

Lifting the cap

The economic impact of increasing public sector wages in the UK



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For UNISON, the public service union

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Acknowledgements

Data from the Labour Force Survey July-September 2013 (Office for National Statistics, 2014) and the Family Resources Survey 2010-11 (Department for Work and Pensions et al, 2012) are Crown Copyright and are provided courtesy of the ESRC's Economic and Social Data Service (ESDS) and distributed by the UK Data Archive.

Executive summary

This report analyses the impact of increasing public sector pay in the UK economy and clearly demonstrates the major benefits to the economy of lifting the public sector pay cap while at the same time easing the squeeze on living standards.

Public sector pay has been subject to very tight limits in recent years as part of the UK Coalition government's austerity drive. In total, pay settlements across most of the public sector only amount to a 3% increase in pay over the 2010-15 parliament, compared to inflation over the same period of around 20% as measured by the Retail Price Index. This means that public sector wages have fallen by 17% in five years. And for some public sector workers the pay squeeze has been even worse than this. According to evidence from the Resolution Foundation, around 300,000 public sector workers are paid less than the Living Wage.

The ongoing period of public sector pay restraint since 2010 has resulted in substantial falls in living standards for households which include public sector workers. There is a clear economic, political and moral case for easing restraints and increasing public sector pay across the board. This report shows that there are substantial benefits across the economy from increasing public sector pay.

The economic impact of an increase in public sector pay

This report looks at the overall effects of an increase in public sector pay on the economy and the public finances, using the IPPR/Landman Economics tax-benefit microsimulation model to model the impacts. For every 1% increase in pay for all public

sector workers the overall public sector wage bill increases by around £1.4 billion.

However, the net cost to the government of increasing public sector pay is significantly less than this for two reasons:

1. Because pay increases, the government collects a higher amount of income tax and National Insurance contributions than it would otherwise have done, and it also pays out less in in-work benefits and tax credits.
2. The government also collects additional indirect taxes (eg VAT and excise duties) because the public sector workers receiving a pay rise are likely to spend at least some of their additional take-home pay on goods and services which are subject to indirect tax.
3. There is a 'multiplier' effect arising from the stimulus to demand as take-home pay increases. This report takes account of recent research from the International Monetary Fund [IMF] which suggests that multipliers are higher in situations like the current one where the economy is still in recovery from the severe economic recession of 2008/09.

Using estimates of the multiplier effects from the International Monetary Fund, the calculations in this report show that on average every 1% increase in public sector pay:

- generates between £710 million and £820 million for the government in increased income tax, National Insurance contributions, and expenditure tax receipts, and reduced benefit and tax credit expenditure. This reduces the net

cost of a public sector pay increase to something in the region of £600 million;

- injects between £470 and £880 million of extra value into the economy;
- creates between 10,000 and 18,000 (full-time equivalent) jobs, especially in sectors such as leisure and transport.

As an illustration, the table below shows estimates for the net cost to government, the increase in national output, and the number of extra jobs created by a 3% increase in public sector pay (approximately in line with the Office for Budget Responsibility's forecast of annual Retail Price Index inflation between now and 2018), using the IMF multiplier estimates. Two numbers are presented – minimum and maximum estimates, corresponding to the minimum and maximum values of the multiplier effect based on the IMF research.

Table 1. Summary of overall economic impacts of a 3% increase in public sector pay

Initial impacts (before multiplier effects)		
Change in overall wage bill (£m)	4,140	
Initial amount recouped by government through increased tax and lower benefit/tax credit payments (£m)	1,750	
Additional impacts (from multiplier effects)	Minimum	Maximum
Extra amount recouped by government through increased tax and lower benefit/tax credit payments after multiplier (£m)	380	710
Total impact		
Total net cost to government (£m)	2,010	1,680
Increase in GDP (£m)	1,380	2,670
Number of extra jobs created (assuming full-time at median wages)	29,000	55,000

The report also looks at which industries the additional jobs might be created in as a result of the increase in public sector pay. Based on spending patterns of workers in the Living Costs and Food Survey the additional jobs are most likely to be created in private sector service industries such as leisure and recreational services and transport.

Funding an increase in public sector pay

The results shown in this report suggest that the government recoups between 50 and 60% of the cost of increasing public sector pay as a result of increased tax receipts and reduced benefit and tax credit payments. This report looks at options for funding an increase in public sector pay without the government having to increase borrowing.

The following options for tax increases would impact mainly on very rich households, and should not significantly reduce the demand for goods and services in the economy (which would reduce the multiplier impact of the public sector pay increase):

- Foregoing the 1% reduction in corporation tax (from 21% to 20%) scheduled for 2015 and instead increasing the rate back up to 22%, or higher (this would be the easiest option to implement in the short run).
- Introducing a tax on high-value land or a “mansion tax” on high value properties.
- Introducing a tax on financial transactions.
- Additional measures to reduce tax avoidance and evasion.

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Introduction

UNISON has commissioned Landman Economics to carry out an economic analysis of the potential economic impact of increasing public sector pay in the UK. Public sector pay has been subject to very tight limits in recent years, as shown in Table 2, which compares pay settlements across the public sector with inflation (as measured by the Consumer Price Index (CPI) and the Retail Price Index (RPI)).

Table 2. Public sector pay limits compared with inflation, 2010-2015

Financial year	Pay increase (nominal, %)	CPI (%)	RPI (%)
2010/11	1.0	3.1	4.6
2011/12	zero	5.2	5.6
2012/13	zero	2.2	2.6
2013/14	1.0	2.7	3.2
2014/15	1.0	1.8	2.5
Cumulative, 2010-15	3.0	15.9	19.9

As shown in Table 2, for each of these years the increase in public sector pay has been less than inflation as measured by the CPI, meaning that wages for a typical public sector worker who received no other increases (such as promotions or scale increments) will have fallen by around 13% in real terms over the 2010-15 Parliament. Using the RPI measure of inflation, the shortfall is even larger, at around 17%. On top of this, for some groups of public sector workers the pay squeeze has been even more severe (for example local government workers and civil servants in some central government departments have been subject to three years of zero increases rather than

two, and 60% of NHS staff will receive a pay freeze rather than a 1% rise for 2014/15).

This report looks at the overall impact on the UK economy and the fiscal deficit of increasing public sector pay. Three scenarios are presented, corresponding to increases of 1%, 2% and 3% respectively.

The report is structured as follows. Section 1 uses data from two UK survey data sources – the Labour Force Survey and the Family Resources Survey – to produce estimates of the number of public sector workers in the UK, their wage levels and other characteristics, and compares these with aggregate estimates from the Office for National Statistics. Section 2 estimates the gross and net costs to the government of increasing public sector pay. The net costs of increasing public sector pay are lower than the gross costs because the increase in public sector pay results in increased tax and National Insurance receipts and reduced benefit and tax credit payments for the Exchequer. However, there is also a multiplier impact arising from the increased demand for goods and services brought about by the increased disposable income of public sector workers. Section 3 estimates how large this multiplier effect might be and the resulting overall impact on the net costs of increasing public sector pay. Section 3 also provides an estimate of the increased employment resulting from the multiplier effect of increased public sector pay, while Section 4 uses data on spending patterns from the UK Living Costs and Food Survey to estimate which sectors in the economy these new jobs might be created in. Section 5 considers equitable ways in which the net cost of meeting public sector pay rises could be met. Finally, Section 6 offers conclusions.

Employment and wages for public sector workers in the UK

This section uses data from two UK household survey data sets, the Labour Force Survey [LFS] and Family Resources Survey [FRS] to identify the characteristics of workers in the public sector in the UK, and in particular their wage levels. The report starts with an analysis of the LFS as it is the most up-to-date source of survey information on wages in the UK, and has the most detail on employment conditions and wages. I then go on to check the data from the FRS against the LFS to make sure that the data in the LFS correspond to the FRS, in preparation for simulating the impact of increasing public sector pay on the public finances and on net incomes later on in the report using the IPPR/Landman Economics tax-benefit microsimulation model (which runs on FRS data).

The number of public sector workers in the UK: evidence from the Labour Force Survey

The most recent official figure for UK public sector employment in the Office for National Statistics (ONS, 2013) is 5.67 million in October 2013¹. Using the Labour Force Survey for July-September 2013 (the most recent data available at the time the empirical work for this project was carried out), public sector workers were defined as employees who identified themselves as in one of the following types of “non-private organisation” in the LFS interview:

- central government or the civil service
- local government or councils
- schools

- police, probation and fire services
- universities
- health authorities or NHS trusts
- the armed forces

Additionally, employees were only counted as in the public sector if they were classified in one of the following SIC2007 industrial categories:

- O (public administration and defence)
- P (education)
- Q (human health and social work activities)

This resulted in the following estimate of the number of employees in the public sector using the July-September 2013 LFS, as shown in Table 3.

Table 3: distribution of public sector employees in the LFS July-September 2013, by type of organisation worked for

Type of organisation	Number of employees (thousands)
Central government or civil service	588
Local government or council (including schools and police)	2,825
University etc.	589
Health authority or NHS trust	1,812
Armed Forces	134
TOTAL	5,948

The analysis using LFS produces a total figure of 5.95 million which is slightly higher than the official ONS estimate of 5.67 million, but only by around 5%. The discrepancy

¹ See <http://www.ons.gov.uk/ons/rel/pse/public-sector-employment/q3-2013/index.html>

between the LFS estimate and the ONS estimate is probably accounted for by a small number of employees in the LFS interview identifying themselves as public sector workers when they are actually in the private sector – for example, working for an outsourcing company providing services to the public sector. In the analysis later in this report I scale down the estimates derived using household survey data so that they match the ONS estimate of the number of public sector workers.

The distribution of wages for public sector workers in the UK

The Labour Force Survey data contains wage information and so can be used to analyse the distribution of earnings for public sector workers. Because wage information is only collected from a subsample of employees in the LFS in any one quarterly survey, the earnings analysis in this report uses four consecutive quarters of LFS data (from October 2012 to September 2013) to provide a larger sample size.

Table 4 shows the distribution of weekly wages and the distribution of hourly wages for employees in the public sector from the LFS.

Table 3. Weekly and hourly wages: public sector employees in the LFS, October 2012-September 2013

Distributional statistic	Weekly earnings (£/week)	Hourly earnings (£/week)
10th percentile	153	6.86
25th percentile	277	9.00
Median	438	12.50
75th percentile	646	17.18
90th percentile	854	23.49
Mean	483	14.66

Table 3 shows that median weekly earnings in the LFS data are around £440 per week. Given that the restraints on public sector pay over the 2010-15 parliament are equivalent to a pay cut of around 17% compared to RPI inflation, this means that by 2015, a worker on median public sector weekly wages will be around £75 per week (or £3,900 per year) worse off than if wages had kept pace with RPI.

The hourly earnings data in the right hand column of Table 2 show that one in 10 public sector workers are paid at an hourly rate of £6.75 or less. This is not far above National Minimum Wage level, and considerably less than the Living Wage² (which over the time period covered by the LFS data was set at £8.55 for workers in London and £7.45 for workers outside London. Further analysis using the LFS suggests that just under 15 percent of public sector workers – around 850,000 employees – were paid at hourly rates below the Living Wage in 2013.

² For more details on how the Living Wage is calculated see the Living Wage Foundation's site at <http://www.livingwage.org.uk/>

However, there is some measurement error in the hours variable for the LFS³, which can lead to overestimates of the number of workers earning below living wage. Research for the Resolution Foundation by Whittaker and Hurrell (2013) using the Annual Survey of Hours and Earnings [ASHE], a larger survey which explicitly records hourly earnings, finds that approximately 300,000 public sector employees were paid at hourly rates below the living wage. However, both the LFS figures presented here and the Resolution Foundation estimates from ASHE use the 2012 rates of the living wage. In November 2013 the living wage increased to £8.80 for workers in London and £7.65 for workers outside London – a higher rate of increase than the pay settlements given to public sector workers – and so it is very likely that the number of public sector workers paid less than the living wage is higher in 2014 than in 2013.

³ This arises because the weekly earnings variable and the variable for hours worked per week in the LFS are not always measured over the same week in the LFS questionnaire.

Modelling the impact of an increase in public sector pay using the Family Resources Survey

This section of the report looks at the impact of an increase in public sector pay on net incomes and on the public finances using the IPPR/Landman Economics tax-benefit microsimulation model. The Family Resources Survey (FRS) has to be used for this analysis as the Labour Force Survey does not contain enough information on economic variables other than wages and employment (eg investment income, rental and mortgage payments, etc.) to enable a full analysis of tax and benefit impacts to be run. The IPPR/Landman Economics tax-benefit microsimulation model is set up to run on FRS data from 2010-11, which is not as up to date as the LFS data analysed in the previous section. FRS does however contain similar employment status variables to the LFS which enable public sector workers to be identified in the FRS sample. A comparison of public sector employment and wages levels in the 2010-11 FRS against data for the same time period in the LFS (available from the author on request) demonstrates that the FRS data gives a reasonably accurate representation of public sector earnings and employment. To ensure that the FRS modelling gives an accurate assessment of the impact of increasing wages for the public sector workforce as it currently stands, the FRS earnings data for 2010/11 are updated to winter 2013 earnings levels using the ONS's Average Weekly Earnings (AWE) index for public sector workers, while the overall totals for public sector employment in the FRS are scaled down to take account of reductions in the public sector workforce between the 2010/11 fiscal year and the current fiscal year.

This report presents three different sets of results for the impact of an across-the-board

pay increase for public sector workers of 1%, 2% and 3% respectively.

Effects of increasing public sector pay assuming no macroeconomic impacts

The first set of results from the tax-benefit model presented here assumes that there are no multiplier effects of increased demand for goods and services resulting from the increase in public sector pay. This is not a very realistic assumption but it provides a useful benchmark against which to assess the potential macroeconomic effects later in the report.

Table 4 shows the results from the tax-benefit model for the aggregate impacts of increasing public sector pay assuming no macroeconomic impacts. A 1% increase in public sector pay results in an increase of around £1.4 billion in the overall public sector wage bill. Of this, the government recoups £470 million in increased income tax and employee National Insurance Contributions (NICs). Employer NICs receipts also increase by £180 million although given that these are paid (at least in the first instance) by public sector employers, the net impact of the increase in employer NICs on the public finances is neutral – simply a transfer of £180 million from public sector employers to the Exchequer. In addition to these impacts there is a £50 million decrease in expenditure on tax credits and means-tested benefits (such as Housing Benefit) due to the tapering away of these transfer payments for low-income families with at least one adult working in the public sector who are receiving them. Overall, around £860 million of the gross wage increase ends up in public sector workers' pockets

(around 62%), with around £520 million (38%) going to the Exchequer. Hence, even without considering multiplier impacts, the net cost to the public finances of a public sector pay increase is less than two-thirds of the gross cost.

The results in the '2%' and '3%' columns are roughly double and triple the size of the results in the 1% column, implying that the impact of increased public sector pay on net incomes and the public finances is roughly linear.

Table 4. Aggregate impacts of increasing public sector pay, assuming no macroeconomic impacts (all results in £millions)

Impact	Scenario: Increase in public sector pay		
	1%	2%	3%
Change in overall wage bill	1,380	2,760	4,140
Increase in income tax and employee NIC receipts	470	940	1,420
Increase in employer NICs receipts	180	360	540
Decrease in benefit/tax credit spending	50	90	140
Total improvement in public finances from increased tax receipts (excluding employer NICs) and reduced benefits/tax credits	520	1,040	1,560
Change in net incomes (= net cost to government of increasing wages)	860	1,720	2,590

The macroeconomic impacts of an increase in public sector pay

This section of the report extends the previous analysis of the economic impact of a public sector pay increase by looking at the potential multiplier impacts of the increase in disposable income for households containing public sector workers. This increase in household net incomes should produce a macroeconomic stimulus effect as some of the increased income is spent in the economy rather than saved. The question is: how large are these stimulus effects likely to be?

The size of the multiplier

To estimate the stimulus impacts of increased public sector pay on the UK macroeconomy it is necessary to make an assumption about the size of the fiscal multiplier. This is a number capturing the extent to which the increases in net incomes arising from an increase in public sector pay feed through into increases in GDP through increased economic activity among UK-based companies and workers.

The UK's Office of Budget Responsibility makes the following assumptions about the size of the multiplier in the UK in its economic forecasting model⁴, with the size of the multiplier depending on where the increase (or decrease) in demand comes from. Table 5 below shows the OBR's multiplier assumptions. In general the multiplier impact of increases in public spending is higher than the multiplier 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 5. OBR multiplier assumptions

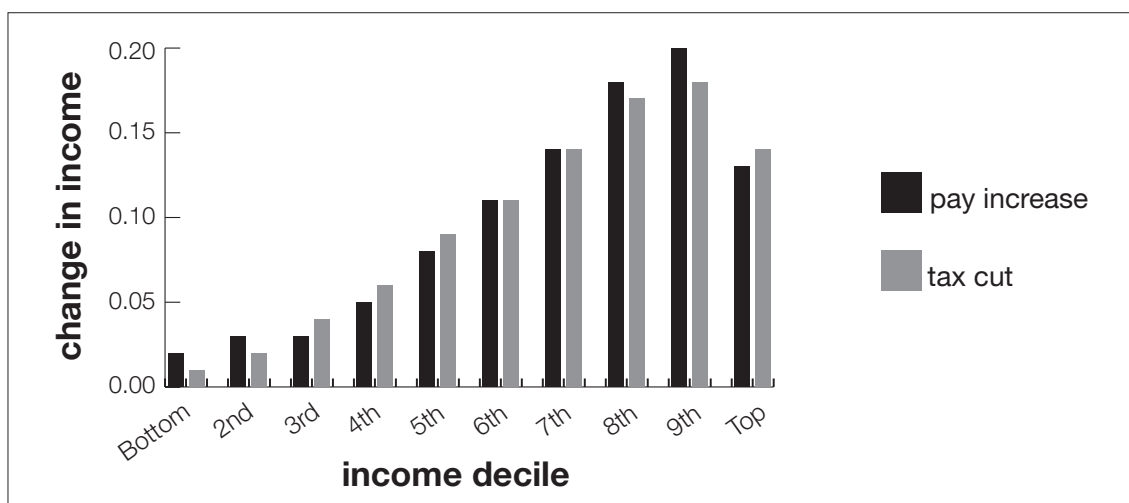
Source of demand increase (decrease)	multiplier
Reduction (increase) in VAT	0.35
Reduction (increase) in personal tax and NICs	0.3
Increase (reduction) in benefit/tax credit spending	0.6
Change in government spending on departments	0.6
Change in government capital investment spending	1.0

Source: HM Treasury (2010), Table C8

Analysis using the IPPR/Landman Economics tax-benefit model suggests that the distributional impact of an increase in public sector pay looks very similar to the impact of a cut in income tax. Figure 1 shows the distributional impact by household income decile (as a percentage of net income) of a public sector pay increase compared with a cut in basic rate income tax. To make the results for both options directly comparable they have been scaled so that each option increases total disposable income for UK households by £1 billion. The overall distributional impact for both options is very similar, with the largest percentage increase in net incomes for households in the eighth and ninth decile.

⁴The OBR model is the same model that HM Treasury uses.

Figure 1. Distributional impact by household income decile of £1bn public sector pay increase vs £1bn cut in basic rate income tax



For this reason, this report uses 0.3 as an estimate of the multiplier that corresponds to the OBR's assumed multiplier for demand changes resulting from cuts to income tax and NICs. However, the OBR multiplier estimates used in the previous section 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)⁵.

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 and 2013: see also Weldon, 2012, and Box 5.1 in OBR, 2014).

⁵ Although the UK economy began to recover during 2013 and the Office for Budget Responsibility expects GDP growth of 2.7% in 2014, this is still not a very weak recovery by historical standards; average earnings have fallen continuously for five years relative to RPI inflation, and much of the increase in consumer spending over the last 12 months has been driven by increased debt, meaning that the recovery lacks solid foundations (Meadway, 2014). In this context, the IMF multipliers look more relevant to the UK's current economic situation than the OBR multipliers.

Taking an average of the OBR's tax and public spending multipliers as shown in Table 4 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, then the estimated multiplier impact of an income tax cut (which is the multiplier used in this report to estimate the effect of a public sector pay

increase) is correspondingly higher, and the estimated net cost to the government of an increase in public sector pay is lower. This report gives results for the multiplier impacts of a public sector pay increase using both the OBR multiplier of 0.3 and larger estimates for the multiplier based on the IMF estimates (which imply a multiplier of between 0.54 and 1.02).

The OBR multiplier of 0.3 implies that the total increase in UK GDP arising from an increase in public sector pay of 1% is $(0.3 \times \text{£}860 \text{ million}) = \text{approximately } \text{£}260 \text{ million}$. This compares with estimates of between £470 and £880 million using the IMF multiplier estimates.

Additional impacts on the public finances

There are two sources for potential gains to the Exchequer from the increased disposable income resulting from a public sector pay increase. Firstly, there is the potential for increased receipts from taxes on expenditure (eg VAT and excise duties) arising from households spending a proportion of their increased disposable income. Secondly, increased employment (via the multiplier effect) will lead to additional income tax and National Insurance Contributions, and reduced benefit and tax-credit spending as more people are employed. This section presents estimates of both these impacts on the public finances using the OBR and IMF multiplier assumptions.

Increased revenue from taxes on expenditure

The extent to which revenue from taxes on

expenditure increases in response to a change in disposable income depends on two factors:

1. The marginal propensity to consume (MPC) – ie the proportion of additional income which is spent rather than saved by households;
2. The average tax rate (comprising mainly VAT plus excise duties) on the additional expenditure

This report uses an estimate of 0.45 for the average MPC across the UK population, based on recent research from the Bank of England (Bank of England, 2012, pp338-339) ⁶. Analysis of Data from HMRC VAT and excise duty receipts compared to total consumer expenditure data from ONS suggests that the share of expenditure taxes in overall consumption is around 17%⁷.

This means that the additional expenditure tax receipts that can be expected from an increase of £860 million in net incomes (corresponding to a 1% increase in public sector pay) is:

$$860 \times 0.45 \times 0.17 \\ = \text{approximately } \text{£}70 \text{ million.}$$

⁶ Specifically, the Bank of England research (based on a household survey carried out by NMG Consulting for the Bank) suggest that the average MPC (marginal propensity to consume) in response to permanent changes in income was approximately 45 percent.

⁷ HMRC data from <http://www.hmrc.gov.uk/statistics/receipts/receipts-stats.pdf> shows that total revenue for expenditure taxes for 2012-13 was approximately £155 billion, compared to total household final consumption expenditure of £920 billion (see ONS 2013, Table 1.3)

Increased employment from multiplier effects

It is possible to calculate the impact on the public finances arising from multiplier impacts as follows. Recent data suggests that the share of wages in GDP is approximately 54 percent⁸. Given that the estimated increase in GDP from the multiplier effects of around £260 million using the OBR multiplier, and between £470 and £880 million using the IMF multiplier, this suggests that the increase in overall (gross) wages will be, at lowest, $(0.54 \times 260) =$ approximately £140 million, and at best, $(0.54 \times 880) =$ approximately £470 million.

In terms of the impact of this increase in gross wages on the public finances, an analysis using the IPPR/Landman Economics tax-benefit model of the average increase in income tax and NICs revenue and the average reduction in tax credit and benefit spending, based on a comparison of families with no-one in work, one adult in work and (for couples) two adults in work, suggests that on average around 50% of the increase in gross wages resulting from a previously non-working person moving into employment is recouped by the Exchequer. This implies that the improvement in the public finance resulting from the multiplier effect (using the OBR's multiplier estimates) is between £70 million (half of £140 million) and £440 million (half of £880 million).

⁸ See ONS (2013), series HAEA (compensation of employees) and YBHA (gross domestic product at market prices). The ratio between the two series in 2012 (the most recent year for which data are currently available) is approximately 54%.

Summary of overall net cost to the government and employment impacts of increasing public sector pay

Tables 5a, 5b and 5c show the net cost to the government of increasing public sector pay by 1, 2 and 3% using the OBR multiplier assumptions, the lower bound IMF multiplier assumptions and the upper bound IMF multiplier assumptions respectively. The tables also show the number of additional full-time equivalent jobs (at average earnings levels) created.

Table 6a. Net cost to the government of increasing public sector pay (£millions) and number of jobs created under OBR multiplier assumptions (multiplier=0.3)

	Size of pay increase		
	1%	2%	3%
Initial cost (from Table 3)	860	1,720	2,590
Additional expenditure tax receipts	-70	-130	-200
Additional tax receipts and reduced spending from multiplier effect	-70	-140	-210
Net cost to government	720	1,450	2,180
Number of additional jobs created	5,000	11,000	16,000

Table 6b. Net cost to the government of increasing public sector pay (£millions) and number of jobs created under IMF lower bound multiplier assumptions (multiplier=0.54)

	Size of pay increase		
	1%	2%	3%
Initial cost (from Table 3)	860	1,720	2,590
Additional expenditure tax receipts	-70	-130	-200
Additional tax receipts and reduced spending from multiplier effect	-130	-250	-380
Net cost to government	660	1,340	2,010
Number of additional jobs created	10,000	19,000	29,000

Table 6c. Net cost to the government of increasing public sector pay (£millions) and number of jobs created under IMF lower bound multiplier assumptions (multiplier=1.02)

	Size of pay increase		
	1%	2%	3%
Initial cost (from Table 3)	860	1,720	2,590
Additional expenditure tax receipts	-70	-130	-200
Additional tax receipts and reduced spending from multiplier effect	-240	-470	-710
Net cost to government	550	1,120	1,680
Number of additional jobs created	18,000	36,000	55,000

The results from Tables 6a, 6b and 6c show that the additional expenditure tax receipts resulting from increased demand, and the additional tax receipts and increased spending resulting from the multiplier effect, mean that between 48 and 60% of the net cost of increasing public sector pay is recouped by the government in increased tax receipts and reduced benefit and tax credit spending, depending on which multiplier estimate is used. A 3% increase in public sector pay creates between 16,000 and 55,000 jobs depending on which multiplier estimate is used.

Which industries might see an increase in employment as a result of increased public sector pay?

The analysis in the previous section suggested that a 3% increase in public sector pay could increase employment by between 16,000 and 55,000 jobs (depending on which multiplier estimate was used, and assuming full-time jobs at average UK earnings). This section uses data on spending patterns of households in the UK Living Costs and Food Survey (LCF) with similar income profiles to the households in which public sector workers are located to offer some insights into which sectors of the economy these additional jobs might be created. The LCF is an annual sample of around 5,000 UK households each year which collects information on household expenditure, classified into different categories of goods and services.

Unlike the LFS and FRS, the LCF does not collect any information on industry sector or type of organisation worked for, so it is not possible to identify public sector workers directly. As an approximation, I have used the patterns of overall expenditure by goods and services category in the LCF data for all households and then, for the subsample of working age households with employees only, re-weighted expenditure totals according to the distribution of the additional disposable income arising from the public sector pay increase, by household decile. Table 7 shows the breakdown of overall household expenditure in the LCF sample as a whole and for the sample re-weighted to resemble the FRS population of households containing public sector workers.

Table 7. Breakdown of overall expenditure by goods/service category in the 2011 LCF: overall, and reweighted to correspond to household income decile impact of increase in public sector pay

Product group	Percentage of total expenditure	
	All households	Households with employees only, weighted by decile impacts of public sector wage increase
Food and non-alcoholic beverages	13.3	11.3
Alcoholic beverages & tobacco	2.9	2.6
Clothing and footwear	5.2	5.4
housing, water and electricity	15.4	12.5
furnishings, HH equipment, carpets	6.6	6.6
health expenditure	1.6	1.4
transport costs	15.9	18.7
Communications	3.2	2.9
Recreation	15.4	16.3
Education	1.7	2
Restaurants and hotels	9.5	10.8
Misc goods and services	9.3	9.5
Total	100	100

The right-hand column of Table 7 shows that the additional disposable income arising from a public sector pay increase is most likely to be spent on transport (19% of total expenditure), recreation (eg leisure services, sports, music, cinema etc. – 16 percent), housing, water and electricity (13%), food and non-alcoholic beverages (11%) and restaurants and hotels (11%). Most of these services are provided by the private sector in the UK. Therefore, it seems clear that increasing public sector pay has a positive spillover impact on the private sector due to the increase in demand for private sector services such as car and rail travel, leisure centres, cinemas and sporting activities.

Funding an increase in public sector pay

As shown in Section 2 of this paper, the government should be able to recoup around 50 to 60% of the gross cost of increasing public sector pay through increased tax receipts and reduced benefit and tax credit expenditure. This leaves a net bill to the taxpayer of between £560 and £720 million for a 1% increase in public sector pay, rising to between £1.6 billion and £2.2 billion for a 3% increase. This section discusses options for tax increases or spending cuts elsewhere which could fund increased pay for public sector workers without the government having to increase borrowing.

Tax increases

There are several options for tax increases to fund increased public sector pay. In compiling these the main objective has been to identify tax increases which:

1. impact mainly on the richest decile of households;
2. do not significantly reduce the demand for goods and services in the economy – otherwise this would (at least partially) negate the stimulus impact of the public sector pay increase modelled in Section 2.

The principal options for tax increases are described below.

Short-term options

Increase corporation tax

The main rate of corporation tax for firms with profits of over £1.5 million has been cut from 28% in 2010 to 21% in 2014 and is

scheduled to be cut further to 20% in 2015. Although corporation tax is formally a tax on business profits, there is a dispute in the academic economic literature regarding whether firms are able to shift the incidence of corporation tax onto workers in the form of lower wages. However, recent research by Clausing (2012) using data on a panel of OECD countries for the years 1981 to 2009 suggests that the impact of cutting corporation tax is mainly to increase corporate profits, other things being equal. Given that the distribution of income from profits is very skewed towards richer households, if Clausing's analysis is correct it is likely that the impacts of increasing corporation tax on reducing demand for goods and services would be relatively small compared to the stimulus effects from increasing public sector pay discussed in Section 3.

HM Treasury's ready reckoner⁹ suggests that a 1% increase in the main rate of corporation tax would raise around £480 million. This suggests that forgoing the cut in corporation tax to 20% in 2015, and instead raising the rate back up to 22%, would raise more than enough revenue to fund a 1% increase in public sector pay. Raising the rate back up to 28% - where it was when the coalition government took office in 2010 – would raise over £3 billion, which would be more than enough to fund a 3% pay increase. This would still leave the UK's corporation tax rate well below the average for the G7 group of countries (OECD, 2013).

⁹ See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297451/20140318_DirectEffectofillustrativechanges_Mar_v0.1.pdf

Longer-term options

Increasing corporation tax has the advantage that it could be done immediately, using the existing tax structures and legislation, and could therefore fund an immediate increase in public sector pay. Below I consider three longer-term options for increasing taxes which would require new legislation to implement, and so are more likely to be options for the medium term than the short term. However, the potential revenue yield of the three options below is a lot higher than the revenue yield from corporation tax and so they would have the advantage of being usable to fund sustained increases in public sector pay over a longer period, should the government wish to do so.

Introduce a land value or property tax

Stocks of high-value land and property are currently undertaxed in the UK and represent a substantial potential source of tax revenue. Last year, researchers at the London School of Economics estimated that introducing a tax on land values could raise up to £30 billion per year (Hills et al, 2013)¹⁰. A “mansion tax” on high value properties, as originally suggested by the Liberal Democrats, would be another option which could raise up to £2 billion (Lawton and Reed, 2013). Both of these taxes would impact mostly, or completely, on the most wealthy households and the net effect of funding an increase in public sector pay using a land value or property tax would be redistributive from very rich households to low and middle income households.

¹⁰ This is probably a conservative estimate; other sources (for example Wadsworth 2013) suggest much higher potential revenue.

Introduce a financial transactions tax

A financial transactions tax [FTT] has recently been proposed as a means of raising additional revenue from the financial sector in the UK and other countries. The FTT would be a tax at a low rate (between 0.5% and 0.005%) on transactions involving shares, bonds, derivatives and foreign exchange¹¹. Calculations by the campaign group Stamp Out Poverty suggest that a FTT could raise up to £20 billion in the UK alone – many times the cost of even a 3% increase in public sector pay. A group of at least 11 EU countries are already planning to introduce an FTT at some point in the next few years. As the majority of financial transactions (by monetary value) are undertaken by, or on behalf of, the very wealthy, it is likely that the distributional impact of using an FTT to fund an increase in public sector pay would be redistributive from the very rich to families lower down the income distribution.

Reduce tax avoidance and evasion

There is a gap between the amount of tax which the UK government should collect if everyone did what was required or expected of them by law and the amount of tax the government actually collects. This tax gap mainly comprises two parts:

- tax evasion – where people and companies break the law and don’t declare the tax they owe.
- tax avoidance – where people and companies use loopholes in tax law to get round paying the tax expected of them.

¹¹ For more details on how an FTT would operate, see <http://www.stampoutpoverty.org/faqs/>

HM Revenue and Customs (2013) suggests that total tax evasion in 2011-12 amounted to around £15 billion¹², while avoidance amounted to £4 billion. Some independent estimates of the tax gap are much higher; for example Tax Research UK estimates that total tax avoidance amounts to £25 billion while tax evasion is around £70 billion. Regardless of which figure is correct, measures to reduce tax avoidance and/or evasion would be able to fund a substantial increase in public sector pay without having to increase actual rates of tax. The most effective policy change to reduce avoidance would be to introduce a General Anti-Avoidance Bill (along the lines of the private members' bill introduced by Michael Meacher MP in June 2012)¹³. To tackle evasion more effectively, HMRC should cancel planned cuts to its staffing levels and instead devote more staff time to prosecuting people and companies who evade tax.

Reductions in other spending

As an alternative to increasing taxation, it would be possible to reduce wasteful spending in other areas to free up resources to fund an increase in public sector pay.

For example:

- £3 billion could be saved in user fees and interest charges every year if PFI

schemes were replaced with conventional public procurement¹⁴;

- £15 billion could be saved each year if the UK brought military spending closer to the EU average, reducing overseas commitments and focusing on domestic security¹⁵;
- £100 billion could be saved over 40 years by cancelling Trident¹⁶.

¹² this figure combines HMRC's estimates for the amount of tax lost as a result of criminal attacks on the tax system, the hidden economy, and tax evasion defined as "illegal activity, where registered individuals or businesses deliberately omit, conceal or misrepresent information in order to reduce their tax liabilities."

¹³ For more details see <http://www.taxresearch.org.uk/Blog/2012/09/18/michael-meacher-on-the-general-anti-tax-avoidance-principle-bill/>

¹⁴ This is a UNISON estimate based on work by Jean Shaoul.

¹⁵ Estimate using figures from SIPRI, http://www.sipri.org/research/armaments/milex/milex_database

¹⁶ Figures from CND, Cut Trident and its replacement, March 2012. <http://www.cnduk.org/information/briefings/trident-briefings/item/download/170>

Conclusions

The ongoing period of public sector pay restraint since 2010 has resulted in substantial falls in living standards for households which include public sector workers. There is a clear economic, political and moral case for easing restraints and increasing public sector pay across the board. This report has shown that there are substantial benefits across the economy from increasing public sector pay. Using estimates of the multiplier effects from the International Monetary Fund, the calculations in this report show that on average every 1% increase in public sector pay:

- generates between £710 million and £820 million for the government in increased income tax, National Insurance contributions, and expenditure tax receipts, and reduced benefit and tax credit expenditure. This reduces the net cost of a public sector pay increase to something in the region of £600 million;
- injects between £470 and £880 million of extra value into the economy;
- creates between 10,000 and 18,000 (full-time equivalent) jobs, especially in sectors such as leisure and transport.

The additional cost to the government of increasing public sector pay can be met in one of two ways: either by increasing taxation, or reducing other spending. There are a wide range of options on both the tax and the spending side which would be distributionally equitable.

It is important to note three additional factors which have not been taken into consideration in this analysis. Firstly, the report has not looked at the impact of

continued real-terms wage reductions in the public sector on the motivation and morale of public sector employees, and the difficulties that reduced public sector pay might cause employers in recruiting and retaining staff. Deteriorating staff motivation and morale, coming on top of major cuts and reorganisation across the public sector, are likely to result in productivity losses which make the delivery of public services less effective. These effects have not been included in the calculations in this report as they are difficult to measure precisely, but if they had been included, this would most likely have increased the benefits of increased public sector pay to the wider economy and to public service users.

Secondly, this report focuses on workers formally classified as in the public sector. As a result of outsourcing policies over the last three decades there are a large number of workers delivering public services who work in the private, voluntary or community sectors. This is particularly the case in services such as social care, waste management and other local government services but is also increasingly the case in other areas such as healthcare and prison services too. The mechanisms for providing an equivalent pay rise to these workers would be less straightforward. Some would automatically track the public sector deals, some would not. Part of the funding for these wage increases would come from the outsourcing organisations and some may come, ultimately, from the public purse via higher contract prices. However, if a pay rise for these workers was included in the calculations, the potential positive impact on the economy would also need to be taken into account.

Finally, it is possible that an increase in pay for public sector workers might have a knock-on impact in the private sector, bidding up wages for private sector workers as well due to increased competition to recruit workers. Once again these effects have not been included in the calculations in this report as they are difficult to measure precisely, but if they had been included, this would most likely have shown additional positive impacts on the economy via a further economic stimulus.

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