but which would be critical to the overall impact of any such policy.

- The categorisation of sectors in terms of profitability to determine the likely impacts are based on arbitrary thresholds relative to the UK average that makes the simplifying assumption that all sectors earn the same level of 'normal profits', although this in reality could vary for several reasons such as industry structure.

Methodology

To assess the likely impact of increasing wages to the living wage we need first to assess how much can be absorbed by companies providing contracted-out services. Increasing wages raises the cost of production. As such, a firm's reaction to an increase in the wage floor would likely depend on a number of factors including market characteristics and overall labour costs. The potential effects of such a change

12 This issue is however examined in the final section of the report.

are reduced employment, higher costs to consumers due to labour cost pass-through, and lower profits.

This report tries to identify the most likely dominant effect of an increase in the wage floor on a specific sector through the analysis of these factors, but there could be an impact across all prices, profits and employment. Specifically, the analysis looks at a sector's profitability, its reliance on low skilled labour and temporary workers, and its overall labour intensity. This analysis focuses on the impacts on six sectors: care; retail; construction; IT/computing; financial services; and business services.

A set of rules is used to consider how each sector may respond to increases in pay for those below the living wage. These are:

- **Profitability**. Industries were defined as high, mid or low profitability, based on their gross operating rate ('GOR').[13] Sectors with GOR that is more than double the UK average are assumed to be highly profitable sectors, which those whose GOR is within 10% of the UK average are assumed to have low profitability. Sectors within the two thresholds are assumed to be mid-profitable.

  Highly profitable industries are often associated with less intense competitive pressures. Firms in such industries would therefore be able to pass part of the increased costs to consumers. For the purposes of this analysis, it was assumed that highly profitable industries would more likely absorb a part of the increased labour costs and also increase the price to offset the decrease in profits.

  Mid-profitable industries were assumed to most likely react to an increase in labour cost through lowering profits and also the level of employment. Finally, low-profit industries were assumed to have relatively elastic supply with high levels of competition and relatively low barriers to entry so the employment impact is likely to be greater as firms adjust to labour cost increases.

- **Magnitude of impact on labour costs.** This estimate is based on the share of workers earning the minimum wage in the sector, using ONS data on wage distribution by sector.[14] Where the share of low paid workers is lower than the UK average, it is assumed that the magnitude of any effects will be low since the

13 Calculations are based on ASHE 2013 data. Gross operating rate is defined as gross operating surplus over turnover.
14 ASHE 2013 data was used. As the ONS does not provide information of the entire wage distribution, but only percentile data, it was necessary to assume distribution in the percentile intervals is linear in order to estimate the number of workers at NMW. This approach is used throughout the report.

increase in labour costs will be marginal for firms in that specific sector.

- **Labour intensity.** The labour intensity is based on the ratio of total labour costs and total net capital costs in the industry.[15] It was assumed that a ratio close to the UK average indicates a less labour intensive industry, a ratio of approximately 10 represents a mid-labour intensive industry, and a ratio of 20 or higher represents a relatively more labour intensive industry. The more an industry production process relies on capital, the smaller would be the impact of a rise in labour cost.

- **Share of temporary employment.** Using Eurostat data, the percentage of temporary workers in each of the industries under analysis was calculated. It was assumed that, other things being equal, a higher share of temporary workers in an industry increases the likelihood of an impact on employment, as employers would have more flexibility in changing labour use.

The measures are relative to the UK average, which are presented along with the estimates for the industries considered in Table 2. The benefit of this approach is that it provides a simple and practical structure to consider the sector effects that is consistent with economic theory. However, it also requires a judgement to be made about the classification of sectors (for example, thresholds at which a sector's profit is considered high or low).

Findings

Given the characteristics of the different sectors, a raising of the wage floor to the living wage could be expected to have a material employment effect on the care and retail sectors, while the other sectors could be expected to react mildly to the policy if they did not boost productivity or find other ways of adapting. In particular, the IT/computing and construction industries would be expected to have a small profit effect, whereby they would absorb the minor increase in the labour cost, while the business services and financial services sectors would be more likely to have small price effects.

The absence of price effect on low paying industries is in line with recent literature, which has found no price effect in care industry in the UK,[16] nor in the food retail sector.[17]

15 Calculations are based on ASHE 2013 data.
16 See Machin, S., Manning, A. and Rahman, L. (2003), 'Where the Minimum Wage Bites Hard: The Introduction of the UK National Minimum Wage to a Low Wage Sector', *Journal of the European Economic Association.*
17 See Draca, M., Machin, S., and Van Reenen, J. (2005) *The Impact of the National Minimum Wage on Profits and Prices*, Research Report for the Low Pay Commission.

Table 2: Characteristics of selected sectors

Sectors	Gross operating rate (average across 2008 - 2012)	Employment costs[18]/ Capital cost[19]	Adult employees on temporary contracts	Percentile range within which NMW falls
Care	14	5.9	6.0%	10-20
Retail	9	5.0	2.5%	10-20
Construction	19	8.2	3.8%	0-10
IT/computing	23	19.5	3.7%	0-10
Financial services	-[20]	-[21]	2.3%	0-10
Business services	31	69.0	3.6%	0-10
UK average	13	5.1	5.0%	0-10

Source: Analysis of ONS and Eurostat data.

Considering each of the industries in more detail:

- **Care.** In this industry, 10% of workers are below the NMW, which is higher than the UK average and implies that it would be highly affected by the policy. The GOR is close to the UK average and so any wage change could potentially have an employment impact.
- **Retail.** The retail industry also has a high reliance on low paid workers and low profitability, with GOR below the UK average, and so there is expected to be an employment effect in this industry from a change in the NMW.
- **Construction.** The industry is defined as mid-profitable, and as the share of temporary workers is below the UK average, it is expected that the increase in

18 Total employment costs is obtained from the Annual Business Survey and includes all overtime payments, bonuses, commissions, payments in kind, benefits in kind, holiday pay, employer's national insurance contributions, payments into pension funds by employers and redundancy payments less any amounts reimbursed for this purpose from government sources.
19 Total net capital expenditure is from the Annual Business Survey and is calculated by adding the value of new building work, acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.
20 Data unavailable. ONS does not include the Financial Sector in its datasets on sector performance.
21 Data unavailable. ONS does not include the Financial Sector in its datasets on sector performance.

labour costs would be absorbed through lower profits. The proportion of workers below the NMW are less than the UK average in this industry and so any impacts are expected to be moderate.

- **IT/computing.** The industry is expected to show only a moderate reaction to an increase in the NMW given its relatively low share of workers below the NMW. Given that it is mid-profitable and has a relatively low share of temporary workers, any impact would be on lower profits, although the magnitude of the impact is expected to be low.
- **Financial services.** The industry is highly profitable, and the impact of the change in policy is expected to be minimal given the relatively low share of workers below the NMW.
- **Business services.** As above, the industry has a relatively low share of workers below the NMW and so any reaction is expected to be minimal.

The next section incorporates these findings when calculating how much it might cost government departments to pay contracted-out staff the living wage and how much could be absorbed by companies providing the services.

Section 2

The cost of making government departments living wage employers

Section 2: The cost of making government departments living wage employers

There has been growing interest in both the living wage and how government can use public procurement to tackle low pay. This section of the report looks at how much it would cost to achieve these objectives. It analyses the effects, including the likely cost to government, of implementing the LW[22] as the minimum earned by specific groups of central government workers. Three policy options are explored:

- **Policy option 1.** Raising all direct central government employees' hourly wage to the LW.
- **Policy option 2.** Paying employees hired through contractors by central government departments the LW at a minimum.
- **Policy option 3.** Paying all employees of firms winning procurements with the central government the LW at a minimum.

Policy option 1

For policy option 1, the analysis estimates the cost to central government of raising the minimum hourly wage of all central government departments' employees to the appropriate LW or LLW. Table 3 lists the departments considered.

The cost of raising all central government department employees' wages below the LW to the appropriate LW is calculated by combining the data on government employment with estimates of the average cost of the wage increase to government, both for London workers and for workers in the rest of the UK. The annual average cost of the wage increase for each type of worker depends on whether the worker is full-time or part-time, and on whether the job is based in London as that determines the appropriate LW to be implemented.[23]

Three main assumptions were used in the analysis:

- The wage distribution has the NMW as lower bound;
- Wages are uniformly distributed in the wage interval being analysed; and
- The proportion of full-time and part-time workers in each department is assumed to follow that for the overall Civil Service. Currently, 14% of London-

22 As it is heavily based on the Office of national Statistics ASHE 2013 data, the analysis only considers employees on adult rates, the only data available on ASHE.

23 Annual averages are calculated on the basis of 35 working hours a week for 52 weeks.

based civil servants are part-time, while 24% of workers in the rest of the UK are part-time.[24]

Table 3: Departments considered in the analysis

Department
Cabinet Office
Department for Business Innovation and Skills ('BIS')
Department for Culture, Media and Sport ('DCMS')
Department for Education ('DfE')
Department for Environment, Food & Rural Affairs ('DEFRA')
Department for International Development ('DFID')
Department for Transport ('DFT')
Department for Work and Pensions ('DWP')
Department of Communities and Local Government ('DCLG')
Department of Energy and Climate Change ('DECC')
Department of Health ('DH')
Foreign and Commonwealth Office ('FCO')
HM Treasury
Home Office
Ministry of Defence ('MOD)
Ministry of Justice ('MOJ')
Northern Ireland Office
Scotland Office
Wales Office

Data on the number of direct central government department employees paid below the LW were obtained from a Freedom of Information request by the Labour Party carried out in March 2014 ('FOI request'). These are presented in Table 4, with the proportion of London-based workers calculated based on ONS data.

Amongst the MOD employees, 10 of the 79 based in London are paid between the LW and the LLW, while the remaining 69 have hourly wages between the NMW and the

24 ONS data.

LW, according to the results of the FOI. The yearly average wage depends on the range of the interval into which the worker's wage falls.

Table 4: Direct government employees paid below LLW/LW

	London	Rest of UK	Total
Ministry of Defence	79	901	980
Department for Work and Pensions	25	204	229
Ministry of Justice	238	171	409
Total	**342**	**1,276**	**1,618**

Source: FOI data and analysis based on ONS data.

The indicative cost of increasing the wages of these workers to the appropriate LW is presented in Table 5. The estimated direct cost to government of the wage increase would be in the order of £2 million.

Table 5: Estimated annual cost to government

		Wage range	Number of workers	Annual average wage increase per worker	Estimated cost
London	Part-time	NMW and LLW	37	£1,133	£41,811
		LW and LLW	1	£523	£733
		NMW and LW	10	£610	£5,890
	Full-time	NMW and LLW	227	£2,266	£514,359
		LW and LLW	9	£1,047	£9,419
		NMW and LW	59	£1,219	£71,945
Rest of UK	Part-time	NMW and LW	311	£610	£189,617
	Full-time	NMW and LW	964	£1,219	£1,175,502
TOTAL			1,618		£2,009,276

Source: Analysis of FOI data and ONS data.

Policy option 2

The analysis of policy option 2 estimates the cost to government of ensuring all employees hired through contractors are paid the LW. Two different approaches to the issue were used:

- Only procurements for goods and services provided to central departments are considered as contracts; and
- All procurements run by the government are considered as contracts.

Further, for the second approach, we estimated:

- The impact of contractors of all departments paying the LW to those working for government procurements.

As in policy option 1, the core methodology for the assessment consists of multiplying the estimated average cost increases resulting from the policy under study with the number of workers affected. However, as the number of workers affected by each policy is not readily available for some of the options considered, further steps in the estimation are required.

Contracts for the central government departments

Data from the FOI request indicates that 5,650 workers of companies providing goods and services to central departments earn below the LW. These are divided across five central departments, as shown in Table 6.

The number of contractor workers that are based in London for each department are estimated using the share of direct employees in London for the relevant department. This assumes that the share of contractor workers for a department's office mirrors the number of direct employees of the office. Similarly, the share of Civil Service workers working part-time in London and in the rest of the UK is used to estimate the proportion of part-time and full-time contractors. Table 7 sets out the estimated workers and the estimated cost of ensuring the increase to the appropriate LW.

The estimated total direct cost of the policy is approximately £11 million.

In practice this cost of policy is likely to be distributed between government and industries, with the balance depending on the structure of the industry the companies belong to, and how important government contracts are for the industry. Further information on the nature of these contracts would be required to estimate the proportion of the cost to government.

Table 6: Contractor workers below LW by department

Department	Contractor workers below LW
DWP	4,920
BIS	342
FCO	-
Cabinet Office	72
Scotland Office	-
Northern Ireland	-
DFT	-
DCMS	-
DFID	-
DfE	115
Wales Office	-
HM Treasury	-
DECC	-
DH	-
MOD	-
Home Office	-
DCLG	-
DEFRA	201
MOJ	-
Total	5,650

Source: FOI data.

Table 7: Estimated cost of the policy per worker category

		Number of workers	Annual average wage increase per worker	Estimated cost
London	Part-time	667	£1,133	£755,553
	Full-time	4,097	£2,266	£9,282,512
Rest of UK	Part-time	213	£610	£129,719
	Full-time	674	£1,219	£821,557
TOTAL		5,651		£10,989,341

Source: Analysis of FOI and ONS data.

All central government department contracts

The second approach to estimating the cost of this policy is to assume it applied to all contracts issued by central government departments. Contracts for the financial year 2013 were aggregated into 19 sectors, shown in the table below.[25]

The impacts of the policy for all central government departments, and of Whitehall specifically, are calculated as follows:

- By estimating the cost by industry of the proposed policy option, and by multiplying the average annual cost per worker with the number of affected workers in the sector.
- As the number of affected workers is not readily available, it was approximated using the total value of contracts in combination with the wage distribution in each of the industries.
- The total number of contractor employees working for the government is approximated using the ratio of industry jobs and industry turnover. Assuming that the overall industry ratio applies to the subset of contracted workers in the industry that work for the government, and considering the total value of government contracts in the sector as revenue, an approximate estimate of the number of contractor jobs for the government in an industry was obtained. This methodology is explained in detail in Appendix A, while assumptions used in the aggregation of contracts can be found in Appendix B.

25 Contracts were sourced from the Contracts Finder website; contracts relating to the 2013 financial year were identified via assumptions detailed in Appendix B. See gov.uk/contracts-finder.

- Analyse whether the cost is likely to be passed from the firms to the government in the form of higher bidding prices for government contracts, based on the specific structure of each industry.

Table 8: Industries by type

Code	Industries
A	Agriculture, Forestry And Fishing
B	Mining And Quarrying
C	Manufacturing
D	Electricity, Gas, Steam And Air Conditioning Supply
E	Water Supply; Sewerage, Waste Management And Remediation Activities
F	Construction
G	Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles
H	Transportation And Storage
I	Accommodation And Food Service Activities
J	Information And Communication
K	Financial And Insurance Activities
L	Real Estate Activities
M	Professional, Scientific And Technical Activities
N	Administrative And Support Service Activities
O	Public Administration And Defence; Compulsory Social Security
P	Education
Q	Human Health And Social Work Activities
R	Arts, Entertainment And Recreation
S	Other Service Activities

Source: Nace Rev.2, European Commission.

All departments' contractors paying the LW to those working for government procurements

In 2013 financial year, central departments carried contracts for a total value of over £10 billion, with the majority of contracts in the manufacturing sector and in the professional, scientific, and technical activities sector. This is estimated to amount to

approximately 186,000 workers.

Table 9: Estimated contractor employees working for the government

Industry	Total value of contracts ('000)[1]	Workers/ turnover ('000)[2]	Estimated number of workers	Share of workers in London[3]	Workers in London	Workers in rest of UK
A	£1,967	0.025	50	0%	0	50
B	£2,030	0.001	1	6%	0	1
C	£4,589,153	0.005	21,971	6%	12	195
D	£104,908	0.002	207	6%	5	77
E	£17,984	0.005	82	4%	947	21,024
F	£673,914	0.004	2,434	13%	325	2,109
G	-	0.003	-	15%	-	-
H	£534,012	0.008	4,147	17%	725	3,423
I	£35,462	0.018	640	23%	149	491
J	£592,619	0.005	3,140	32%	1,008	2,132
K	£443,723	0.008[26]	3,520	33%	1,154	2,366
L	£33,289	0.008	252	40%	100	152
M	£1,545,903	0.008	12,265	34%	4,129	8,136
N	-	-	-	38%	-	-
O	£1,174,236	0.009	10,983	12%	1,338	9,645
P	£241,476	0.148	35,749	12%	4,461	31,288
Q	£573,621	0.107	61,590	14%	8,419	53,171
R	£15,949	0.005	86	21%	18	68
S	£174,286	0.167	29,020	21%	5,957	23,063
Total	**£10,754,532**		**186,137**		**28,746**	**157,390**

Notes: 1. Analysis of Contracts Finder data, details in Appendix B. 2. The number of workers is sourced from the ONS ASHE 2013, Turnover is sourced from Annual Business survey 2012 (latest available). 3. Sourced from ONS, Regional Labour Market 2014 and Labour market Statistics 2014.

26 As data was unavailable for the financial sector, the ratio of Professional activities (M) was used.

The estimated number of workers in each industry, divided between London-based and UK-based according to the relevant industry's share, was then combined with the proportion of workers below the appropriate LW,[27] to estimate the number of workers that would be affected by the policy in each sector. This is approximately 7,000 people in London and 23,000 in the rest of the country.

Finally, applying the average annual wage increase by category, an approximation of the possible total direct cost of the policy was calculated. This is estimated to be approximately £43 million, with 35% of direct costs incurred in London.

The sectors that would be most affected by the policy are water, sewerage and waste management activities; professional, scientific and technical activities; education; other services; and health and social work activities, with the latter alone bearing around 40% of the total cost of the policy.

Impact on government, industry and employment

As the analysis in section 1 has shown sector profitability is likely to be a key determinant of the distribution of the cost of the living wage between government and industry of increasing the wage floor.

Sectors with the lowest profits are likely to be least able to absorb the costs and therefore most likely to pass these onto government. Sectors were classified as follows:

- Costs are likely to passed onto the government: If GOR is below 15% and labour to capital cost ratio is higher than 6, or GOR below 10% and labour to capital cost ratio higher than 5; or GOP below 20% and labour to capital cost ratio above 10.
- Uncertain: If GOR is around 20% and labour to capital cost ratio is lower than 6.
- Costs are likely to absorb by companies: If GOR is higher than 20% and labour to capital cost ratio is below 5.

These thresholds are indicative but provide a framework to consider the potential magnitudes of the costs.

Table 11 shows the potential distribution of the costs by industry. As the majority of the sectors affected face relatively low profit margins, a large proportion of the cost burden is expected to be passed through to government in the form of higher contract costs.

27 Data from ONS ASHE, distribution is assumed linear in percentile intervals.

Table 10: Estimated cost by industry

	London				Rest of UK				UK
Industry	Workers for gov't	Workers with wage between NMW and LLW	Workers affected	Cost	Workers for gov't	Workers with wage between NMW and LW	Workers affected	Cost	Total cost per industry
A	0	48%	0	£21	50	32%	16	£19,753	£19,775
B	0	7%	0	£12	1	4%	0	£58	£71
C	12	18%	2	£4,914	195	13%	25	£30,415	£35,328
D	5	22%	1	£2,353	77	4%	3	£3,477	£5,831
E	947	7%	65	£147,675	21,024	9%	1,818	£2,216,304	£2,363,979
F	325	17%	55	£123,542	2,109	9%	185	£225,248	£348,791
G	-	52%	-	-	-	40%	-	-	-
H	725	19%	134	£303,859	3,423	9%	302	£367,945	£671,805
I	149	80%	119	£269,541	491	69%	339	£412,860	£682,401
J	1,008	11%	115	£261,232	2,132	6%	131	£159,795	£421,027
K	1,154	10%	113	£256,419	2,366	5%	125	£152,204	£408,623
L	100	21%	21	£47,889	152	12%	18	£22,258	£70,147
M	4,129	14%	588	£1,332,110	8,136	8%	638	£777,430	£2,109,540
N	-	49%	-	-	-	37%	-	-	-
O	1,338	9%	114	£259,426	9,645	5%	444	£541,555	£800,981
P	4,461	24%	1,064	£2,411,649	31,288	14%	4,256	£5,190,133	£7,601,782
Q	8,419	29%	2,440	£5,528,879	53,171	18%	9,624	£11,735,487	£17,264,366
R	18	48%	9	£19,291	68	35%	24	£29,302	£48,594
S	5,957	32%	1,916	£4,342,331	23,063	22%	5,091	£6,208,171	£10,550,502
Total	28,746		6,757	£15,311,146	157,390		23,038	£28,092,396	£43,403,543

Source: Analysis of contracts and ONS data.

Using alternative thresholds, the expected distribution of the cost burden would change at the margin (that is, rather than the cost for a particular sector falling on the government it becomes uncertain who would bear the cost).

This intervention would likely have a negligible impact on employment. This is because it only affects a small portion of the workforce, and a small portion of workers earning less than the LW. However, as with all analysis in this report, this is limited to the direct impacts.

Table 11: Distribution of the cost burden ('000)

	Expected distribution of cost burden		
Industry	Government	Uncertain	Absorbed by industry
A			x
B			x
C	x		
D		x	
E			x
F	x		
G	x		
H		x	
I	x		
J			x
K			x
L			x
M			x
N			x
O			x
P		x	
Q	x		
R	x		
S	x		
Total cost	£28,930	£8,279	£6,194

Source: Analysis based on ONS data.

Policy option 3

This option looks at the cost of contracting companies paying the LW to all their employees (regardless of whether they work directly on a government procured service). This would be akin to social wage clause, whereby in order to be eligible to bid for contract the company was itself a living wage employer.

In order to estimate the impact of all contracting companies paying the LW to all their employees, a complete list of such companies and the number of their employees would be necessary. As the names of the contracting companies are not readily available from the Contract Finder, this analysis was not feasible. To illustrate the extent of the exercise, the top 10 contracts per department returned a list of over 260 non-unique companies, which would have to be matched with manually-retrieved employment levels.

To undertake the analysis in a meaningful way, the top 10 highest value contracts in the dataset were examined. These account for over 26% of the total value of contracts.

An analysis of the top 10 contracts out of 6,465 is not representative of the entire population of contracting firms, as the sample is biased towards larger firms. Nevertheless, it does provide an insight into the overall direction and intensity of the impact of the policy.

The top 10 contracts provide a list of 61 unique companies, which aggregately employ 464,000 workers, of which over the 80% is based outside London. Of these workers, 104,300 would be affected by the policy, resulting in a total estimated direct cost for the market of approximately £153 million, based on the aggregate wage increase across the 61 companies.

Impact on government, industry and employment

When considering the industry-wide reaction of a policy, two things should be noted, both connected to the fact that the increased labour cost of this particular policy option would be much higher than the one associated with the previous option.

- There may be industries in which the number of bidding companies would decrease dramatically as a result of the policy. The extent to which this would happen depends on many factors, the main one perhaps being the importance of government contracts for the industry and the extent to which the industry is affected by the policy.
- As the wage cost increase under this option is significantly larger than under the

other policy options, there is an increased risk of employment effects, particularly in localised areas.

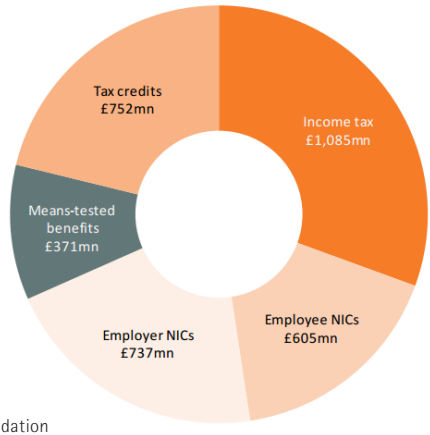
These caveats must be seen alongside the limitations inherent with the relatively small sample of contracts analysed. As such, this study provides an initial indication of the potential effects.

Factoring in tax and benefit savings

As set out in the underlying assumptions, the headline findings do not consider the potential impact they could have on the Treasury. As low paid employees earn more revenue to HMT from income tax would theoretically increase. Likewise, social security payments and tax credits would be reduced.

The below table shows the potential savings to government of moving all employees to the living wage (excluding for employment costs and reduced corporation tax take).

Estimated gross savings to Treasury if all employees were paid at least the living wage



Source: IPPR/Resolution Foundation

The impact for the treasury of paying the living wage differs from sector to sector and household to household. The distribution by household composition shows that those without children would gain most. However, lone parents and couples with children would respectively on average be around £400 and £600 a year better off.[28] This reflects

28 Ibid

the interaction with means-tested benefits, which those with children are more likely to be in receipt of. As households earn more, the state reduces support – sometimes at high marginal rates.

Potential gains for different households

	Average annual net income	Average increase in net income	Average % change in net income
Single no children	£13,079	£727	5.6%
Couple no children	£27,106	£922	3.4%
Lone parent	£22,612	£398	1.8%
Couple with children	£31,549	£614	1.9%

Source: Lawton, K and Pennycock, M Beyond the bottom line: The challenges and opportunities of a Living Wage (IPPR/Resolution Foundation, 2013)

The Institute for Fiscal Studies (IFS) has previously undertaken work to estimate the potential cost and savings of moving all public sector employees onto the living wage. This includes moving all school, NHS, and local government employees up to the living wage alongside those employed in central government departments. Using this analysis we can estimate in general terms the potential savings that would need to be offset when calculating the costs of making all central government departments living wage employers. By using the upper end figures (i.e. not taking into account the costs that might be absorbed by companies) we can discount the impact on corporation tax.

The IFS study shows that if everyone in the wage floor in the private sector increased to the living wage then gross earnings would increase by between £11.4 billion and £12.0 billion. Around £4.5-4.9 billion would accrue to government through increased higher income tax and employee national insurance payments and lower spending on benefits and tax credits. A further £1.4-1.5 billion would be paid in employers' national insurance contributions. In total the Treasury would be net beneficiaries of around £5.9-6.3 billion (leaving aside employment effects).[29]

The study suggests that the effective tax rate would be 46% for moving all workers

29 Brewer, M and Philips, D *IFS Analysis on the living wage* (IFS, 2010)

up to the living wage.[30] Applying this formula to the costs set out in this report suggests that the bill for directly employed staff would be reduced by around £1.1 million whilst the bill for contracted hired staff would be around £5.9 million. As such the cost to Whitehall departments to be eligible to be living wage employers would be approximately £7 million.

If the living wage was to become the wage floor for all services procured then the cost would drop from around £43.4 million to £23.4 million, and if some wage increases are absorbed by providers alongside tax and benefit savings (but discounting the impact on corporation tax) then the costs are reduced still further to £17.2 million.

Whitehall and the Living Wage: Summary

Number of workers	Cost	Tax & Benefit Savings	Net Cost to Government
A: 1,618 (directly employed)	£2m	£0.9	£1.1m
B: 5,650 (hired contracted staff in Whitehall)	£11m	£5.1	£5.9m
C: 29,795 (all contract staff incl. B)	£43.4m	£20m	£23.4m
D: 29,795 (all contract staff incl. B, but with contractor paying 21% towards cost of LW)	£37.2m	£20m	£17.2m
E: 31,413 (all direct A and all indirect D)	£39.2m	£20.9m	£18.3m

30 The IFS calculations were made before welfare reforms and changes in the personal allowance thresholds which would reduced savings. However, the types of people working for Whitehall departments might be different to those in the private sector – for example fewer restaurant and bar workers who might tend to be younger and have fewer children - therefore increasing the effective tax rate. Moreover, moving small numbers to the living wage is likely to increase the effective tax rate as it is more likely that one rather than two people per household receives a pay rise.

Conclusion

Conclusion

High levels of low pay and in-work poverty are now widely recognised as serious social and economic problems. Part of the response to this challenge has been the growing support for the living wage, notably from local government. Despite government backing for the living wage campaign its introduction within Whitehall departments has failed to materialise.

This research paper has set out headline figures for moving workers in Whitehall departments on to the living wage. It has also highlighted the cost to government and the numbers of people who could benefit if Whitehall departments included living wage clauses in public contracts. As the figures show, the cost of paying those employed directly or indirectly in Whitehall departments the living wage are small in comparison to overall public spending. Given the small numbers involved and the significance of government taking a lead it is perhaps now time that the Whitehall departments became living wage employers.

Appendix A

Methodology for contracts and the living wage

Methodology for contracts

The methodology used to estimate the number of workers affected by the policy for those options for which the number of workers affected was not readily available consists of two parts: estimates of cost per industry and pass-through costs.

Estimation of cost per industry
The cost of the wage raise for each industry was calculated as the product of average yearly cost of the wage raise per worker, and the number of workers affected in each industry, both for London and for the rest of the UK.

In order to obtain an estimate of the cost of the policy per industry, the following steps were taken:

- The total value of contracts in each industry for the fiscal year 2013 was estimated.
- The ratio of industry workers and total industry turnover was taken.

  It was assumed that the overall productivity of worker in the industry does not change when one looks at the subset of workers working for government contracts. This means that the ratio of number of workers in the industry and industry revenue – calculated as turnover – is roughly the same as the ratio of workers contracted by the government in the industry and the total value of the contracts in that industry. This is shown in figure 1.

Figure 1: Assumption for estimating contractor employees working for the government

This relationship allows estimating the number of contractor workers in each industry.

- The share of workers earning below the LW per industry was estimated, using the ASHE 2013 wage distribution per industry.

As the ASHE only provides wage data in percentiles, it is not possible to exactly estimate the number of workers within any wage level that is not a percentile bound. Therefore, uniform distribution in the percentile intervals was assumed.[31] This assumption further implies that the price paid by the government for its contracts is similar to the market price of the job.[32]

- Combining the estimated number of contractor workers in London and in the Rest of the UK with the share of workers below the LW and the London LW retrieved from the ASHE, an estimate of the number of contractor workers in each industry was obtained.

- The estimate of workers affected by the policy was then multiplied by the relevant average yearly wage, which allowed obtaining an estimate of the cost per industry of the policy under study.

  This was estimated assuming wages are uniformly distributed between the NMW and the LW of interest. As the wage distribution is believed to spike in correspondence of the price-floor, it is expected that this assumption does not distort the results for small enough intervals. A sensitivity test was performed in this respect: substituting the average annual wage change for workers in London and in the rest of the UK with estimates of these differences calculated on the basis of the ASHE distribution for each industry (i.e. using 38 average wage difference estimates instead of 2), increases the cost of the policies Section 3.2.2 by 0.7% and 0.005% respectively (in order of discussion in the report).

Pass-through of the cost

While the impact of a compulsory raise in labour costs affects an industry in its entirety, which is the case of a rise of the NMW, the impact of a raise in the labour costs associated with government contracts affects only those industries that effectively win the auctions, with the strength of the impact depending on the industry's specific structure. In particular:

- As the raise affects only those firms that win contracts with the government, there will be less incentive for those firms that operate on very low profits to participate to government contracts' auctions.

31 Given that the percentile intervals are 5, 10 or 20% long, the assumed linear distribution in the intervals is not expected to diverge significantly from the actual wage distribution.
32 Contracts are won through an auction process which ensures that contracts are not overpriced with respect to their market value.

- While the higher labour cost associated with winning the contract would cause part of the firms in an industry to increase their bids to offset the cost increase, in certain industries there will likely be firms that are able to absorb the increase in labour cost brought by the policy and keep the bid unchanged.

Looking at an industry's profit margins allows gaining information on the structure of the industry. An industry that is structurally prone to low profit margins, will be less likely to have a set of firms whose profit margin is significantly higher than that of the rest of the industry. Moreover, an industry that has a high share of workers affected by the policy will be less likely to have firms that are able to absorb the cost increase and hence keep the bid price unchanged.

Therefore, an industry that is highly affected by the policy and has low profits will be likely to pass the cost increase onto the government, while industries that are likely to have companies gaining high profits or in which there are firms that are hardly affected by the policy and are at least averagely profitable would be likely to absorb the increase in labour cost and hence keep the contract prices unchanged.

Among those industries that have a set of firms whose profits are significantly higher than the majority of the industry's, the higher is the number of firms in this set, the more likely it is that there will be 'competition on the top', resulting in a bigger portion of the price increase been absorbed by the industry (and hence a lower proportion of it being passed onto government).

This analysis takes into account the first two points, analysing which industries are more likely to pass the price increase onto government, but takes a conservative approach regarding the last point, assuming that all industries that are able to absorb the price do so completely.

Appendix B

Contract aggregation and the living wage

Contract aggregation

The UK government runs thousands of contracts every year, ranging from very short ones to some lasting over a decade.

In order to isolate the value of contracts in the FY 2013, some adjustments were required:

- The contracts' length can only be retrieved manually from the Contract Finder dataset, while the contract's deadline is available. Further, the database contains contracts that begin in 2012 but continue in 2013. It was therefore necessary to identify those contracts that only marginally count in the FY2013. Having performed some analysis of the data, contracts whose value was over £1 million in the first three months of the fiscal year and contracts whose deadline is in April 2013 were removed from the dataset;
- The value of contracts whose length spans more than a year was divided by the number of years the contract lasts for, in order to estimate the amount of the contract relevant to 2013; and
- Having analysed the data, it was decided to exclude contracts listed with an estimated value to avoid the double counting of contracts due to the presence of both the proposal and the finished contract in the dataset.

The Smith Institute
The Smith Institute is an independent think tank which provides a high-level forum for thought leadership and debate on public policy and politics. It seeks to engage politicians, senior decision makers, practitioners, academia, opinion formers and commentators on promoting policies for a fairer society.

If you would like to know more about the Smith Institute please write to:

The Smith Institute
Somerset House
South Wing
Strand
London
WC2R 1LA

Telephone +44 (0)20 7845 5845
Email info@smith-institute.org.uk
Website www.smith-institute.org.uk

The Smith Institute is a not-for-profit company (registered as SI Research Limited, 07098225)