

Title: The National Minimum Wage (Amendment) Regulations 2024 IA No: DBT-005(IA-F)-23-CMRR RPC Reference No: RPC-DBT-5324(1) Lead department or agency: Department for Business and Trade (DBT) Other departments or agencies:	Impact Assessment (IA)			
	Date: 30/01/2024			
	Stage: Final			
	Source of intervention: Domestic			
	Type of measure: Secondary legislation			
	Contact for enquiries: sasha.pendleton@businessandtrade.gov.uk			

Summary: Intervention and Options	RPC Opinion: Green
--	---------------------------

Cost of Preferred (or more likely) Option (in 2019 prices)

Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
-£4.2m	-£2160.2m	£217.7m	

What is the problem under consideration? Why is government action or intervention necessary?

The National Minimum Wage (NMW) was introduced in 1999, with the aim of increasing the wages of the lowest paid without damaging their employment prospects. The National Living Wage (NLW) was introduced in 2016 and is centred on equity, primarily around reducing wage inequality, with an aim to reach two-thirds of median earnings by 2024. The Low Pay Commission (LPC) has made a recommendation to the Government on the NMW and NLW rates that should apply from April 2024. This recommendation will enable the Government to reach the target set for 2024.

What are the policy objectives of the action or intervention and the intended effects?

This year the NLW age eligibility has been lowered to 21 and it will reach two-thirds of median earnings in line with the Government's target set in 2019. The objective of the NMW is to maximise the wages of low paid workers under the age of 21 without damaging their employment prospects by setting it too high. The aim of the NLW is to ensure that low paid workers aged 21 and over are fairly rewarded for their contribution to the economy. The NMW/NLW sets a wage floor below which pay cannot fall ensuring protection for low-paid workers, while also providing incentives to work.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

This Impact Assessment considers changes to the NLW and NMW that should apply from April 2024. The independent LPC makes recommendations on the NMW/NLW to the Government, consulting extensively and undertaking substantial analysis. Further detail is contained in the LPC's Summary of Evidence report and letter to the Government that were published in November 2023.

This assessment considers two options:

1. Do nothing – Maintain current NMW/NLW rates
2. Implement the LPC recommended rate increases (preferred option)

The Government's preferred option is to implement the LPC's recommended rate increases. This is to ensure that the NMW continues to achieve its objective of maximising the wages of the low-paid younger workers without damaging their employment prospects, and the NLW achieves the target of two-thirds of median earnings by 2024.

Will the policy be reviewed? The LPC review the policy annually **If applicable, set review date:** 10/2024

Is this measure likely to impact on international trade and investment?	No			
Are any of these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)	Traded: N/A		Non-traded: N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:



Date:
30/01/2024

Summary: Analysis & Evidence

Policy Option 1

Description: Implement the LPC recommended rate increases (preferred option)

FULL ECONOMIC ASSESSMENT

Price Base Year 2023	PV Base Year 2024	Time Period Years 6	Net Benefit (Present Value (PV)) (£m)		
			Low: -2.4	High: -5.5	Best Estimate: -5.5

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	2.4	331.9	1970.6
High	5.5	858.5	5005.5
Best Estimate	5.5	514.5	3033.5

Description and scale of key monetised costs by 'main affected groups'

Our central estimate of the cost of accepting the LPC's NMW/NLW rate recommendations is £3,092m (not discounted). This includes transition costs (£5.5m) and an increased labour cost to employers of £3,087m (not discounted costs of £1,700m direct impacts and £1,386m indirect impacts). This is a transfer with a largely neutral net economic impact. It is made up of £2,618m (not discounted) of increased wages for employees, and £469m (not discounted) of increased non-wage labour costs, which are mainly employer pensions and National Insurance contributions.

Other key non-monetised costs by 'main affected groups'

Evidence from the LPC suggests although the NMW increases are ambitious, the youth labour market appears strong. Without a substantial increase to the wage floor for young people, they risked being cut adrift from prevailing wage rates in the labour market. Additionally, the LPC note increases to the NLW will not significantly risk employment prospects, although may have macroeconomic impacts in the long run. These impacts are highly uncertain, but the OBR have estimated a slight negative impact on unemployment. Nevertheless, there is no substantial evidence this has ever materialised from past upratings.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	331.9	1968.2
High	0	858.5	5000.0
Best Estimate	0	514.5	3028.0

Description and scale of key monetised benefits by 'main affected groups'

Our central estimate of the overall benefits is for a total benefit to employees and the Exchequer of £3,087m (not discounted). This is a transfer from employers with a largely neutral net impact. Employees benefit from £2,618m (not discounted) of increased wages, while employees and the Exchequer benefit from £469m (not discounted) of non-wage labour benefits, predominantly consisting of pension and National Insurance contributions. Applying HMT Green Book methodology for distributional analysis, the total benefit to workers could increase up to around £4,200m.

Other key non-monetised benefits by 'main affected groups'

There could be macroeconomic benefits in the long-run (e.g. improved productivity, increased consumption, multiplier effects or marginal propensity to consume). Employers who provide accommodation are expected to benefit from an increased amount that can be offset against NMW/NLW pay. Workers can also benefit as these are often mutually beneficial arrangements. Take up of this is likely to be low.

Key assumptions/sensitivities/risks	Discount rate	3.5%
-------------------------------------	---------------	------

The key assumption is on the counterfactual for how wages would change in the absence of minimum wage rises. We use a methodology recommended by independent experts (NIESR) and approved by labour market experts. For the value of the counterfactual, we believe that the academic literature's majority view of spillovers reaching the 25th percentile to be the most appropriate. This is the lowest point in the distribution where we find workers to no longer be impacted by the minimum wage (directly or indirectly).

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 283.7	Benefits: 0.0	Net: 283.7	

Contents

Impact Assessment Scope	5
Background to the Impact Assessment	5
Policy Context and Objectives	5
Rationale for continued intervention	7
The Economic Context	9
Consultation	11
Options Identification	12
Option 0: Do nothing	13
Option 1: Implement the LPC recommended rate recommendations	13
Approach to the Appraisal	14
Counterfactual	15
Non-wage labour costs	21
Appraisal period	21
Spillovers	21
Direct and indirect effects	22
Factoring in potential unemployment	23
Appraisal of Impacts: Monetised Impacts	23
Central estimate: Labour costs	23
Low-cost estimate: Labour costs	24
High-cost estimate: Labour costs	24
Difference in estimates compared to the 2023 Uprating	24
Sensitivity analyses	24
Non-Wage Bill Impacts	26
Transition costs	26
Net cost to business	28
Monetised benefits to workers	28
Net Present Value	30
Appraisal of Impacts: Non-monetised Impacts	30
Macroeconomic Impacts	30
Fiscal impacts	34
Enforcement	36
Number of workers benefitting	36
Regional Impacts	37
Sectoral impact	37
Small and Micro Business Assessment (SaMBA)	38

Specific Impact Tests	40
Equalities impact and Family Test	40
International trade	40
Implementation	41
Monitoring and evaluation	41
Annex A: Further modelling results	43
Annex B: Literature Review	46
Annex C: Previous cost estimates from minimum wage upratings	48
Annex D: Public/Private/Voluntary sector cost breakdown	50
Annex E: Specific Impact tests	51
Annex F: List of contributors to LPC Consultation	59

Impact Assessment Scope

1. The Low Pay Commission (LPC) has recommended an increase to the National Living Wage, and the extension of its eligibility to those aged 21 and over (previously those aged 23 and over). The LPC has also recommended increases to the National Minimum Wage for younger workers (separate rates for those aged under 18, and for those aged between 18 and 20), to the Apprentice National Minimum Wage rate, which applies for those aged under 19 or in the first year of an apprenticeship, and to the accommodation offset. With the extension of the National Living Wage to those aged 21 and over, the National Minimum Wage rate for 21- and 22-year-olds becomes superfluous and can be abolished. The Government has accepted these recommendations¹ in full and they will come into force on 1st April 2024, subject to parliamentary approval.
2. Almost all workers in the UK are eligible to be paid at least the minimum wage. Eligibility for specific rates is determined by a worker's age and, if they are an apprentice, when they started their apprenticeship.
3. This Impact Assessment (IA) appraises the impacts of uprating the current National Living Wage (NLW) and National Minimum Wage (NMW) rates to the LPC's recommendations. This IA is a marginal appraisal, whereby we consider the impact of workers' wages increasing from the existing NMW/NLW to the proposed future NMW/NLW. This IA does not consider a scenario where the NMW/NLW is completely removed as, in the hypothetical absence of an NMW/NLW uprating, the current minimum wage rates would remain legally binding.
4. The LPC continuously monitors and evaluates the impact of the NMW/NLW, as summarised in their annual reports. Their assessment of the impact of the rates, and the state of the wider economy, are factored into the rates that they then propose for the following year. The LPC will undertake an assessment of the impact of the proposed 2024 minimum wage rates in Autumn 2024, which we welcome as a key contribution to the evidence base, and we will consider any relevant findings from their assessment in future IAs.

Background to the Impact Assessment

Policy Context and Objectives

5. The NMW and NLW set a legal minimum wage floor below which pay must not fall. This ensures protection for low-paid workers, whilst also providing incentives to work and reducing reliance on the State topping up wages through the benefits system.
6. The NLW was announced in July 2015 and came into force in April 2016. Initially, it had a specific target of reaching 60% of median hourly earnings by 2020, subject to sustained economic growth. As with the minimum wage rates for younger workers, the Government sets the annual NLW rates following recommendations by the LPC. The Government values the rate recommendations and advice of the LPC, and the NMW/NLW policy, and their annual uprating, depends on the LPC's annual advice. By taking into account the advice provided by the LPC in October 2019, the 60% target for the NLW was reached through the April 2020 increase.
7. Once this target was reached, the Government set a new target, for the NLW to reach two thirds of median earnings, taking economic conditions into account, and for the rate to apply to workers aged 21 and over (down from 25 and over). First announced by the then Chancellor, Sajid Javid, at the 2019 Conservative Party conference, and subsequently included in the party's manifesto for the general election in

¹ LPC (2023) Minimum wage rates for 2024 [\[Link here\]](#)

December of the same year, the new target was intended to take the full course of a Parliament, and to be met by 2024.

8. With these new parameters, the NLW has sought to ensure that low paid workers aged 23 and over are fairly rewarded for their contribution to the economy. Pinning the target to a proportion of median earnings, rather than a specific monetary value, was designed to ensure flexibility. The increases to the NLW therefore slow or accelerate based on the average wage growth and hence, the state of the economy. The Government has also emphasised in the LPC's remit the importance of monitoring the labour market, advising on emerging risks, and, if justified by the economic evidence, recommending that the Government should review its target or delay the timing.
9. The NMW came into force in 1999, following the passage of legislation in 1998. The initial rationale was to protect low paid workers from 'extreme low pay'² i.e. the risk that some employers, without government intervention, may pay unacceptably low wages. Extreme low pay has been eliminated, but the NMW remains in force to protect against the prospect of it; it is also designed to ensure a level playing field for employers, preventing them from undercutting competitors with exploitative wages. As part of the annual remit, the Government asks the LPC to recommend NMW rates as high as possible without damaging younger workers' employment prospects.
10. The youth labour market is much more sensitive to economic shocks and young people can be exposed to longer-term scarring effects³ from prolonged spells of worklessness, as well as facing a comparative disadvantage when entering the labour market due to a lack of work experience and less knowledge. In November 2019, the LPC published a Youth Rates report⁴, to assess the operation and effectiveness of the youth rates, following the introduction of the NLW and in light of broader changes to labour market dynamics. This report stated: 'young people enter the labour market with relatively limited experience and few skills, and so have lower productivity while they learn the job. In addition, employers may need to provide additional training. Any minimum wage structure needs to recognise the lower productivity and higher training costs of less experienced workers. Failure to do so could mean that some employers are unwilling to give young people those critical first opportunities.' As such, there have been different rates for different age groups since the introduction of the minimum wage, and a cautious and considered approach has been taken towards the extension of the NLW to younger workers; the age of eligibility was reduced from 25 to 23 in 2021, and will now be further reduced to 21, following this year's LPC recommendations. From 2024, separate NMW rates for under 18s- and 18–20-year-olds will remain in place. As workers must be at least school leaving age to receive the NMW, the lowest band applies mainly to 16- and 17-year-olds, though some school leavers may start working at the age of 15.
11. The Apprentice National Minimum Wage (ANMW) was introduced in 2010 to grant apprentices, who were previously exempt from the NMW, the legal protections it entails. It applies to those apprentices who are aged under 19, or aged 19 or over and in the first year of their apprenticeship. The LPC continues to recommend this rate so that the level of the ANMW provides a fair deal for apprentices, protecting them from exploitation whilst at the same time not deterring businesses from taking them on and providing good quality training. However, they plan to consider the longer term of a separate apprenticeship rate.
12. The LPC also makes an annual recommendation for the value of the accommodation offset. The accommodation offset was introduced alongside the minimum wage in 1999 and provides a mechanism to offset the cost of providing accommodation for workers against the NLW or NMW. The offset rate is deducted from wages without reducing pay for NLW/NMW purposes; it is the only benefit in kind that can count towards the minimum wage, as there are scenarios when the provision of accommodation can be

² Prior to the introduction of the NMW in 1999, a third of low-paid workers were in extreme low pay.

³ Bell D & Blanchflower D, 2011, Young people and the great recession, *Oxford Review of Economic Policy*, 27 (2), pp. 241-267

⁴ A review of the Youth Rates of the National Minimum Wage (2019) [[Link here](#)]

mutually beneficial for both employer and worker. The offset arrangements provide protection to workers and give some recognition of the value of the benefit but are not intended to reflect the actual costs of provision. The LPC have periodically reviewed the working and impacts of the accommodation offset and have made a number of recommendations as to how it should operate. Overall, they have repeatedly reaffirmed their support for the existence of the offset, citing two central principles – firstly, that restrictions on deductions are an important measure to protect workers from being exploited or from having their minimum wage undermined, and secondly, that accommodation charges (capped at the level of the offset) should be the only deduction permitted to take a worker’s pay below the NMW/NLW.

13. As the decision on the appropriate rates is both empirical and based on extensive stakeholder engagement, the LPC report contains a large body of evidence and analysis on the impact to date of the NMW and NLW. The LPC considers the prospects for the UK economy by considering the latest available forecasts for growth, average earnings, inflation, employment, and unemployment from the Office of National Statistics (ONS), Office for Budget Responsibility (OBR), Bank of England (BoE) and HM Treasury’s panel of independent forecasters. They also have an extensive consultation period to collect the views and analysis of interested stakeholders. The LPC also commission external research to better inform them of the impacts of minimum wage policy. The evidence, research and data collected and produced by the LPC have been used to inform this IA.
14. The LPC published their recommendations for the new rates, alongside a summary of evidence, in November 2023⁵:

Table 1: National Living Wage and National Minimum Wage rates for 2024

	2023 rate	2024 rate	% nominal increase	Cash increase
National Living Wage 21 and over (previously 23 and over)	£10.42	£11.44	9.8%	£1.02
18 to 20	£7.49	£8.60	14.8%	£1.11
Under 18	£5.28	£6.40	21.2%	£1.12
Apprentice	£5.28	£6.40	21.2%	£1.12
Accommodation Offset	£9.10	£9.99	9.8%	89p

Rationale for continued intervention

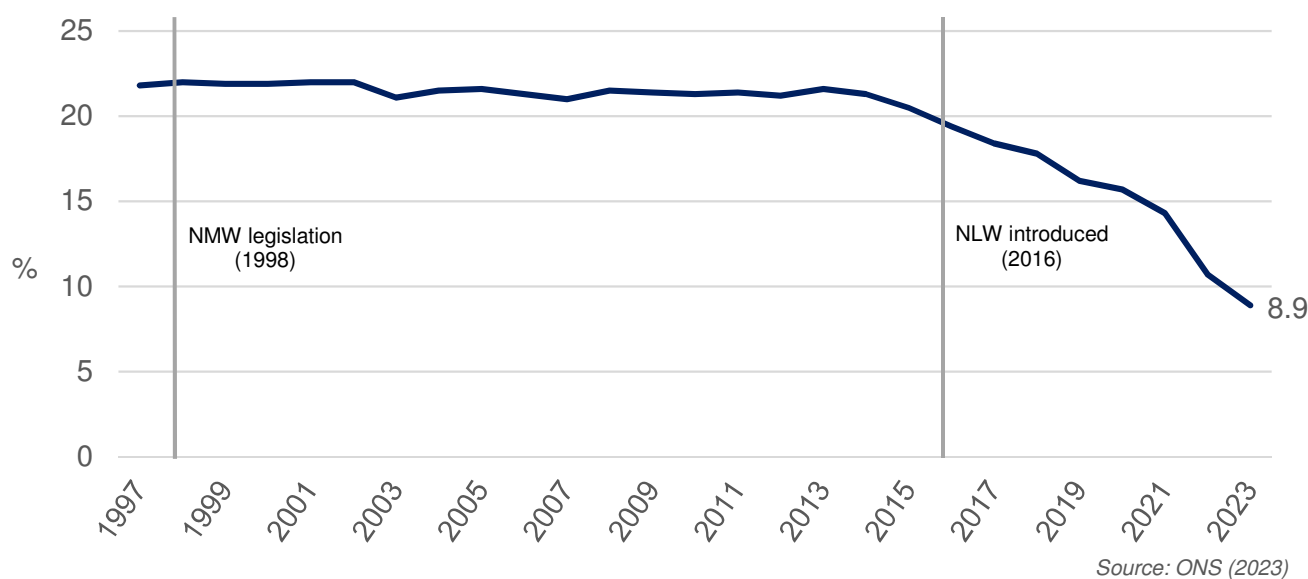
15. In the standard model of a ‘perfectly competitive’ market, wages and employment are determined by the interaction of supply and demand. This model predicts that competition between employers for employees should drive wages up to be equal with the ‘marginal revenue product of labour’, so that labour is paid in perfect proportion to its contribution to production. Any deviation from this wage would lead to an extension or contraction of market demand which would lead back to the market equilibrium. According to this model, government-interventions to increase the minimum wage would push the cost of labour above what it is worth to employers, leading to a contraction of demand and the creation of unemployment.
16. However, if the market is not ‘perfectly competitive’ and firms have market power, then wages are not determined solely by the forces of supply and demand. In such a scenario there is no guarantee that wages will be equal to the value of labour’s contribution to production, meaning that some workers may

⁵ LPC (2023) Minimum wage rates for 2024 [\[Link here\]](#)

be paid an exploitatively low wage. The economic rationale for a statutory wage floor is to therefore address the welfare loss caused by unequal bargaining power in the labour market⁶.

17. The labour market today is markedly different to that of the late 90s when the NMW was first introduced: it has a higher participation rate, higher employment rates, lower unionisation (from 30% of employees in unions in 1999 to 22.3% in 2022)⁷. The demographics of workers have evolved with more diversity in the workplace, for example, the employment rates for women and disabled people are at a near record highs at 72.1%⁸ and 53.6%⁹ respectively in 2023 Q2¹⁰. Rates of extreme low pay have also essentially fallen to zero¹¹. Analysis from the ONS shows that the number of people in low pay in the UK (defined as the number of people earning below two-thirds of median hourly pay) fell for the tenth consecutive year in 2023 – to 8.9% (Figure 1). These changes to the labour market have occurred in parallel with annual upratings of the NMW and the introduction of the NLW.

Figure 1 – Proportion of low paid jobs (hourly pay)



18. The economic rationale for continued intervention via the NMW is based on maintaining a wage rate for younger workers that is close to the competitive market equilibrium. The Government seeks to achieve this by giving the LPC a remit to recommend an NMW rate that does not damage the employment prospects of low paid workers.

19. The economic rationale for the NLW is broader, with its purpose centred on equity, primarily around reducing wage inequality, and ensuring that low paid workers enjoy the benefits of economic growth. The two-thirds of the median target for the NLW for 2024 means that wages of the lowest paid will rise relative to the middle of the wage distribution. This will be the ninth annual uprating of the NLW and achievement of the Government’s ambition to end low pay (in hourly terms).

20. The NMW and NLW have been a key policy to support low-paid workers in an environment of high inflation and cost-of-living pressures in the last few years. Inflation is still moderately high at 4.7% in October 2023,

⁶ Annex A in the 2022 IA further describes the theoretical rationale for intervention [\[Link here\]](#)

⁷ Trade Union membership UK 1995-2022 statistical bulletin [\[Link here\]](#)

⁸ ONS Female employment rate (aged 16 to 64, seasonally adjusted:% [\[Link here\]](#)

⁹ Table A08: Economic activity of people with disabilities aged 16-64: rates, UK [\[Link here\]](#)

¹⁰ Owing to issues with ONS LFS data we use Q2 2023 as the latest reliable data point throughout and descriptive analysis

¹¹ Resolution Foundation’s Low Pay Britain 2016 report (p16). As a result, the Resolution Foundation have stopped calculating this measure for their latest reports: [\[Link here\]](#)

but it is falling, and the OBR expects it to reach the 2% target in 2025¹². The LPC highlight that the NLW will rise by 6.3% in real terms and the rises in 2024 should more than recover the real value lost over the cost-of-living crises and help protect against living standards. This is in comparison to between 2021-2023 where the real value of the NLW fell as inflation outstripped the rises in the NLW¹³.

The Economic Context

The macroeconomy

21. The state of the economy plays an important role in the LPC's minimum wage rate recommendations and in the Government's decision to accept them.
22. Since recent revisions to GDP data, the UK economy recovered from the pandemic faster than previously thought. However, growth has slowed substantially since then and the level of GDP has barely changed in a year¹⁴. The economy is also set to grow more slowly over a 5-year forecast period than the OBR has previously forecasted in March. The OBR forecasts real GDP growth to be 0.6% in 2023, to 0.7% in 2024 and 1.4% in 2025¹⁵.
23. Monetary policy has tightened in recent times with increases in interest rates squeezing households and firms. This has weakened consumer consumption alongside weaker incomes and has driven the fall in GDP growth. Potential GDP is also weaker compared to the OBR's March forecast owing to weaker productivity and fewer average hours worked. Nevertheless, the OBR notes that there is significant uncertainty around GDP growth forecasts.
24. Inflation has been falling since the beginning of the year but is still moderately high at 4.7% in October 2023. Inflation has been more persistent than expected, with the OBR revising their forecast of returning to the 2% target a year later in 2025. In the short-term, higher nominal wage growth is predicted to be the main contributor to inflation, outweighing the effect of lower energy prices¹⁶.
25. Recent ONS business surveys show signs of improvement in business conditions, with around 10% of businesses reporting expected decreases in performance over the next 12 months (compared to around 15% this time last year)¹⁷ and 9% reporting experiencing worker shortages (compared to 13% last year)¹⁸. However, some low pay sectors (e.g. hospitality, retail and transport and storage) remain under pressure. Around 70% of businesses in low-paying sectors have reported experiencing challenges to business turnover, with economic uncertainty as the top concern¹⁹. Among low paying sectors experiencing an increase in input prices, absorbing costs remains the most common response to cost pressures, followed by raising prices. There are also signs of rising insolvency risks among SMEs, who tend to experience a larger share of total costs due to the NMW/NLW increases compared to larger firms.

The labour market

26. The labour market has shown a strong recovery since the pandemic and is still strong by historical standards (i.e. high employment, high vacancies, low unemployment). Whilst the labour market has been slowing in recent months, the latest published data is more mixed – the employment rate and the number of vacancies decreased, whereas real wages increased, and payroll employment is at record levels.

¹² Bank of England November 2023 Monetary Policy Report [[Link here](#)]

¹³ LPC Summary of evidence 2023 Report: November 2023 [[Link here](#)]

¹⁴ LPC Summary of evidence 2023 report: November 2023 [[Link here](#)]

¹⁵ OBR, November 2023 Economic and fiscal outlook. [[Link here](#)].

¹⁶ OBR, November 2023 Economic and fiscal outlook. [[Link here](#)]

¹⁷ ONS BICS Wave 97 and 71

¹⁸ ONS BICS Wave 96 and 70

¹⁹ ONS BICS Wave 86

27. The employment rate was 75.7% in July to September 2023, down 0.1 percentage points on the previous three-month period. Compared to pre-pandemic, the employment rate is 0.9 percentage points lower due to higher inactivity and increased unemployment. The unemployment rate was 4.2% in July to September 2023, unchanged on the previous quarter²⁰.
28. Since the pandemic, a significant number of workers have left the labour market, leaving labour supply lower than before the pandemic. The inactivity rate (i.e. those not actively seeking a job) rose by more than a percentage point in the first year of the pandemic, the sharpest 12-month rise on record. The inactivity rate remains 0.7 percentage points higher than before the pandemic (357,000 increase on pre-pandemic levels among those aged 16 to 64, of which 275,000 are aged 50-64)²¹.
29. Increases in economic inactivity in the first year of the pandemic were largely driven by those aged 16-24, while more recent increases were driven by those aged 50 to 64 years²². More working-age people are self-reporting long-term health conditions, with 36% saying that they had at least one long-term health condition in 2023 Q1, up from 31% in 2019 Q1, and 29% 2016 Q1. The number of people economically inactive because of long term sickness has risen to over 2.6 million people, an increase of over 400,000 since the start of the pandemic²³.
30. There has been a gradual softening in the demand for labour as vacancy rates are now much closer to 2019 rates than recent highs. In May 2022, job vacancies reached a peak of 1.3 million, but this has fallen to just under 1 million in September 2023²⁴. However, vacancies remain 156,000 higher than the pre-pandemic level²⁵. Worker shortages are also lessening as there are fewer vacancies overall, employers find the market less competitive and so easier to recruit from. Nevertheless, worker shortages in low-paying sectors remain above those for other sectors, such as hospitality and health and social work²⁶.
31. The number of jobs in low-paying sectors has grown more slowly than in other industries since 2019 with a 2% growth rate compared to 7.7% respectively²⁷. The minimum wage could be a cause of this relative decline, although other factors are likely playing a more important role. Minimum wage workers are now more likely to progress onto higher pay and it is likely that these moves are to non-low paying industries²⁸. Low-paying employers are also finding it more difficult to recruit than other sectors owing to competition, therefore we would expect slower employment growth. Longer term factors also play a role with the shift away from high street retail, changes to the migration system and the pandemic changing employment patterns²⁹.
32. Nominal pay growth remains strong and has outpaced inflation in recent months, leading to growth in real pay (i.e. inflation-adjusted). Annual growth in average regular pay (excluding bonuses) was 7.7% in July to September 2023, 0.2 percentage points lower than the previous 3-month period but still one of the highest regular annual growth rates since comparable records began in 2001. Annual growth in employees' average total pay (including bonuses) was 7.9%; this total annual growth rate is affected by the NHS and Civil Service one-off cost of living payments made in June and July 2023. These will continue to affect total pay figures for the next 12 months. In real terms (adjusted for inflation CPIH), annual growth for total pay rose on the year by 1.4% and for regular pay rose on the year by 1.3%³⁰.

²⁰ ONS Labour market overview UK: November 2023 [\[Link here\]](#)

²¹ ONS Labour market overview UK: November 2023 [\[Link here\]](#)

²² Employment in the UK: September 2023 [\[Link here\]](#)

²³ ONS Rising ill-health and economic inactivity because of long-term sickness, UK: 2019 to 2023 [\[Link here\]](#)

²⁴ LPC Summary of evidence 2023 report: November 2023 [\[Link here\]](#)

²⁵ ONS Labour market overview UK: November 2023 [\[Link here\]](#)

²⁶ LPC Summary of evidence 2023 report: November 2023 [\[Link here\]](#)

²⁷ LPC Summary of evidence 2023 report: November 2023 [\[Link here\]](#)

²⁸ LPC Summary of evidence 2023 report: November 2023 [\[Link here\]](#)

²⁹ LPC Summary of evidence 2023 report: November 2023 [\[Link here\]](#)

³⁰ ONS Labour market overview UK: November 2023 [\[Link here\]](#)

33. Although the labour market has shown some signs of loosening, it remains tight in a historical context with the vacancies to unemployment ratio still elevated and above its 2019 Q4 level. Nevertheless, the slowdown in output growth is feeding into a softening of labour demand and an easing of recruitment difficulties.
34. Unemployment is expected to continue to slowly rise as the labour market loosens. The OBR have forecasted it to reach 4.6% in 2025 Q2 before falling slightly to 4.4% in 2026. Nonetheless, it has been revised to peak around a year later than had previously been forecasted by the OBR in March 2023. This is owing to a weakening in labour demand from rising interest rates and slower GDP growth.
35. With the labour market continuing to loosen and inflation set to moderate, some of the upward pressures on wage growth observed in 2023 should start to ease. The BoE, OBR and HMT panel all show the falling path of growth rates in their forecasts. For example, the BoE have forecasted wage growth to fall from 6.8% in 2023 to 4.3% in 2024 to 2.8% in 2025. This contrasts with the more sudden short-term decrease in the average forecasts of the HMT panel where wage growth falls from 6.4% in 2023 to 3.6% in 2024, to 3% in 2025. We reflect this uncertainty on wage dynamics in our analytical approach, which is discussed in detail starting on paragraph 63.

Table 2: Forecasts of selected economic variables (November 2023 market rate projections)

	2023			2024		
	OBR	BoE	HMT average	OBR	BoE	HMT average
GDP	0.6	0.5	0.5	0.7	0.5	0.5
Unemployment rate	4.2	4.0	4.4	4.6	4.5	4.7
Average earnings	6.8	6.0	6.4	3.7	3.5	3.7
Inflation (CPI)	7.5	5.0	4.6	3.6	2.5	2.7
Sources	<p>a: OBR EFO, November 2023. [Link here]</p> <p>b: Bank of England November 2023 Monetary Policy Report. Forecasts refer to Q4 of each year. [Link here]</p> <p>c: HMT, Average of Independent Forecasts (previous three months), November 2023 release [Link here]</p>					

Consultation

36. The NMW and NLW rates are underpinned by extensive consultation, analysis, and evidence-gathering carried out by the LPC. On top of its own expertise and analysis, the LPC consults with a wide range of stakeholders from across civil society through its annual evidence programme. This year the LPC received responses from over 100 various organisations either through written consultation, oral evidence sessions or visits across the UK³¹. The LPC makes recommendations on the future rates but the final decision on whether to accept them is made by the Government.
37. The LPC's work and the wider economic context, enable us to understand how the proposed rates may impact businesses and are summarised below³²:
- Respondents thought the overall economy had held up better than expected, with consumer demand more resilient than forecast and a recession avoided. Worker representatives pointed to the ongoing buoyancy of profits and dividends in the corporate sector. Employer representatives argued that beneath the overall picture, especially for small businesses, was bleak, with many suffering from pandemic-era debt and rising input costs.

³¹ See Annex F for list of contributors – Appendix 1 of the Low Pay Commission Report 2023 (LPC (2024, forthcoming))

³² LPC (2024, forthcoming)

- Inflation and costs were the leading concerns for most employers with energy costs still prominent and little confidence inflation would significantly fall in the near term. Worker representatives were concerned about inflation cutting the real value of pay awards, but argued it was driven mainly by businesses profit-seeking and that wage rises should not be viewed as inflationary.
- Workers and employers alike told the LPC the labour market was strong. From employers, labour shortages were a source of uncertainty and an increasing drag on activity. There were signs of loosening around the fringes; some employers believed workers were increasingly preoccupied by job security against the backdrop of rising living costs.
- Employers generally described the NLW as a leading – but not the main – cost to their businesses. Several groups told the LPC that over time employers were being pushed into more difficult decisions over how to manage increases (for example, whether to raise prices). The evidence tended to suggest small employers were more affected than larger ones. As last year, the most common reported responses in surveys were absorbing the cost via reduced profits and increasing prices. It remained relatively rare to hear of employment impacts, whether from redundancies, reduced hiring or reduced hours. Pay differentials remained a major stress point for employers large and small.
- A large volume of evidence centred around the impact of rising living costs and the hardship borne by low-paid workers despite the NLW's increase. Respondents drew the link to the struggle to get adequate hours, the prevalence of zero-hours contracts and evidence on rising rates of in-work poverty, arguing these factors combined to undermine progress with the NLW. Respondents also focused on the design of and level of provision under Universal Credit as a contributing rather than a mitigating factor when it came to in-work poverty.

Options Identification

38. The Government has a manifesto commitment for the NLW to equal two-thirds of median earnings by 2024 for workers aged 21 and over, taking economic conditions into account. The Government has separately issued the LPC with a remit to recommend the NLW rate to apply from April 2024 which meets this target if economic conditions allow³³. This target is part of our wider objective to work towards a high wage, high skill, high productivity economy. For the other rates, the LPC was asked to recommend rates as high as possible without damaging the employment prospects of each group.
39. The LPC provide a recommendation by extensively considering a wide range of evidence. These include a written public consultation exercise, held from March to June, a UK-wide programme of visits and meetings, an oral evidence session with 26 organisations representing workers and employers, a range of independent research projects and comprehensive analysis of a range of economic and labour market data.
40. The LPC's remit asked them to advise on any emerging risks and – if the economic evidence warrants it – recommend that the Government reviews its target. The aim of this “emergency brake” is to ensure the lowest paid continue to see pay rises without significant risks to their employment prospects. Therefore, in theory, there are a number of possible policy options, including higher or lower rates, or maintaining the age thresholds as they are. Nevertheless, the LPC have recommended to the Government the rate of the NLW consistent with reaching the target of two-thirds of median earnings for all workers ages 21 and over by 2024. The LPC assessment was “finely balanced” and, whilst there are challenges around economic growth conditions and pressures on businesses (particularly SMEs), the LPC noted that the overall labour market appears resilient, and the low paying end of the labour market also appears robust³⁴.

³³ NLW and NMW: LPC remit 2023 [\[Link here\]](#)

³⁴ Letter from Bryan Sanderson with LPC recommendations for 2024 (2023) [\[Link here\]](#)

41. The Government has accepted the LPC’s recommendations in full and this was announced at the Autumn Statement. Therefore, the IA considers two options which will be assessed against the policy objectives set out above:

- Option 0: Do nothing – maintain the existing NMW and NLW rates
- Option 1: Implement the LPC recommended rates from April 2024.

Option 0: Do nothing

42. If the LPC’s rate recommendations are not implemented, then the status quo will prevail and the current NMW and NLW rates would continue to be the statutory pay floor that workers are legally entitled to.

43. The “do nothing” option would not achieve the policy objectives of the NMW and NLW rates. We believe some workers aged 21 and over would continue to be paid below two-third of median wages, meaning the Government would not meet its manifesto commitment to end low (hourly) pay for NLW workers. Likewise, pay growth for NMW workers would be lower than in the LPC recommendations due to the presence of monopsony power.

Option 1: Implement the LPC recommended rate recommendations

44. The LPC rate recommendations for April 2024, as outlined in their report, are as follows:

Table 3: Low Pay Commission NMW/NLW rate recommendations for April 2024

	LPC recommendation	Current rate	Annual percent increase
National Living Wage rate (21+)	£11.44	£10.42	9.8%
21-22-year-old rate	£11.44	£10.18	12.4%
18-20-year-old rate	£8.60	£7.49	14.8%
16-17-year-old rate	£6.40	£5.28	21.2%
Apprentice rate	£6.40	£5.28	21.2%
Accommodation offset (daily figure)	£9.99	£9.10	9.8%

45. In their ‘Summary of Evidence 2023 Report’ and letter to the Government, the LPC has summarised the analysis, consultation and subsequent rationale behind its recommendations for the NMW and NLW rates which should apply from April 2024. The Government has considered this and subject to parliamentary approval will implement the LPC’s recommendations in full. Below is a summary of the rationale for this. Further detail is available in the LPC’s report.

The National Living Wage

46. In order to reach the 2024 target, the LPC has advised that the age of eligibility should be lowered to 21 and that the NLW should rise to £11.44. This represents an increase of 9.8% for those aged 23 and over, and 12.4% for 21–22-year-olds. This increase will enable the Government to meet the manifesto target for the NLW to reach two-thirds of average earnings for those aged 21 and over. The proposed increases in the 2024 NLW rates are higher than those seen last year and would be the highest ever single increase in pence and percent terms. A full-time worker on the NLW will see their pre-tax pay increase by more than £1,800 to nearly £21,500. This year employer stakeholders were more accepting of the projected 2024 NLW rate than in previous years, with few arguing against hitting the target³⁵. Many noted that the projected increase was approximately in line with inflation, which made it easier to accept. Most

³⁵ LPC (2024) Long report – forthcoming

respondents also favoured going ahead with the extension of the NLW to 21- and 22-year-olds, noting it would have a small impact on most employers.

47. The LPC forecast that the recommended NLW increase of 9.8% will achieve the manifesto target of reaching two thirds of median earnings for those aged 21 and over. They have acknowledged that this is higher than the initial projections published in spring 2023; this is due to higher wage growth than expected. The LPC also highlight the continuing impact of cost-of-living challenges and state “this substantial increase will restore the real value [of the NLW] that has been eroded” by high inflation³⁶. The LPC have also concluded that the increase will not significantly risk employment prospects. A strong labour market is likely to mitigate against any potential adverse consequences from significant NMW/NLW increases since demand for work is higher as are wage pressures to retain and recruit.

National Minimum Wage (s)

48. The gap between the youth rates and the NLW has widened in recent years, which led the LPC to address this in their recommendation.

49. 16-17-year-olds saw a significant boost to their employment post-pandemic. Though this has in part unwound, their employment remains above pre-pandemic levels. Therefore, the LPC have recommended an increase of 21.2%, taking them from £5.28 to £6.40.

50. Although employment for 18–20-year-olds appears to be above pre-pandemic levels, there has been a slight rise in unemployment and inactivity. However, this may be affected by issues with the Labour Force Survey (LFS) as this group saw the strongest median pay growth of any group. Coverage also fell again, making it the lowest of the youth populations with more than 60% paid at the NLW or above (compared to 55% in 2019). Therefore, the LPC have recommended an increase of 14.7%, taking the minimum wage from £7.49 to £8.60.

51. These rates balance the aim to stay in line with underlying wage growth and inflation whilst recognising the higher risk of unemployment for this group.

The Apprentice NMW

52. The LPC have recommended aligning the Apprentice Rate and the 16–17-Year-Old Rate, with the rates being equal but separate since April 2022. They continue to support this position, with no evidence yet emerging to justify separating the rates. Therefore, the Apprentice Rate is increasing by 21.2% from £5.28 to £6.40.

Accommodation Offset

53. Last year the LPC reviewed the offset and are waiting for next steps following the Department for Levelling Up, Housing and Communities consultation on the Decent Homes Standard for the private rented sector. Therefore, in the meantime recommend increasing the offset in line with the NLW, by 9.8% to £9.99. The rationale for recent increases in the rate has been to encourage the provision of higher-quality accommodation. However there continues to be limited data available on how many employers use the accommodation offset and therefore both the Government and the LPC use stakeholder engagement to understand the impact of recent increases. The sectors most likely to use it are agriculture and horticulture, and to a lesser degree, the hotel sector, particularly in rural locations.

Approach to the Appraisal

54. This section explains the approach to estimating additional wage costs and non-wage costs resulting from the uprating in the NMW/NLW rates. The results of this approach are given in paragraph 98 onwards.

³⁶ Letter from Byran Sanderson with LPC recommendations for 2024 (2023) [[Link here](#)]

Counterfactual

Background to the choice of counterfactual

55. The core assumption in our analysis is the counterfactual: the profile of the counterfactual is both a function of i) the wage level low paid workers would receive in the absence of the policy; and ii) the wage growth they would have experienced over the course of the minimum wage uprating. The true counterfactual is unobservable and given the NMW and NLW are universally applicable across the UK, there is no pure control group to compare the policy intervention against.
56. Multiple approaches have previously been considered to estimate the counterfactual. Due to its unobservable nature, none can be proven, i.e., we rely on making normative economic statements. Moreover, the actual cost to business/benefit to workers can vary between zero and infinity depending on the wage growth assumption. If the wages for low paid workers were to grow at an equal or higher rate to the size of the uprating in the counterfactual this results in no additional cost to employers. However, if workers affected were to experience zero wage growth in the counterfactual, then the cost would also be infinite.
57. In response to previous IAs, the RPC has commented on the suitability of the counterfactual we have used to estimate the cost to business/benefit to workers because of NMW/NLW upratings. Detailed discussion of this can be found in 2022's IA³⁷, but two key points to highlight are:
- In 2017, we commissioned the National Institute of Economic and Social Research (NIESR) to research the most appropriate counterfactual for us to employ in this and future IAs³⁸.
 - In 2018, following some comments from the RPC regarding NIESR's findings, we undertook further engagement with labour market academics to scrutinise our counterfactual methodology further. We once more found broad consensus for our approach, providing us with validation to proceed this year. In particular, the 'catch-up' concept (whereby we estimate the cost of the uprating by considering the point at which our counterfactual catches up to the minimum wage rate) was agreed to be the most appropriate method to assess the impact of the uprating. Additionally, most respondents disagreed that wage growth at the bottom of the pay distribution would be at or close to zero, in the absence of a minimum wage uprating. There was agreement that an average uniform growth rate for all minimum wage workers should be used.
58. This is discussed in more depth in previous IAs, but simply, the NIESR recommended approach is to (i) use the current wage distribution as the starting point for the counterfactual and (ii) apply a wage growth assumption based on judgement about the state of the economy and labour market.
59. Our choice of counterfactual wage growth has varied slightly in previous years and the RPC has often commented on the evidence to support our chosen method. However, this broad approach, as suggested by NIESR's research, has now received seven 'green' fit-for-purpose ratings by the RPC, though we continue to check its validity each year with leading labour market academics.
60. In practice, to implement NIESR's recommendation we estimate the cost to business/benefit to workers by calculating how long it takes for the counterfactual growth trajectory to 'catch up' with the proposed NMW and NLW rates. Further detail of the arithmetic calculations on how the 'catch up' is estimated can be found in 2017's IA³⁹.

³⁷ Amendment to the regulations 2022 Impact Assessment, Annex H [\[Link here\]](#)

³⁸ National Minimum Wage And National Living Wage Impact Assessment Counterfactual Research A Report By The National Institute Of Economic And Social Research [\[Link here\]](#)

³⁹ Amendment to the NMW regulations 2017 Impact Assessment, page 50. [\[Link here\]](#)

61. Where alternative proposals have been put forward, we have traditionally made efforts to consider this. For example, by estimating an alternative counterfactual (specifically a ‘shadow wage distribution’) – this is described in greater detail in Annex D of the 2022 IA⁴⁰. We continue to undertake an extensive exercise of sensitivity analysis to understand the impact of our assumptions, with this reflecting the uncertainties posed in this year’s analysis.
62. Finally, our own desk-based research and previous analysis, leads us to conclude that our current approach is the most appropriate one. As always, we will continue to monitor this going forwards.

Counterfactual for this IA

63. We continue to use our core NIESR-suggested methodology⁴¹, with changes in assumptions made in line with their recommendations, specifically on the rate of wage growth in the counterfactual.
64. The most suitable growth rate to use depends on how the economy is expected to perform over the appraisal period. As suggested by NIESR, our IAs before the 2022 IA had used historic wage growth at the part of the wage distribution unaffected by the NMW/NLW uprating as a proxy for counterfactual wage growth. That is using average nominal wage growth at the 25th percentile of the wage distribution from a historically analogous period. NIESR recommended this approach, stating among things, asymmetries in forecasting errors and lack of representation of the underlying labour market trends in the alternative methods, such as using advanced econometric models.
65. However, where the economic environment is largely unprecedented since the introduction of the minimum wage, there may not be an appropriate proxy period to use. In such a situation, we believe using a range of independent forecasts as a gauge for future years may form a better proxy since they will capture the best information about the current economic environment and what that means for wage growth. Although this is a slight departure from the previous approach, we believe it is still consistent with the NIESR’s 2017 report, which state that ‘[the counterfactual] choice will inevitably involve judgement on the current state of the business cycle, informed by independent forecasts of key institutions’⁴².
66. In addition, with larger increases the NMW/NLW in recent years, the counterfactual wage takes longer to ‘catch up’ with the actual rates, resulting in a longer appraisal period. Between 2016 and 2021 the counterfactual wage caught up with the rate within 2 years, however this was 3 years in 2022, 4 years in 2023 and 6 years for this year (see paragraph 87 onwards for discussion of appraisal period for this IA). A longer appraisal period makes it less suitable to make a linear assumption about counterfactual wage growth since this period may cover more than one stage of the business cycle, and therefore picking simply a ‘recessionary’ or ‘expansionary’ period would be inappropriate. Therefore, a forecast of wages is more likely to capture these changing dynamics over time. Nevertheless, forecasts are based on conditioning assumptions on the future economy, which is hard to predict, especially further through time.
67. As such, the last two IAs have departed from using a historical period of wage growth at the 25th percentile as the counterfactual assumption. In the 2022 IA, the OBR median growth forecast from their October 2021 Economic and Fiscal Outlook was used, and in 2023, the average of the HMT panel of independent forecasters was used. We believed this best reflected the economic cycle experienced by the UK, including the unique situation of recovering from the pandemic which was unlikely to be represented by other recent historical periods. Sensitivities on counterfactual wage growth were a low scenario of 0.48% (the 2008 – 10 Great Recession growth rate), and a high scenario of 1.23% (2016 – 19 growth rate). In 2023, sensitivity analysis was done by using the 2022-2026 lowest and highest average quarterly wage growth forecast from the HMT panel, which were 0.78% and 1.56% respectively. The average quarterly

⁴⁰ Amendment to the NMW regulations 2022 Impact Assessment [\[Link here\]](#)

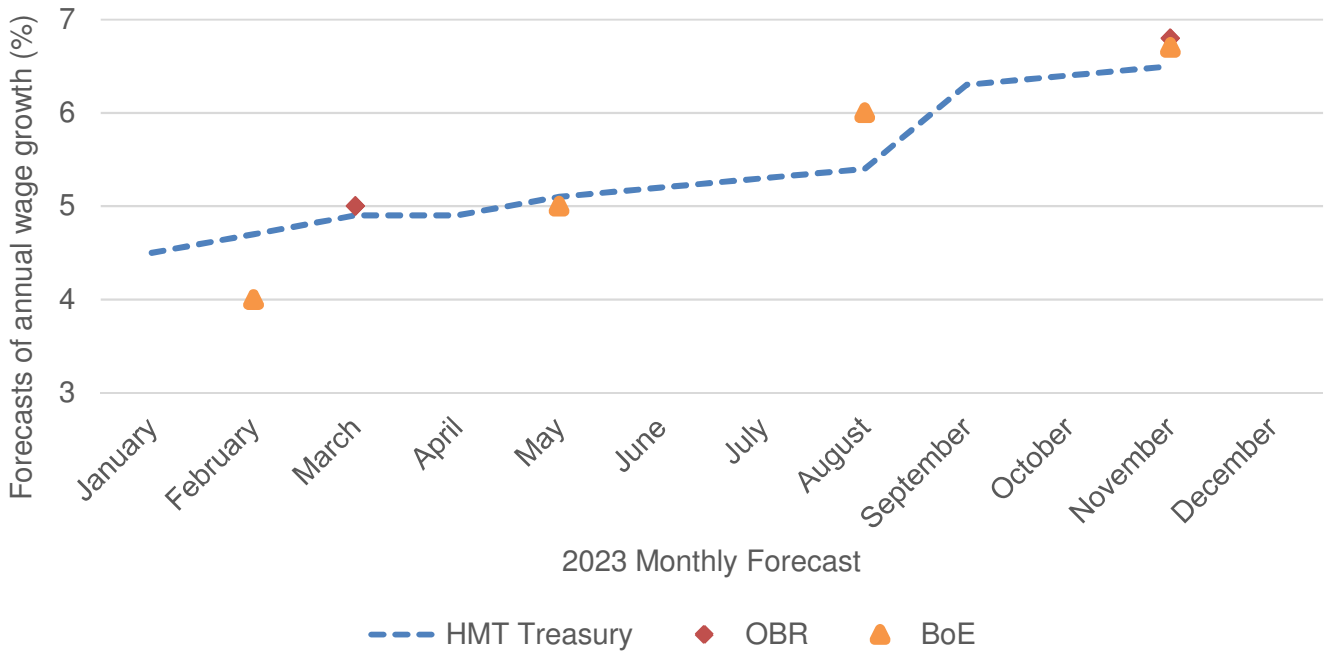
⁴¹ National Minimum Wage and National Living Wage Impact Assessment. Counterfactual research. NIESR [\[Link here\]](#)

⁴² National Minimum Wage and National Living Wage Impact Assessment. Counterfactual research. NIESR. p. 74 [\[Link here\]](#)

wage growth forecast from the OBR (2022-2024) and BoE (2022-2025) were also used, which were 0.65% and 0.78% respectively.

- 68. In practice, wage growth has been far higher in 2023 than the HMT panel predicted, so it is likely that counterfactual wage growth would have been higher than the 0.85% used in last year’s IA. This means our estimates were almost certainly an overestimate⁴³.
- 69. Forecasts throughout 2023 have continually been revised upwards owing to the persistence of wage growth (see figure 2). The persistence has been a result of pay settlements driven by inflation as well as a tightness in the labour market. Although there has been a loosening in the labour market, shortages and competition remains, particularly in certain sectors such as hospitality and social work⁴⁴.

Figure 2: Changing forecasts for average wage growth in 2023



- 70. The knock-on effects of unique events, such as Covid, have continued in 2023, with slow growth, low productivity, and weak consumer consumption. Geopolitical situations have led to volatile fuel prices which has contributed to the persistence of inflation. Furthermore, wage growth has remained strong despite the labour market loosening.
- 71. Based on this uncertain outlook, finding a single historical period that well reflects the current UK economic climate is difficult. Therefore, in this year’s IA we have again judged that using a forecast of average wage growth as our counterfactual to be the correct approach.
- 72. Wage growth by hourly pay has also been stronger at the lower end of the pay distribution compared to the top. Between April 2019 and April 2022, hourly pay grew at 17.5% at the 10th percentile, compared with 10.8% at the median⁴⁵. The NLW is a driver of this growth, but many low paid workers saw their pay grow more than then NLW. Therefore other factors could be at play, such as the structural tightness of low-paying sectors. This has risen from worker shortages, particularly in occupations such as hospitality,

⁴³ The fact wages grew significantly faster than prediction is also clear from our projection of coverage in the 2022 IA being significantly more than the data showed ex post. The LPC 2022 report shows NLW coverage in April 2022 was just 1.4m compared to our prediction in the IA of 2.1m.

⁴⁴ LPC Summary of evidence 2023 report: November 2023 [[Link here](#)]

⁴⁵ National Minimum Wage: Low Pay Commission Report 2022 (2023) [[Link here](#)]

cleaning, and social care⁴⁶. This would also suggest our approach is conservative, as wage growth at the bottom of the pay distribution is higher than average.

73. Amongst the BoE, the OBR and the HMT panel of independent forecasters, there is a significant range in the forecasted intensity, timing, and profile of the projected fall in wage growth. This demonstrates the differences amongst the underlying assumptions (see Table 4). The forecasters also produce estimates across different horizons, for example, the OBR produce estimates until Q1 2029, but the BoE only until 2026. Within HMT’s panel of independent forecasts of wages, we have taken an average of the range from each year (2023-2028) as our central estimate and used the extreme highest and lowest as windows for the best- and worst-case scenario⁴⁷. For example, in 2024, we use the UBS forecast as the lowest (2.1%) and NIESR as the highest (4.9%) as these are the highest and lowest figures within the panel. We remove forecasts made prior to September 2023 to remove outdated predictions.

Table 4: Annual forecasted wage growth (2023-2028)

	BoE	OBR	HMT Panel Low	HMT Panel Central	HMT Panel High
2023	6.8%	6.6%	5.1%	6.4%	8.5%
2024	4.3%	3.9%	2.1%	3.6%	4.9%
2025	2.8%	2.2%	2.1%	3.0%	4.3%
2026	2.0%	2.1%	2.1%	3.2%	4.5%
2027		2.6%	2.5%	3.3%	4.7%
2028		3.0%			

74. Our modelling approach uses a quarterly, rather than annual, growth rate for counterfactual wages. The OBR is the only forecaster to provide such figures. For the other forecasters, we convert the annual growth figures into four, equal quarterly growth figures that takes into account compounding effects⁴⁸.

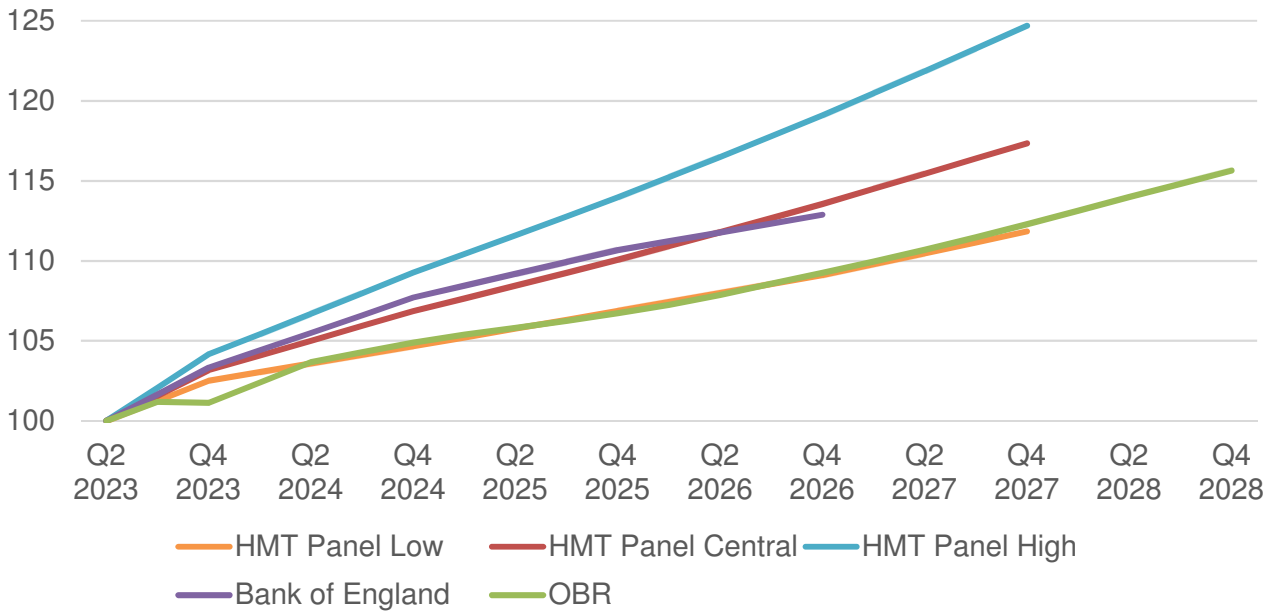
75. Figure 3 shows the resulting forecast profiles. The OBR holds a particularly pessimistic view of wage growth, especially in the final quarter of 2023, and only catches up with the extreme lowest figure of the HMT panel in subsequent quarters. The BoE also follows a similar trajectory to the HMT panel central forecast which provides support for using this as the counterfactual growth rate.

Figure 3: Indexed wage growth forecasts (2023 Q2 – 2028 Q4)

⁴⁶ LPC Summary of findings 2022 [\[Link here\]](#)

⁴⁷ HMT Forecasts for the UK economy: November 2023, [\[Link here\]](#)

⁴⁸ To calculate the quarterly growth rate we have used the equation: $(1 + \text{Growth Rate})^{(1/4)} - 1$. For example, for the HMT panel central 2024 quarterly average, we have taken the growth per quarter average as the 2024 average growth rate (3.6%), divided by 100+1, to the power of (1/4)-1 which gives an average growth per quarter of 0.9%.



76. Therefore, we use the HMT Panel as the basis of our low, central, and high-cost scenarios as we believe this set of forecasts will capture all current available information about the state and direction of the economy, incorporate a range of scenarios that could occur and provide a central point of where forecasts converge. We also undertake a sensitivity analysis that utilises the OBRs and BoEs wage growth forecasts (see paragraph 105 onwards).
77. The use of low and high-cost scenarios are not considered as likely, but as extremes of potential outcomes. With more pessimistic wage growth forecasts, it would take the counterfactual longer to catch up and therefore generate higher costs. Therefore, more optimistic forecasts will generate lower costs. Throughout the rest of the IA, we use “low” and “high” from the perspective of costs, rather than wage growth.
78. In the indexed wage growth forecasts (see figure 3), we have used forecasted 2023 estimates. However, in the counterfactual, we have substituted Q3 2023 forecasts with observed outturn data from AWE⁴⁹. This has been done through finding the growth rate from April, from when ASHE is calibrated to, to the average of July – September 2023.
79. The counterfactual takes 6 years to catch up which exceeds the horizon to which the HMT panel produce their forecasts. This is also true for the sensitivity analysis; therefore we use the long run (2001-2019) average wage growth at the 25th percentile (0.81%) for the remaining quarters in the appraisal. For example, in our central scenario, the HMT panel forecasts until 2027, therefore in 2028 and 2029, we use 0.81% for each quarter.
80. Following extensive work done internally within DBT and engagement with academics, we do not consider a counterfactual scenario in which there is zero wage growth for low-paid workers to be likely. Comparisons of international evidence (see Box 1 below), analysis of the wage growth forecasts mentioned above, and our assessment of the outlook for the labour market and low-paid jobs, all suggest low paid workers would still see some level of wage growth in the absence of the NMW/NLW increases. We therefore rule out modelling a such a counterfactual scenario.

Box 1: The USA as a comparative example

⁴⁹ Average Weekly Earnings in Great Britain: November 2023 [\[Link here\]](#)

The United States is an example of a rich and industrialised nation covered by a variety of minimum wage regulations. The Federal minimum wage rate has been \$7.25 an hour since 2010, with no increases seen since. Twenty U.S. states, representing 131 million Americans, have chosen to use this Federal minimum wage while the other thirty U.S. states, representing 198 million Americans, have chosen to implement their own minimum wages, with various increases in these rates having been experienced over the past decade. The median annual growth rate of the minimum wage among these thirty States is 3.8%.

Following the Dube Review, which summarises the literature on US minimum wages, we have also observed the US to identify what had happened to wage growth if a minimum wage rise had not increased (as has been seen in the federal minimum wage), to identify any trends that could be applied to our own counterfactual.

Individuals in the bottom quartile (e.g. 25th percentile) of earnings in states reliant solely on the Federal minimum wage (i.e. which did not experience a minimum wage increase) saw average annual wage increases of 2.9%. The bottom quartile of earners in states which did raise their minimum wage experienced average annual wage growth of 3.7%, slightly below the median increase annual growth rate among the thirty states.

While this exercise loosely identifies correlation (without specific controls for causation), it does suggest that if the minimum wage did not increase, the bottom quartile of workers would experience wage growth. However, they would experience a lower growth rate relative to the scenario where minimum wages did rise.

There are always constraints in applying findings across countries, however there are also strong similarities between the US and UK labour markets in the period 2010-2019. Both countries experienced strong labour market recoveries post financial crises, with unemployment rates falling below pre-recession levels by 2019. Furthermore, both countries' wage growth has been relatively weak over this period and both nations are considered to have relatively 'liberal' labour market policy regimes compared to other developed economies.

This comparison can also be expanded into the post-pandemic recovery period. In both countries, the demand and supply of labour has been relatively imbalanced since 2019 leading to tight labour markets. For both countries this imbalance is due to a number of different factors including matching efficiency, declining participation rates and increases in the long-term sick.

Conversely, there are relevant differences between the two countries, the UK has higher overall labour participation rates and higher trade union density, which have not been controlled for and likely affect wage growth. Some differences can be observed however between how much this tightness has translated into broadening wage pressure, visible in the US but to a lesser degree in the UK.

Nevertheless, there are sufficient similarities between these two economies to support the basic finding that incomes among the bottom quartile of workers experience some wage growth in the absence of rising minimum wages, but less than would be expected if an ambitious minimum wage policy is in effect.

Summary

81. The counterfactual is, by its very nature, unobservable. Previous findings from NIESR, where they have deployed advanced econometric techniques to attempt to estimate the counterfactual growth rate, found these models to have low predictive power. Since we are in a world of normative economics rather than positive economics, NIESR recommend an approach where we make a judgement of what the available evidence dictates is the most suitable counterfactual, and it is one that we have continued to follow here.
82. To calculate our best estimate, we judge that the average of the recent forecasts from independent institutions in the HMT panel provides a reasonable counterfactual wage profile. We then make use of

extreme ends of the independent forecasts to calculate lower and upper bound estimates. This approach reflects the uncertainty in forecasts, while also capturing the latest available information on the state of the economy, and the dynamics of moving from a period of high wage growth to lower wage growth. We conduct further sensitivity analysis for key other major forecasters (OBR and BoE) to assess how they compare to the HMT Panel.

83. NIESR believe using a uniform growth rate across the wage distribution is unbiased and representative of the typical minimum wage worker, as is used in this IAs modelling. There is no evidence that the counterfactual wage level is different to the existing minimum wage or is it falsifiable. Evidence also does not support an argument that counterfactual wage growth would be zero for a period owing to 'base raising' effects.
84. Annex C lists previous methodology and the evolution of the counterfactual. We continue to implement recommendations from independent experts and acknowledge there may be alternative approaches. Previous IAs have used slight variations in the counterfactual but have similar limitations, and none have been shown to be more appropriate than the approach used in this IA.

Non-wage labour costs

85. The second source of direct cost associated with the NMW/NLW upratings is associated with non-wage labour costs, such as pensions and employer National Insurance contributions. Therefore, we have uprated the employer wage bill impacts by 17.9% to account for these additional costs. This figure comes from ONS analysis for 2019-2020⁵⁰. In IAs prior to 2022, we used the Eurostat figure of 21.8% was used. However, since exiting the European Union, Eurostat no longer publish this value for the UK, and therefore the more recent ONS figure is preferred.
86. Previously, NIESR voiced concerns that the Eurostat (and therefore the ONS) figure 'is likely to be an overestimate because it does not account for the fact that some workers do not meet the National Insurance contribution (NIC) threshold'⁵¹. We continue to use the full 17.9% uplift here, as we conservatively assume that any overestimates are likely to be balanced against potential underestimates.

Appraisal period

87. The length of our appraisal period is how long it takes the counterfactual, on average, to catch up with the LPC rate recommendations. As we have a uniform counterfactual growth rate for all rates, which is what NIESR recommend in their report, and the percentage increase in the rates varies across the age bands, the appraisal period differs for each of the NMW and NLW rates.
88. In our central scenario, we estimate that it will take the NLW rate 16 quarters for our counterfactual to 'catch up' with the NLW increase. Given the increases in the NMW rates, it will take the 18-20 rates 20 quarters and the 16-17 and Apprentice rates will take 24 quarters for wage growth to catch up to the corresponding minimum wage rates.

Spillovers

89. As discussed in previous IAs, we make an assumption that the increase in the minimum wage has an impact on other parts of the wage distribution, not directly impacted by the increase in the NLW and NMW. The rationale for this is that, as a higher wage floor is implemented, some employers will choose to either i) give pay rises to those paid above but near the new minimum wage; and/or ii) increase the pay of some workers previously paid below the new minimum to a greater level than just bringing pay into line with the

⁵⁰Index of Labour Costs per Hour, UK: July to September 2020, ONS [\[Link here\]](#)

⁵¹ National Minimum Wage and National Living Wage Impact Assessment. Counterfactual research. NIESR. p. 50 [\[Link here\]](#)

new statutory minimum. Employers do this out of a desire to maintain wage differentials between their employees to recognise different roles and responsibilities, maintaining a high employee morale.

90. In the past we have used evidence from NIESR and LPC to assume that spillovers last between the 20th and the 30th percentile of the earnings distribution, with the effect dissipating towards the upper end of that range.
91. There has been considerable research in this area, including Avram & Harkness (2019)⁵², Georgiadis & Manning (2020)⁵³, and IFS (2021)⁵⁴, examining the effects of previous NLW increases on wage spillovers. The authors find significant spillovers up to the 30th percentile, 25th percentile and 20th percentile respectively. Overall, these findings are encouraging as they are consistent with the assumptions made in our previous IAs.
92. During a tight labour market, we would expect businesses to be more likely to maintain differentials to retain and recruit staff. However, this is likely to be constrained by their profit margins and/or their ability to pass on costs to consumers, especially since firms are currently facing many other costs pressures (e.g., energy prices). The LPC consultation shows spillovers continue to persist beyond the NMW/NLW rates. Employers worry that a rising minimum wage reduces pay differentials within firms and workers' incentive to progress. Responses also suggest employers were being pushed into more difficult decisions over how to manage increases. There is evidence of shrinking differentials, however, workers are finding it easier to move off the wage floor. Workers could be seen to be using opportunities in other firms and industries to progress, despite falling differentials⁵⁵.
93. Due to the uncertainty in finding the point in the wage distribution where spillovers end, we have decided to use a mixture of theoretical understanding, quantitative data and academic engagement to estimate that the spillovers from the 2024 NMW/NLW increases will extend to the 25th percentile. This is in keeping with the approach that was agreed by the RPC last year. Previously, we have based sensitivities to this assumption on a +/- 5 percentage points range (i.e. spillovers between 20th – 30th percentile). However, due to increased uncertainty we assess a wider range of spillover assumption, namely +/- 10 percentage points or spillovers reaching for the 15th and 35th percentiles.

Direct and indirect effects

94. We have classified the increase in labour costs caused by the spillover effect up the earnings distribution as an indirect impact. This distinction is appropriate because the only regulatory requirement on employers is to meet the new pay floor. The decision to raise wages of those earning above the new rates in order to maintain pay differentials is at the discretion of employers and not required by the regulation – in fact, some employers may choose to use the squeeze in wage differentials as a way of mitigating the overall labour cost impact of an increase in the NMW/NLW.
95. Previously, the RPC have commented that our classification did not capture the possibility that some of the ripple effect may be non-discretionary because pay differentials are written into contracts. As argued in previous IAs, evidence from XpertHR and the LPC found that while the minimum wage has an impact on wider wage-setting behaviour, employers tend not to set wages at X% above the rates, indicating that increases in pay differentials between employees is an indirect business response to the change in legislation. This is supported by qualitative evidence gathered by NIESR in 2017 which found that the overall wage budget in large firms is often set at senior/board level, which includes considerations about

⁵² Harkness, S. E., & Avram, S. (2019). The impact of minimum wage upratings on wage growth and the wage distribution. A report prepared for the Low Pay Commission [[Link here](#)]

⁵³ Georgiadis, Andreas and Manning, Alan, The Impact of the UK Minimum Wage: Evidence from High-Frequency Firm-Level Data (March 25, 2020) [[Link here](#)]

⁵⁴ Cribb, Jonathan et al. (2021). The distributional and employment impacts of nationwide Minimum Wage changes. IFS working paper [[Link here](#)]

⁵⁵ LPC Summary of evidence 2023 report: November 2023 [[Link here](#)]

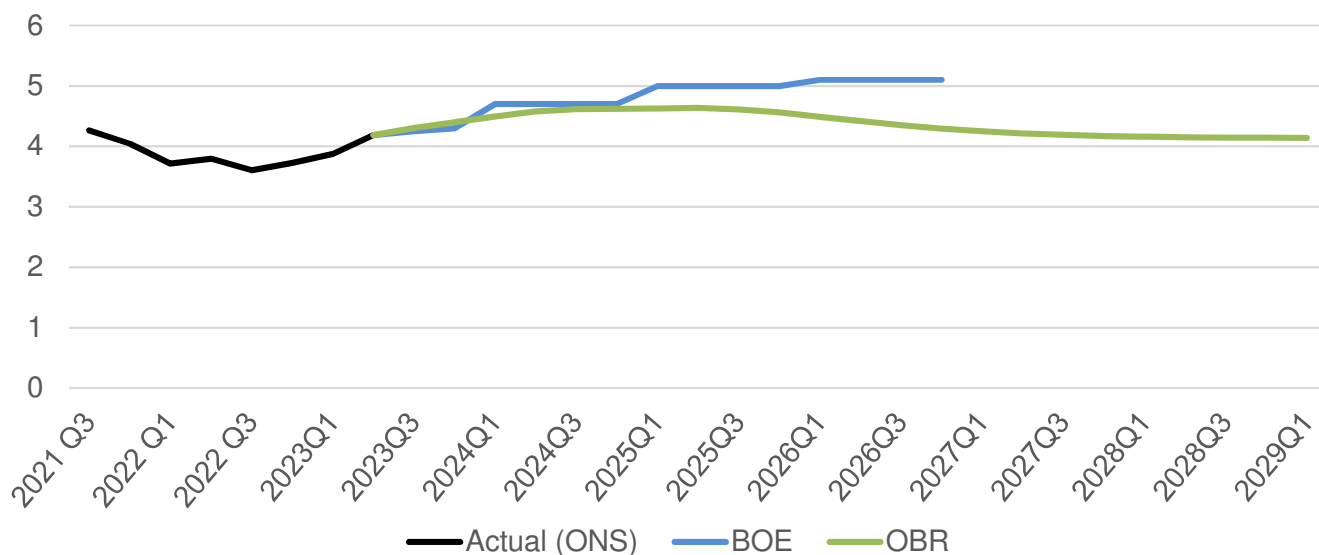
percentage increases in the NMW/NLW. Decisions about allocation to groups of employees and individuals are then made after this. This was further corroborated in conversations with payroll experts.

Factoring in potential unemployment

96. Theoretically, the employment rate has an impact on the costs of the NMW/NLW uplift. If the unemployment rate is lower, then there are more workers who benefit from uplift and the cost of the policy is higher. Conversely, if the unemployment rate is higher there are less workers and therefore lower costs.

97. Unemployment has been forecasted to rise in the next year by the BoE and OBR, reaching 4.7% and 4.6% respectively in Q4 2024. The BoE forecast that unemployment will continue to increase to 5.1% in 2026 whereas the OBR show it to peak in 2024, before decreasing to 4.3% in Q4 2026. By incorporating the forecasted rise and using the peak forecast of 5.1% by the BoE, it suggests that around an additional 120,000 people will be unemployed. This is small relative to the overall size of the employee population and so has a negligible impact on cost estimates. We would expect that the unemployment modifier scenario would generate estimates that will fall within the range produced in other scenarios – as in previous IAs - and therefore we do not run it.

Figure 4: Unemployment rate forecasts (%), November 2023



Appraisal of Impacts: Monetised Impacts

Central estimate: Labour costs

98. As discussed in the counterfactual section above, we make a range of assumptions on the counterfactual wage growth to produce a range of cost estimates. In our central scenario, we assume that wages grow in the counterfactual in line with the average independent forecasts from the HMT panel. We also make use of observed outturn data from AWE in 2023. For quarters where the forecasts are not available (2028 onwards), we assume that wages will grow in line with the historical, long-run trend. Further detail on the methodology to construct this counterfactual wage profile can be found in paragraph 63 onwards.

99. Our central cost estimate of the total labour costs is **£3,100m** (undiscounted). This is split into wage bill impacts of **£2,600m** and non-wage impacts of **£450m** (numbers may not sum due to rounding). Tables 10, 11 and 12 in Annex A provide a further breakdown in constant prices.

Low-cost estimate: Labour costs

100. In our low-cost scenario, we assume that the counterfactual wage growth is in line with the highest independent forecast from the HMT panel for each year where forecasts are available. Again, we use observed outturn data from AWE in 2023 and the long run trend for 2028 onwards. Further detail on the methodology to construct this counterfactual wage profile can be found in paragraph 63 onwards.

101. In this scenario the total cost to employers from implementing the LPC rate recommendations, and thus complying with the incoming legislation, is **£2,000m**. It is made up of **£1,700m** in increased wages and **£300m** in additional employer non-wage costs.

High-cost estimate: Labour costs

102. In our high-cost scenario, we assume that the counterfactual wage growth is in line with the lowest independent forecast from the HMT panel for each year where forecasts are available. Again, we use observed outturn data from AWE in 2023 and the long run trend for 2028 onwards. Further detail on the methodology to construct this counterfactual wage profile can be found in paragraph 63 onwards.

103. Overall, our high-cost estimate of the total labour costs is **£5,150m**. This is split into wage bill impacts of **£4,350m** and non-wage impacts of **£800m**.

Difference in estimates compared to the 2023 Uprating

104. This year the central estimate of costs for the NMW/NLW (£3,100m) uplift is substantially higher than the costs of the last uplift (£2,530m). However, this cost is expected to materialise over a longer appraisal period (6 vs 4 years), resulting in a lower cost on a per-year basis. This increase in costs is due to the increases to the NMW/NLW rates being larger than last year's across the board, especially with the inclusion of 21–22-year-olds in the NLW. This leads to a commensurate increase in costs to business. This is partially offset by the higher counterfactual wage growth assumption in this year's IA compared to last year.

Sensitivity analyses

105. Due to uncertainty around several key variables involved in our analysis, we have performed extensive sensitivity analyses to try and isolate the impact of each assumption. These sensitivities are discussed in each relevant section but for ease of comparison, we have presented our full list of sensitivities and key results in Table 5 below.

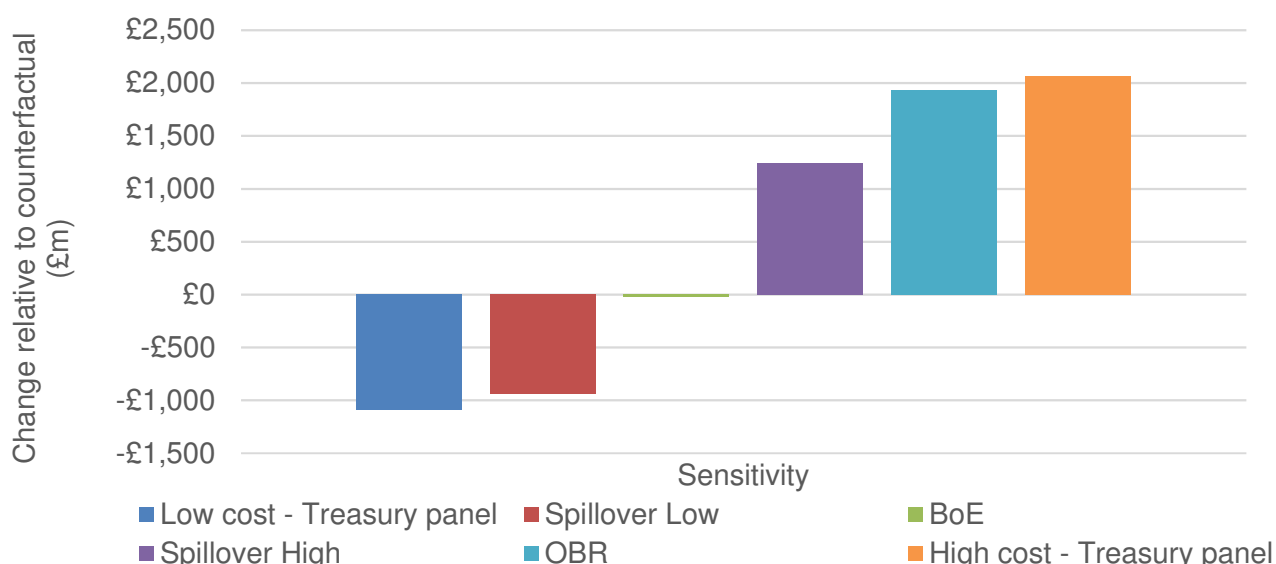
Table 5: Sensitivity analysis results

Costs (£m, undiscounted and in 2023 prices)	Central (HMT Panel)	Low Cost (HMT Panel)	High cost (HMT Panel)	OBR	BoE	Spillover Low (15)	Spillover High (35)
Wage Cost	£2,600	£1,700	£4,350	£4,250	£2,600	£1,800	£3,650
Non-Wage Cost	£450	£300	£800	£750	£450	£350	£650
Total Cost	£3,100	£2,000	£5,150	£5,000	£3,050	£2,150	£4,350

106. The table shows that both the costs are most sensitive to the counterfactual wage growth. Using the high counterfactual, the total cost falls to £2,000m, while using the low counterfactual causes the cost to increase to £5,150m. We also use the OBR's and BoE's median wage growth forecasts as further sensitivities. These lead to costs to business estimates of £5,000m and £3,050m respectively.

107. Assuming that spillovers only reach the 15th percentile, causes costs to fall to £2,150m. Conversely if spillovers reach the 35th percentiles, we find that costs rise to £4,350m.

Figure 5: How costs change relative to the central scenario as assumptions change



Non-Wage Bill Impacts

Transition costs

Familiarisation costs

108. The concept of annual minimum wage increases is fully embedded in the UK labour market; they have occurred regularly for the last 20 years. Employers, especially those in low paid sectors, will generally expect the minimum wage to increase⁵⁶. This awareness is, in part, thanks to extensive information on the Gov.uk webpages, targeted His Majesty’s Revenue and Customs (HMRC) ‘Promote’ awareness-raising activity, and an extensive communications campaign in the lead up to past NMW/NLW upratings, which will run again for the April 2024’s rates.

109. However, businesses may need to take some time to familiarise themselves with the new rates to ensure they are compliant with this incoming legislation. Therefore, we estimate the opportunity cost of businesses familiarising themselves with the legislation. There are no official statistics that provide estimates of the number of businesses which are covered by the NMW and NLW increases examined in this IA. However, a number of surveys run by stakeholders provide some evidence. A CIPD survey of its members found that 19% of businesses were affected by the increase of National Minimum Wage rates in April 2023 to a small extent, 24% to some extent and 18% to a large extent. This would mean that a total of 62% were affected somehow⁵⁷. This is similar to a survey by the Federation of Small Businesses (FSB), who found that 34% reported the increase in the National Living Wage increased their wage bill by a large extent and 38% reported to some extent, totalling 72% affected some way⁵⁸. Furthermore, the DBT Small Business Survey found that the National Living Wage was mentioned by 21% of micro, 35% of small and 34% of medium-sized businesses as a major obstacle to the success of the business⁵⁹.

110. Naturally, the number benefitting will vary across sectors, and some representative organisations representing employers in specific low paid sectors found higher proportions. The estimates used are

⁵⁶ Low Pay Commission, 2020 Report, Summary of Findings, November 2020

⁵⁷ CIPD (2023) Informing the UK’s National Living Wage for 2024 [\[Link here\]](#)

⁵⁸ FSB response to the Low Pay Commission’s consultation on the National Living Wage and National Minimum Wage Rates to apply from April 2024

⁵⁹ Small Business Survey 2022: businesses with employees [\[Link here\]](#)

from similar sources to previous IAs, although this range is higher. This shows that the share of businesses reporting being affected by the NLW increases is also higher.⁶⁰

111. Consequently, in this IA we take a range between 62% and 72% of employers who are affected by the proposed increase in the NMW/NLW. Using the 2023 Business Population Estimates (BPE)⁶¹, we estimate that between 910,000 and 1,060,000 employers will be affected by the changes to the minimum wage.
112. As the IA is assessing only the marginal costs of implementing new NMW and NLW rates, it is relatively straightforward for an employer to familiarise themselves with this change. It will involve either checking Gov.uk or calling the Acas helpline – traffic through these routes tend to increase around the implementation of new rates, as supported by evidence in the 2017 IA⁶². Additionally, employers may also hear about the rates via official Government communications or through third party channels, such as the news. After the Government’s communications campaign for the 2023 NLW uprating, 59% of those aware of the NLW reported that the source of their awareness was online advertisement, 41% mentioned TV advertising, 27% cited online news sites and 24% reported social media⁶³.
113. We have previously assumed it will take employers 5 minutes to establish what the new rates are – which includes some time finding the right place to look for information. This assumption is based on the average duration of visits to the National Minimum Wage landing page on Gov.uk (~ 4 minutes) and the length of calls that Acas received regarding NMW/NLW issues (~ 5 minutes).
114. However, following engagement with the payroll industry it was highlighted that companies who already have employees on the NMW/NLW are more likely to respond to surveys on the matter. In this instance, the views of companies who may newly be affected by the NMW/NLW are not collated. It is possible that it would take these companies longer than 5 minutes to establish what the new rates are as they may previously be unfamiliar with the process.
115. The Government has responded to numerous correspondence cases on the matter and aimed to keep businesses sighted of developments as much as possible. Comprehensive guidance on the minimum wage is available to businesses on Gov.uk to help them check they are paying their workers correctly. The Government regularly reviews the minimum wage guidance, drawing on the expertise of a readership panel comprising employer and worker representatives, as well as technical and legal experts. This year we will further be undertaking an extensive communications campaign to ensure businesses are appropriately ready for the April 2024 upratings.
116. Despite this activity, we have taken a conservative approach to increase the familiarisation time in our best and high-cost estimates (doubling the time taken to 10 minutes), to account for this adjustment. We continue to use 5 minutes in our low-cost estimate. This increase in the length of familiarisation time aims to capture instances where employers are affected by the changes in NMW/NLW for the first time and would spend more time establishing the appropriate rates consequently.
117. To calculate the burden, we estimate the opportunity cost of a HR Manager/Director’s⁶⁴ time by using the median hourly pay from ASHE 2023 of £26.31, uplifted for non-wage labour costs of 17.9%. Applying this to our estimate of businesses affected equates to a **one-off familiarisation cost of between £2.4m and £5.5m**. The former is our low-cost estimate, whilst the latter is our conservative best estimate. This estimate has not been adjusted to take into account the familiarisation cost to the public sector, which

⁶⁰ The National Minimum Wage (Amendment) Regulations 2021 [[Link here](#)].

⁶¹ Business Population Estimates 2023 [[Link here](#)]

⁶² See page 33, The National Minimum Wage (Amendment) Regulations 2017. [[Link here](#)]

⁶³ Kantar Public, National Living and Minimum Wage 2023 Campaign Evaluation Summer 2023

⁶⁴ Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 [[Link here](#)] (Table 14.5a), SOC code: 1136

would be negligible considering that there are only 12,390 enterprises in this sector in the UK (according to the latest update of the BPE⁶⁵), and it constitutes a small proportion of total costs incurred by businesses.

Implementation costs

118. The NMW and NLW continue to follow the same cycle as last year. Using qualitative evidence from NIESR's 2017 report, we found that 'adjustments to comply with these rates had minimal implications for administrative resources because pay was adjusted annually in any case'⁶⁶. Consequently, we believe that there is a negligible, if any, additional burden as a result of the changes to this legislation.

119. We have also previously engaged with payroll representatives on the possible costs of changing employee contracts or tax codes but were again informed that these costs were likely to be minimal or negligible. Employee contracts often have NMW/NLW clauses embedded into them which would not be affected by an uprating. Changing of tax codes is also unlikely to be a significant cost as most employees affected by an uprating would not be earning enough to warrant a change in tax codes.

120. In light of this evidence, we do not monetise implementation costs as a result of uprating the NMW/NLW as we expect them to be either equal to or near zero for businesses.

Non-compliance

121. In line with previous Better Regulation guidance⁶⁷, 100% compliance with the policy is assumed unless there is evidence to the contrary. Whilst ASHE data is able to estimate the number of jobs paid on hourly pay rates below the age applicable NMW and NLW, both the ONS and DBT make clear that this should not be considered as a direct measure of NMW/NLW non-compliance as there are legitimate reasons for a job to be paid below the NMW (e.g., a deduction can be made for accommodation).

122. In light of not having a reliable basis on which to make a robust estimate of the true level of non-compliance for future upratings, we assume full compliance with the NMW and NLW. Not adjusting for non-compliance produces a conservative estimate since in reality, non-compliant employers will not bear the same costs as compliant employers. To give a sense of scale of this assumption; if we assumed that the number of employees registering pay below minimum wage rates in ASHE 2023 (estimated 366,000 workers) were excluded from our estimates, this would reduce the total cost to £386m – an 13% reduction from our central scenario.

Net cost to business

123. We separate the impact on the private, public, and voluntary sectors in order to calculate the EANDCB for our central estimate. We do this by calculating what proportion of workers eligible for each rate are in the private and voluntary sectors, and then we multiply this by the overall cost and coverage estimates above. A full breakdown is provided in Annex D.

124. Using the IA Calculator, we estimate that the equivalent annual net direct cost to business is £283.7m (over maximum appraisal period of 6 years). These are based on our central case scenario. Spillover costs are not included in this calculation as they are an indirect cost to business.

Monetised benefits to workers

125. The monetised benefits of the NMW/NLW increase are higher wages and non-wage benefits (e.g. employers' pension contributions) received by workers. In our central scenario, the additional wage

⁶⁵ Business Population Estimates 2023 [\[Link here\]](#)

⁶⁶ NIESR (2017) National Minimum Wage and National Living Wage Impact Assessment. Counterfactual research. p. 37 [\[Link here\]](#)

⁶⁷ Guidance, Better regulation framework. [\[Link here\]](#)

benefits to workers are estimated at £2,600m across 6 years, covering both the direct increase in minimum wage and spillover effects. In this way the NMW/NLW increases represent a transfer from employers to low-paid workers.

126. In addition, workers benefit from the non-wage impacts, which are also a transfer from business. These are estimated to be £450m in our central scenario; however, this includes both benefits to workers (e.g. higher employer pension other employee benefit contributions) and benefits to the exchequer (e.g. National Insurance contributions). As it is not possible to determine the split of employee benefits vs taxation, we cannot calculate the total benefit to workers. However, we know that total benefits to workers and the Exchequer are £3,100m.
127. Given that these benefits predominately accrue to the lowest-paid workers, we can undertake equality weighting to illustrate the social benefit from the NMW/NLW increases. The HMT Green Book states that 'when assessing costs and benefits of different options, it may be necessary or desirable to "weight" these costs and benefits, depending on which groups in society they fall on'. This is based on the principle of the diminishing marginal utility of income, whereby the value on an additional pound of income is higher for a low-income recipient and lower for a high-income recipient.
128. The method included in the Green Book is to use an estimate of the elasticity of the marginal utility of income to calculate the redistributive effect of the policy⁶⁸; in the Green Book this value is 1.3. To calculate the distributive effect, you divide the point on the distribution of the earner that you are taking the money from by the point on the distribution of the earner that you are giving to and raise it to the power of the elasticity of the marginal utility of income. In this way, someone at the median (i.e. 50) values an extra pound 2.45⁶⁹ times more than someone at the 100th percentile. The formula therefore weights the benefit more the lower down the income distribution the worker is.
129. As an illustrative approach, we calculate equity-weighted benefits for workers who were in NLW jobs based on the 2023 rates. The NLW rate in April 2023 was £10.42 and the median hourly wage was £15.88⁷⁰. This shows workers on the NLW to be at 66% of the median wage⁷¹. This means that workers in NLW jobs value the direct additional wages at 1.7 times more than those at the median⁷². The total direct wage transfer of £1,400m therefore gives an equity-weighted benefit to the recipients of £2,500m.
130. Throughout the IA, we have assumed that indirect (spillover) benefits accrue up to the 25th percentile of the wage distribution, which is equivalent to 76% of the median wage. Following the same calculation as above, the indirect wage transfer of £1,200m gives an equity-weighted benefit to workers of £1,700m. The total benefit due to distributive effects of the wage transfer is therefore £4,200m.
131. This approach is only illustrative for three reasons. The first is that we are proxying an individual's position on the income distribution by their wage rate. These two measures may not align because total income is determined by working hours as well as hourly wage (i.e. you could have a high paid individual not working many hours). Furthermore, a worker's position on the wage distribution does not necessarily reflect their position on the household income distribution. It is plausible that an individual could be working a minimum wage job whilst their household income is relatively high, due to the contributions of other earners to the household (e.g. young workers living with their parents). In line with this, the IFS found that only 22% of minimum wage earners are in the lowest fifth of working households⁷³.

⁶⁸ HMT Treasury (2022) The Green Book [\[Link here\]](#)

⁶⁹ $\left(\frac{100}{50}\right)^{1.3}$

⁷⁰ ASHE (2023)

⁷¹ 10.42/15.88

⁷² $\left(\frac{100}{66}\right)^{1.3}$

⁷³ IFS The Future path of minimum wages [\[Link here\]](#)

132. Secondly, we assume that the NMW/NLW represents a transfer from those at the median to those on low pay. However, who ultimately pays for the increases in the NMW/NLW is not always clear. For example, it is frequently reported that costs associated with increases to the minimum wage are absorbed by companies through reduced profits, implying costs are borne by shareholders who are likely to be beyond the median income. This would suggest our approach for distributional effects produces an underestimate because costs imposed on individuals beyond the median should be equity-weighted downwards. We are also assuming that the NLW bite is valid for the other NMW rates, whereas evidence suggests that the bite is higher for those under 21. This again suggests our approach is conservative. While the approach is likely conservative for 21–22-year-olds who are now in-scope of the NLW, the opposite is likely to be true for workers who were above the 2023 NLW rates but will be paid the 2024 NLW rates. Some businesses also suggest that they pass NMW/NLW increase onto consumers in the form of higher prices. Again, consumers will be spread amongst the income distribution rather than exactly at the median, which would change our equity-weighting.

133. Finally, we cannot equity weight the indirect benefits as some of these accrue to the Exchequer and it would not be right to equity weight the benefits to Government. Nevertheless, we include the distributive analysis to indicate that, with equity weighting, the Net Present Value of the uprating would be significantly positive.

Net Present Value

134. As the wage costs of the policy represent a transfer to workers, and the non-wage costs of the policy are largely a transfer to either workers (sick leave, pensions, etc.) or the Government (NICs), in net, unequity-weighted terms, these cancel out. As a result, the NPV of the policy is almost neutral (i.e. close to zero). The costs of the policy that are not a transfer are the transition costs associated with the policy. The NPV of the policy is therefore -£4.2m (i.e. relatively small).

Appraisal of Impacts: Non-monetised Impacts

135. Thus far we have monetised the direct and indirect impacts caused by an increase in the NMW/NLW. These have been a cost to business/benefit to workers as a result of an increase in employers' wage bill. However, there are non-monetised impacts that may arise as a result of accepting the LPC's rate recommendations, such as broader impacts on the macroeconomy and potential fiscal implications.

Macroeconomic Impacts

136. As part of their evaluation of the impact of the NMW/NLW, the LPC examine the impact of the most recent uprating. In addition, in 2022 the LPC published a review of NLW from its introduction in 2016 up to the start of the Covid-19 pandemic. Below we summarise the key findings and the supporting evidence from these reports, identifying any broader second- to third-order impacts that the proposed 2024 uprating may have. We have also summarised the most recent academic literature on possible impacts of the minimum wages in Annex B.

Employment

137. Economic theory predicts mixed effects on employment. Neoclassical theory suggests that the most prominent macroeconomic impact resulting from an increase in the minimum wage is higher unemployment if the minimum wage rate is set above the competitive market equilibrium. On the other hand, empirical evidence from the Dube review suggests that a higher minimum wage could reduce vacancies and employee turnover in an imperfectly competitive labour market.

138. Due to the LPC's remit, we do not expect there to be any significant adverse employment effects as a result of the proposed NMW increases. They fulfil their remit by consulting across a broad range of stakeholders and analysing a thorough body of evidence. Moreover, the LPC's evaluations on the impact

of the NMW have found no evidence that it has led to significant impacts on employment. Therefore, we believe our assumption here is justified. The LPC itself is made up of representatives from employer and worker backgrounds who are interested in not harming employment prospects.

139. To date there is no conclusive evidence that the NLW upratings have negatively impacted employment. The National Living Wage Review⁷⁴ assessed the impacts of the policy between 2016 and 2020 and did not find conclusive evidence of a negative impact on employment or hours. Though a mix of both positive and negative effects on employment were found, the effects are small and only affect certain groups of workers at certain times.
140. In the LPC consultation, it was reported that it remained relatively rare to hear of employment impacts, whether from redundancies, reduced hiring, or reduced hours. In the FSB's survey, 5% of respondents said they had reduced the number of employees through redundancies, this is compared to 9% last year. However, REC argued demand for workers had not been impacted by the increase, with vacancies for many job roles being up, suggesting no NLW impact⁷⁵.
141. There is further evidence on the impacts of NMW/NLW on employment in our literature review in Annex B. Butcher & Dickens (2012)⁷⁶, (2022)⁷⁷ and Lord (2022)⁷⁸ all find that increases in the NLW had a significantly positive impact on median earnings, but causing no significant negative impacts on employment or on hours worked from NLW increases. Georgiadis & Manning (2020)⁷⁹ also found the impact of the NMW on employment to be indistinguishable from zero. However, Wilson & Baily (2020)⁸⁰ found that firms paying below the incoming minimum wage experience 2-3% lower employment growth. An IFS study (2021)⁸¹ used data from ASHE to find that the higher minimum wage decreased the number of jobs just below the minimum wage, and increased the number at, and slightly above, the minimum wage. Overall, it found statistically insignificant effects on employment.
142. A study by London Economics (2022)⁸² finds that the change in the age threshold of the NLW in April 2021 had no effect on aggregate employment, or on employment in low-paying sectors. However, the research did find a negative effect on hours worked for 23–24-year-olds relative to 26-year-olds when limiting the sample to those in low paying sectors and occupations. Latimer (2022)⁸³ compared employment in the same 'job types' across low-paying and high paying areas before and after a NLW increase and found that employment has fallen more for minimum wage workers than for other workers since 2019. It is noted in the study that there is not enough evidence to suggest causality between the NLW increases and employment effects given the impact of the pandemic on the labour market over recent years.
143. Nevertheless, some forecasters have previously suggested that an increase in the NLW in line with the Government's target of two-thirds of median earnings by 2024 may lead to an increase in the unemployment rate. The OBR have previously used a minimum wage employment elasticity of -0.4 which, according to the 2019 Dube review, is considerably higher than most other elasticity figures used in

⁷⁴ The National Living Wage Review (2015-2020) A report by the Low Pay Commission 2022. [\[Link here\]](#).

⁷⁵ LPC (2024) Long report – forthcoming

⁷⁶ Dickens, Richard, Manning, Alan and Butcher, Tim, (2012), Minimum Wages and Wage Inequality: Some Theory and an Application to the UK, Working Paper Series, Department of Economics, University of Sussex Business School, [\[Link here\]](#)

⁷⁷ Butcher, Tim, and Richard Dickens. 2022. "Impact of the NLW using geographic wage variation." Low Pay Commission in-house research report.

⁷⁸ Lord, Anthony. 2022. "The impact of the National Living Wage on wages, employment, and hours." Low Pay Commission in-house research report.

⁷⁹ Georgiadis, Andreas and Manning, Alan (2020). The Impact of the UK Minimum Wage: Evidence from High-Frequency Firm-Level Data. [\[Link here\]](#)

⁸⁰ Impact Of National Living Wage On Businesses, Frontier Economics, November 2020

⁸¹ Cribb, Jonathan et al. (2021). The distributional and employment impacts of nationwide Minimum Wage changes, IFS Working Paper. [\[Link here\]](#)

⁸² Assessing the impact in the reduction in the age of eligibility to the National Living Wage (NLW) from 25 to 23, London Economics, Report for the Low Pay Commission, 2022

⁸³ Latimer (2022), "The impact of the National Living Wage on labour market outcomes using bunching analysis", Low Pay Commission in-house research report.

academia. The Dube review considers 439 estimated elasticities of employment or hours for various low-wage groups with respect to the minimum wage, most of which are centred around zero with a median of -0.05. The OBR's use of a stronger elasticity means the potential negative effects of a rise in minimum wages may be overstated in their modelling. On the subject, the Dube review noted: "the authors conclude that it was unlikely that the minimum wage increases under study led to statistically or economically meaningful job losses". Their conclusions, along with various other academic findings (outlined in Annex B), continue to suggest that the employment effects of minimum wages are negligible.

144. The OBR have since revised their elasticity down to -0.3 (equating to the NLW resulting in unemployment of 50,000 by 2024). However, they continue to note that this is higher than that suggested by the literature, reflecting the fact that a higher NLW will increasingly apply to workers in sectors subject to conventional market pressures. We will continue to monitor this potential effect in future years.

Pay differentials

145. In the LPC's consultation, pay differentials were perceived by many employers as the largest challenge raised by the NLW. There is evidence that the NLW reduced pay differentials in its first phase (2016-2020), although this year, fewer firms reported reducing differentials than in previous years. The FSB noted that not many small businesses had narrowed differentials with 32% saying the differences in pay between better-paid staff and NLW workers had stayed the same; 27% that it increased (versus 21% last year); 17% that it decreased (10% last year). This may be due to other pressures on pay for low-paid workers, such as labour shortages. It also becomes harder for firms to reduce differentials over time, previous NLW rises may have already shrunk their differentials to a minimum viable level⁸⁴.

146. It has previously been highlighted by the RPC that shrinking pay differentials between those on the minimum wage and those in more senior roles could result in decreased churn/turnover in the labour market. This may be because staff are no longer incentivised to take on responsibility and look to progress to more senior positions.

147. However, despite concerns that the erosion of pay differentials are reducing incentives for workers to move into higher pay scales, there is limited evidence outside of surveys that NLW increases are negatively impacting the probability of workers moving out of minimum wage employment. Analysis from the LPC (2023)⁸⁵ suggests that workers are more likely to progress off the minimum wage than pre-pandemic. They find that in 2023 50% of NLW workers who remained employees progressed off the NLW, an increase from 40% between 2016 and 2018. The research also finds that the share progressing to be paid £1 or more above NLW has increased from 15% to 20% between 2018-19 and 2022-23. Despite this, it is possible that progression opportunities have worsened in specific sectors. For instance, the LPC find that between 2011/12 and 2014/15, 49% of call centre workers progressed into higher-paid employment, whereas between 2016/17 and 2018/19 only 41% of call centre workers did.

148. More evidence is needed on the impact of reduced pay differentials on recruitment and staff turnover, but the claim that NLW increases have an overall negative impact on career progression is not currently supported by evidence.

Prices

149. After inflation peaked in October 2022 at 11.1%, a 41-year high; it has been falling at a steady rate back towards the target, dropping to 4.7% in October 2023. The OBR forecasts inflation to fall more gradually over the next few years, hitting the 2% target in Q2 2025. Although inflation has been falling, the substantial increase in the NMW/NLW introduces a risk to push inflation higher.

⁸⁴ LPC (2024, forthcoming)

⁸⁵ LPC Summary of Evidence Report 2023, page 13 [\[Link here\]](#)

150. Past evidence from Frontier Economics (2020)⁸⁶ suggests that a 10% increase in the minimum wage would be expected to increase prices for goods and services reliant on minimum wage workers by 0.2 to 1.2%. Subsequently, the impact on headline consumer price inflation, which covers a wider subset of goods and services, would be negligible.
151. As highlighted by the LPC, the current main business concerns are around economic uncertainty and energy costs⁸⁷. Particularly, businesses in low-paying sectors are reporting that they are experiencing challenges to business turnover with economic uncertainty the top concern. Among businesses in low-paying sectors reporting that they are experiencing cost pressures, around two-thirds report absorbing cost rises in profits and around 40% reported passing on cost rises to prices⁸⁸. However, increases in business costs and rising inflation has made it easier to pass through costs. The LPC have estimated even if firms passed on 100% of the cost of NLW increases, this would have a very small impact on overall inflation (an increase of up to 0.3 percentage points). Nevertheless, employers have informed the LPC they felt they were reaching a limit as to what they could pass through without undermining demand⁸⁹. Furthermore, business stakeholder groups have informed us that they broadly still support the 2024 rate.
152. It is possible that a significant increase in the NLW could also have a ‘signalling’ effect, whereby it influences pay-setting in the rest of the economy. However, evidence from previous significant rises suggests this is unlikely, especially with momentum behind wage growth increases expected to slow as the labour market loosens.
153. Despite inflation falling, it remains above the 2% target. Therefore, the rise in the NMW/NLW becomes a greater risk as businesses may pass on wage costs through price rises. This in turn could cause workers to demand higher wages. Nevertheless, previous evidence suggests that the direct impact of the NMW/NLW on inflation is likely to be small. For example, the BoE state “the direct effect on aggregate wage growth [of the NLW] is likely to have been limited, particularly in the context of already elevated wage growth”⁹⁰. Furthermore, wage growth in 2023 has been historically strong and inflation has continued to fall. This suggests that although in theory the two may be linked, in practise, it may not be the case. The risk of a significant rise in inflation from the NLW increase is hence deemed to be low.

Productivity

154. Productivity growth is important given the background of rising inflation and costs faced by firms following an NMW/NLW increase. Increasing productivity is a non-inflationary source of economic growth, it allows firms to grow output without increasing inputs and incurring their associated costs. These cost reductions flow through to product prices and help reduce inflation. Productivity growth represents a positive supply shock that lowers inflationary pressures.
155. The increase in the NMW/NLW is universal for all workers of the same age and workers cannot be paid below the pay floor that the NMW/NLW provides. It could be argued that it is unlikely that increases to the NLW would give rise to a widespread increase in labour productivity, as might be predicted by the efficiency wage theory at an individual firm level. Efficiency wage theory is the theory that increasing wages leads to higher efficiency and higher profits consequently, as workers are more motivated at higher wages.
156. Increasing productivity is possible with the NLW (and to an extent NMW) as employers seek to increase the marginal product that each unit of labour produces in order to offset the increased labour cost. Firms could do this by increasing capital investment which often complements labour rather than

⁸⁶ Estimating The Impact Of Minimum Wages on Prices, Frontier Economics, November 2020

⁸⁷ LPC Summary of Evidence Report 2023 [[Link here](#)]

⁸⁸ DBT analysis of BICS, June and August 2023

⁸⁹ LPC Summary of Evidence Report 2023 [[Link here](#)]

⁹⁰ BoE (2023) Monetary policy report [[Link here](#)]

substitute for it. Alternatively, firms could invest in human capital through training programmes to raise worker's skills, which may also improve motivation, and retention rates which increase labour productivity.

157. The same argument could also be made against such investments. If employers are facing inflationary pressures, they may save costs elsewhere after the NMW/NLW increase. These cuts could come in the form of reducing expenditure on investment and training, which is likely to reduce productivity in the long term.

158. The 2022 LPC consultation found that employers were investing in automation in response to the NLW and other cost pressures⁹¹. Although automation leads to productivity gains, it also can result in negative employment effects. Lordan (2018) found the effects of minimum wages rises on automation to be modest overall, but larger in manufacturing. The study concluded some low-skilled jobs are expected to be more affected in the future, such as delivery drivers and security guards⁹². As a result, businesses in these occupations may be more likely to automate as a result of the NMW/NLW increases but will also have greater productivity gains.

159. Overall evidence for an increase in productivity is mixed. Through their own analysis, the LPC has found no evidence to date that the introduction of the NLW had a significant effect on productivity at the industry-region level⁹³. While wages grew faster between 2015 and 2019 in industry-regions more exposed to the NLW, the same trend does not hold for productivity. This suggests the introduction of the NLW appears to have increased wages, but not productivity, meaning firms absorbed the increased labour costs through other channels than productivity, such as by raising prices or reducing profits.

160. However, positive results can be found in Dustmann et al. (2021) who found that the introduction of a federal minimum wage in Germany in 2015 led workers to move to more productive firms⁹⁴. A 2023 survey by the Chartered Institute of Personnel and Development⁹⁵ also found that 23% of businesses said they would respond to the rise in the National Living Wage by raising productivity or improving efficiency.

Other macroeconomic impacts

161. Other potential macroeconomic impacts include increased consumption as low paid workers have higher levels of disposable income. This will depend on individual household preferences and their marginal propensity to save. In the short term if consumption increases it will lead to increased aggregate demand, whereas in the longer-term output may increase if individuals choose to save their increased income.

162. All of the macroeconomic impacts mentioned here would not be first round effects – in some cases they would be third or fourth round as a result of the direct impact from uprating the NMW/NLW. Therefore, we do not quantify or monetise these impacts in this impact assessment; although, as mentioned above, the OBR have in the past sought to model the impacts of the NLW on employment. Academic literature has also attempted to do this, which we summarise in Annex B. Overall, the LPC find the impact of the policy other macroeconomic factors to be benign in almost all cases.

Fiscal impacts

163. In their March 2020 EFO, the OBR produced forecasts for expected impacts of the NMW/NLW increases on government borrowing. Higher earnings increase tax revenue, reduce government welfare spending, and therefore net borrowing. A counterbalancing impact is that unemployment effects refer to

⁹¹ LPC (2022) Summary of Findings [\[Link here\]](#)

⁹² Lordan, Grace (2018) *Minimum wage and the propensity to automate or offshore*. Low Pay Commission, London, UK. [\[Link here\]](#)

⁹³ The impact of the National Living Wage on productivity. Edivin Latimer, Low Pay Commission, March 2022 [\[Link\]](#)

⁹⁴ Reallocation Effects of the Minimum Wage, Christian Dustmann, Attila Lindner, Uta Schönberg, Matthias Umkehrer, Philipp vom Berge, The Quarterly Journal of Economics, Volume 137, Issue 1, February 2022, Pages 267–328. [\[Link\]](#)

⁹⁵ Chartered Institute of Personnel and Development, 2023. Summer Labour Market Outlook Survey 2023. [\[Link here\]](#)

increases in welfare payments, consistent with the OBR's assumption that the NLW will increase unemployment by 50,000 by 2024.

Table 6: OBR estimates of the fiscal effects of increasing the NLW, March 2020, £bn (negative figures mark an improvement in the public finances)

	Forecast			
	2021-22	2022-23	2023-24	2024-25
Welfare spending	-0.1	-0.1	-0.1	0.0
Earnings effects	-0.1	-0.3	-0.4	-0.5
Uprating effects	0.0	0.1	0.3	0.4
Unemployment effects	0.0	0.1	0.1	0.2
Income tax and NICs receipts	-0.4	-0.8	-1.1	-1.5
Corporation tax receipts	0.1	0.1	0.2	0.2
Other receipts	0.0	0.0	0.0	-0.1
Debt interest	0.2	0.2	0.2	0.2
Total effect on net borrowing	-0.3	-0.6	-0.9	-1.2

Source: OBR Economic and Fiscal Outlook March 2020, table C (pp.49)⁹⁶

164. The OBR forecast that the largest effect will be on income tax and NIC receipts, which increase by up to £1.5 billion a year by 2024/25. This is of course predicated by the OBR estimating a path for the NLW, which is inherently uncertain as the Government is advised by the independent LPC (who are guided by our target in their remit) each year for the following year's rate. This is noted by the OBR in their EFO (page 47), and for the purposes of their forecasting, they assume that the NLW will rise smoothly to reach the desired level in 2024.

165. These estimates were published prior to the COVID-19 pandemic taking full effect on the UK and before there was any certainty on the impact of it on UK earnings and the economy. Moreover, the policy responses and policies enacted by the Government since the predictions will have caused substantial changes to those forecasts, for example changes in NICs contributions, tax thresholds, and a change to the universal credit taper rate.

166. The OBR also noted significant modelling uncertainties regarding these estimates. In particular, a series of challenging assumptions were made over how workers and wages react to minimum wages, including judgements over the extent to which firms absorb the costs through changing employment, or prices and profits. We consider the OBR to overestimate their minimum wage employment elasticity.

167. We have not estimated the net fiscal impacts in more detail than this because of the uncertainty associated with estimating the potential impacts listed above and stated in the OBR's report – some of which will be third or fourth round effects of the direct impact of the proposed increases in the NMW/NLW.

168. However, while our estimates of non-wage labour costs used in this IA (on both direct and indirect wage impacts) include a range of costs, they are largely made up of employer NICs, which will go to the Exchequer in the first instance. Indirectly these exchequer benefits are also for employees - a proportion of NIC receipts are paid into the National Insurance Fund and go towards the state pension.

169. Moreover, we have estimated the wage costs on public sector employers. A fuller depiction of this is provided in Annex D, but in summary 8% of the total cost in this IA is estimated to be borne by public

⁹⁶ OBR (2020) Economic and Fiscal Outlook [\[Link here\]](#)

sector employers⁹⁷; this is equivalent to £225m over the appraisal period in our central case scenario, however only £120m is a direct cost as a result of the proposed NMW/NLW rates. The remaining £105m is an indirect cost and will depend on behavioural responses of public sector employers.

Enforcement

170. HMRC enforce the NMW/NLW on behalf of the Government. HMRC responds to 100% of worker complaints and also conducts proactive, targeted enforcement of at-risk employers. HMRC also carry out awareness-raising activity to prevent non-compliance in the first place and therefore reduce the need for enforcement action. If HMRC investigate an employer and find it is breaking the NMW law, HMRC then issues a Notice of Underpayment (NoU) containing details of the underpayments, the period to which they relate, and the workers affected. Once issued with an NoU, the employer will have to pay back the arrears owed to workers, face a financial penalty, and can be publicly named and shamed under the NMW Naming scheme, unless they successfully appeal against the NoU. See paragraph 121 for a discussion of non-compliance analysis.
171. DBT have increased resources to enforce the minimum wage – the budget has more than doubled from 2015/16 to 2021/22. In 2021/22, HMRC returned more than £16.3m in arrears to over 120,000 workers and issued 696 fines totalling £13.2m to businesses who failed to pay the minimum wage. Since 1999, the Government has overseen the repayment of over £173 million to 1.4 million workers, issued nearly £86.5 million in financial penalties and completed over 87,000 investigations. The Government will publish its full NMW/NLW Enforcement and Compliance report in due course.

Number of workers benefitting

172. In order to supplement our cost estimates, we also produce forecasts of the number of workers directly benefitting from the increase to the NMW/NLW in April 2024. This is the number of workers who are estimated to receive a direct pay increase to comply with the 2024 rates. As such, the number of workers benefitting encapsulates the direct benefits but not those who benefit from indirect/spillover impacts. In previous years, we had calculated this rate to be coverage of the NMW/NLW, but this was consistently overestimated compared to the outturn data.
173. The 2023 IA includes a detailed discussion on the reasons that our analytical approach over-estimates coverage, that is the number of workers in NMW/NLW jobs in April 2024. For example, the 2023 IA estimated that there could be around 2.5m workers in NLW jobs in April 2023, but data from ASHE 2023 shows that it was in fact around 1.4m. In part, this is because of a tight low-paid labour market over this period. However, this is also because our approach to estimate coverage implicitly assumes businesses do not seek to maintain pay differentials between workers (i) in NMW/NLW jobs based on the current rates and (ii) those above the current NMW/NLW rates but expected to be below the new rates.
174. Having reviewed our approach, we consider likely that this could lead to an under-estimate of the indirect cost to business but would not have an impact on the direct cost to business and EANDCB. To mitigate this, we have conducted extensive sensitivity analysis in this IA, including varying the share of the wage distribution where spillover effects occur.
175. As mentioned in the 2023 IA, the LPC illustrate an alternative approach to forecasting coverage based on the historical relationship between the increase in bite and the increase in coverage. We will continue to monitor this approach and consider how this can be incorporated into our analysis.
176. Our central estimate is that around 2.9m workers will directly benefit from the incoming NMW/NLW rates in April 2024. This includes private and voluntary sector workers and public sector workers. We

⁹⁷ Note this may be an underestimate since it is unlikely to capture the full impact on occupations that are private-owned but publicly funded, for example much of adult social care.

expect a further 4.4m workers to benefit indirectly. This is based on spillover effects reaching the 25th percentile of the wage distribution.

Table 7: Projected number of workers directly benefitting in April 2024 across different NMW/NLW rates

Central estimate of projected workers directly benefitting			
Rate bracket	Proposed rate	Number of workers directly benefitting	Percent of labour force
21+ NLW	£11.44	2,690,000	9.2%
18-20 NMW	£8.60	120,000	0.4%
16-17 NMW	£6.40	70,000	0.2%
Apprentice NMW	£6.40	40,000	0.1%
Total		2,930,000	10.0%

Source: DBT Analysis of ASHE 2023. Note: Totals may not sum due to rounding; figures rounded to nearest 10,000

Regional Impacts

177. The number of workers directly benefitting from the 2024 NMW/NLW rates as a percentage of the regional workforce varies from region to region. The region with the highest proportion of workers benefitting is the North East (13.9%) compared to the region with the lowest which is London (5.5%).

Table 8: Projected number of workers directly benefitting from NMW/NLW in April 2024 by region / country

	NLW (21+)	NMW	Total	% of workers in region/country
North East	140,000	10,000	150,000	13.9%
North West	320,000	30,000	350,000	11.4%
Yorkshire & Humber	250,000	30,000	280,000	12.4%
East Midlands	240,000	20,000	260,000	13.5%
West Midlands	280,000	20,000	300,000	12.4%
South West	230,000	20,000	250,000	10.1%
East	240,000	20,000	260,000	10.1%
London	230,000	10,000	240,000	5.5%
South East	310,000	30,000	340,000	8.2%
Wales	130,000	10,000	140,000	11.1%
Scotland	180,000	20,000	200,000	8.2%
Northern Ireland	140,000	20,000	160,000	12.6%
Total	2,690,000	230,000	2,930,000	10.0%

Source: DBT Analysis of ASHE 2023. Note: Totals may not sum due to rounding; figures rounded to nearest 10,000

Sectoral impact

178. Low-pay sectors will be impacted disproportionately by the NMW/NLW rate increases. Table 9 provides a detailed estimate of the number of workers directly benefitting from the NMW/NLW rates for a range of low-pay sectors, as defined by the LPC, such as social care, retail, and hospitality. The sectors with the highest proportion of workers directly benefitting are hair and beauty (49.8%), cleaning and maintenance (35.8%) and hospitality (34.1%).

Table 9: Projected number of workers directly benefitting from NMW/NLW in April 2024 by low-pay sector

	NLW (21+)	NMW	Total	% of workers in sector
Agriculture	30,000	3,000	40,000	22.8%
Food processing	80,000	2,000	80,000	27.2%
Textiles	10,000	-	10,000	24.7%
Retail	440,000	40,000	480,000	26.3%
Hospitality	360,000	90,000	450,000	34.1%
Security and enforcement	30,000	-	30,000	19.0%
Cleaning and maintenance	300,000	3,000	300,000	35.8%
Social care	150,000	1,000	150,000	20.4%
Childcare	80,000	8,000	90,000	30.2%
Leisure	50,000	9,000	60,000	20.3%
Hair and beauty	30,000	5,000	40,000	49.8%
Office work	220,000	10,000	230,000	15.2%
Non-food processing	50,000	3,000	50,000	18.0%
Storage	150,000	4,000	150,000	20.4%
Transport	50,000	1,000	50,000	33.3%
Call centres	5,000	-	5,000	13.2%
Education	50,000	3,000	50,000	10.6%
Healthcare	90,000	1,000	90,000	14.3%
Non-low paying sectors	520,000	50,000	570,000	3.0%
Total	2,690,000	230,000	2,930,000	10.0%

Source: DBT Analysis of ASHE 2023. Note: Totals may not sum due to rounding; figures rounded to nearest 10,000 unless figure is less than 5k and then is rounded to nearest 1,000.

Small and Micro Business Assessment (SaMBA)

Impact on small, micro and medium sized businesses

179. Guidance from the Better Regulation Executive⁹⁸ states that 'Departments should consider the case for exemption of medium-sized businesses in addition to that for SMBs via the completion of an IA'. Therefore, the discussion in our SaMBA extends to cover the impact of medium-sized businesses.

180. Table 10 contains our estimates of projected number of workers directly benefitting from the NMW/NLW in April 2024 and our central estimate of the total costs, broken down by business size.

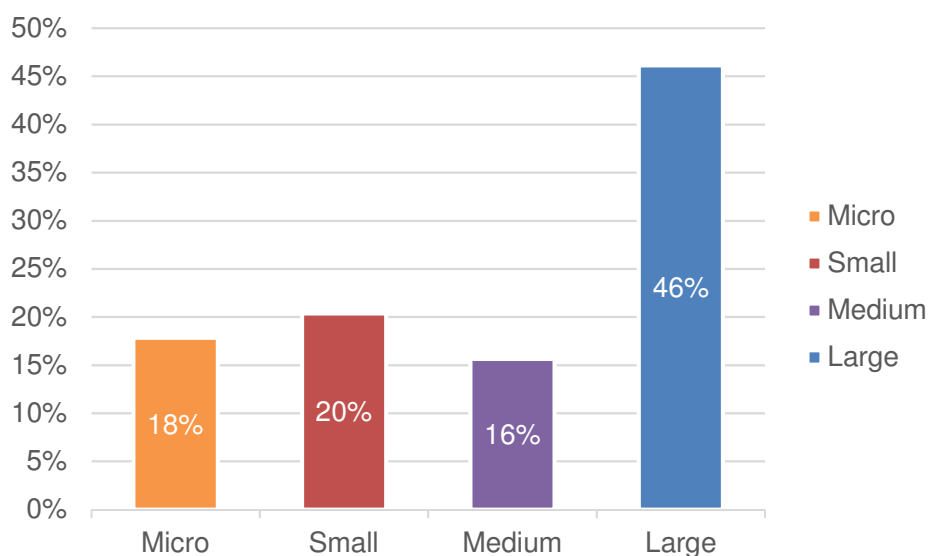
Table 10: Projected number of workers directly benefitting from NMW/NLW in April 2024 and costs by business size

Rate	Micro		Small		Medium		Large	
	Workers	Total Cost	Workers	Total Cost	Workers	Total Cost	Workers	Total Cost
NLW (21+)	520k	£440m	550k	£510m	410k	£430m	1,200k	£1,350m
Others	50k	£110m	90k	£120m	40k	£50m	50k	£80m
Total	580k	£550m	640k	£630m	450k	£480m	1,250k	£1,420m

Source: DBT Analysis of ASHE 2023. Note: Number of workers benefitting and cost estimates by business size may not match total costs and workers benefitting exactly due to rounding and sampling error when data is disaggregated

⁹⁸ DBT Better Regulation Framework [\[Link here\]](#)

Figure 6: Proportion of total costs by business size



181. We expect around 38% of the costs of this policy to be borne by small and micro businesses and 16% by medium sized businesses (see Figure 6). According to the Business Population Estimates 2023, 40% of workers are employed in small and micro businesses⁹⁹. A further 13% are employed in medium businesses. Therefore, relative to the UK average proportion of medium, small, and micro (SMEs), the burden is expected to fall more on SMEs compared to larger firms.

The reasons against exempting small, micro and medium businesses

182. There are both equity and economic reasons why small, micro and medium businesses are not exempt from the NMW/NLW. Firstly, an exemption would undermine the objectives of the policy because a significant proportion of NMW/NLW workers work in small, micro and medium businesses and so an exemption would significantly undermine the ability of the minimum wage to address the possibility of employers exploiting the vulnerability of certain workers to pay them unacceptably low wages and undercut their competitors. Moreover, the cost imposed on small, micro, and medium businesses is equal to the benefits that the workers receive. Consequently, exempting these firms would mean a significant proportion of the expected benefits from this proposal would not be realised.

183. There are also economic reasons against an exemption. Exempting small, micro and medium businesses would enable them to avoid the increase in labour costs associated with raising the wages of the lowest paid. This would create economic inefficiencies through several effects. Firstly, it would create a distortion in the market by distorting cost-competitiveness at the expense of large businesses, which would undermine competition. Secondly, it would create a disincentive for businesses to grow – if they were to expand sufficiently to be classified as a large sized business, they would be obliged to raise wages for all their employees to meet the NMW/NLW rates, thereby introducing a significant cost of expansion at the threshold between small and medium sized businesses.

184. The annual NMW/NLW increases are fully embedded in the UK labour market with rate changes being made for over 20 years. The majority of employers are aware of the increasing minimum wage, in particular the NLW, with good knowledge among businesses that the rates had changed in April 2023 (the Government communication campaigns suggest that 87% were aware of the NLW¹⁰⁰). Given the success of previous communications campaigns, there will be employer targeted communications activity and guidance to ensure small and micro businesses are aware of the NMW/NLW changes. Moreover, rates are announced before the legislation has gone through Parliament to maximise adjustment time for

⁹⁹ Business Population Estimates (2023) [[Link here](#)]

¹⁰⁰ Kantar Public, National Living and Minimum Wage 2023 Campaign Evaluation Summer 2023

businesses. This year, rates were announced as part of the Autumn Budget, over 5 months before the rates come into effect. This, combined with the communications campaigns, will seek to mitigate the burden placed on small and micro businesses.

185. The Government has more recently announced further measures to support small businesses in the Autumn budget. These include, Help to Grow: Management and UK Export Finance SME Support. The small business multiplier in England will also be frozen for a fourth consecutive year and the current 75% relief for Retail, Hospitality and Leisure properties will also be extended for 2024-25, a tax cut worth £2.5 billion.

Specific Impact Tests

Equalities impact and Family Test

186. Section 149 of the Equality Act 2010 requires DBT to have due regard to promoting equality of opportunity, eliminating discrimination and fostering good relations between groups. The impact of the NMW and NLW increases on equalities considerations is considered in full in Annex E. In summary, the evidence suggests that there will be disproportionate positive wage impacts on protected groups as a result of the proposed increase in NMW/NLW, and we have found no evidence of significant negative impacts.

187. Some research suggests the NLW may have reduced employment for women, especially amongst those working part-time. However, the evidence is not yet conclusive and where negative employment effects are found, they have been small and have done little to halt the long-run trend of more women entering work. Overall employment rates continued to grow faster for women than for men after the introduction of the NLW¹⁰¹.

188. In commissioned research, McKnight (2022)¹⁰² found that the introduction of the NLW did not lead to negative effects on employment retention for employees with disabilities or for disabled employees reporting at least one functional impairment. The research also found no statistically significant negative effects on employment retention for BAME employees overall. However, the research did find that the introduction of the NLW may have led to a small reduction in employment retention among Indian men¹⁰³.

International trade

189. In line with Better Regulation Framework guidance, we have assessed the potential for the NMW/NLW increases to have an impact on international trade.

190. This year, as with previous years, the LPC have noted that the most common response to the rise in the NMW/NLW rates is to increase prices. It is plausible that price rises could have a negative impact on the UKs competitiveness, particularly if the rises are significant in the UKs export intensive industries relative to competitors.

191. The majority of economic discussion surrounding the impact of a minimum wage floor and its impact on international trade centres around the costs of the factors of production. Economic theory suggests the introduction or raising of a minimum wage floor has the effect of unevenly increasing production costs, with more labour-intensive industries feeling more pressure than skilled and capital-intensive industries. The long-term effect is to encourage specialisation in the production of skilled labour and capital-intensive

¹⁰¹ The National Living Wage Review (2015-2020), LPC, page 40. [[link here](#)]

¹⁰² McKnight, Abigail. 2022. The impact of the NMW/NLW on employment retention and wage progression by ethnicity, disability and gender. Research report for the Low Pay Commission. Centre for Analysis of Social Exclusion, London School of Economics.

¹⁰³ The National Living Wage Review (2015-2020), LPC, page 44. [[link here](#)]

exports at the expense of low-skilled labour-intensive exports. This is explored in Brecher (1974) and expanded by Schweinberger (1978) and Neary (1985).

192. Government research has shown that the UK's highly skilled labour force and sophisticated technology are major sources of the UK's competitive advantage⁵⁷. Economic theory may then suggest that a minimum wage for a country such as the UK could further the specialisation in skills and capital-intensive exports without undermining overall export competitiveness. However, noting the limited empirical evidence and that macro effects such as trading terms, exchange rate, UK productivity are likely to have more substantive impacts on international trade, we believe it is proportionate to assess that the NMW/NLW will have a negligible impact on international trade.

Implementation

193. The changes to the NMW and NLW regulations will be made through secondary legislation and will come into force on 1st April 2024.

Monitoring and evaluation

194. The approach to monitoring of this legislation is for the LPC to continue to monitor, evaluate and review the NMW and NLW rates on an annual basis and reports its findings to Government. As per previous upratings, the legislation will not include a statutory review clause, as this would undermine established arrangements in which the Secretary of State, under the powers in the National Minimum Wage Act, routinely consults with the LPC to undertake a review of the NMW rates which are set out in secondary legislation.

195. The LPC is an independent body that advises the government about the NMW/NLW sponsored by DBT. They are comprised of nine commissioners, drawn from a range of employee, employer and academic backgrounds. The LPC continuously monitors and evaluates the impact of the NMW/NLW, as summarised in their annual reports. This is done through:

- Carrying out extensive consultation with a wide range of organisations.
- Comprehensively analysing a range of economic and labour market data, including econometric evidence of the impacts of the uprating.
- Commissioning research projects.
- Reviewing international evidence.

196. The LPC conducted extensive monitoring and evaluation of the 2023 minimum wage rates and summarised their assessment, and how this informed their recommendations for the 2024 rates, in their short report published in November 2023¹⁰⁴. The LPC's full report will be published in due course. Because the 2024 NLW rates will achieve the target set for 2024, the LPC have also been working to a second research remit asking for evidence to inform future minimum wage policy¹⁰⁵.

197. The LPC will undertake an assessment of the impact of the 2024 NMW/NLW rates and report on this in Autumn 2024. Similar to previous instances, this assessment will be expected to consider the policy objectives for the NMW/NLW and the possible risks that the policy will not meet these objectives or has wider impacts. These risks include the potential adverse impact on employment prospects of low-paid workers (particularly given the significant increases this year for young workers and the reduction of the age threshold for the NLW from 23 to 21 years old) and businesses in low-paid sectors, and wider

¹⁰⁵ LPC Summary of evidence 2023 Report: November 2023 [\[Link here\]](#)

¹⁰⁵ NLW and NMW: remit on the future of the NLW (2023) [\[Link here\]](#)

indicators such as inflation and productivity. In the past, the LPC has undertaken significant evidence-building, stakeholder engagement and econometric work to assess these types of risks (e.g. the National Living Wage Review (2015-2020)¹⁰⁶ and further studies summarised in the literature review in Annex B). Further monitoring and evaluation steps for the LPC will be provided in the LPC's remit for 2024/2025 which will be published in due course.

¹⁰⁶ The National Living Wage Review (2015-2020) [[Link here](#)]

Annex A: Further modelling results¹

Table 11: Total labour costs in the central-cost estimate: £3.090M

	Year 1			Year 2			Year 3		
	Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)		
	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total
NLW (21+)	£1,385	£248	£1,633	£677	£121	£798	£255	£46	£301
Development (18 - 20)	£66	£12	£78	£40	£7	£48	£19	£3	£22
Youth (16 - 17)	£17	£3	£20	£12	£2	£15	£8	£1	£10
Apprentice	£46	£8	£54	£33	£6	£39	£22	£4	£26
Total	£1,514	£271	£1,785	£763	£137	£899	£304	£54	£358
	Year 4			Year 5			Year 6		
	Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)		
Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	
£4	£1	£5	£1	£0	£1	£0	£0	£0	
£9	£2	£11	£2	£0	£2	£0	£0	£0	
£4	£1	£5	£5	£1	£6	£1	£0	£1	
£12	£2	£14	£5	£1	£6	£1	£0	£1	
£29	£5	£34	£7	£1	£9	£1	£0	£1	

¹ Note that £0 in the tables means that costs are > £0 but round to £0 to the nearest million, whereas a blank means that there were no costs.

Table 12: Indirect labour costs in the central-cost estimate: £1,390M

	Year 1			Year 2			Year 3		
	Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)		
	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total
NLW (21+)	£484	£87	£570	£453	£81	£535	£190	£34	£224
Development (18 - 20)	£9	£2	£11	£9	£2	£11	£8	£1	£10
Youth (16 - 17)	£1	£0	£1	£1	£0	£1	£1	£0	£1
Apprentice	£1	£0	£1	£2	£0	£2	£2	£0	£2
Total	£495	£89	£583	£465	£83	£548	£201	£36	£237
	Year 4			Year 5			Year 6		
	Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)		
	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total
£1	£0	£2	£1	£0	£1	£1	£0	£1	
£6	£1	£7	£1	£0	£1	£1	£0	£1	
£1	£0	£1	£3	£0	£3	£3	£1	£1	
£2	£0	£2	£4	£1	£3	£5	£1	£0	
£10	£2	£12	£4	£1	£5	£9	£1	£0	£1

Table 13: Direct labour costs in the central-cost estimate: £1,700M

	Year 1			Year 2			Year 3		
	Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)		
	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total
NLW (21+)	£901	£161	£1,063	£224	£40	£264	£65	£12	£77
Development (18 - 20)	£57	£10	£67	£31	£6	£37	£11	£2	£13
Youth (16 - 17)	£16	£3	£19	£11	£2	£14	£7	£1	£9
Apprentice	£45	£8	£53	£32	£6	£37	£20	£4	£24
Total	£1,019	£182	£1,202	£298	£53	£351	£103	£18	£122
Year 4									
Year 5									
Year 6									
Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			Wage and Non-wage Impacts (£m)			
Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	Wage Costs	Non-wage Labour Costs	Total	
£2	£0	£3							
£3	£1	£4	£0	£0	£0				
£3	£1	£4	£1	£0	£1	£0	£0	£0	
£10	£2	£11	£2	£0	£3	£0	£0	£0	
£18	£3	£22	£3	£1	£4	£0	£0	£0	

Annex B: Literature Review

198. In 2019, Professor Arindrajit Dube published a government-commissioned report on the international evidence base on the impact of minimum wage regulation on employment and wages. The report reviewed more than 50 empirical studies on the impacts of minimum wages and found that there is little evidence that minimum wage increases reduce overall employment to a significant extent. This annex summarises some of the recent studies commissioned by the LPC since the Dube review, as well as studies produced by academia.

199. While some conclusions vary from study to study, the vast majority find negligible impacts on employment and hours worked. However, concerns about pay differentials were uncovered, suggesting that the feasibility of spillover effects increasing seem unlikely.

Georgiadis & Manning (2020)

200. This study uses the UK's Monthly Wages and Salaries Survey high-frequency monthly data to investigate the impact of national minimum wage changes on wages and employment.

201. The study provides that a rise in the NMW leads to a rise in average earnings as well as providing evidence of spillovers effects. The impact of the NMW on employment was also found to be indistinguishable from zero. Investigation of the timing of the impact suggests that most of the effect is contemporaneous with changes in the minimum wage, though these estimates are less precise.

Wilson & Bailey (2020)

202. Frontier Economics researchers Wilson and Bailey used a difference-in-difference approach drawing on a combination of data from ASHE and the Business Structure Database. Firms are either assigned to 'treatment' and 'control' groups depending on the extent to which they were exposed to the minimum wage, and according to the proportion of labour costs as part of total costs. Firms that pay below the incoming minimum wage are assigned to the treatment group, allowing researchers to compare the effect of minimum wage increases against the control group of firms.

203. The study found that firms in the treatment group experienced 2-3% lower employment growth, after controlling for firm and worker characteristics using regression analysis. The effects are concentrated in the retail and food-service sectors and in smaller workplaces. With regards to the impact of NLW increases on consumer prices of exposed goods, the authors found that inflation is higher in months when the NMW is uplifted, but only a small effect on prices relative to the size of a minimum wage increase where a 10% increase in the minimum wage would be expected to increase prices by 0.2% to 1.1%.

Clark and Nolan (2021)

204. This paper decomposes the ethnic pay gap in Great Britain across the distribution of hourly wages, yielding a detailed insight into differences between groups and how these vary over pay percentiles and through time.

205. While some groups experience reductions in the pay gap consistent with lower discrimination, including relatively well-paid Indian workers and relatively poorly paid Bangladeshis, others - specifically Black groups - face an apparent glass ceiling barring access to well paid jobs. The introduction and uprating of the National Minimum/Living Wage has contributed to improvements at the lower end of pay differentials, narrowing the ethnic wage gap slightly.

London Economics (2021)

206. This study assesses the impact of the change in age threshold of the NLW in April 2021 by comparing outcomes for 23- and 24-year-olds before and after April 2021, with outcomes for 26-year-olds over the same period. The research primarily uses LFS data with ASHE used as a robustness check.
207. The study did not find any impact on aggregate employment, employment in low paying sectors or on hours worked for 23–24-year-olds as a whole. However, when limiting their sample to only 23–24-year-olds in low-paying sectors and occupations, the researchers found that 23–24-year-olds worked fewer hours relative to 26-year-olds following the change in age threshold, driven by a shift to part-time work. The effect was largest for women in low-paying occupations, although there was no significant effect on earnings for this group and the research struggled to attribute causality entirely to the wage changes.

Latimer (2022)

208. Latimer from the Low Pay Commission uses Gross Value-Added data, ONS productivity data and wage data from ASHE, stratified by region and industry, to estimate the effect of the introduction of the NLW on productivity among areas with high versus low coverage using a difference-in-difference approach. The study found no evidence that the introduction of the NLW had a significant effect on productivity at the industry-region level, but results showed a wide range of effects, with the 95 percent confidence interval showing a 1 percentage point increase in coverage in an industry-region could increase productivity by 0.1% or reduce it by 0.22%.

Butcher & Dickens (2022)

209. This study took a difference-in-difference approach to estimate the effect of the minimum wage on employment by comparing outcomes across different sections of the UK labour market, divided up by age, gender and geography. This study relied on ASHE for hourly earnings and LFS data to define employment outcomes of the groups.
210. The study found that increases in the NLW had a significantly positive impact on median earnings. No significant negative impacts were found regarding employment or hours worked from NLW increases, nor were any significant impacts found with respect to zero-hour contracts. The authors did find a significant positive impact on self-employment, although this is almost entirely driven by 2020 and is likely to have pandemic related causes. The study also found that NLW increases boosted labour market participation by reducing economic inactivity, but without increasing unemployment.

Annex C: Previous cost estimates from minimum wage upratings

211. This Impact Assessment once more appraises the impact of uprating the National Minimum Wage rates and amending the NMW Act 1998 (via secondary legislation). As set out in paragraph 3 in this document, this IA considers the impact of moving away from the current legally binding minimum wage rate.

212. The table below summarises the costs to business that each of our Impact Assessments have estimated over the course of the past six years since the introduction of the National Living Wage, in the form of the EANDCB.

213. Alongside this, we present the appraisal period of each annual cost figure and the methodology used in those respective IAs. Following the feedback, we have received both from the RPC and the wider academic community, we have continuously refined the methodology used to estimate business impacts. This does mean that the EANDCBs listed below may not be comparable year-on-year.

214. It should also be noted that the uprating in the NMW/NLW was previously exempt from the Business Impact Target prior to 2019. Subsequently BIT scores have not been provided for the years preceding 2019.

Table 14: Previous cost estimates from minimum wage uprating's and the methodology used (2017-2022)

Year	EANDCB	Business Impact Target	Appraisal Period	Methodology
2017	£131.6m	Not in scope	2 years	Counterfactual wage growth is taken as a midpoint of the inflation rate and average earnings. Spillovers taper down by the 25 th percentile, in line with the OBR methodology.
2018	£76.6m	Not in scope	3 years	After taking on board NIESR's research, the counterfactual wage growth is obtained by taking historic wage growth at the first point in the wage distribution which is not affected by the minimum wage. With the help of independent forecasts, we judge where the UK lies on the business cycle to inform over what period we should consider when taking that historic wage growth. The wage growth is the same across all groups. We use NIESR's estimate of spillovers to stop by the 20 th percentile.
2019	£151.8m	£303.6m	2 years	The counterfactual wage growth is obtained by taking historic wage growth at the first point in the wage distribution which is not affected by the minimum wage. With the help of independent forecasts, we judge where the UK lies on the business cycle to inform over what period we should consider when taking that historic wage growth. The wage growth is the same across all groups. We estimate spillovers to end by the 20 th percentile, which is consistent with the LPC.

2020	£205.6m	£616.7m	3 years	The counterfactual wage growth is obtained by taking historic wage growth at the first point in the wage distribution which is not affected by the minimum wage. With the help of independent forecasts, we judge where the UK lies on the business cycle to inform over what period we should consider when taking that historic wage growth. The wage growth is the same across all groups. We use the LPC's estimate for spillovers to end by the 30 th percentile.
2021	£217.9m	£438.5m	2 years	The counterfactual wage growth is obtained by taking historic wage growth at the first point in the wage distribution which is not affected by the minimum wage. With the help of independent forecasts, we judge where the UK lies on the business cycle to inform over what period we should consider when taking that historic wage growth. The wage growth is the same across all groups. In light of challenging economic circumstances, we estimate for spillovers to end by the 25 th percentile.
2022	£257.1m	£771.3m	3 years	The counterfactual wage growth is obtained from the median OBR growth forecast. This was considered the best estimate of wage growth due to the unprecedented circumstances caused by the pandemic. The wage growth is the same across all groups. In light of challenging economic circumstances, we estimate for spillovers to end by the 25 th percentile.
2023	£373.5m	£1232.2m	4 years	The counterfactual wage growth is obtained from the median wage growth forecast from a range of independent forecasters. Similar to 2022, the forecast of a continued tight labour market combined with slowing and declining economic growth mean it was not feasible to find and utilise a comparable time period.
2024	£217.7m ¹		6 years	The counterfactual wage growth is obtained from the average quarterly wage growth forecast from the HMT panel of independent forecasters. Similar to 2022 and 2023, finding a comparable time period proved difficult owing to slow economic growth, a tight labour market and high wage growth.

Note: In 2017, BEIS commissioned NIESR to research the most appropriate counterfactual for us to employ in this and future impact assessments. The methodology therefore changed significantly in the 2018 IA and has remained consistent since.

¹ Although the total costs are higher this year than last year, the EANDCB is lower. This is a function of calculating the EANDCB over a longer appraisal period and the costs in the later years being relatively small.

Annex D: Public/Private/Voluntary sector cost breakdown²

215. This annex breaks down our central estimate of costs by public, private and voluntary sectors. We have done this by estimating the proportion of public, private and voluntary sector workers who are projected to be affected by each of the rates in April 2024, using ASHE 2023, and then applied these proportions to the total costs estimated previously in the impact assessment.

216. When calculating the EANDCB we combine the private and voluntary sectors. The proportion of workers who we expect to be affected in these sectors for the NLW is 92%, whilst for the 18-20, 16-17 and Apprentices NMW rates the proportions are 99%, 99% and 91% respectively. Please note that these values are presented in constant prices, with figures rounded to the nearest million.

Table 15: Public sector cost breakdown (£250m)

	Direct		Indirect		Total
	Wage Costs	Non-wage Labour Costs	Wage Costs	Non-wage Labour Costs	
NLW (21+)	£91	£16	£86	£15	£208
Development (18 - 20)	£1	£0	£0	£0	£2
Youth (16 - 17)	£0	£0	£0	£0	£0
Apprentice	£10	£2	£1	£0	£12
Total	£102	£18	£87	£16	£223

Table 16: Private sector cost breakdown (£2,650m)

	Direct		Indirect		Total
	Wage Costs	Non-wage Labour Costs	Wage Costs	Non-wage Labour Costs	
NLW (21+)	£1,022	£183	£967	£173	£2,345
Development (18 - 20)	£96	£17	£31	£6	£151
Youth (16 - 17)	£36	£7	£4	£1	£48
Apprentice	£95	£17	£8	£1	£122
Total	£1,250	£224	£1,011	£181	£2,666

Table 17: Voluntary sector cost breakdown (£200m)

	Direct		Indirect		Total
	Wage Costs	Non-wage Labour Costs	Wage Costs	Non-wage Labour Costs	
NLW (21+)	£80	£14	£75	£13	£183
Development (18 - 20)	£5	£1	£1	£0	£7
Youth (16 - 17)	£3	£0	£0	£0	£3
Apprentice	£4	£1	£0	£0	£5
Total	£90	£16	£77	£14	£198

² Note that £0 in the tables means that costs are > £0 but round to £0 to the nearest million.

Annex E: Specific Impact tests

Equality Analysis

217. Under the Equality Act 2010 the Department for Business and Trade, as a public authority, is legally obligated to have due regard to equality issues when making policy decisions. Specifically, the Public Sector Equality Duty (PSED) sets out:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
- Advance equality of opportunity between people who share a protected characteristic and those who do not; and
- Foster good relations between people who share a protected characteristic and those who do not.

218. The protected characteristics consist of nine groups: age, race, gender, disability, religion or belief, sexual orientation, gender reassignment, pregnancy and maternity, marriage, and civil partnership. This Equality Analysis considers the potential equality impacts of the National Minimum Wage and National Living Wage uprating.

219. The increase in the NMW and NLW have universal coverage for workers aged 16 and over working in all sectors and regions of the United Kingdom. The policy aims to protect workers and all employers are legally obliged to pay at least the statutory minimum hourly rate.

Estimating pay rates by personal characteristics

220. Our statistical information is sourced from Annual Survey of Hours and Earnings (ASHE) and Labour Force Survey (LFS) data published by Office for National Statistics (ONS). There are two key challenges when analysing the effects of the rate increases on protected groups in the labour market.

- Firstly, ASHE does not include data that enables us to analyse earnings by ethnicity, religion, disability status, marital status, sexual orientation, gender reassignment pregnancy and maternity.
- Secondly as set out previously in this IA, pay variables in LFS are less robust than ASHE.

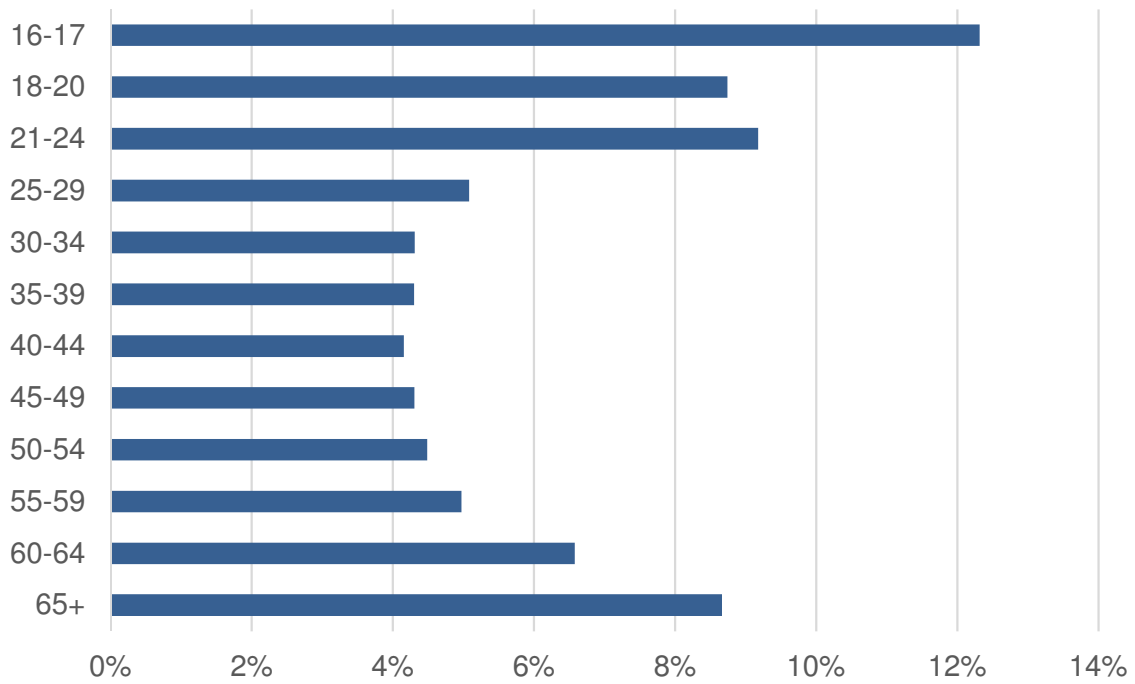
221. The Labour Force Survey does, however, provide information relating to ethnicity, nationality and disability status and earnings. Using an imputation method to boost responses, the ONS can more accurately report earnings data by personal characteristics. We have replicated their findings for the latest quarter of available data and present the findings below.

Age

222. Figure 7 shows estimated coverage³ of different age groups by the NMW/NLW in April 2023. The coverage rate is highest for the youngest workers, with the cohort aged 16-22 having a particularly high coverage rate averaging 12%. The age group with the second highest level of coverage is the 65+ cohort with a coverage rate of 9% followed closely by the 60–64-year-old cohort at 7%. The group with the lowest share of workers covered by the NLW is the 40-44 cohort, at 4% coverage.

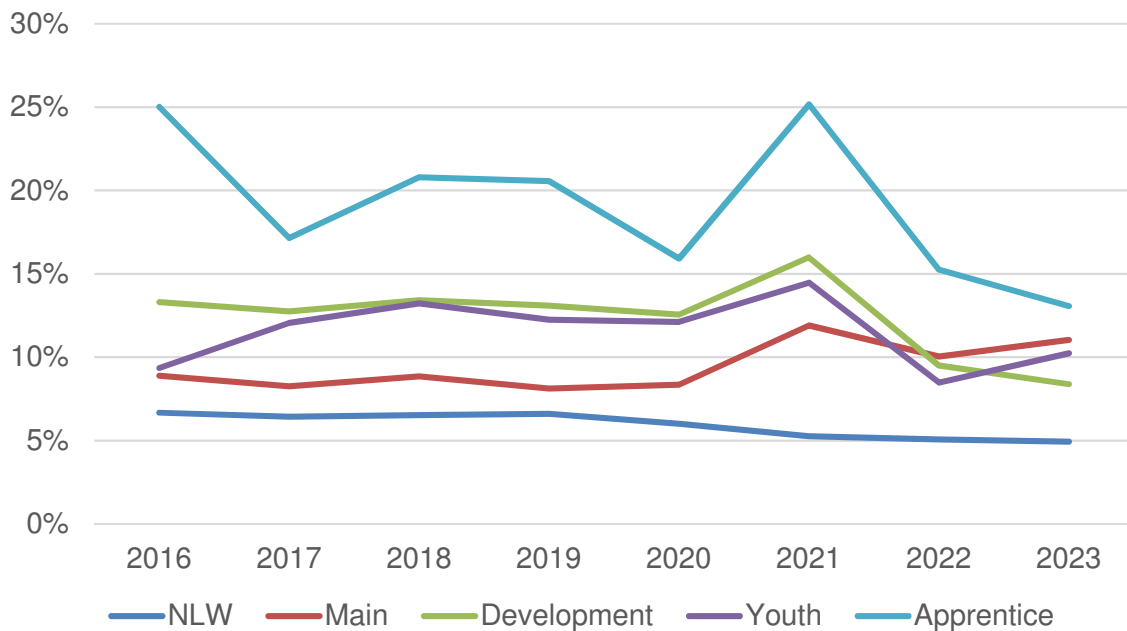
³ Throughout Annex E, coverage is the percent of the employed population from that group that is covered by the NLW.

Figure 7: NMW/NLW coverage by age group, ASHE 2023



223. Figure 8 shows NMW/NLW coverage by age bands over the past 7 years. There has been relatively small changes in coverage from 2022 – 2023 compared to previous years, with small decreases in the main (-1%) and youth coverage rate (-2%). Coverage for the NLW has remained constant while the development and apprentice rates have seen slight increases of 1 and 2 percentage points respectively.

Figure 8: NMW/NLW coverage by age group, ASHE 2016-2023



224. The youth labour market is much more sensitive to economic shocks and young people can be exposed to longer-term scarring effects from prolonged spells of worklessness. They also face a comparative disadvantage when entering the labour market due to a lack of work experience and less knowledge. As raised in the LPC Youth Rates report, ‘young people enter the labour market with relatively limited experience and few skills, and so have lower productivity while they learn the job. In addition, employers may need to provide additional training for young workers, incurring further cost.

225. Young workers have continued to see robust growth in their median hourly pay into 2023, with 18–20-year-olds growing the most. Even with 2023’s large increases in the youth minimum wage rates, young people’s median pay has risen faster than minimum wages since 2016. Use of the youth rates remains below pre-pandemic levels. The LPC short report states that employers are needing to offer higher pay to attract young workers in this competitive labour market. Coverage has fallen particularly sharply in low paying industries, where firms are more likely to report worker shortages. Any minimum wage structure needs to recognise the lower productivity and higher training costs of less experienced workers. Failure to do so could mean that some employers are unwilling to give young people those critical first opportunity.

226. There is some international evidence on the effect of increasing the youth minimum wage rate on labour market accounts. A CPB Discussion Paper (2021)⁴ examines the impact of the 2017 increase in the Dutch youth minimum wage on labour market outcomes for low-paid young workers. Key findings are a rise in workers’ average wage by 4%, without adverse effects on employment or hours worked, and spillover effects accounting for 75% of the total wage increase for younger workers.

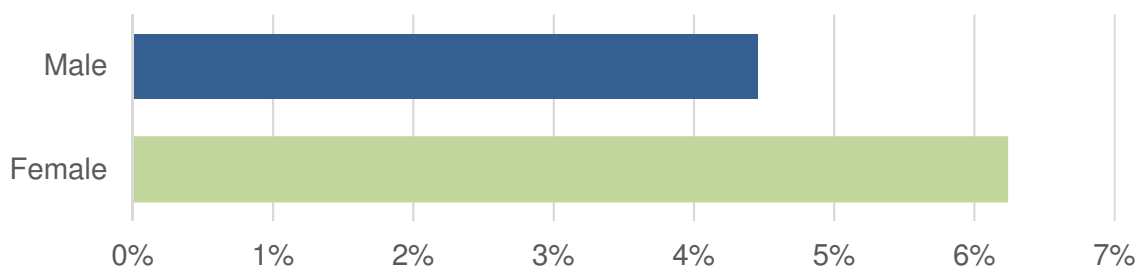
227. In addition, a comprehensive study performing a cross-country level analysis investigated the specific impact of youth minimum wages, utilising data from OECD countries (Marimpi and Koning 2018)⁵. It found that countries with specific youth minimum wages had relative employment rates for young individuals (below age 25) similar to those in countries without minimum wages. However, in countries with uniform minimum wages, the employment rates for young individuals were significantly lower. The study also noted that increases in youth minimum wages had a negative impact on young individuals’ employment rates.

228. In summary, it is the youngest and the eldest workers who are more likely to be in a minimum wage job. This means that the increases to the NLW/NMW rates will disproportionately benefit these groups. Furthermore, we believe that the minimum wage structure needs to recognise the lower productivity and higher training costs of less experienced workers. Failure to do so could mean that some employers are unwilling to give young people those critical first opportunities.

Gender

229. Figure 9 shows how NMW coverage rates vary by gender in the year 2023. Female workers continue to be disproportionately affected by NMW/NLW increases, with a coverage rate of 6.2%. The coverage rate for male workers is slightly lower, at 4.5%. Of those covered by the NMW/NLW rates in the population, 58% are female and 42% are male.

Figure 9: NMW/NLW coverage by gender, ASHE 2023

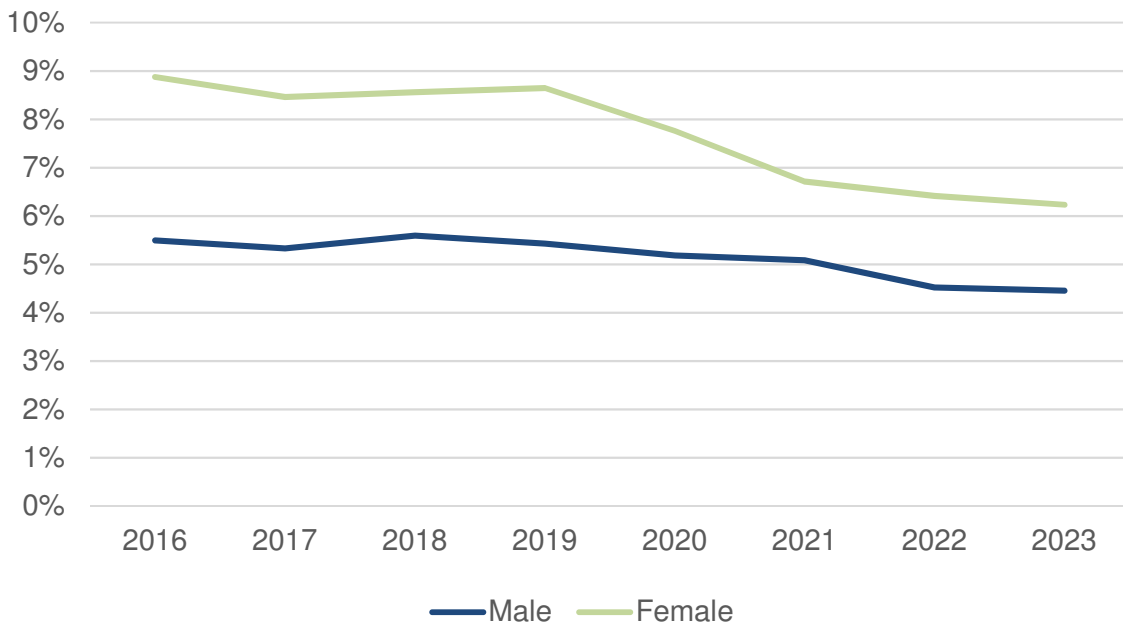


230. Figure 10 NMW/NLW coverage by gender from 2016-2023. Coverage rates have been decreasing for both, with the female coverage rate decreasing more steeply, dropping from 9% in 2019 to 6% in 2023. Males have seen a less sharp decline dropping from 6% in 2018 to 4% in 2023.

⁴ The Young Bunch: Youth Minimum Wage and Labour Market Outcomes, CPB Discussion Paper, April 2021

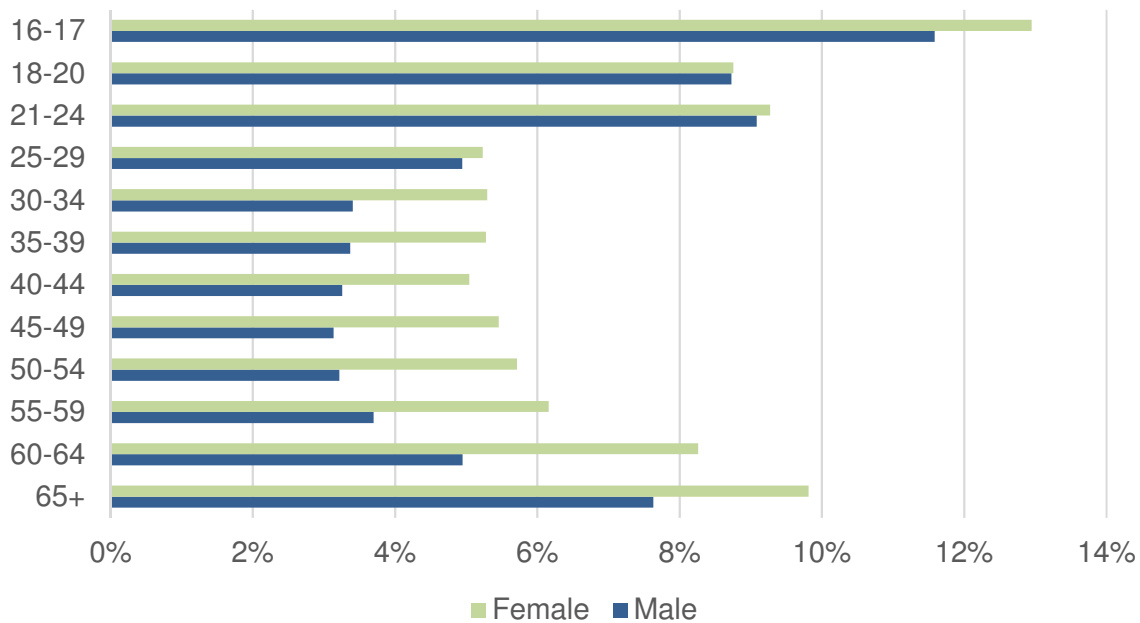
⁵ Marimpi and Koning (2018) Youth minimum wages and youth employment

Figure 10: NMW/NLW coverage by gender, ASHE 2016-2023



231. Figure 11 breaks down NMW/NLW coverage by the gender and age of respondents in the ASHE dataset. The 60-64 cohort see the largest variance in NMW/NLW coverage by gender (3.3 percentage points higher among women). The gender gap in coverage is smaller for younger age bands with the highest variance being in the 16-17 cohort at 1.4 percentage points higher among women.

Figure 11: NMW/NLW coverage by age and gender, ASHE 2023



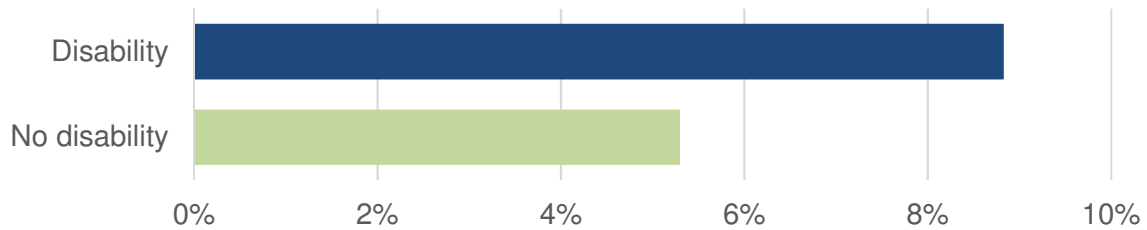
232. Econometric studies present a mixed understanding of the National Living Wage's (NLW) impact on part-time women's employment. Capuano et al. (2019) initially identified weak evidence suggesting small negative impacts on this group's employment prospects. In contrast, their 2018 findings revealed no negative retention effects across any employee group. Additionally, Dickens and Lind (2018) observed no adverse effects in 2016, but did report negative impacts in 2017, indicating that the higher minimum wage possibly led some potential workers to economic inactivity instead. In 2018, Capuano

et al. noted a positive employment retention effect for part-time women in the private sector. This diverse set of outcomes underlines the need for ongoing analysis with the LPC and academics to closely monitor the evolving impacts of NLW upratings on part-time female workers.

Disability

233. Data from the Labour Force Survey shows that employees who have a disability have an NMW/NLW coverage rate 4 percentage points higher than employees without a disability. This is represented in Figure 12.

Figure 12: NLW coverage for workers, aged 23 and over, by disability status, Labour Force Survey Q2 2022 - Q1 2023



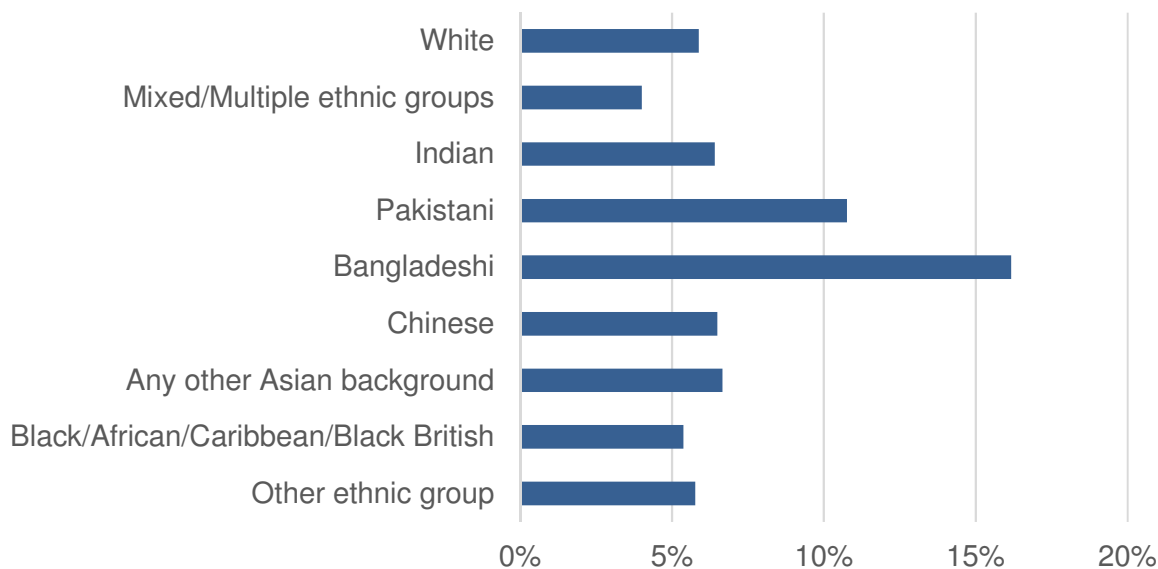
234. There is no evidence to suggest that the NLW rise in 2023 had any adverse effect on the employment prospects of disabled workers. However, due to their higher rates of NLW coverage it is likely that they would experience disproportionate benefits from further rises in the NLW.

235. Previous LPC analysis shows that NLW coverage overtime has increased and decreased proportionately for all disabled and non-disabled workers. This trend does not demonstrate any disproportionate impacts for disabled workers. We believe there are unlikely to have been large adverse effects of last year's increases on individuals with disabilities.

Ethnicity

The coverage rate for ethnic minorities is 6.6%, 0.7 percentage points higher than the coverage rate for white workers as seen in Figure 13. This relatively small difference hides a more diverse picture. When looking at individual ethnic groups, there is greater variation in coverage with some markedly higher, such as Pakistani (10.8%) and Bangladeshi (16.2%), and some lower, such as Mixed/Multiple ethnic groups (4%), than white workers.

Figure 13: NLW coverage for workers, aged 23 and over, by ethnicity, Labour Force Survey Q2 2022 - Q1 2023



236. Previous analysis shows that coverage by ethnicity has fluctuated heavily for some ethnic minorities over the past several years. NLW coverage has drastically decreased for Pakistani and Bangladeshi workers since 2018, reaching approximately 10% from peaks of 18% and 25% respectively. Coverage rates for most other ethnic groups, including white workers, has remained relatively stable since 2016. Chinese workers did see a small peak to 15% briefly in 2019/20 but their coverage has remained consistent aside from this.

237. There is no evidence to suggest that the NLW rise in 2022 had any adverse effect on the employment prospects of ethnic minority workers. However, due to their higher rates of NLW coverage it is likely that they would experience disproportionate benefits from further rises in the NLW.

238. Clark and Nolan (2021)⁶ finds that while some groups experience reductions in the pay gap consistent with lower discrimination, including relatively well-paid Indian workers and relatively poorly paid Bangladeshis, others - specifically Black groups - face an apparent glass ceiling barring access to well-paid jobs. The increasing educational attainment of Britain’s ethnic groups provides some optimism around narrowing pay differentials, particularly at the top of the distribution, while the introduction and uprating of the National Minimum/Living Wage has contributed to improvements at the lower end.

239. Forth (2023)⁷ finds ethnic segregation across workplaces, however found that this does not majorly contribute to the overall difference in wages faced by ethnic minorities. The wage gap predominately exists within workplaces among similarly qualified co-workers, suggesting intra-workplace discrimination. Factors such as lower pay satisfaction and higher skill mismatch among ethnic minorities point towards discriminatory wage setting practices. The study shows how the presence of trade unions and job evaluation schemes within workplaces are linked to smaller wage gaps, indicating their potential in reducing discrimination.

Characteristics not covered by LFS

240. We do not have a comparable way to evaluate the NMW/NLW coverage for some protected characteristics, such as marriage, pregnancy, and religion, as they are not covered within the LFS or

⁶ Clark, K., and S. Nolan (2021). The changing distribution of the male ethnic wage gap in Great Britain, IZA Discussion Paper No. 14276.

⁷ John Forth (2022). The role of the workplace in ethnic wage differentials

recent literature. Nevertheless, we do not expect the uplift to have a disproportionate negative impact on these groups. The NMW applies to all workers regardless of their characteristics with no evidenced impact on employment, and strong evidence showing a positive impact for workers in low-paid jobs.

Summary

241. In summary, the evidence suggests that there will be disproportionate positive wage impacts on some protected groups as a result of the proposed increase in NMW/NLW – including the youngest, and eldest workers, women, ethnic minorities. At the same time, we have found little evidence of the potential for any negative impacts. Evidence of weak negative impacts on part-time women due to the introduction of the NLW in 2016 do not seem to have materialised in subsequent upratings.

Advancing the equality of opportunity

242. The Public Sector Equality Duty (PSED) requires the Department to have due regard to the need to advance equality of opportunity between people who share a protected characteristic and those who do not.

243. The NMW and NLW policy is designed to have a positive impact on all workers in low paid sectors regardless of their personal characteristics. While those under the age of 21 may be impacted by being covered by a lower minimum wage rate, this is balanced by (i) protecting the employment prospects of younger workers given their tougher labour market conditions and the importance of gaining skills and experience; and (ii) possibly improving the attractiveness of younger workers for employers.

Eliminating discrimination and other prohibited conduct

244. The PSED requires DBT to have due regard to the need to eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act. The design of the NMW reflects provisions in the Act which allow the minimum wage rates to vary depending on age up to age 21. Some firms do not use pay structures based on age-related rates, negating risks of increased discriminatory recruitment policies.

Fostering good relations

245. The PSED requires DBT to have due regard to the need to foster good relations between people who share a protected characteristic and those who do not. The NMW/NLW has national coverage, paid to all workers of any social characteristic. This should retain the diversity in the workforce, from skills to ethnicity to social background. Workplace relations should remain positive with workers benefiting from a higher wage floor.

Family test

246. We consider the increase in the NMW/NLW rates will provide a net benefit to families, by making work pay. This policy results in a transfer from employers to employees, increasing the wage of the lowest paid.

247. Previous analysis from the ONS (2021) suggest that employment has grown more quickly for single parents and hence the effect of the proposed increases in the NMW/NLW rates is therefore likely to have a disproportionately positive effect on this group.

248. Analysis from the LPC 2023 report shows that since 2017 the after-tax/benefit increase in the NLW was lower than the pre-tax/benefit increase in the NLW. This is both for households with a single working person working full-time at the NLW and a second household with two adults, one of whom works full-time at the NLW, and two children. After-tax/benefit increases were smaller for the couple

with two children, as this household receives a larger portion of their income through benefits, which tended to grow more slowly than the NLW over this period.

249. However, recent policy changes, like the 2022 adjustments to Universal Credit and the 2023 10.1% benefit uprate, have led to more significant after-tax income gains for families with children, compared to childless households, which rely less on benefits. These dynamics highlight the varying effects of wage and policy changes on different household types.

Annex F: List of contributors to LPC Consultation

Aberdeen City Council
AC Hulme & Sons
Anti Trafficking and Labour Exploitation Unit
Association of Convenience Stores
Association of Labour Providers
Avara Foods
Bangladeshi Caterers Association UK
BDO
British Beauty Council
British Beer & Pub Association
British Chambers of Commerce
British Printing Industries Federation
British Retail Consortium
British Universities Finance Directors Group (BUFDG)
Burnley, Pendle & Rossendale Council for Voluntary Service
Care England
CBI
CBI sharing Economy Council
Center Parcs
Centre for Research into Ethnic Minority Entrepreneurship
Chartered Institute of Personnel and Development (CIPD)
Christians Against Poverty
Community Leisure UK
Community Trade Union
Construction Employers Federation
Cornwall Council
Department for the Economy NI, Apprenticeships Delivery and Performance Branch
Early Years Alliance
Edinburgh Dog and Cat Home
Effective HRM Ltd
Equestrian Employers Association
Federation of Small Businesses
Federation of Wholesale Distributors
Fisherton Mill
Focus on Labour Exploitation (FLEX)
Food and Drink Federation
Future Directions CIC
GMB Union
Good Life Sorted
Greater Birmingham Chambers of Commerce
Greater Manchester Chamber of Commerce
Greater Manchester Combined Authority
Greggs Plc
HM Government
Homecare Association
Horticulture Trades Association
Hospitality Ulster
Incomes Data Research

Institute for Fiscal Studies
Intergenerational Foundation
Irish Congress of Trade Unions
Joseph Rowntree Foundation
Labour Research Department
Living Wage Foundation
Lloyds Banking Group
Local Government Association
Make UK
Manufacturing NI
Mind
Mitchells & Butlers Plc
Nannies and Au Pairs Branch of the Independent Workers' Union of Great Britain (IWGB)
Nanny Solidarity Network
National Care Association
National Day Nurseries Association
National Farmers' Union
National Hair & Beauty Federation
National Institute of Economic and Social Research
National Society of Apprentices
National Union of Rail, Maritime and Transport Workers
NFU Cymru
NFU Scotland
NHS Fleet Solutions c/o Northumbria Healthcare NHS Foundation Trust
Oldham Community Leisure Limited
Organise
Professor Deirdre McCann, Durham Law School, Durham University
Recruitment & Employment Confederation
Resolution Foundation
Rhondda Cynon Taf Council Tourism Hub
Rodeo
Royal Mencap Society
Scottish Agriculture Wages Board
Scottish Grocers' Federation
Scottish Women's Convention
Skills for Care
South Western Ambulance Service NHS Foundation Trust
Southampton City Council
Sparkle Cleaning Services
taskrabbit
Tesco Plc
The Chartered Institute of Payroll Professionals (CIPP)
The End Child Poverty Coalition
The Place Hotel
The Prince's Trust
The Trees Swindon Old Town Ltd
Trades Union Congress
UKHospitality
Union of Shop, Distributive and Allied Workers

UNISON
Unite the Union
Upwork
Wage and Employment Dynamics Strategic Impact Project
West Midlands Combined Authority
Whitbread Plc
Women's Budget Group
XpertHR
Youth Employment UK