New Policy Institute

Young adults and the minimum wage

The case for lowering age eligibility

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Contents

Executive Summary

Since April 2016, the age of eligibility for the government's 'national living wage' (NLW) has been set at 25, with younger workers receiving lower statutory minimum wages. This report was commissioned by UNISON to critically review research relating to minimum wage differentials by age. It begins with a brief economic profile of adults under 25. It then reviews the Low Pay Commission's (LPC) evidence base, as well as studies from other countries relating to age differential minimum wage rates and literature on how employers make hiring decisions with regard to age. The report also includes a discussion of the business case for not using age differentials, based on four case studies and studies from business organisations.

Key findings:

There is strong evidence that people from the age of 21 should be eligible for the NLW

- 21-24 year olds are currently experiencing high earnings growth, low unemployment and high employment. The large majority of this age group (86 per cent) were already being paid the NLW or above in April 2016.
- 21 year olds did not suffer negative employment outcomes from a significant wage rise in 2010, when the economy had only just returned to growth after recession. Not only does the research fail to show negative outcomes from raising wages for 21 year olds, it provides evidence that eligibility for higher wages encourages greater labour market participation.
- Before the introduction of the NLW, the LPC advocated that 21 should be the age of eligibility for the highest adult rate. They made this recommendation because the majority of 21 year olds were already paid the adult rate or above. Those that weren't were mainly employed by larger employers who could absorb the cost.
- The strong labour market performance of this group, the previous rationale of the LPC, and the recent evidence that raising wages for this group does not generate negative employment outcomes, and may actually encourage greater labour market participation mean it would be consistent with the LPC's remit to recommend that eligibility for the NLW be lowered to 21.

Raising the value of minimum wages for people under 21 has not historically harmed employment outcomes

- Increasing the value of youth minimum wages for people under the age of 21 in the UK has not had negative employment effects outside of economic downturns, and does not affect young people's educational choices.
- Evidence from both of the UK and abroad indicates that increasing the value of the minimum wage for teenagers encourages greater labour market activity in this group.
- The body of evidence on the productivity of young workers is conflicting, and shows that productivity and age may not have as straightforward a relationship as is often assumed- increasing the value of minimum wages of young people may increase their productivity.
- There is some evidence from both the UK and abroad that a large difference in value between youth rates and adult rates leads to the substitution of older workers for younger ones. Recent surveys of employers in the UK suggest that the current difference between the NLW and the youth rates may risk this occurring.

Publication bias reduces certainty in the international evidence

- Reviews of international evidence have shown that increases to minimum wages have negative employment effects for young people in countries without age differential wage rates. They also indicate that young people experience more negative employment effects from changes to wage rates in economic downturns, even in countries with age differentials.
- However, a meta-analysis of the international literature concluded there was publication bias towards studies that demonstrated negative employment effects of minimum wages, which calls into question the body of evidence.
- Recent studies corrected methodological issues in earlier studies that found negative youth employment effects from changes to the minimum wage in the USA. These studies found no negative employment effects for teens, even during times of economic downturn. It is possible other international studies showing negative employment effects are also the result of flawed methodology.
- The majority of evidence from other major European economies demonstrates small or insignificant effects from minimum wages on youth employment,

however differing labour market interventions mean these countries are not directly comparable to the UK.

Abolishing age differentials could bring many benefits to employers

- The rationale for age-based wage differentials views young workers as less productive that older workers. This is at odds with the value that many employers place on young people.
- Higher wages could encourage higher labour market participation by young people in sectors where they are needed, such as social care.
- Paying young people already in employment the same rates as older workers would bring an end to ‘divisive’ wage policies which could bring many benefits from improved morale, such as lower turnover and higher productivity.

Introduction

This report examines the evidence base for different minimum wages based on the age of an employee. When the national minimum wage was first introduced, there was a ‘sub’ minimum wage for 18-21 year olds (known as the ‘Youth Development Rate’), and an ‘adult’ rate from age 22. This has changed, most recently with the introduction of a new rate for those aged 25 and above, meaning there are now separate wage rates for those aged under 18, 18-20, 21-24 and those aged 25 and older.

As of April 2017, these age rates were as follows:

Age band	Minimum wage rate, April 2017
Under 18	£4.05
18-20	£5.60
21-24	£7.05
25+	£7.50

The government refers to the rate for those aged 25 and above as the ‘national living wage’ (NLW). For clarity, and to avoid confusion with the voluntary Living Wage advocated by the Living Wage Foundation, in this report we refer to the rate for those aged 25+ as the NLW. Where reference is made to the National Minimum Wage (NMW), this refers to the pre- April 2016 highest minimum wage rate, not the current rate for 21-24 year olds.

This report proceeds by first examining the labour market status and pay rates of those subject to the lower minimum wage rates for young adults. It then analyses the rationale for introducing a new wage rate for those aged 25 and older, as well as the example case of the Low Pay Commission’s recommendation that those aged 21 should receive the highest minimum wage rate when it has previously been 22.

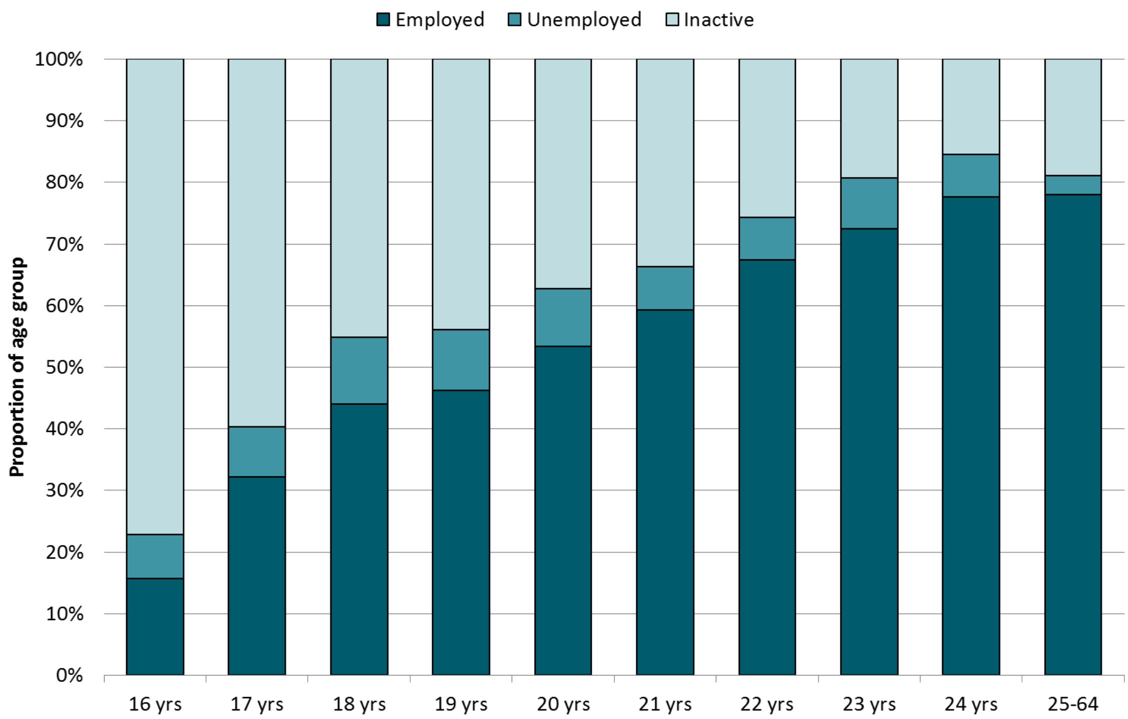
The evidence base for employment effects from higher minimum wages for younger adults more generally is then considered, as well the international evidence and evidence around the extent to which employers consider age-related minimum wages when hiring staff. The report finishes with some case studies from employers on the advantages of not differentiating pay by age.

The labour market position of adults under the age of 25 in 2016

In 2016, there were 7.2 million 16-24 year olds in the UK, corresponding to the age range for minimum wage levels below the NLW's age of eligibility at 25. 1.5 million were 16-18, 2.3 million were 18-20, and 3.4 million were aged between 21 and 24. Prior to the introduction of the NLW in April 2016, the 3.4 million 21-24 year olds had been entitled to the highest minimum wage rate.

Economic status

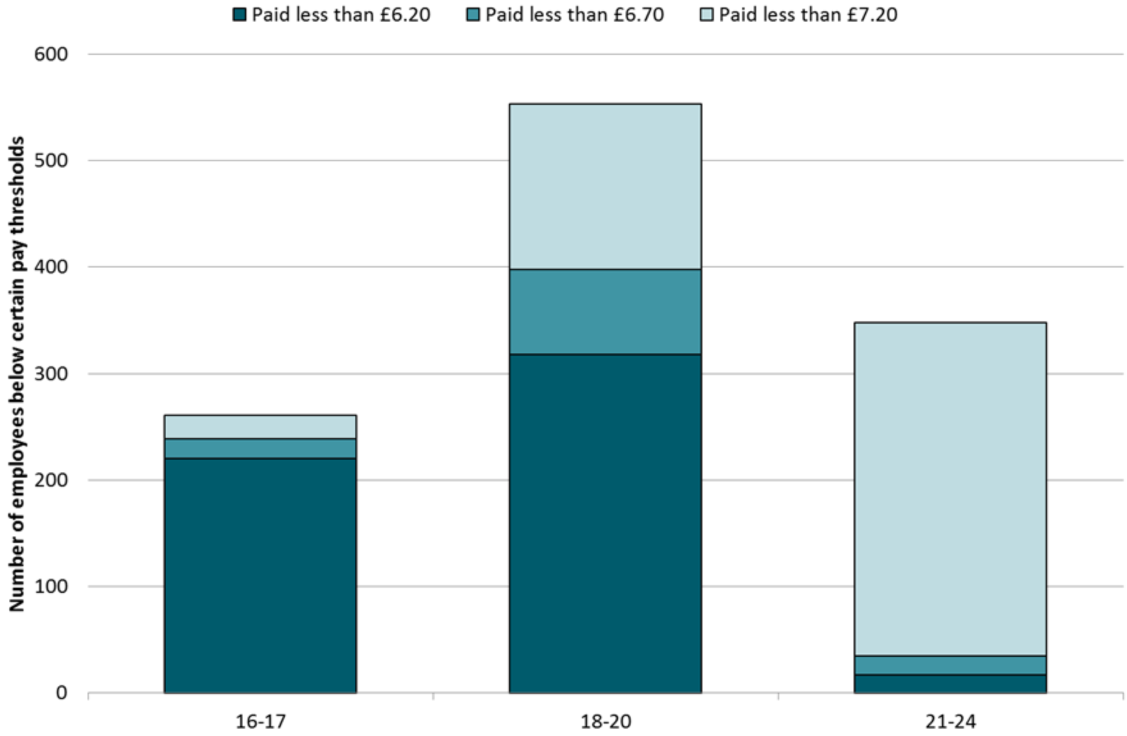
The graph below shows the economic status of 16 to 24 year olds individually, and for 25-64 year olds together. All the age groups below 25 have higher levels of unemployment than 25-64s. 24 year old adults have the same average employment rate to the rest of the working-age population (78 per cent), with declines in employment rates more pronounced from 23 and below. As a whole, the 21 to 24 age group has an employment rate of 69 per cent.



Much of the difference between younger adults and working-age adults as a whole results from participation in education, which accounts for the large inactivity share.

Employee pay under the age of 25

This graph looks at the number of employees paid below £7.20 an hour in 2016 (the NLW rate introduced in April 2016) by minimum wage age groups (apprentices are included). There were 2.35 million 21-24 year olds in employment. Excluding the self-employed, around 17 per cent were paid below £7.20 an hour.



In other words, for the 21-24 age group at least, most were already paid the NLW level. For younger age groups, there was a more pronounced difference. 77 per cent of 16-17 year old employees were paid below £7.20, and 51 per cent of 18-20 year olds.

1 The introduction of the NLW and other age-based eligibility changes

1.1.1 Setting the age for the NLW at 25 was political, not evidence-based

The Low Pay Commission (LPC) has consistently supported wage differentials for younger adults since its creation.[1] The LPC has argued that young people have a greater risk of unemployment when their minimum wage is raised, and that the minimum wage might ‘restrict opportunities for training or work that developed basic skills.’[2] However, the current age at which eligibility for the NLW begins (25), is not consistent with the LPC’s evidence base or stated recommendations pre-2016.

While the LPC’s approach to the minimum wage rates for teenagers evolved over time (16 and 17 year olds were exempt from the minimum wage at the LPC’s recommendation in 1999, the LPC later recommended in 2004 that a minimum wage was required for these ages to create a pay floor and prevent exploitation), the LPC consistently argued from 1998[3] until 2015 that 21 year olds should receive the highest adult rate of the minimum wage (which was then called National Minimum Wage).

In 1999, when the national minimum wage rates were first introduced, the Labour Government created a separate rate for young adults aged 18-22 (The Youth Development Rate). The LPC recommended that 21 year olds should receive the National Minimum Wage consistently for the next decade, and in 2009, the Labour Government accepted the recommendation.[4] From October 2010 until the introduction of the NLW in 2016, 21 year olds received the highest rate of the minimum wage- then the National Minimum Wage. During the LPC’s 2010 consultation, when the economy had only just moved out of recession, there was very little opposition from businesses for the change: the British Hospitality Association, the British Beer & Pub Association, the Business In Sport and Leisure among others acknowledged that lowering the age to 21 would not have a negative impact on business, as most companies already paid 21 year olds the NMW.[5] In 2011, only three responses in the LPC’s consultation (the National Hair Dressers Federation and the Association of Licensed Multiple Retailers and one hotelier)

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[1] Low Pay Commission (2009) *National Minimum Wage: Low Pay Commission Report 2009.* Low Pay Commission
[2] Ibid.
[3] Ibid.
[4] Low Pay Commission (2010) *National Minimum Wage: Low Pay Commission Report 2010.* Low Pay Commission
[5] Ibid.

disagreed with the change. This provides strong evidence that employers view 21 year olds as adults, and that even in times of economic uncertainty there is broad support from employers to pay the adult rate from 21. The decision to set the age of eligibility for the NLW to 25 ran counter to established employer norms.

Through their 2015 report, the Low Pay Commission continued to support the recommendation that the highest rate of the NMW should apply from the age of 21. In the aftermath of the recession, from 2011 to 2014 the LPC recommended lower rates of growth for the Youth Development Rate and the 16 and 17 year old rate of the minimum wage or freezing the rates (in 2012), out of concern for the weak recovery of young people's employment rates. Despite this, the LPC re-affirmed in every year's report that 21 year olds should remain eligible for the NMW. In 2014, the Coalition Government asked the LPC to outline the conditions necessary to make larger raises to the NMW in future. In the resulting report 'Future Path for the National Minimum Wage' the LPC assumes that the NMW will apply from the age of 21- no mention is made of potential negative employment outcomes for this age group by a more steeply rising minimum wage.[6]

The Government's rationale for moving the age of eligibility for the highest rate from 21 to 25 is laid out in their impact assessment.[7] One of the main pieces of evidence included in the assessment was that the 'bite' of the minimum wage (the ratio of the minimum wage to median wage) tended to be higher for ages 21-24 than for those 25 and over. It also stated that this age group seemed to fare comparatively badly to older workers in economic downturns. However, the main rationale for setting the age at 25 (rather than 24, 21 or any other age) was based on legislation and social norms, rather than evidence. Firstly, the National Minimum Wage Act 1998 allows for age differential rates below 26, so no amendment was required to current legislation. The age of 25 seems to have been derived more from international legislative definitions (both the ILO and EU define 'young people' as under 25) and within the UK for Student Support and differing eligibility for under 25s for social security benefits such as Working Tax Credits. These definitions and social security entitlements are political, as was the decision to raise the age of entitlement for the NLW to 25.

1.1.2 The LPC rationale for lowering the age of eligibility for the National Minimum Wage to 21- then and now

The LPC based its recommendation that 21 year olds should be eligible for the National Minimum Wage on several factors. The first was that on a range of

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6 Low Pay Commission (2014) *The Future Path of the Minimum Wage* Low Pay Commission.

7 Department for Business Innovation and Skills (2015) *Amendment To The National Minimum Wage Regulations 2015-Increase In NMW Rates* BIS

measures, most notably the hourly earnings for the bottom 10 per cent of earners and the unemployment rate, 21 year olds more closely resembled 22 year olds than 20 year olds[8]. The second was that by 2008, the vast majority of 21 year olds (90 per cent) were already paid at the National Minimum Wage level. The remaining 10 per cent of 21 years paid below the NMW level worked mainly for large firms in retail and hospitality sectors which it was felt would be able to 'absorb the additional costs imposed by this change.'[9]

On this basis, the eligibility for the NLW should begin from 21. 86 per cent of all 21-24 year olds were paid above the NLW in April 2016, when the NLW came into effect.[10] The retail and hospitality sectors have the two largest proportions of low-paid jobs for 21-24 year olds[11], and in these sectors most 21-24 year olds receive a wage above the NLW. In retail, 90 per cent of 21-24 year olds were paid above their minimum wage (£6.70) in April 2016. In hospitality, 77 per cent of this age group were paid above it.[12] Even in care homes, a sector that generated particular concern over the impact of introducing the NLW, almost a third of employees under 25 are already being paid at or above the NLW.[13]

In 2016, the lowest tenth of hourly earners among 21 to 24 year olds more closely resembled older adults currently eligible for the NLW rather than younger adults. 25-29 year olds at the 10th percentile earned 10 per cent an hour more (at £7.51) than their counterparts aged 21-24 (at £6.82). 18-20 year olds at the 10th percentile earned 28 per cent less (at £5.34) than the 21-24 age group.

21 to 24 year olds are currently experiencing their best labour market outcomes in many years. In the year to 2016, they experienced a 5.3 per cent earning growth, their highest rate of growth since 2001.[14] Unemployment for this group has fallen back to its level at the start of the recession (6.7 per cent), and the proportion engaged in work (both those in full time education who also work and those in employment only) is near the historic peak level previously seen in 2002.[15] The employment rate for this group in June 2016 was the highest since records began (79 per cent).[16]

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[8] Low Pay Commission (2009) *National Minimum Wage: Low Pay Commission Report 2009* Low Pay Commission
[9] Ibid.
[10] Low Pay Commission (2016) *National Minimum Wage: Low Pay Commission Autumn Report 2016.* Low Pay Commission
[11] NPI analysis of 2014 adhoc ONS data.
[12] Ibid.
[13] Giupponi et al (2016) *The Impact of the National Living Wage on English Care Homes* Low Pay Commission
[14] Low Pay Commission (2016) *National Minimum Wage: Low Pay Commission Autumn Report 2016* Low Pay Commission
[15] Ibid.
[16] Ibid.

Based on these key indicators, 21 to 24 year olds resemble the age group above them more than the age group below them. It would therefore be consistent for the LPC to recommend that workers receive the NLW from 21.

1.1.3 Evidence before the change in eligibility from 22 to 21

The LPC's commissioned research provided an evidence base for lowering the age from 22 to 21. Dickens et al (2010)[17] found that during the years that the NMW eligibility age was 22, turning 22 did not harm low-skilled young people's labour market outcomes, and in fact improved them by reducing unemployment and inactivity rates and increasing employment.[18] This research suggested that lowering the age of eligibility to 21 might actually improve the labour market outcomes for 21 year olds, as it would increase the incentive to undertake employment. A later report by Fidrmuc and Tena (2013)[19] slightly complicated the picture by looking at the labour market outcomes for all workers, not just the low-skilled. They found that while there was no negative employment effect to turning 22, they found negative employment effects for men turning 21 and both men and women turning 18.[20] The researchers however acknowledge that their findings may be distorted, as they were not limited to low-skilled workers, by demographic changes to the young adult workforce at 18 and 21 as these are the ages when many people leave full-time education.

1.1.4 Evidence after the change in eligibility from 22 to 21

After 2010, research found no significant and lasting negative impact on 21 years olds resulting for the lowering of the age of eligibility. In October 2010, 21 year olds moved from the previous Youth Development Rate of £4.83 to the uprated NMW of £5.93- a 23 per cent increase in their minimum wage rate.[21] The previous increase is almost twice the proportional increase in the value of the minimum wage for 21 year olds than they would receive in 2018, if 21-24 year olds minimum wage was increased from the current £7.05 to the projected 2018 NLW rate of £7.90 (a 12 per cent increase).

Between 2011 and 2015, only the LPC's 2013 report highlighted concerns that the unemployment rate rose and employment fell for 21 year olds, and that these outcomes might be a result of the changes to the age of eligibility. This changing

[17] Dickens et al (2010) The Impact On Employment Of The Age Related Increases In The National Minimum Wage Low Pay Commission
[18] Ibid.
[19] Fidrmuc and Tena(2013) *The Impact Of The National Minimum Wage On The Labour Market Outcomes Of Young Workers* Low Pay Commission
[20] Ibid.
[21] Low Pay Commission (2014) *National Minimum Wage: Low Pay Commission Report 2014* Low Pay Commission.

pattern for 21 year olds was brief- from the third quarter of 2011 until the third quarter of 2012. After that, unemployment for 21 year olds fell and employment picked up, so that the gap that had emerged between these labour market outcomes for 22 and 21 year olds narrowed.[22]

There were two studies commissioned by the LPC to analyse the impact of this change in eligibility for 21 year olds. The first, completed in 2011, found that: 'this change had no significant effect on the likelihood of being in full-time education, the likelihood of being NEET or the likelihood of being in work for 21-year-olds relative to 20-year-olds.'[23] The second, completed in 2015, built on the work of the previous report, and found mixed results. Overall, however, the effects found were small and researchers concluded there was no evidence that 21 year olds should not continue to receive the adult NMW.[24]

1.1.5 Conclusion

21 year olds did not suffer negative employment outcomes from a significant wage rise in 2010, when the economy had only just returned to growth after recession. Not only does the research fail to show harm from raising wages for young people, it provides evidence that eligibility for higher wages encourages greater labour market participation. This suggests that the comparatively low rate of youth wages compared to the adult rates may actually be hindering youth labour market participation. This theory is supported by some international evidence and our case studies (see sections 2.1.4 and 4.1.1).

The majority of 21 to 24 year olds are already paid at the NLW or above. This group is currently experiencing high employment and earnings growth. Pre-2016, the LPC's rationale for lowering the age of eligibility to 21 was based on a range of labour market indicators, such as the proportion already paid above the NMW and the hourly earnings of the bottom tenth compared to older and younger age groups. Those that weren't were mainly employed by larger employers who could absorb the cost. These requirements are still met by 21-24 year olds in 2016. The increase in the wage rate in 2018 would only be half of the increase which occurred in 2010. On this basis, the NLW rate should apply from age 21.

[22] Low Pay Commission (2014) *National Minimum Wage: Low Pay Commission Report 2014* Low Pay Commission
[23] Crawford et al (2011) *The Impact of the Minimum Wage Regime on the Education and Labour Market Choices of Young People: a Report to the Low Pay Commission* Low Pay Commission
[24] Conlon et al (2015) *The impact of the minimum wage on young people: Final Report to the Low Pay Commission* Low Pay Commission

2 Evidence on minimum wage rates effect on the labour market outcomes of 16 to 21 year olds

2.1.1 Employment

Since the introduction of the minimum wage, researchers have studied the 'quasi-experiments' offered by changes to the wage rates, as well as the age differentials, to investigate whether the minimum wage affects labour market outcomes. Stewart (2004)[25] found that the initial introduction of the minimum wage rates in 1999, as well as the uprating in the value of the rates in 2000 and 2001 had no negative effects on employment for young adults (only 18-21 in this study, as 16 and 17 year olds were excluded from the minimum wage until 2004).[26] A meta-analysis of 25 UK studies from 1999-2015 found that the uprating of the minimum wage had no significant employment effect on young people (under 22), except during the recession, when young people's employment retention was negatively affected by an increase in the minimum wage.[27]

2.1.2 Full-time education

Multiple studies[28], most notably Crawford et al (2011)[29], have found that the introduction or uprating of national wage rates have no significant impact on young people's likelihood of remaining in full time education (FTE). Average local wages have been shown to have little effect on educational decisions, although some labour market conditions (such as high unemployment) may impact young people's educational choices.[30] Other factors such as the participation age, parental education and socioeconomic characteristics[31] have a bigger influence. There is therefore little basis for concern that a high minimum wage for young people will encourage them to leave education.

2.1.3 Productivity

An implicit argument in much of the LPC literature justifying age differentials is that young workers require more training, and are less productive than their older

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25 Stewart (2004) The Employment Effects of the National Minimum Wage Economic Journal.
26 Ibid.
27 Hafner et al (2016) *The Impact Of The National Minimum Wage On Employment: A Meta-Analysis* RAND Europe
28 De Coulon et al (2010) *Minimum Wage and Staying On Rates in Education for Teenagers* Low Pay Commission.
29 Crawford et al (2011) *The Impact of the Minimum Wage Regime on the Education and Labour Market Choices of Young People: a Report to the Low Pay Commission* Low Pay Commission
30 Ibid.
31 Conlon et al (2015) *The Impact of the Minimum Wage on Young People: Final Report to the Low Pay Commission* London Economics for the Low Pay Commission.

counterparts. However, research on the productivity of young workers relative to older workers is not that straightforward. Dickerson et al (2011)[32] found that 16-21 years olds are slightly over-paid based on their productivity relative to older workers, but that it fell after the introduction of minimum wages. This may indicate that raising wages for young people can raise their productivity.

The most recent evidence commissioned by the LPC on young worker's productivity[33] found mixed results- that 16-20 year olds in low-paying sectors were under-paid relative to their productivity compared to older workers, while 21 to 24 year olds were overpaid relative to older workers.

Differential minimum wage rates for young workers may affect how young people are treated in the workforce by their employers, which may also be depressing their productivity. Employer's bias against young people is widespread[34][35] particularly towards teens and school-leavers, although employers appear to have concerns recruiting people through their mid-twenties[36]. Many employers perceive younger workers as lacking requisite skills[37], and believe that teens' attendance and disciplinary records tended to be poorer than older workers[38].

Despite the negative perceptions, the vast majority of employers who employ young people report being satisfied with them[39]. Wage differentials may be re-enforcing age bias in the workplace and in hiring decisions, rather than reflecting the reality of young workers capabilities. This has been shown to be the case with the gender wage gap in some sectors[40][41], whereby the wage gap in itself is taken as evidence of women's lower productivity, therefore justifying the continuation of the wage gap. Lucas and Keegan (2007)[42] suggested in a qualitative study of hospitality businesses in Wales that managers underestimated the skills and capacity of 16 and 17 year olds relative to older workers. The researchers suggested that the differential wages

[32] Dickerson et al (2011) *An Investigation Into The Relationship Between Productivity, Earnings And Age In The Early Years Of A Working Life*
[33] Conlon et al (2016) *An examination of the impact of the NMW on earnings, the bite and wage differentials (15-4)* London Economics for the LPC.
[34] UK Commission for Employment and Skills (2012) *National Employer Skills Survey*. UKCES.
[35] British Chamber of Commerce (2011) *The Workforce Survey: Small Businesses* BCC
[36] Ibid.
[37] Canny (2007) *What Employers Want And What Employers Do: Cumbrian Employers' Recruitment, Assessment And Provision Of Education/Learning Opportunities For Their Young Workers* Journal of Education and work
[38] Low Pay Commission (2004) *Protecting Young Workers: National Minimum Wage Low Pay Commission Report 2004* Low Pay Commission.
[39] Chartered Institute of Personnel and Development (2012) *Learning to Work: Survey Report* CIPD
[40] Madden (2012) *Performance-Support Bias And The Gender Pay Gap Among Stockbrokers* Gender & Society
[41] Smith (2002) *Pay and Productivity Differences between Male and Female Veterinarians* ILR Review
[42] Lucas and Keegan (2007*) Young workers and the National Minimum Wage* Equal Opportunities International

applied to this group re-enforced this view of young people, regardless of individuals' abilities.

Early LPC reports also include anecdotal evidence that the introduction of the National Minimum Wage may have affected how employers treat young workers, with some companies giving their internal 'adult' rate to young people from the age of 21 before the introduction of the NMW in 1999.[43] It is possible that setting wage differentials for younger employees re-enforces or even creates prejudicial attitudes toward young people in the workforce. Arbitrarily moving the age of eligibility for the NLW to 25 may prejudice how employers view people in their early 20s, just as it may already affect how they view teens. This de-valuation of labour may foster resentment and lower productivity in younger workers (for a fuller discussion see section 4.1.3)

2.1.4 Hiring Decisions and substitution

The majority of research into age-related hiring practices has focused on older workers (near retirement age), but some recent studies relating to youth hiring exist. Lanot et al (2013)[44] studied the age profile of the workforce in low-paying sectors between 1997 and 2010 to discern if a 'substitution effect' could be found for older workers (over 55) and younger workers (i.e. if a wage rise of one group would lead to employers hiring more of the other group to save costs). They did not find a substitution effect between young and old workers. They noted that the age profile of the workforce in low-paying sectors had changed little between 1997 and 2010 with a few exceptions. They found that during the recession demand for young employees fell more than for older employees. However, they also found an increase in the proportion of 16 and 17 years olds in the workforce after the minimum wage was brought in for this age group up until the recession. This is consistent with recent international evidence from Spain[45] and Canada[46] that minimum wages encourage teen employment. It is further evidence (along with Dickens et al (2010)[47] and Conlon et al (2015)[48], see section 1.1.4), that eligibility for higher wages may increase the labour market participation of young people.

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[43] Dickens et al (2010) *The Impact On Employment Of The Age Related Increase In The National Minimum Wage* Low Pay Commission

[44] Lanot et al (2013) *The Substitution Rate between Low Pay Workers and the National Minimum Wage*
Low Pay Commission

[45] Guiliano (2013) *Employment, Substitution And The Teenage Labour Supply: Evidence From Personnel Data* Journal of Labour Economics

[46] Shannon (2011) *The Employment Effects of Lower Minimum Wage Rates for Young Workers: Canadian Evidence*

[47] Dickens et al (2010) The Impact On Employment Of The Age Related Increase In The National Minimum Wage Low Pay Commission

[48] Conlon et al (2015) *The Impact of the Minimum Wage on Young People* Low Pay Commission

Conlon et al (2015)[49], also indicates there is some evidence that if the gap is large enough between the youth rates and the adult rates, a substitution effect may occur for low-skilled labour. The study found that overall, becoming eligible for the adult minimum wage does not appear to have impacted employment overall between 2006 and 2013 (and in fact positively effects employment for low-skilled workers). But between 2011 and 2013, when the gap between the rate for 18-22/21 year-olds and the NMW grew due to the freezing of youth rates, there appears to have been a negative employment effect for low-skilled employees of becoming eligible for the NMW at 21 or 22.

Recent research from the Netherlands[50] support the hypothesis that large differences in the value of adult and youth rates may have negative employment effects for older workers. It found that some workers were fired and replaced with younger workers as they approached the age of the full adult rate. This evidence is particularly striking given that the Netherlands is a Coordinated Market Economy (CME), where negative employment effects related to the minimum wage are generally seen to be less likely (see section 3.1.1). The largest wage gap between ages in the Netherlands study was 17 per cent. In 2017 in the UK, the wage gap between the rate for 18 and 20 year olds and 21 to 24 year olds is nearly 26 per cent, and the wage gap between under 18 year olds and 18-20 year olds is 38 per cent. The LPC has long argued that age differentials are necessary to protect employment of young people, but age differentials may be harming employment of people at 18, 21 or 25.

While it is too soon to tell if the increasing gap between the age rates will lead to the substitution of younger workers for those eligible for the NLW, recent research commissioned by the LPC suggests that employers are considering it. One survey of 119 employers across a range of sectors found that a third thought the age profile of their employees would change as a result of the NLW. Among childcare providers, it was 39 per cent[51]. Another survey of over 1,000 employers found a significant minority (8 per cent) were planning to hire more young workers in response to the NLW.[52] It is therefore advisable that the wage gaps between younger workers and 25 year olds are not allowed to grow too large, as this may have negative employment effects for older workers.

[49] Conlon et al (2015) *The Impact Of The Minimum Wage On Young People* Low Pay Commission
[50] Kabátek (2016) *Happy Birthday, You're Fired! The Effects of Age-Dependent Minimum Wage on Youth Employment Flows in the Netherlands* IZA Discussion Papers
[51] Incomes Data Research (2016) *Impact of the National Living Wage Report for LPC*
[52] D'Arcy (2016) *Weighing Up The Wage Floor Employer Responses To The National Living Wage* Resolution Foundation

2.1.5 Conclusion

Increasing the minimum wage rate for 16 to 21 year olds has had no negative employment effects outside of economic downturns. Increasing the value of minimum wages also has no effect on young people's educational decisions. The body of evidence on the productivity of young workers is conflicting, and shows that productivity and age may not have as straightforward a relationship as is often assumed. Raising young people's wages may encourage labour market participation and improve their productivity[53]. While raising wages for young people has no negative employment effects outside of downturns, comparatively low youth rates may have negative employment effects on older workers. There are indications that when the wage differential increases, some substitution of younger workers for older workers occurs.

[53] Dickerson et al (2011) *Investigation Into The Relationship Between Productivity, Earnings And Age In The Early Years Of A Working Life* Low Pay Commission.

3 International evidence on the effect of the minimum wage on young people

The recent change to the age of eligibility for the NLW to 25 sets the UK apart from other developed economies with age differentiated minimum wages. Greece is the only other such country to set the eligibility age as high as 25 (and this is only because it is part of its Fiscal Adjustment Programme), the majority of other developed countries that use age differential minimum wages set eligibility for the adult rate at 21 or younger.[54][55] The UK is also unusual in having no consistent relationship between the adult rates and the youth rates[56], for example, in Belgium, people aged 16 years old and younger receive a minimum wage worth 70 per cent of the 'adult' standard minimum wage, which rises to 76 per cent at 17.[57] This presents a challenge in drawing conclusions from other countries that can be applied usefully to the UK. Other country differences, such as youth educational attainment, employment, and unemployment rates further complicate the picture.

3.1.1 Youth Employment in Economic Downturns

Croucher et al (2011)[58] undertook a comprehensive international literature review for the LPC which analysed studies from twelve countries (including the UK). They concluded that countries with Coordinated Market Economies (CMEs) where the state plays a strong role in regulating the labour force and economy and strong collective bargaining institutions play a role in negotiating minimum wages have limited utility in supplying evidence to the UK context. These countries are less likely to display negative employment effects from minimum wages (as the section 3.1.3 below shows). The researchers suggested that Liberal Market Economies (LMEs), such as the USA, Canada, Australia and New Zealand, where state-led mechanisms set the minimum wage in response to market forces, are the most similar to the UK. Of these LMEs, the USA has the largest evidence base of studies relating to youth employment effects from the minimum wage.

The overall conclusion of this review was that negative employment effects from the introduction or increase in the minimum wage for young people were generally very small and on the margins of statistical significance from the majority of studies analysed, and that changes to the minimum wage was more likely to have a negative effect in countries that did not have age differential minimum wages. These findings

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54 Eurwork (2017) *Statutory minimum wages in the EU 2016* Eurofound
55 Croucher et al (2011) *The Impact Of Minimum Wages On The Youth Labour Market An International Literature Review For The Low Pay Commission* Low Pay Commission
56 Ibid.
57 Eurwork (2017) *Statutory minimum wages in the EU 2016* Eurofound
58 Croucher et al (2011) *The Impact Of Minimum Wages On The Youth Labour Market An International Literature Review For The Low Pay Commission* Low Pay Commission

are consistent with a seminal study by Neumark and Wascher (2006)[59], which also found negative employment effects for young people from minimum wage increases in countries without youth wage differentials.

Dolton and Bondibene (2011)[60] focused on the effect of minimum wages during economic downturns, using data from 33 OECD countries for the years 1976-2008. This study found that for young people aged 15 -24, the existence of a minimum wage had a negative employment effect during periods of economic downturn. However, they also found the younger sub-group (15 to 19 year olds) did not show any significant negative employment effects during an economic downturn or during any other point in the economic cycle.

Taken together, these studies would seem to indicate that international evidence points to both the vulnerability of youth employment during economic downturns, and justifies the need for age differential rates. However, other recent studies have found bias in the international evidence base, which calls into question the degree of certainty its estimates can be viewed with.

3.1.2 Publication bias towards negative findings

Chletsos et al (2015)[61], used a meta-analysis of 77 international studies from 18 countries to explore whether minimum wages had an effect on employment measures. They found no overall employment effect from minimum wages, although there was some evidence of a negative effect for young people. However, their study also found evidence of publication bias in international literature towards studies that show negative employment effects. They conclude that 'the impact of neo-classical theory in new minimum wage research is still quite strong.' Neo-classical economic theory states that minimum wages should have negative employment effects, and despite the changing consensus since Card and Krueger's (1992[62], 1995[63]) seminal studies, multiple studies have found an ongoing bias towards publishing studies which show negative employment effects.[64] If academic studies that find negative employment effects are more likely to be published, the body of evidence that

[59] Neumark and Wascher (2006) *Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research* NBER Working Paper
[60] Dolton and Bondibene (2011) *An Evaluation Of The International Experience Of Minimum Wages In An Economic Downturn.* Low Pay Commission
[61] Chletsos et al (2015) *The Employment Effect of Minimum Wage Using 77 International Studies Since 1992: A Meta-Analysis* MPRA
[62] Card (1994) Minimum Wages and Employment: a case study of the Fast Food Industry in new Jersey and Pennslyvania American Economic Review, 84 (4): pp. 772-93.
[63] Card and Krueger (1995) *Myth and Measurement: the New Economics of the Minimum Wage* Princeton University Press
[64] Doucouliagos et al (2008) *Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis* School Working Paper

minimum wages have negative effects for young people should be viewed in this context.

The largest body of evidence on the effect on youth employment of the minimum wage outside the UK comes from the USA. A series of studies[65][66][67] have critiqued the methodology of previous US studies which have shown negative youth employment effects (notably the much cited work of Neumark and Wascher[68]). They found the negative youth employment effects found in other studies disappeared (or were statistically insignificant) when state differences and the long-term downward trend in teen employment over time was accounted for. Once this trend was included, they found no evidence that raising minimum wages impacts teen employment at any point in the economic cycle (even during an economic downturn[69]).

3.1.3 Evidence from major European economies with minimum wages

As noted in Croucher et al (2011)[70], other major European market economies have structural features (such as ubiquitous collective bargaining) that make them less directly comparable to the UK than LMEs such as the USA. However, it is worth noting that neighbouring developed economies with different approaches to youth minimum wages have generally found small or insignificant minimum wage effects on youth employment.

3.1.3.1 France

The minimum wage eligibility age in France is 18, with under-17s receiving a wage of 80 per cent and 17 year olds receiving 90 per cent of the adult rate (although this only applies to people with less than 6 months experience in their sector)[71]. Studies on the impact on youth employment of raising the minimum wage have found mixed results. Several studies in the 1990s either found not significant[72] or 'not robust'[73] effects on youth employment (15-24) from increasing the minimum wage, while one study found that there was a negative effect for 15-24 year olds, but not as large a

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65 Allegretto (2011) *Do Minimum Wages Really Reduce Teen Employment? Accounting For Heterogeneity And Selectivity In State Panel Data* Industrial Relations

66 Allegretto et al (2013) *Credible research designs for minimum wage studies* IRLE Working Paper

67 Allegretto (2015) *Credible Research Designs for Minimum Wage Studies: A Response to Neumark, Salas and Wascher*

68

69 Allegretto (2011) *Do Minimum Wages Really Reduce Teen Employment? Accounting For Heterogeneity And Selectivity In State Panel Data* Industrial Relations

70 Croucher et al (2011) *The Impact Of Minimum Wages On The Youth Labour Market An International Literature Review For The Low Pay Commission* LPC

71 Eurwork (2017) Statutory minimum wages in the EU 2016 Eurofound

72 Gellab (1998) *Minimum Wages and Youth Unemployment* ILO Employment and Training Papers.

73 Bazen et al (1991) *The Impact of the Minimum Wage on Earnings and Employment in France* OECD Economic Studies

one as for 25-30 year olds.[74] Other policies in France, such as employment promotion programmes[75] and age eligibility for social security benefits[76] likely contribute to the negative effect for 25-30 year olds in France. These policy differences make it difficult to draw comparisons with the UK.

3.1.3.2 Spain

The minimum wage age of eligibility is 16 in Spain (age differentials for under 18s were abolished in 1998[77]). One study from the 1990s[78] which found a negative employment effect for teenagers (16-19 year olds) was included in the meta-analysis which found international publication bias towards negative findings[79] (although the results of the meta-analysis should not be taken as proof of bias in every study included). More recent studies[80][81] have failed to find significant employment effects on youth employment.

3.1.3.3 Germany

Germany introduced a minimum wage for the first time in 2015. Some sectors have exemptions through 2017[82], otherwise the minimum wage applies to everyone from age 18. While there was concern from some economists[83] that the minimum wage would lead to increased unemployment, this has not occurred[84]. However, no specific analysis of the effect on youth employment appears to have been carried out yet. Research from New Zealand[85] indicates that a clearer picture of youth employment effects emerges several years after the introduction of a minimum wage, so it will be some time before conclusions can be drawn from Germany.

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[74] Abowd, J., Kramarz, F., Lemieux, T., and Margolis, D. (2000) *Minimum Wages and Youth Employment in France and the United States* National Bureau of Economic Research
[75] Ibid.
[76] Neumark and Wascher (2007) *Minimum Wages and Employment* Foundations and Trends in Microeconomics
[77] Kelly et al (2017) *A Study Of Sub-Minimum Wage Rates For Young People* Low Pay Commission Ireland
[78] Dolado et al (1996) *The Economic Impact of Minimum Wages in Europe*. Economic Policy
[79] Chletsos and Giotis (2015) *The Employment Effect Of Minimum Wage Using 77 International Studies Since 1992: A Meta-Analysis* MPRA
[80] Blazquez et al (2009) *Minimum Wage and Youth Employment Rates in Spain: New Evidence for the Period 2000-2008* Economic Analysis Working Paper Series University of Madrid
[81] Cebrian (2010). *Análisis De Los Efectos Del Aumento Del Salario Mínimo Sobre El Empleo De La Economía Española.* Revista de Economia Laboral (cited in Croucher et al 2011)
[82] EuroWork (2017) *Statutory minimum wages in the EU 2016* EuroWork https://www.eurofound.europa.eu/observatories/eurwork/articles/working-conditions-industrial-relations/statutory-minimum-wages-in-the-eu-2016.
[83] Amlinger et al (2016) *The German Minimum Wage: Experiences And Perspectives After One Year* WSI
[84] Ibid.
[85] Hyslop and Stillman (2007) *Youth Minimum Wage Reform and the Labour Market in New Zealand*. Labour Economics

3.1.4 Conclusion

Until the 1990s, there was a consensus, based on neo-classical economic theory, that minimum wages harmed employment. Despite a large body of evidence that minimum wages do not effect employment, multiple studies have found that publication bias towards studies that show a negative employment effect continues. This may be particularly relevant to studies of youth employment, as neo-classical economic theories seem to persist in this area of discourse.

Overall, much of the international evidence is not applicable to the UK context as it is compromised by confounding variables such as differing mechanisms for setting minimum wages. The largest body of evidence outside the UK- from the USA- is conflicting, and may demonstrate bias. The majority of evidence from other major European economies demonstrates small or insignificant effects from minimum wages on youth employment. The international evidence does not provide consistent evidence that age differential minimum wages are necessary to protect young workers labour market outcomes.

4 The employer view against age differentials

The LPC's consistent support for age differentials is based on the assumption that younger workers have less to offer that older workers. Research for business organisations however, presents a different view of young people. They suggest that young workers are a vital addition to workforce and can bring unique benefits. The interviews below offer a positive case for employing young adults at wage rates equal to older adults.

As earlier sections have discussed, many young people are already being paid the NLW or above by employers, even in low-paying sectors. We interviewed four employers for case studies who do not apply age differentials to explore employers' reasons for not using youth differential rates. Two were from the public sector: a spokesperson for Sixth Form College employers and a spokesperson for Local Government employers. The other two were private sector employers: a retailer with nine employees (micro business) and a private social care provider with 20 employees (small business).

For these employers, the business case against using age differentials was based on two main types of benefits. The first set were benefits that young people brought to their workforce, as they did not believe they would be able to recruit young people by offering the statutory youth minimum wages. For the social care provider we spoke to, they felt that the lack of talented young people in the sector posed an existential threat to the future of social care. The second set of benefits arose from not using wage differentials, which employers felt were 'divisive' to the workforce, and therefore bad for morale. These included reduced turnover, improved productivity, and reduced absenteeism.

4.1.1 Strengthening recruitment opportunities of young people

Many employers in the UK face problems with recruitment, skills shortages and retention.[86] Getting more inactive young people into the workforce (both through encouraging part-time employment for those in full-time education and employment for those not in education) could be part of a strategy to alleviate these issues, as they would widen the recruitment pool and provide a talent pipeline for skills. Employees are more likely to remain with employers who give them their initial training in the workforce[87], so recruiting young people could be a strategy to improve retention.

[86] Chartered Institute of Personnel and Development. (2017) *Labour Market Outlook* CIPD.
[87] Hogarth et al (2012) *Employer investment in apprenticeships and workplace learning: the fifth Net Benefits of Training to Employers Study BIS research paper No 67*. Department for Business, Innovation and Skills

Age differentials create barriers to youth recruitment in two ways. Firstly, they re-enforce employer bias against young people by implicitly indicating that young people are universally less productive than older people. Secondly, they contribute to youth disengagement from the labour market (as discussed in previous sections), especially in certain sectors like social care.

Among the employers we interviewed, there was a sense that wage differentials unfairly set an expectation that any young worker would be less productive than older workers, while in reality every worker should be evaluated individually, rather than based on inherent characteristics which they could not control.

> *'I wouldn't consider age as appropriate reason for different pay rates' Spokesperson for Sixth Form Colleges Employers*

> *'Are you rewarding age or are you rewarding performance? Age is something no one can do anything about. You can do something about your performance; you can't do something about your age.' Spokesperson for Local Government Employers*

Wage differentials may be hindering youth recruitment by setting the potential earnings of young people below the level at which they would seek employment (see hiring decisions section for full discussion). The problem is particularly acute in some sectors, such as local public sector jobs, which has an age profile which skews older:

> *'We want a positive mix of ages in our workforce, we don't want to preclude people from working in the sector. We want to be fair and not inhibit our recruitment of people under 25.' Spokesperson for Sixth Form Colleges*

The social care provider we interviewed believed that the recruitment of young people into the sector was vital to its survival. The ageing population of the UK will lead to a massive expansion of this sector over the coming decades, so there is a need to establish a talent pipeline now:

> *'[There shouldn't be age differential rates in social care] for the future of Britain. The Government should be doing everything that they can to get young people into social care. There is a huge national need. Whether you work in private or public social care organisations, you are providing a public service, a community service, to Britain.' Private Social Care Provider*

The social care provider's experience has been that a wage far in excess of the youth rates is necessary to recruit high-calibre young people into a stressful role. The provider has paid the voluntary London Living Wage since the beginning of the business, and has recently found they need to offer an even higher base rate than that in order to recruit. This view was supported by one of the provider's employees, a 19 year old woman we also interviewed. She said she would not have considered taking a job in social care that was paid at £5.60 an hour:

> *'It's a really stressful job, so if you get less (than the London Living Wage) it wouldn't be worth it to you.'*

The provider also felt that paying the statutory minimum to young people restricts an employer's recruitment pool to a smaller area. Young people have identical travel costs to older workers, meaning that the lower wage makes travelling further afield for work less feasible.

4.1.2 The benefits of young people

The employers we interviewed felt that young employees added unique value to their workforce which was worth rewarding. The retail business owner felt that young employees were able to connect the business to a younger customer base, and keep the business 'relevant':

> *'We need to be on the cutting edge of trends. Young people help us be aware of trends. We wouldn't survive in this area [an area of London popular with young professionals] if we became 'old'. They relate well to our young customer base.' Retail business owner*

The retailer mentioned young employee's use of social media as bringing additional value to the business, which has been highlighted as a key benefit by other business research into the recruitment of younger people who are 'digital natives'[88][89][90].

A survey by the CIPD of employers found that almost half (43 per cent) of employers felt that 'fresh ideas and new approaches' were a benefit of younger employees. [91]Other benefits of young employees mentioned by a large proportion of employers were 'willingness to learn' and 'motivation, energy and optimism'[92]. These characteristics were also echoed by the employers we interviewed. For the social care provider, these traits, combined with the ability to shape employees with less work experience by their own organisational culture, was a strong incentive to hire young people:

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[88] Chartered Institute of Personnel and Development (2012) *The Business Case for Employer Investment in Young People: Today's Young People, Tomorrow's Workforce* CIPD.
[89] PWC (2011) *Millennials at Work: Reshaping the Workplace* PWC
[90] Lowe and McLean (2015) *Building the Digital Talent Pipeline: The Business Benefits And A How To Get Involved Guide For Businesses Supporting Young Digital Making Through Employee Volunteering* Nesta.
[91] Chartered Institute of Personnel and Development (2012) *Resourcing and Talent Planning: Survey Report.* CIPD
[92] Ibid.

> *'There's a big benefit of taking people new to sector rather than experienced people in the sector. Our experience interviewing people who have worked in the sector is that experienced workers in the sector have lost the qualities you would think are good in social care. And this comes from working in a sector which has systemic employee abuse for so long. They're generally not happy anymore and they're not kind. They're not customer service oriented.'*

This social care provider was keen to harness the enthusiasm of younger people, which they felt had been lost by people with experience of working in a sector that generally has poor working conditions. To them, young people's lack of experience was a benefit rather than a liability. It meant that they could instill their own organisational culture into their employees, to grow a workforce with excellent customer service skills.

The retail owner also valued the opportunity to shape employee's expectation of the workplace:

> *'Younger people don't have any idea in their head about how things should or shouldn't be [in the workplace]. We have a particular workplace culture- we value roles differently, and have less of a hierarchy. Young people are more open to that.'*

Age differential rates are based on the premise that young workers are a liability to employers. Our interviews with employers, and a large body of evidence from business research, shows the experience of employers does not support this view. Young people can bring unique value to businesses, from fresh ideas and enthusiasm, to the potential to build a workforce that shares organisational values from the ground up. Not only do age differentials fail to reward these benefits, they may actively discourage young people from entering sectors that desperately need them.

4.1.3 Avoiding the problems of 'divisive' wage differentials

The other set of benefits that employers perceived related to avoiding the problems of 'divisive' wage policies. All of the employers we spoke to had not used wage differentials in decades, if at all. Therefore, their views on these benefits were often couched in the view that age differentials *decreased* productivity and retention, rather than their abolition increasing productivity. However, research into the impact of the voluntary living wage provides compelling evidence that wage levels that make employees feel valued have positive impacts on morale which in turn reduces staff turnover[93][94], and improves productivity.[95][96]

4.1.3.1 Age differentials damage morale; rewarding individual performance improves productivity

We spoke to two spokespeople for public sector employers, that despite an extremely difficult funding climate, had remained committed to not introducing age differentials for employees under 25 with the introduction of the NLW. The main reason given by both was that age differentials would be too 'divisive' in the workforce and damage morale, which would have knock on effects for turnover and productivity.

> *'As an organisation with many different roles, why would we differentiate by age at the bottom of the pay scale when we don't higher up? We would never differentiate senior manager pay by age, so why would you do it for a cleaner or a nursery nurse? If the way wages are set is not consistent and transparent, it may lead to conflict in the workplace.' Spokesperson for Sixth Form College Employers*

The employers we spoke to stressed the need to reward individual performance, rather than age. They believed this allowed them to get the best out of all of their employees:

> *'A young person performing well should progress at the same rate as an older person progressing well. Age shouldn't play into it. If you're being paid less because of your age, you may feel undervalued, which may have a negative impact on productivity.' Spokesperson for Local Government Employers*

4.1.3.2 Reducing staff turnover

Reducing staff turnover among young employees was seen as a benefit that brought savings in multiple ways. Especially in low-paying, typically high turnover sectors, reducing turnover can bring massive savings:

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[93] Equality and Human Rights Commission (2014). *The Invisible Workforce: Employment Practices in the Cleaning Sector: Findings Report* EHRC

[94] Wills et al (2012) *The Costs And Benefits Of The London Living Wage.* Queen Mary University and Trust for London.

[95] Equality and Human Rights Commission (2014) *The Invisible Workforce: Employment Practices in the Cleaning Sector: Findings Report.* EHRC.

[96] London Economics (2009) *An Independent Study Of The Business Benefits Of Implementing A Living Wage Policy In London: Final Report For Greater London Authority Economics.* Greater London Authority.

'In some sectors, where managers spend half their time recruiting because turnover is so high, if you can halve turnover that is a real financial saving.' Spokesperson for Local Government Employers

Reducing turnover was also critical to ensuring high standards in customer service, especially in social care:

> *'In some services, [turnover] makes a difference in the quality of service, you're not constantly got a train of people who aren't up to speed on the job. The customers have a continuity of service, particularly in social care type roles. You don't want 50 per cent turnover and a different home care worker turning up every day. Reducing turnover, absenteeism and helping morale will all result in a better service.' Spokesperson for Local Government Employers*

Implementing the voluntary living wage has been shown to reduce staff turnover[97][98]- with a survey of employees saying the increase in wages made them feel more loyal towards their employer. If paying a higher wage improves staff loyalty, it was believed by the employers we interviewed that age differentials have the opposite effect. As the quote from the Spokesperson for Sixth Form Colleges above highlights– if employers are seen to be inconsistent or not transparent in their dealings with employees this will cause resentment and erode trust and loyalty. This creates a vicious cycle for young people in the workforce- they feel undervalued and unfairly treated. If this leads to increased turnover or absenteeism among young employees in some workplaces, this feeds the employers' bias that young people are less reliable than older workers, and do not deserve the same wage rate. Abolishing age differentials at the national level could therefore have a similar effect on young employees that a move to voluntary living wage has- it would send a powerful message to young people that they are valued in the workplace.

4.1.4 Conclusion

Abolishing age differential rates would bring benefits to both employers who currently have young workers and those who seek to recruit them. Higher wages could encourage higher labour market participation by young people. This would potentially mean that more employers would be able to recruit young people into sectors such as social care where they are needed. More employers across sectors would also benefit from the capabilities that young workers can bring- such as digital savvy, enthusiasm and fresh thinking. Paying young people already in employment the

[97] Equality and Human Rights Commission, 2014. *The Invisible Workforce: Employment Practices in the Cleaning Sector: Findings Report.* Equality and Human Rights Commission.

[98] Jensen et al (2013). *The Prevalence And Impact Of The Living Wage In The Uk: A Survey Of Organisations Accredited By the Living Wage Foundation.* Queen Mary, University of London.

same rates as older workers would bring an end to ‘divisive’ wage policies which could bring many benefits from improved morale, such as lower turnover and higher productivity.

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