

An assessment of the potential compensation provided by the new 'National Living Wage' for the personal tax and benefit measures announced for implementation in the current parliament

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Executive summary

- A package of changes to the tax, tax credit and benefit system has been announced for implementation in the current parliament as part of the government's deficit reduction programme. These will reduce household incomes significantly, particularly for those towards the bottom of the income distribution. The July 2015 Budget also announced a substantial increase in the national minimum wage for those aged 25 and over, which the Chancellor described as a new "National Living Wage" (NLW).
- If the NLW were to have no effect on GDP, employment or hours of work it would offset 27% of the drop in household incomes from the impact of net tax and benefit reforms. In fact, as the Office for Budget Responsibility stresses, the NLW is likely to depress GDP and employment, and the money for it has to come from somewhere so this can be taken as a "better case" scenario, at least in the short term.
- The new NLW offers such little compensation because the boost to gross wages is smaller than the announced fiscal tightening and almost one-third of the increase in gross wages goes to the Treasury in higher tax receipts and lower benefits and tax-credit entitlements.
- Among the 8.4 million working age households who are currently eligible for benefits or tax credits who do contain someone in paid work the average loss from the cuts to benefits and tax credits is £750 per year. Among this same group the average gain from the new NLW, is estimated at £200 per year (in a "better case" scenario). This suggests that those in paid work and eligible for benefits or tax credits are, on average, being compensated for 26% of their losses from changes to taxes, tax credits and benefits through the new NLW.
- The average losses from tax and benefit changes in deciles 2, 3 and 4 of the household income distribution are £1,340, £980 and £690 per year, respectively. These same groups are estimated to gain £90, £120 and £160 from the new NLW (again on a "better case" scenario). This suggests that a "better case" estimate of the compensation these groups are receiving is 7%, 13% and 24% respectively, on average.
- There may be strong arguments for introducing the new NLW, but it should not be considered a direct substitute for benefits and tax credits aimed at lower income households.

1. Introduction

This briefing note, prepared for the House of Commons Treasury Select Committee, starts in section 2 by documenting the estimated distributional impact of the tax and benefit changes that have been announced for implementation in the current parliament. It then goes on in section 3 to consider the extent to which households might expect the net losses from these changes to be offset through increased wages as a result of the large increase in the minimum wage for those aged 25 and over that was announced in the July 2015 Budget. Section 4 concludes.

2. Distributional impact of the personal tax and benefit changes announced for this parliament

Analysis produced by IFS researchers for a briefing the day after the Budget showed the estimated distributional impact of the personal tax and benefit changes that have been announced for this parliament.² This included analysis of the vast majority of the announced changes to personal taxes, tax credits and benefits, the main ones include the following announcements from the July 2015 Budget:

- a four-year freeze to most working age benefits and tax credits (raising £3.9 billion);
- a reduction in the amount individuals can earn before they start to see their tax credits or universal credit withdrawn (raising £3.3 billion);
- an increase in insurance premium tax (raising £1.6 billion);
- a further restriction in tax-relief on pension contributions for those on high incomes (raising £1.2 billion);
- a cut to the generosity of the benefit and tax credit system for those with more than two children (raising £1.1 billion); and
- a further increase in the income tax personal allowance (costing £1.2 billion).

The analysis did not include analysis of changes to "business taxes" such as the further reductions in the rate of corporation tax (costing £1.9 billion), although it should be remembered that these changes will affect individuals too. This analysis used the IFS tax and benefit model, TAXBEN,

² Source: A. Hood (2015), *Benefit changes and distributional analysis*, presentation given at the IFS post July 2015 Budget briefing, 9 July 2015 (<u>http://www.ifs.org.uk/tools_and_resources/budget/505</u>).

applied to data from the 2012–13 Family Resources Survey and the 2012 Living Costs and Food Survey. Since then more up-to-date data have become available in the form of the 2013–14 FRS. So below we present a revised estimate of the distributional impact in 2019–20 of all personal tax and benefit measures that are to come into place between now and then, most of which were announced in the July 2015 Budget. Qualitatively the results are unaffected by the use of more up-to-date data.

Overall the modelled measures are estimated to reduce household incomes by an average of £480 per year, or 1.4%. As shown in Figure 1 average losses are greater towards the bottom of the income distribution. This is true in both cash terms and when the changes are measured as a share of income. This is of course because the largest measures are cuts to working age benefits and tax credits, the vast bulk of which are received by families in the bottom half of the income distribution.





Note: Figure shows the average change in net household income under the now planned April 2019 tax and benefit system (with all reforms fully in place) compared to an unreformed (but uprated) April 2015 tax and benefit system. Universal credit is assumed not to be in place in April 2015 but to be fully in place in April 2019. Assumes full take-up of means-tested benefits and tax credits.

Source: Authors' calculations using the IFS tax and benefit model, TAXBEN, run on the 2013–14 Family Resources Survey and the 2012 Living Costs and Food Survey.

3. Gains from the new 'National Living Wage'

The July 2015 Budget also announced a substantial increase in the national minimum wage for those aged 25 and over. Described by the Chancellor as a new "National Living Wage" (NLW), from April 2016 this is to be set at \pounds 7.20 per hour, which is 50p per hour above the standard minimum wage. It is then to be increased so that it reaches 60% of median hourly wages by April 2020. The Office for Budget Responsibility (OBR) estimates that this will be \pounds 9.35 per hour in April 2020, which is 13% – or \pounds 1.10 – higher than if the standard minimum wage were increased simply in line with average hourly wages.

In its analysis the OBR assumes that the 2.7 million people who they estimate would otherwise earn below £9.35 an hour in April 2020 will see an increase in their hourly pay. It further assumes that some individuals with hourly wages just above the new NLW will receive a pay increase as differentials in pay are, at least in part, maintained. Overall it estimates that gross pay will increase by £4 billion (equivalent to 0.3% of total employee compensation).

This suggests that the new NLW will provide some compensation for those who will lose from the cuts to benefits and tax credits that the Chancellor announced in the Budget. But it is also clear that the compensation can, at best, only be partial. There are to be £12.5 billion of net cuts to benefits and tax credits and an estimated £4 billion increase in gross wages.

Furthermore, while the new NLW will increase hourly pay for some individuals it is highly likely to reduce incomes in other ways. It could lead to a reduction in employment. Indeed the OBR assumes that it will increase the unemployment rate by 0.2 percentage points (equivalent to 60,000 individuals) and reduce the average hours worked by those in work by 0.2%. Taken together this reduces total hours worked per week by 4 million. The OBR estimates GDP will be in fact be *reduced* by 0.1% as a result of the introduction of the new NLW. In other words the OBR is expecting that the new NLW will result in a small overall *reduction* in living standards (at least in the short run).

It is also important to be clear that even if GDP, employment and hours worked are all left unchanged the increase in gross wages from the new NLW will need to come from someone. Either company profits will fall depressing returns to shareholders, or prices will rise or the earnings of other individuals will be reduced. The only way that overall the new NLW could pay for itself is if it directly boosted productivity – possible in the longer run, though unlikely to be sufficient to pay for the higher wages in full.

We can't model these possible effects at this point. Instead we focus on two other ways in which the new NLW may not directly compensate those losing from reductions in their tax credits:

- Some of the increase in gross wages will be subject to income tax and National Insurance contributions and in some cases it will also reduce individuals' entitlements to benefits and tax credits. Some of the £4 billion increase in gross wages would therefore benefit the exchequer rather than lead to an increase in net incomes.³
- Any gains from the new NLW will not necessarily be well targeted at the same individuals who lose from the cuts to benefits and tax credits. For example some low wage individuals may not be receiving tax credits (for example due to having a higher income partner) and therefore could benefit from the new NLW despite not suffering any loss in tax credits. In addition some of those losing tax credits may not gain from the new NLW because their hourly earnings already exceed it or, of course, if they are aged under 25.

So here we abstract from the fact that the OBR thinks the new NLW will actually reduce GDP (and therefore, at least eventually, household resources) and the fact that even if GDP is left unchanged then the cost of the new NLW would have to come from someone. Our focus is on which groups might see an increase in their gross wages and estimate the extent to which the resulting increase in their net incomes compares to the losses they might experience from the tax and benefit changes announced in the July 2015 Budget.

Method

Doing these calculations is far from straightforward. The challenge is obtaining a robust estimate of hourly wages of individuals across the

³ That is not to say that the NLW will strengthen the public finances. To estimate the overall impact on the public finances one would need to consider other impacts such as to the public sector wage bill and to receipts of other taxes such as those on corporate profits and dividends.

household income distribution. One method is to use the same FRS data as exploited above in figure 1. These data contain a high quality measure of weekly earnings and a measure of hours worked. Unfortunately, the measure of hours worked is known to contain a high degree of measurement error.⁴ Constructing hourly wages using these data would therefore lead to an imprecise and potentially biased estimate of how many, and which types, of individuals would be affected by any change in the national minimum wage.

To estimate the impact of the new NLW the OBR therefore uses data from the Annual Survey of Hours and Earnings (ASHE). This contains a high quality measure of both earnings and hours. However, it is not possible to use this survey to produce an estimate of household income and it has relatively limited information on individual characteristics. Therefore we choose to supplement the information in the FRS with data from the Labour Force Survey (LFS). This survey contains a good measure of weekly earnings, an estimate of hours worked and – crucially for our purposes – a direct measure of hourly pay for those individuals who are paid by the hour. The methodology we employ - which was used in earlier work for the Low Pay Commission⁵ – is to impute the hourly wages of individuals in the FRS by matching them to "similar" individuals in the LFS who report their hourly pay. By "similar" we consider a wide range of characteristics most obviously the level of weekly earnings and hours of work, but also their sex, age, education, region and industry. We only carry out this imputation for those individuals in the FRS who seem potentially able to receive a pay increase as a result of the new NLW – those whose weekly earnings are already more than seventy times the new NLW are assumed

⁵ M. Brewer and P. De Agostini (2013), *The National Minimum Wage and its interaction with the tax and benefits system: a focus on Universal Credit*, Institute of Social and Economic Research, University of Essex

⁴ See, for example, M. Brewer, R. May and D. Phillips (2009), *Taxes, Benefits and the National Minimum Wage*, Low Pay Commission Research Report (<u>http://webarchive.nationalarchives.gov.uk/20130708092703/http://lowpay.gov.uk/lowpay/research/pdf/FromLPC Document Feb.pdf</u>).

⁽https://www.iser.essex.ac.uk/research/publications/522257). See also A. Hood, R. Joyce and D. Phillips (2014), 'Policies to help the low paid' in C. Emmerson, P. Johnson and H. Miller (eds), *The IFS Green Budget February 2014*, London: Institute for Fiscal Studies (http://www.ifs.org.uk/publications/7072).

not to be able to gain (on the basis that very few will work more than this number of hours per week).

Who gains from the new NLW

Overall our estimates suggest that, relative to what OBR estimates, more employees will gain from the new NLW in 2019–20: our estimates using the LFS data suggest that 21% of all employees (i.e. including employees aged under 25) will gain whereas the OBR estimate based on ASHE data is 16%. The difference is likely due to differences between ASHE and the LFS with the latter being known to contain a higher proportion of individuals on relatively low wages. It is not possible to say which estimate is likely to be closer to the truth: there are, however, reasons to think that our LFS based measure will be an overestimate (due to issues in imputing hourly wages).

There is considerable variation across groups in the proportion of individuals who are estimated to benefit from the increase in the new NLW. As shown in Table 1 37% of those who work less than 30 hours per week are expected to gain (as working lower hours is associated with lower paid jobs). This is in contrast to those working 30 hours per week or more where 16% are expected to gain. Related to this, women are more likely to gain than men: overall one-in-four female employees are estimated to gain from the new NLW compared to one-in-six male employees, with much (but not all) of this difference being explained by the fact that women are more likely to be in paid work part-time than men. Employees aged between 25 and 39 and those aged 60 and over are more likely to gain, while individuals between 40 and 59 are less likely (as they are more likely to be at the peak of their career in terms of hourly-pay). Of course no-one aged under 25 can gain from the new NLW.

The proportion which gains is particularly low among those working in IT, finance and the professional services (as their hourly wages tend to be higher) and much higher among those working in other service industries (such as care workers and employees within hospitality and retail) – with part-time workers in this industries being particularly likely to gain. There is hardly any variation by whether or not the household contains children, with this being true of both full-time and part-time employees.

Further analysis of the likely gainers from the new NLW can be found in recent work by researchers at the Resolution Foundation.⁶

	% estimated to gain		
Employee type		Those	Those
	All	working	working
		less than	30 hours
		30 hours	per week
		per week	or more
All	21	37	16
Men	16	35	14
Women	25	37	19
Aged under 25	0	0	0
Aged 25 to 39	25	48	20
Aged 40 to 59	20	40	15
Aged 60 and over	26	35	19
In household with children	21	37	15
In household without children	21	37	17
Manufacturing, agriculture and construction	16	37	15
Service industries	34	51	27
IT, finance, professional and technology	10	26	8
Other	30	48	22
Public admin, education and health	15	24	12
Industry not classified	16	31	13

Table 1. Per cent of employees estimated to potentially gain from the new NLW

Source: Authors' calculations using the 2013–14 Family Resources Survey and the 2013–14 Labour Force Survey.

Average gains from the new NLW and comparisons to changes from tax and benefit reforms

As well as suggesting that more individuals will be affected by the new NLW, our methodology also suggests a larger increase in gross wages. The OBR estimates that these will be increased by £4 billion, and that allows for some wage increases to occur above the new NLW as some differentials are assumed to be maintained. Our method suggests a larger boost to gross wages of £5.6 billion (and this is despite not allowing for

⁶ C. D'Arcy, A. Corlett and L. Gardiner (2015), *Higher ground: who gains from the National Living Wage?*, London: Resolution Foundation (http://www.resolutionfoundation.org/wp-content/uploads/2015/09/NLW1.pdf).

any increase in wages above the new NLW). Again there are reasons to think that our LFS based measure will be an overestimate of the gains. Therefore in what follows we produce two estimates of the distributional impact of the increases in wages directly linked to the new NLW. In the first we take the estimates based on the LFS at face value so that the overall increase in gross wages from the new NLW is £5.6 billion. We also present an alternative where all increases in gross wages are scaled so as to get the same £4 billion overall increase as suggested by the OBR (i.e. all gains are scaled by 72% (4/5.55)). It is not possible to know for certain which estimate is better. But even under the "better case" scenario where gross wages are boosted by £5.6 billion among all the broad groups we consider the new NLW only provides very partial compensation for the tax and benefit changes announced for implementation over this parliament.

In terms of the increase in net incomes our unscaled estimates suggest that 63% of the increase in gross wages would feed through to an increase in net incomes – that is to say the estimated £5.6 billion increase in gross wages is expected to result in a net income rise of £3.5 billion. The remaining £2.0 billion would accrue to the Treasury through higher receipts of income tax and National Insurance Contributions and reduced payments of tax credits and benefits.⁷ This increase in net incomes of £3.5 billion is substantially smaller than the £12.5 billion of cuts to benefits and tax credits announced in the July 2015 Budget. Thus, even if it were the same individuals who lost from the cuts to social security benefits and tax credits who benefitted from the new NLW then they would, on average, experience a net loss: overall our "better case" estimate suggests that the drop in household incomes from the impact of net tax and benefit reforms is being offset by 27% from the introduction of the new NLW. Scaling the increase in gross wages to match the £4 billion estimate from the OBR leads to an estimated increase in net incomes of £2.5 billion (with the remaining £1.5 billion accruing to the Treasury), which would suggest that on average households were compensated for 19% of the overall loss from changes to the tax and benefit system.

Figure 2 below shows how the estimated boost to net incomes from the new NLW is distributed across the household income distribution. This

⁷ Note this is not an estimate of the overall impact of the NLW on the public finances. See footnote 5 on page 3.

has the same y-axis scale as Figure 1 in order to aid comparisons with the estimated changes to net incomes coming from tax and benefit measures announced for this parliament. Two estimates are produced: the first is the unscaled "better case" scenario where we take the estimates implying that the overall boost to gross wages will in fact be £5.6 billion. The second is the scaled estimates where the overall boost to gross wages is limited to £4 billion in order to match OBRs estimated impact of the new NLW. Figure 2 shows that gains are, on average, greatest around the middle of the income distribution with smaller gains at the bottom and the top. Towards the bottom of the income distribution the average gains are lower since there are more individuals who are not in paid work, or who are working fewer hours, and it is more likely that gains will lead to reductions in tax credit and benefits. Towards the top of the income distribution the gains are also lower because there are fewer individuals with low hourly pay. Measured as a per cent of net income the gains are, obviously, further reduced towards the top of the income distribution.





Note: "Scaled" estimated have all estimated increases in gross wages from the new NLW multiplied by 4/5.6 in order to match the OBR's £4 billion estimate of the overall boost to gross wages.

Source: Authors' calculations using the IFS tax and benefit model, TAXBEN, run on the 2013–14 Family Resources Survey and the 2013–14 Labour Force Survey.

Comparing Figure 2 with Figure 1 provides an estimate of the extent to which the new NLW might be considered as providing compensation for the forthcoming tax and benefit changes, and how this compensation varies across the household income distribution. The average losses from tax and benefit changes in deciles 2, 3 and 4 were £1,340, £980 and £690 per year, respectively (as shown in Figure 1). Using the unscaled "better case" estimates these same groups are estimated to gain £90, £120 and £160 from the new NLW. This suggests that a "better case" estimate of the amount of compensation these groups are receiving is 7%, 13% and 24% respectively, on average. Further up the household income distribution the concept of compensation is less clear: for example on average those in deciles 8 and 9 are estimated to gain from both the forthcoming tax and benefit changes and also from the new NLW. This pattern of compensation arises because the losses from the cuts to benefits and tax credits are relatively focussed on the bottom half of the income distribution, whereas the estimated gains from the new NLW are more evenly spread across the household income distribution.

Some of the low income households who lose from the cuts to benefits and tax credits that have been announced for this parliament are unable to gain from the new NLW as they do not contain anyone in paid work. Obviously to gain from the new NLW you need to be an employee aged 25 or over (i.e. not out of paid work, or in self-employment, or be aged under 25). Among the 2.9 million working age households eligible for benefits or tax credits and not containing anyone in work the average loss from the cuts to benefits and tax credits is estimated at £2,070 per year, with no offsetting compensation from the NMW. Among the 8.4 million working age households who are currently eligible for benefits or tax credits who do contain someone in paid work the average loss from the cuts to benefits and tax credits announced for this parliament is £750 per year. Among this same group the average gain from the new NLW, again under the "better case" scenario, is estimated at £200 per year (or £140 per year with the gains from the new NLW scaled downwards to match the OBR's estimate). This suggests that in the "better case" estimate those in paid work and eligible for benefits or tax credits are, on average, being compensated for 26% of their losses from changes to taxes, tax credits and benefits through the new NLW. These figures are presented in Table 2.

	Number of HHs	Av. annual impact of tax & benefit changes	Av. "better case" annual gain from the new NLW	Av. "better case" net change
	(million)	(£ per year)	(£ per year)	(£ per year)
All households	27.1	-£478	£129	-£348
All working age HH eligible for benefits/tax credits Of which:	11.3	-£1,089	£147	-£942
with someone in paid work	8.4	-£754	£198	-£556
w/o someone in paid work	2.9	-£2,069	£O	-£2,069
All working age HH eligible for benefits/tax credits with children	7.0	-£1,272	£144	-£1,127
Of which:	F 0	6000	(17)	(7)7
with someone in paid work	5.9	-£909	£1/2	-£/3/
w/o someone in paid work	1.1	-£3,159	£U	-£3,159
All working age HH eligible for benefits/tax credits w/o children	4.3	-£796	£153	-£643
Of which:				
with someone in paid work	2.6	-£400	£257	-£142
w/o someone in paid work	1.8	-£1,374	£0	-£1,374

Table 2. Estimated impact of forthcoming tax and benefit changes and "better case" gains from the new NLW, by household working status and whether or not the household contains children

Notes and sources: See Figure 1.

This variation in who gains from the new NLW, and the variation in who loses from the tax and benefit changes to come into force over the next few years, means that the compensation provided by the increases in the new NLW varies considerably across different family types. For example among the 4.3 million working age families who are eligible for benefits or tax credits but who do not have children, we find that, on average, the tax and benefit measures announced for this parliament reduce their incomes by £800 whereas the new NLW is estimated to increase them by £150. This implies average compensation of 19%. In contrast among the 7 million working age families who are eligible for benefits or tax credits and who do have children, we find that, on average, the tax and benefit measures announced for this parliament reduce their incomes by £1,270 whereas the new NLW is estimated to increase them by £140. This implies average compensation of 11%.

The driving force behind this difference is because the cuts to tax credits and benefits are, on average, greater among households with children relative to households without children (as working age households with children receive much more in benefit and tax credits than working age households without children). This is in contrast to the estimated gains from the increase in the new NLW which are similar for families with and without children (as indicated by Table 1).

4. Conclusions

This briefing note has examined the impact of the new "National Living Wage" in the context of the planned tax and benefit changes that have been announced to be implemented in the current parliament. In this analysis we do not take into account that the new NLW may have a negative impact on GDP, employment and hours of work. Additionally, we ignore the fact that even if GDP is left unchanged the money to pay for higher wages will need to come from someone. Even in this favourable scenario the new NLW will provide only very partial compensation to those lower income groups hit hardest by cuts in benefits and tax credits.

This is not surprising. First, the cuts in benefits and tax credits are larger in aggregate than the estimated direct increase in wages as a result of the new NLW. Second, among those who do benefit from the new NLW, some of the increase in their earnings is lost in higher tax payments and lower benefit entitlements (at least 65% for most working people receiving universal credit, for instance). Third, many of those who will lose from the benefit and tax credit changes will not benefit from the new NLW. This is because they are not in paid work, or because they are self-employed, or because their hourly pay is already some way above the level of the new NLW, or, because, most obviously, they are aged under 25.

There will be winners from the overall package of tax, benefit and wage policy changes. Those not in receipt of benefits or tax credits cannot lose from benefit cuts and many of this group will gain from the announced increases in the personal allowance and higher rate threshold. Furthermore this group will include households containing someone with a low hourly wage who will gain from the NLW. But where such families have an individual on a low hourly wage partnered to a higher earner they will often be towards the middle and upper part of the income distribution. Indeed, women working part time in a low paid job, whose partner's income is sufficient to take them above tax credit and benefit thresholds, are likely to be among those gaining most from the NLW: they may get to keep all the extra pay, as they will not face the withdrawal of benefits, and their own income could be sufficiently low so that they don't have to pay any income tax or National Insurance contributions on their additional earnings.

The NLW is therefore not a substitute for targeted benefits and tax credits when it comes to helping poorer households and tackling poverty. In aggregate, it is not big enough. And it is not targeted at the same group.

This does not mean it is necessarily a bad idea. It will provide *some* compensation to *some* of those hit by the benefit and tax credit changes. Moreover, if the government believes the labour market functions poorly and that some people are paid less than their productivity warrants, mandating higher pay through the new NLW may help address this problem. Some also argue that higher wages will lead to higher productivity. The risk is that it could have negative impacts on employment and hours of work as higher wages reduce employers' demand for labour – which is what the OBR expects. Careful monitoring of the impact of the new NLW for those aged 25 and over is crucial.