Research Bulletin 19/3 | Economic Implications of the National Living Wage in Northern Ireland in 2020

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Summary

The 2015 UK Budget introduced a new National Living Wage (NLW) for all workers aged 25 and over. This took effect in April 2016[i] and was set at £7.20 per hour, it was subsequently increased to £7.50 per hour from April 2017 and £7.83 per hour from April 2018. It is the Government's goal for the NLW to rise to 60% of median earnings by 2020, currently expected to be approximately £8.62 per hour[ii]. Thus far, overall economic performance would suggest that the NLW has not created any significant issues in the labour market. At the UK level, employment is at record highs and unemployment at historic lows. However given the short period since the introduction of the NLW, there is still limited understanding of how organisations have dealt with the increase in labour costs (i.e. increased prices, absorbed into profits, reduced staff, improved productivity etc.)

Although many sectors of the economy will not be significantly impacted by the NLW, other sectors will see a substantial increase in their cost base, notably lower wage sectors including social care, hospitality, agriculture, retail and administration services. UUEPC analysis of the economic benefit of the NLW in 2020 estimates that through productivity gains and additional earnings, the economy will generate an additional £80m in GVA. On the negative side, the additional cost to business will result in a reduction equivalent to £78m of GVA. Furthermore, the additional cost burden to businesses will also reduce staff in some instances. Using the latest elasticity of labour estimates from the Office for Budget Responsibility, this will result in an associated negative GVA impact of £75m.

The overall net economic impact of the NLW to the Northern Ireland economy is estimated to be negative £73m. However, this negative impact is very sensitive to assumptions around job losses (or reduced additional recruitment) which result from the policy. There may also be a positive fiscal contribution associated with higher earnings of those in work of £29m. However, it is unclear as to how much of this Northern Ireland would benefit from through transfer from HM Treasury.

Introduction

The 2015 UK Budget introduced a new National Living Wage (NLW) for all workers aged 25 and over. This took effect in April 2016[iii] and was set at £7.20 per hour, it was subsequently increased to £7.50 per hour from April 2017 and £7.83 per hour from April 2018. It is the Government's goal for the NLW to rise to 60% of median earnings by 2020,

currently expected to be approximately £8.62 per hour. The decision on the annual uplift and pathway to the 2020 rate is recommended by the Low Pay Commission (LPC). The LPC are also currently responsible for making a recommendation to Government on the level of each of the following wage rates:

- National Minimum Wage (NMW) – which now only applies to 21 – 24 year olds;
- Youth Development Rate – for 18 – 20 year olds;
- Under 18 year old rate; and
- Apprentice Rate.

The remit given to the LPC in respect of the National **Minimum** Wage, was to set a rate which "*helps as many low-paid workers as possible without damaging their employment prospects*." In respect of the National **Living** Wage, the Government has asked the LPC to "*consider the pace of increase*" with a view to reaching a target of 60% of median earnings by 2020, "*subject to sustained economic growth*" and "*taking into account the state of the economy, employment and unemployment levels and relevant policy changes*". The age structure of the NLW (i.e. 25+ only) was put in place to reflect the identified need to manage employment risks, in particular recognising that younger workers may not be able to sustain a higher pay floor. The Government Regulatory Impact Assessment on the NLW[iv] (BIS, 2015) stated that "*introducing the NLW at a lower age threshold could damage employment prospects because younger workers already face higher unemployment rates.*"

This new instruction to the LPC marked a change in policy direction. Previously, the N**M**W rate was determined by evidence, in order to fulfil the requirement to minimise the impact on the economy. However, the N**L**W rate has already been determined by Government and as a consequence there could be a greater risk of wider negative economic consequences.

Given over two years has passed since the introduction of the NLW, it is possible to give a more evidence based view of the impact. Thus far, overall economic performance would suggest that the NLW has not created any significant issues in the labour market. At the UK level, employment is at record highs and unemployment at historic lows. However, there is still limited understanding of how organisations have dealt with the increase in labour costs (i.e. increased prices, absorbed into profits, improved productivity etc.) and this is discussed further in this research bulletin.

Impact of the NLW across the economy

The introduction of the NLW impacts different areas of the economy and is quantified in the following terms:

- Bite by sector – the 'bite' is defined as the NLW as a % of the median wage (in an individual sector). This is a key measure used in the literature to assess the impact of the NLW in different sectors.

- % of workers benefiting from the NLW by sector – those workers who will see their earnings increase as a result of NLW.
- % increase in the wage bill by sector – this will also vary significantly across sectors.

Table 1 below shows the bite for workers aged 25 and over at the UK level. The bite was 56.4% in April 2016 on introduction, increasing to 58% in 2018 before rising ultimately to 60% by 2020.

Table 1: Bite of the NLW for those aged 25 and over, UK

	NLW (£)	Bite (%)
2018	£7.83	58%
2019	£8.21	59%
2020	£8.62*	60%

Source: Low Pay Commission

* This is based on LPC estimate and may be subject to change as UK earnings forecasts are revised.

Bite by sector (in Northern Ireland)

Understanding the impact of the NLW in different sectors is important when assessing the potential employment risks in each of those sectors. **Table 2** below shows the bite across each sector in Northern Ireland which could flag those at greatest risk.

Table 2: Bite of the NLW for those aged 25 and over, UK

Sector	NLW in 2020: £8.62	
	Median Wage	Bite
Restaurants and hotels	£8.25	104%
Agriculture	£9.01	96%
Admin' & support services	£9.20	94%
Wholesale & retail	£9.21	94%
Other service activities	£10.09	85%
Arts & entertainment	£10.60	81%
Real estate	£11.63	74%
Manufacturing	£12.04	72%
Transport & storage	£12.38	70%
Construction	£12.95	67%
Water supply & waste	£13.63	63%
Health & social work	£14.53	59%
Public admin & defence	£14.91	58%
Professional scientific & technical	£15.00	57%
Information & communication	£15.79	55%
Finance & insurance	£16.21	53%
Mining	£16.55	52%
Education	£17.72	49%
Elect' & gas	£28.61	30%
Average	**£12.12**	**71%**

Source: ASHE, DfE, & UUEPC analysis

This shows that the impact on wages varies significantly across different sectors. Furthermore, as the NLW increases the impact becomes more significant. The NLW rate represents a small percentage of median wages in higher earning sectors such as Electricity & Gas, Education, Information & Communications and Professional Services. In contrast, the NLW in sectors such as Hospitality (Restaurants & Hotels), Agriculture and Retail will be either equivalent to or higher than the median wage in those sectors if the NLW had not been introduced.

Number of employees benefiting

Given the different sizes of sectors both within regions and across regions, analysis of the number of employees benefiting from the implementation of the NLW also provides context to the scale of the impact on the economy. **Table 3** below sets out the number and percentage of employees currently paid below the NLW rate in each sector and therefore directly benefitting from the NLW. In order to maintain differentials between pay grades, staff currently paid above the proposed NLW rate will also benefit from a pay increase.

Table 3: Employees benefitting from the NLW by sector: 2020

Industrial Sector (as identified by DfE analysis)	No. of employees benefitting	% of sector total employees
Manufacturing	19,800	19%
Wholesale & retail trade	35,000	38%
Accommodation & food service activities	13,900	54%
Administrative & support services	11,700	37%
Education	9,100	10%
Human health & social work activities	20,600	15%
All other activities	18,000	8%
Total	**128,100**	**18%**

Source: Department for the Economy

Increase in wage bill by sector

The scale of the increase in the wage bill, will vary significantly across sectors and is a further measure of the extent to which different areas of the economy will be impacted. **Table 4** below presents the analysis of the estimated wage bill increase across sectors (this includes wage increases for those currently earning above the NLW to maintain differentials). It shows the sectors most affected are Agriculture, Restaurants & Hotels and Wholesale and Retail. This is also consistent with the sectors showing the largest 'bite' and the largest proportion of workers benefitting from the introduction of the NLW.

Table 4: Increase in the wage bill by sector: 2020

Sector	Forecast wage bill in absence of NLW (£Bn)	Forecast wage bill increase with NLW (£Bn)	% Increase wage bill
Agriculture	£0.26	£0.27	3.33%
Restaurants and hotels	£0.77	£0.79	1.59%
Wholesale & retail	£2.62	£2.65	1.18%
Admin' & support services	£1.13	£1.15	1.11%
Manufacturing	£2.54	£2.57	0.87%
Health & social work	£3.29	£3.31	0.53%
Other service activities	£0.29	£0.29	0.51%
Arts & entertainment	£0.29	£0.30	0.50%
Education	£1.93	£1.93	0.24%
Transport & storage	£0.78	£0.78	0.19%
Public admin & defence	£1.76	£1.76	0.08%
Construction	£1.03	£1.03	0.07%
Finance & insurance	£0.69	£0.69	0.04%
Information & communication	£0.85	£0.85	0.03%
Professional scientific & technical	£1.11	£1.11	0.03%
Mining	£0.05	£0.05	0.00%
Elect' & gas	£0.09	£0.09	0.00%
Water supply & waste	£0.20	£0.20	0.00%
Real estate	£0.16	£0.16	0.00%
TOTAL	**£19.85**	**£19.96**	**0.58%**

Source: DfE & UUEPC analysis

Most vulnerable sectors

Taking this information together, the sectors which face the most pressure can be identified. Analysis conducted by the Resolution Foundation at the UK level suggested that 3 groups could be identified and the UUEPC has completed a similar analysis for Northern Ireland:

- **Group 1: Limited impact** – sectors where the impact is small, the bite is relatively low (below 60%) and the increase in the sector wage bill is less than 0.1%. This group contains 22% of the total employees affected and includes sectors such as finance, ICT and education;
- **Group 2: More moderate impact** – sectors where the impact is greater, the bite is higher (between 60% and 90%) and the increase in the sector wage is also higher but less than 0.5%. This group contains 43% of the total workers affected and includes sectors such as Manufacturing, Construction and Health;
- **Group 3: Significant impact** – sectors where the impact is much more significant. The bite is at least 90% and the wage bill would increase by more than 1%. This group contains 35% of the total workers affected and includes sectors such as Agriculture, Hospitality (Restaurants and Hotels), Retail and Administration & Support Services.

Adjusting to the NLW

Organisations can respond to the increased cost associated with the NLW in a number of different ways (referred to in the literature as 'channels of adjustment'). This section sets out the channels of adjustment available and identifies the key assumptions used in modelling the economic impact, discussed later in this research bulletin.

In consultation with organisations locally and in the detailed literature a range of channels of adjustment have been identified. Importantly, the way in which businesses respond, is significant in terms of the overall economic impact of the NLW. The following high level channels of adjustment have been identified:

- Reduce employment;
- Reduce profits;
- Reduce other staff costs;
- Increase productivity;
- Increase prices; and
- Changing workforce composition.

Reducing employment: This can take a number of forms, from the highly visible of making staff redundant, to the more subtle approach of reducing hours of existing staff (e.g. less overtime), to the almost invisible reducing future recruitment.

Reduce profits: Absorbing the additional wage cost into margin represents a transfer of wealth from the firm to the employee. As a result, the overall economic impact of reduced profits would be marginal (assuming firms had sufficient profits to absorb the additional cost), employees would have more money to spend but businesses would have less funding for investment and distribution to shareholders (potentially to spend).

Reduce other staff costs: The general view in respect of this option is that the NLW policy puts more focus on the hourly rate of pay rather than the total reward package. That said, firms have a number of options in this regard and it includes reducing pay of higher paid staff (not common), squeezing differentials between the grades of higher paid staff, reducing non-salary rewards and reducing bonuses and overtime.

Increase prices: Increasing prices could seem like the obvious response to an increase in the cost base, however the evidence suggests firms may have limited scope to raise prices. It is also important to recognise that higher prices would have the impact of increasing nominal GVA but not real GVA. Therefore, there would be no improvement in the overall macro-economic picture and customers would pay for the increase in earnings of those who would benefit from the NLW.

Increase productivity: Increasing productivity remains the desired outcome from an increase in the wage floor as there would be no cost to the economy in terms of higher unemployment or higher inflation. There are a number of ways in which productivity could be raised including: worker motivation and morale is increased, absenteeism is reduced and improved management of poor performance; improved capital-labour mix; performance improvement through increased training; lower levels of staff turnover therefore lower re-training costs; business reorganisation (e.g. including outsourcing of functions); and a drive to achieve greater economies of scale.

Changing the workforce composition: Given the NLW applies only to those aged 25 and over, it was anticipated that there would be the potential for firms to change the composition of their workforce by recruiting a greater proportion of younger workers or rotating older workers out of the business in favour of under 25s. Other potential responses include increasing the proportion of apprentices (also excluded from the new NLW rate).

Consultees also raised one further channel of adjustment – **non-compliance**. The Low Pay Commission have already raised this as a potential issue in the social care sector (across the UK). Whilst some level of non-compliance is likely to exist, it is difficult to determine and for the most part, unlikely to persist in the long term.

Three other important areas used in determining the economic impact of the NLW:

- The '**spill-over effect'** – i.e. those who may be earning marginally above the NLW but will benefit from an increase in order to maintain differentials with different grades of staff;
- The **effective tax rate** paid by those on minimum/ living wage – i.e. the proportion of the gross salary uplift the employee would see in their net pay;
- **Fiscal impact of job losses** – quantifying the impact of reduced tax revenue and increased benefits payments from potential job losses.

Spill-over effect: This is another area which has been subject to a range of academic research. For the purposes of this study we have focused on the findings published by the Low Pay Commission[v]. As in other areas, the research findings are mixed. Covering the period up to 2007, Stewart (2009) explored a range of approaches to assessing the impact of the NMW on differentials and concluded they were generally small. However, Butcher, Dickens and Manning (2012) identified evidence of more significant spill-over effects that reached up to the 25th percentile. The OBR also originally chose to use this 25th percentile assumption as the basis for their assumptions on spill-over when estimating the UK macro-economic impact. In addition, research undertaken by the LPC and presented in their 2017 report[vi] stated that "*the 2017 increase in the NLW created ripple effects up to the 30th percentile*". This is intuitively correct as the NLW increases, so the ripple effect should increase. Given the lower wage profile in Northern Ireland, a higher proportion of workers will be directly impacted by the living wage and the spill over is likely to increase beyond the 30th percentile. However, in the LPC's 2018 report[vii] "spillovers only travelled as far as the 20th percentile". The LPC speculate that higher wage growth in 2018 may have reduced the capacity of employers to pay NLW-

equivalent awards to those earning just above the minimum in order to maintain differentials. Overall this shows a potentially volatile effect one year to the next.

Effective Tax rate: It is recognised that a proportion of the additional gross earnings will be offset by either increased income tax and National Insurance contributions (NICs) and/ or reduced in-work benefits. The effective tax rate paid, will vary significantly depending on the employee's personal circumstances. Landman Economics research from 2018 identified the average Marginal Deduction Rate (MDR) on the increase in gross wages to £10 per hour would be 33.8% for men and 32.1% for women. The higher hourly gain (and lower marginal deduction rate) for women occurs because women are more likely to be working part-time and hence more likely to be below the income tax personal allowance and the National Insurance thresholds, and hence not paying income tax or NICs on any marginal increase in incomes.

Fiscal impact of job losses: Raising the NLW increases the spending power of those benefitting from the salary increase and that also delivers a fiscal benefit. However, job losses result in a negative fiscal impact as tax revenues will fall and benefits payments will increase. As with the effective tax rate estimates, the fiscal impact of job losses will change over time and therefore the more recent the research the better. The latest study the research team could source was a report funded by the Joseph Rowntree Foundation[viii] which considered the economic impact (including the fiscal impact) of moving someone on benefits into a living wage job in Leeds. They estimated that the Government gained, on average, approximately £6,900 per job per annum.

Estimating the economic impact in 2020

This section sets out the economic impact of the NLW in Northern Ireland. It includes both the economic benefits and costs associated with the policy. **Table 5** below summaries the net economic costs/benefits.

Table 5: Summary of Net Economic Benefits: 2020

Summary: Central case	£	£
ECONOMIC BENEFIT		
GVA Impact (Additional Earnings)	£52m	
GVA Impact (Productivity)	£28m	
TOTAL GVA BENEFIT		£80m
ECONOMIC COSTS		
GVA Impact (Channels of Adjustment)	(£78m)	
GVA Impact (Company closures/ job losses)	(£75m)	
TOTAL GVA COST		(£153m)
NET GVA IMPACT		**(£73m)**
NET FISCAL BENEFIT		*£29m*

Source: UUEPC analysis

These results show that the increase in earnings and productivity improvements have the potential to deliver significant economic benefits. However, the additional benefits to employees, represents an additional cost to business and the adjustment channels taken by business have a significant bearing on the extent to which the NLW policy delivers an economic benefit overall.

The analysis shows that if job losses can be kept to a minimum then the economic costs and benefits would be broadly in balance. However, given the greater proportion of lower paid jobs and lower margin businesses in Northern Ireland, it seems likely that some (even if relatively low) job losses are likely.

The current job loss estimates are based on labour demand elasticities used by the OBR and are therefore based on historic research. It is important to recognise that the NI and UK labour markets have performed strongly since the introduction of the NLW and the elasticity applied reflects that labour market performance. However, if further evidence comes to light indicating an even lower (or perhaps greater) level of job losses following the introduction of the NLW, the analysis could be re-run and revised results could be considered for policy implications.

Similarly, if the proportion of additional costs met by productivity improvements can be increased and thereby reducing the other channels of adjustment, then the positive economic impact would increase. Whilst some fiscal benefit will be derived, it will transfer to the UK Treasury and it is lower than the net economic cost[ix]. The additional spending associated with the NLW will also create employment in sectors across the economy where the additional earnings will be spent. The net jobs impact by sector is shown in **Table 6** below:

Table 6: Net job losses/gains: 2020

Sector	Gross jobs lost	Gross jobs gained	Net jobs lost/gained
Wholesale & retail	-436	406	-30
Admin' & support services	-299	104	-195
Manufacturing	-227	46	-182
Restaurants and hotels	-224	139	-85
Health & social work	-201	36	-166
Agriculture	-164	61	-103
Transport & storage	-80	52	-28
Professional scientific & technical	-63	47	-17
Education	-61	42	-19
Construction	-37	33	-4
Arts & entertainment	-29	161	132
Other service activities	-29	16	-13
Finance & insurance	-20	15	-5
Information & communication	-17	39	22
Public admin & defence	-15	15	0
Elect' & gas	-8	14	6
Mining	-5	5	1
Water supply & waste	-3	4	1
Real estate	-2	6	4
TOTAL	**-1,921**	**1,242**	**-679**

Source: UUEPC analysis

Conclusion

There are significant benefits to be secured from the introduction of the NLW in terms of increased earnings and productivity improvements. However, these positive benefits are more than impacted by the costs associated with the negative channels of adjustment:

- reducing other staff costs either through reducing the hours of staff, squeezing pay grade differentials, or reducing headcount;
- increasing prices and passing the burden on to consumers and other businesses; and
- a reduction in profits and in particular, the investment spending lost and consumer spending lost through reduced dividends.

The most significant negative impact comes from reducing headcount. In some instances, organisations may simply reduce their staff numbers, reduce future recruitment levels and in some circumstances, businesses struggling for viability (i.e. at the 'tipping point') may close and all jobs in the organisation would be lost. This is very difficult to estimate but assumptions are based on an elasticity within a range identified in OBR research.

In addition to the negative economic impact, there is also a positive fiscal benefit. As employees' earnings increase, their tax contribution increases and benefits received reduces. This fiscal benefit is separate from the economic impact assessment and it is not clear that NI would benefit from the fiscal uplift.

The analysis has focussed on the economic and fiscal implications associated with the National Living Wage. However, the NLW policy will also support wider societal benefits and help reduce inequality. By making work pay for those who are capable of working and lowering the reliance on the welfare state, the result could be an improved longer term economic outlook with stronger public finances. In addition, income distribution across the United Kingdom has widened over the last 50 years with a greater proportion of economic growth being attributed to higher income for the top 10 per cent of the population. The NLW (and NMW) policies will disrupt this feature and will support rising incomes for the lowest paid members in society helping to make the UK and Northern Ireland a more equal and fairer society in the long run. Whilst this long term Government goal of making work pay is laudable, it is being offset in the short term but ongoing tax and benefit reforms which the Institute for Fiscal studies suggest is having a negative impact on overall income levels.[x]

For further reading on the economic implications of the NLW in 2020, please refer to the Department for the Economy web page and download UUEPC's full report. This includes more detailed analysis, policy comments and industry consultations.[xi]

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[i] https://www.gov.uk/national-minimum-wage-rates

[ii] The forecast 2020 nominal level of the NLW has fallen from £9.35 when the policy was announced in July 2015 due to slower than anticipated overall wage growth.

[iii] https://www.gov.uk/national-minimum-wage-rates

[iv] BIS (Nov 2015), *Impact Assessment: Amendment to the National Minimum Wage regulations 2015 – introducing the National Living Wage*.

[v] Low Pay Commission (2016) *National Minimum Wage, Low Pay Commission report, Spring 2016*.

[vi] Low Pay Commission (2017) *National Minimum Wage, Low Pay Commission report, 2017*.

[vii] Low Pay Commission (2018) *National Minimum Wage, Low Pay Commission report, 2018*.

[viii] Paul Bivand and Dave Simmonds, JRF (December 2014), *The benefits of tackling worklessness and low pay*.

[ix] Prior to the introduction of the NLW, in-work benefits were seen by some as a salary subsidy to minimum wage employers and one of the rationales for increasing the then 'minimum wage' was to shift the cost of that subsidy away from Government back to the employer. The positive fiscal impact therefore represents that transfer in financial terms.

[x] Living standards and the National Living Wage, IFS (2018): Available via: https://www.ifs.org.uk/uploads/publications/comms/R145%20-%20Chapter%206.pdf

[xi] https://www.economy-ni.gov.uk/publications/economic-implications-national-living-wage-northern-ireland-2020-final-report