# **Appendix 2**

# Research summary for the 2018 Report

- 1. Since the Low Pay Commission (LPC) was established in 1997, research has played a vital role in informing us about the impact of the National Minimum Wage (NMW). This continues to be the case. Indeed, the importance of research has been given an added boost with the introduction of the National Living Wage (NLW) a step change in the value of the minimum wage for those aged 25 and over, as well as a stated commitment to increase it significantly above average earnings growth until 2020. In both our commissioned research and that conducted independently, we have sought to use the findings to better understand the impact of the minimum wage in the UK and how it might affect the labour market and economy more generally.
- 2. For this report, and in addressing our terms of reference, we commissioned a comprehensive programme of eight research projects; four concerned with the impact of the minimum wage (NLW and NMW), and four with a focus on the additional items in our remit (the review of the 'Taylor Premium' and the review of youth rates). Four of these projects two on the impact of the minimum wage and two on Taylor-related issues have reported in full and covered the following areas:
  - an investigation of the impact of the NLW on pay, employment and hours;
  - an assessment of the impact of the UK minimum wage on automation and offshoring;
  - an assessment of the use of zero-hours and minimum-hours contracts and the volatility of those hours and its impact on earnings; and
  - an overview of what other countries do to tackle insecurity of work (and earnings).
- **3.** There are four ongoing research projects:
  - an investigation of the impact of the NLW on employment and hours, including on young people;
  - an assessment of the impact of the NLW on earnings, differentials and progression;
  - an investigation of the factors affecting employers' pay-setting for young people; and
  - an assessment of the impact of the minimum wage on young peoples' decisions to enter the labour market.
- 4. These research projects were also supplemented by in-house research investigating the impact of the NLW. The focus this year, unlike the previous two years, has been on more econometric studies. Various qualitative studies have been carried out by other organisations throughout the year, for example, CIPD (2018c) and a range of business organisations (such as the Federation of Small Businesses, Association of Convenience Stores, the National Hairdressers Federation, the National Farmers' Union, the British Retail Consortium and the British Chambers of

Commerce), as well as a survey of trade union members (Usdaw, 2018). The findings from the external research that are relevant to the impact of the NLW are summarised in Chapter 2.

**5.** We start our summary by considering the impact of the minimum wage (the NMW and the NLW) on pay, employment and hours. The role of minimum wages in advancing automation and offshoring is then considered. We conclude this appendix by noting the key findings from the projects informing our work on the 'Taylor Premium' and reviewing preliminary findings from research commissioned to provide insights into our review of the youth rates. The research informing the review of youth rates will be published alongside our youth review in the spring of 2019, while that relevant to the Taylor Review will accompany our report on Taylor that will be published soon.

# Impact of the National Living Wage

- 6. In 2016, we commissioned the National Institute of Economic and Social Research (NIESR) to conduct an econometric analysis of the impact of the NLW on earnings, employment and hours. Recognising the limited data available when the research started, this study was conducted over a longer time period than usual with interim findings delivered for our 2017 Report. Building on the difference-in-difference methods used in previous studies, such as Dickens, Riley and Wilkinson (2015), this research attempted to identify the impact of the NLW. That is, it identified a treated group (those directly affected by the NLW) and a similar 'untreated' or 'control' group that were not affected (by the increases in the NLW). It then compared the outcomes of the treated group with those of the control group between the pre-treatment period (pre-2016) and the post-treatment period (after 2016). Three definitions of the treated group were used: all workers earning between the initial minimum wage and the forthcoming one; only workers earning at or very close to the initial minimum wage; and a 'wage gap' (a measure of the gap between the individual wage and the forthcoming minimum wage).
- 7. In the United States, with varying state and city minimum wages, the control group can be relatively easy to identify. This is harder in the UK as the minimum wage is national. The researchers made use of two different ways to identify a control group. First, as in much of the previous UK literature, they identified workers who prior to each increase in the NLW were already paid just above the new NLW and thus not directly affected by the increase. Second, they made use of the fact that the NLW increases did not apply to those aged 21-24 comparing the outcomes of those aged 25 and over with that of the younger age group.
- 8. The interim report Aitken, Dolton, Ebell and Riley (2017) using the Annual Survey of Hours and Earnings (ASHE) up to 2016 and the quarterly Labour Force Survey (LFS) up to the second quarter of 2017, had found that the introduction of the NLW in April 2016 had led to large increases in real wages for NLW workers, particularly for those that had previously been paid the NMW. These initial results also pointed to some evidence of potentially substantial negative effects on employment from the introduction of the NLW. However, considering the statistically strong placebo effects in some of the specifications, the researchers suggested that the initial results did not provide conclusive evidence of an impact of the introduction of the NLW on employment retention.

- **9.** As part of the research programme, additional quasi-experimental specifications were explored using different baseline specifications. The researchers examined placebo effects in years prior to the introduction of the NLW to see whether there were similar effects of an imaginary NLW introduced in previous years. The final report Aitken, Dolton and Riley (2018) concluded that these were supportive of the analysis (in that there were no significant placebo effects) using some specifications based on the standard identification methodology. However, the placebo tests were generally less supportive of the age-based approach to identification.
- 10. The researchers also highlighted concerns about using data from ASHE to identify the effects of the NLW, as its introduction in April 2016 occurred at roughly the same time as the annual survey was conducted, thereby potentially covering different minimum wage years depending on the length of the pay reference period. To address this, they considered the quarterly LFS to isolate the effects of the NLW from the NMW. But, as in much previous work, analysis using the LFS did not yield significant effects of increases in the wage floor on wage growth. Using the ASHE, the researchers also looked in more detail at particular industries, occupations and regions. The researchers again compared the outcomes of the treated group with those of the control group.
- **11.** Taking these caveats into account, Aitken, Dolton and Riley (2018) found that using the ASHE real hourly wages for the treated group increased by around 4-7 percentage points more than they otherwise would have done, at the time of the NLW's introduction. In addition, the NLW uprating in 2017 added a further 0.8-1.3 percentage points. These effects were evident across all regions, and all low-paying industries and occupations.
- 12. However, considering all employees, they found no conclusive evidence of any significant impact on employment retention or hours when using the approach of Dickens, Riley and Wilkinson (2015). They looked for effects separately for males working part and full-time and for females working part and full-time. Using ASHE, they found little evidence of negative effects, except for women working part-time. For this group, employment retention fell by 1.5-2.6 percentage points. This was similar to the findings of Dickens, Riley and Wilkinson (2015) on the impacts of the introduction of the NMW. Analysing the LFS, no such effects were found for women working part-time, but the LFS also did not identify significant wage effects. The method comparing those aged 25-26 with those aged 22-23 found no significant effects on employment retention. The results suggested that wages increased for both groups at the time of the introduction of the NLW, with little differential change in employment retention between these two age groups.
- 13. Using the ASHE data, and considering low-paying occupations and industries, the researchers generally found no evidence of any significant employment retention effects except in retail. There was some evidence of a negative effect on employment retention for women working part-time in the lowest-paying retail occupations, and in the retail industry. But they found no significant negative effects on hours for women working part-time in retail. Looking at the regions and countries of Great Britain, negative employment retention effects for women working part-time were only found in the North East. There was also some evidence of a reduction in hours among low-paid women working part-time in London.

- 14. Aitken, Dolton and Riley (2018) concluded that the NLW had been a significant intervention in the labour market, raising the wages of the lowest paid, but that it had so far had little adverse impact on overall employment retention. However, consistent with previous evidence such as Dickens, Riley and Wilkinson (2015), they also found some evidence of small adverse effects on the employment opportunities of women working part-time. This study also found negative effects on employment retention in the retail sector. These negative findings were dependent on model specification and the data source used. It should also be noted that, apart from the exceptions noted, although their point estimates consistently cannot reject the null hypothesis that the NLW has had no impact, the confidence intervals are wide, meaning that large negative or positive effects cannot be ruled out.
- **15.** In newly commissioned research that is due to report in full next autumn, Capuano, Cockett and Gray (2018) builds on and complements the work conducted by Aitken, Dolton and Riley (2018) in looking at the impact of the NLW on employment and hours, including on young people. They will look at how effects might vary for men and women working full-time and part-time, as well as assessing how the NLW has affected those aged 16-17, 18-20 and 21-24.
- 16. Their analysis uses ASHE and the LFS but, in contrast to that previous study (Aitken, Dolton and Riley, 2018), this research uses the five-quarter Longitudinal Labour Force Survey (LLFS), instead of the quarterly LFS. They identify three methods to investigate the impact. First, they define the treatment group as those who earned less than the forthcoming minimum wage. They then compare outcomes on employment retention and hours worked with a comparison group (who earned more than 10 per cent above the forthcoming minimum wage, or an alternative group earning 10-20 per cent above the forthcoming minimum wage). They compare outcomes from 2011-15 with those after 2016.
- 17. Second, they use age (those aged under 25 and those aged 25 and over) and wage (those aged 25 and over earning less than the forthcoming minimum and those earning more) comparison groups. They argue that the difference between the two relative effects better identifies the true impact of the introduction of the NLW.
- **18.** Third, to address methodological issues raised in Brewer, Crossley and Zilio (2015) and refined in Brewer, Crossley and Joyce (2018), they will report confidence intervals for their estimates, focus on economic rather than statistical significance and report minimum detectable effects (which gives a better idea of how large effects would need to be).
- 19. In very preliminary analysis of the first method (the simple difference-in-difference) using the longitudinal LFS, they found that, although the coefficients on employment retention were negative, they were largely statistically insignificant and, in economic terms, small. The effects on hours were also negative but were insignificant in statistical and economic terms.
- 20. The third project that assesses the impact of the minimum wage is an investigation of its effects on earnings, pay differentials and wage progression. As above, it is a longer-term project that will conclude in autumn 2019 and consists of two parts. Avram and Harkness (2018) provide new evidence on progression out of minimum wage jobs using data from a longitudinal survey of UK households, Understanding Society (the UK Longitudinal Household Survey, which replaced the British Household Panel Study), that covers 2009-2016. They focus on those aged 25 and over. Over the next year, they will extend this to cover 2017. The second part of the project will use ASHE

from 2008-2017 to improve the existing evidence on the impact of the UK minimum wage on the distribution of hourly and weekly earnings.

- 21. The first element of the project, and the focus of the report, examines how individual, job and employer characteristics affect transitions out of minimum wage jobs, as well as any evidence that the level of the minimum wage (NMW/NLW) has had an impact on the probability of transitioning. Theory is ambiguous on how minimum wage increases affect wage progression. On the one hand, increases in the minimum wage might lead to bunching and squeezed differentials with fewer incentives for progression. On the other, it may lead to increased training and work re-organisation, making progression easier.
- 22. Previous research had shown the introduction of the NMW had significantly increased pay at the bottom without affecting employment. Compliance was found to be generally high and spillovers limited. However, there had been increased bunching at the NMW/NLW with an apparent squeeze on differentials. Previous studies in the UK had focused on the period prior to 2010. Whereas the existing literature convincingly shows that the minimum wage has boosted wage growth at the bottom of the distribution, there is limited evidence on its impact on wage progression. Cai, Mavromaras and Sloane (2018) and Jones, Jones, Latreille, Murphy and Sloane (2013) using UK data found no effects on low wage dynamics, while Rinz and Voorheis (2018) using US data found that minimum wages had increased earnings mobility at the bottom of the wage distribution. The focus of this research so far had been on progression out of minimum wage jobs and the role of the minimum wage level as well as that of individual and job characteristics, using Understanding Society data covering the period 2009-2016 a period when the minimum wage increased considerably relative to median pay and coverage increased from around 4 per cent to 7 per cent of workers.
- 23. Using seven waves of Understanding Society data from 2009-2016 and focussing on those aged 25 and over, they study transitions between four pay states over time and across low and high wage areas (defined using travel-to-work area geographies). Using a competing risks discrete time model, they estimate the probability of leaving a minimum wage job to a low-pay job, a high-pay job or non-employment. They found that mobility out of minimum wage jobs was quite high with around a half leaving for higher paid jobs each year, but most of these (around four-fifths) were to higher-paying low-wage jobs rather than to high-paying jobs. Transitions over three years were slightly higher. These findings are consistent with the earlier studies Bryan and Taylor (2006) and Jones, Jones, Murphy and Sloane (2004) that had looked at the introduction of the NMW.
- 24. Consistent with another previous study Jones, Jones, Letreille, Murphy and Sloane (2013) they also find considerable variation across geographies in the transitions out of minimum wage jobs. Investigating the impact of the level of the minimum wage on transition probabilities, they compare low and high wage areas over time. If the minimum wage does affect transition probabilities, it is expected that as the bite increases low-wage areas would be more affected than high-wage areas. They found that transition probabilities from minimum wage jobs to higher-paying low-wage jobs were similar across areas with different wage levels, whereas the transition probability to a high-paid job (paying more than two-thirds of median hourly earnings) increased as the area wage level increases. They note, however, that this result does not take account of differences in workforce characteristics across areas with different wage levels.

- 25. They also use a competing risks discrete time model to investigate the impact of changes in the minimum wage on the probabilities of moving out of a minimum wage job, by comparing how transitions in high and low wage areas change as the minimum wage bite increases. It is expected that low wage areas would be more affected than high wage areas. They find no evidence that transition probabilities in low wage areas are more affected by changes in the minimum wage bite than those in high wage areas. The estimated differences are both statistically insignificant and close to zero in substantive terms.
- **26.** They conclude that there is no evidence, in the period studied, that increases in the NMW or NLW have had a negative or positive effect on wage progression. These results are in line with two other studies that have examined low pay dynamics Cai, Mavromaras and Sloane (2018) and Jones, Jones, Latreille, Murphy and Sloane (2013). Using different data sources, they also found no effects of minimum wages on transition probabilities.
- 27. However, Avram and Harkness (2018) did find that individual and job characteristics were important determinants of transitions out of minimum wage jobs. The transition to higher pay was associated with higher qualifications; working in large firms or the public sector; and working on temporary contracts. Negative influences were from being female; working part-time; working in hospitality (accommodation and food services) or in the manufacture of food, beverages or textiles; previous unemployment; and duration in a minimum wage job. Thus, there was some evidence consistent with scarring from minimum wage persistence (although the data do not allow the researchers to control for unobserved heterogeneity). This finding is also consistent with the previous literature on the minimum wage Bryan and Taylor (2006) and low pay dynamics more generally Stewart (2007) and Cappellari and Jenkins (2008). Avram and Harkness (2018) also found similar individual and job characteristics associated with transitions to both higher-paying low-paid employment and high-paid employment.
- 28. The second element of the research will build on previous work by Stewart (2002) and Butcher, Dickens and Manning (2012). They will use difference-in-difference techniques to examine the impact of minimum wage upratings on earnings distributions. They will also look at changes in earnings distributions by making use of the geographic variation in wages, comparing the impacts in low-wage areas (those most affected by the NMW and NLW) with those in higher-wage (less affected) areas. They will report these findings in time for our 2019 Report.
- **29.** In summary, Avram and Harkness (2018) concluded that there was substantial mobility out of minimum wage jobs but that most transitions were short-range (and workers continued to be low paid). There also appears to be no impact of minimum wage increases on wage progression probabilities.
- **30.** To complement our commissioned research, we have also conducted some in-house analysis. Dickens and Lind (2018) assessed the impact of the recent introduction and subsequent increases of the NLW on a range of labour market outcomes. In contrast to the other two studies investigating the impact of the NLW on employment and hours, that used individual data to compare individuals affected by the minimum wage with those not affected, this study made use of the geographic variation in wages. Unlike the other two studies, this approach should capture all employment change (entry and exit) and not just employment retention (exit).

- 31. They constructed quarterly data from the first quarter of 2013 to the first quarter of 2018 for 218 travel to work areas (TTWAs) in Great Britain.<sup>5</sup> They derived measures of employment, unemployment, inactivity, youth employment, self-employment and hours from the LFS, and earnings measures from ASHE. They defined low and high wage areas in two ways by bite (the NMW/NLW as a proportion of median earnings) and by coverage (the proportion paid below £7.20) in spring 2015. They then compared outcomes across low and high wage areas as the NLW was introduced and then raised to £7.50 an hour. They used a difference-in-difference approach to conduct these comparisons.
- 32. They found strong and significant wage effects, with the largest increases at the bottom of the pay distribution. These wage effects were stronger for women than men. Unsurprisingly, the effect in 2017 was smaller than in 2016. In contrast, the effects on employment appear stronger in 2017 than in 2016. They found a statistically significant but modest negative effect on employment in 2017 but no effect in 2016. That negative finding on employment was not reflected by an increase in unemployment but in inactivity and there was no significant effect found on hours worked. Although they noted that the data was volatile (due to smaller sample sizes), they also found no effect on the employment of young people. They did find some positive but not robust effects on self-employment in both 2016 and 2017.
- 33. They then tested for robustness of the common trends assumption and in the choice of area. Using 418 local authorities, they again found some evidence of negative effects in 2017, but not in their preferred specification. They concluded that there were large relative increases in the minimum wage in 2016 and 2017 and that they had found some evidence of some job loss in 2017, particularly for women.
- 34. The authors acknowledge that further work was needed to address some reservations about the methodology used and the robustness of the findings. These included: using the bite as a measure of wage variation (when it is driven by changes in the median); a larger employment impact in 2017 than in 2016; the sensitivity of the results to weighting; the potential role of Universal Credit; and the large elasticities implied by some of the estimates.

# Impact on automation and offshoring

- 35. The fourth research project that we commissioned for our 2018 Report looked at whether increases in the minimum wage changed the employment probabilities of low-skilled workers who are reliant on automatable jobs or jobs that could reasonably be offshored. This was a longer-term project that had reported interim findings for our 2017 Report. Building on recent US studies and taking account of the definitions used previously in the US, but utilising the UK Skills and Employment Survey series, Lordan (2017) distinguished occupations that were automatable (and those that were not) and those that were offshorable (and those that were not). But first, we give a brief summary of the findings from those US studies.
- **36.** Lordan and Neumark (2017) investigated the impact of minimum wages on automatable jobs those that employers find easier to substitute with machines in the US over the period 1980-2015. Using pooled monthly samples from the Current Population Survey (CPS) and matching

<sup>5</sup> Disaggregated data at that geographic level is not available for Northern Ireland.

them to monthly state-level data on minimum wages, they found that minimum wage increases significantly decreased the share of automatable employment held by low-skilled workers and increased the likelihood of unemployment for those low-skilled workers in automatable jobs. The effects were larger for older, low-skilled workers in manufacturing.

- 37. In complementary work, Aaronson and Phelan (2017) again using the CPS also analysed the impact of minimum wage hikes on the susceptibility of low-wage employment to technological substitution. They found evidence that minimum wage increases led to reductions in employment of cognitively routine tasks but found no evidence of reductions in manually-routine or non-routine low-wage occupations. The effects appeared small due to concurrent growth in other low-wage jobs, but workers previously employed in cognitively routine jobs did experience relative wage losses.
- **38.** Using quarterly Labour Force Survey data from 1997-2017, Lordan (2017) calculated employment shares for automatable and offshorable jobs. She then used individual-level data to estimate whether increases in the minimum wage increased the likelihood of those in automatable or offshorable employment losing their jobs in the next period. She also considered the impact on hours.
- **39.** She found that minimum wage increases had been followed by falls in the employment shares of automatable or offshorable jobs but that, in aggregate, these effects were modest. They were larger for manufacturing, particularly for automation, but remained modest. Larger effects were also found for low-skilled males, older workers and black low-skilled workers.
- **40.** In her analysis at the individual level she found that, following a minimum wage increase, low-skilled workers in automatable or offshorable employment were less likely to keep their jobs in the next period than those in non-automatable or non-offshorable jobs. They also worked fewer hours. The effects were again modest, but they were greater for manufacturing, males and older workers.
- **41.** Following a minimum wage increase, those in automatable or offshorable employment were also more likely to switch jobs to non-automatable or non-offshorable jobs in the next period. On aggregate, these effects were again small. Significant but modest effects were also found when using shares of hours in automatable or offshorable employment. These were again larger for males, older workers and Black workers.
- **42.** Lordan (2018) updates this research by drawing on an alternative dataset, ASHE, that was not available to her when conducting the previous analysis. The earnings data in ASHE is considered as more reliable and precise than that derived in the quarterly LFS. The treatment and control groups should thus be more reliably defined. However, data on ethnicity is not recorded in ASHE, so the new research focused on age and gender.
- **43.** Overall, she found that the analysis investigating the impact of the minimum wage on the shares of automatable employment were consistent with the findings using the quarterly LFS. That is, that there was some evidence of significant negative employment effects. Indeed, she found significant effects in many more industries, although the most substantive effects were still in manufacturing. In contrast, the analysis of minimum wage effects on offshorable jobs found the effects were insignificant and centred around zero.

- **44.** In assessing the impact by age and gender, Lordan (2018) also found that the oldest and youngest workers were the most affected by minimum wage increases on the shares of automatable employment; and that women were substantially more affected than men. However, as with the aggregate analysis, she found no significant impacts of the minimum wage on offshorable jobs across all the demographics investigated.
- **45.** She concluded her econometric analysis by noting that the effects she had found in the UK so far were smaller than those found in the US.
- 46. Lordan (2018) also speculated about the future of automatable and offshorable jobs. She thought that the classification of offshorable jobs was unlikely to change in the short to medium term but considered that the definition of automatable jobs was evolving. She identified three classifications of low-skilled jobs that were useful in thinking about the future. First, those where the jobs were unlikely to be fully automatable as they required some human interaction, such as childcare and hairdressing. Second, those where human interactions are not always required but where they may be preferred, such as waiting and bar staff. These jobs are to some extent automatable and it is likely that there will be some polarisation in these occupations between robots and humans. Third, there are those jobs where customers do not care whether the service is delivered by a human or a robot, and where innovation has been advancing. These are jobs that have a high risk of disappearing completely and might include drivers, delivery jobs and security. She summarised this section by noting that jobs would be lost to automation but that new jobs would be created that require different skills. In the past, the jobs lost had been more than replaced by new jobs. However, that did not mean that would happen in the future and we needed to be prepared.
- 47. Cribb, Joyce and Norris Keiller (2018), in a research report for the Institute for Fiscal Studies, also looked at the impact of minimum wages on automation. They argued that the small or negligible employment effects of the minimum wage found to date may not apply as the National Living Wage increases to a rate of over £8.50 an hour in 2020. In 2015, around 4 per cent of workers aged 25 and over were covered and this was set to rise to 12 per cent by 2020. As well as covering many more jobs in 2020, the minimum wage will likely cover very different jobs. They noted that many of the jobs covered by the minimum wage in 2015 were in personal service occupations, such as workers in hospitality, and these jobs were not readily doable by machines.
- **48.** However, they found that jobs set to be covered by the NLW in 2020 were more than twice as likely to be in the top decile of the most 'routine occupations', such as retail cashiers and receptionists, as those directly affected by the minimum wage in 2015. They found that ease of automation increases with wages up to around the 25th percentile a quarter of the way along the earnings distribution but then falls back as wages rise further. They concluded that it was unclear what the net employment effects would be. As technology replaces some jobs, new jobs can be created that are complementary to that new technology. Minimum wage workers may just end up doing different jobs rather than losing employment altogether.

# Additional research projects for the 2018 Report and beyond

**49.** The four other research projects commissioned this year related to the two reviews that we have been conducting – the review of the Taylor recommendation that hours worked beyond those contracted should be subject to a minimum wage premium, and the review of youth rates. These will be covered in more detail when the respective reviews are published – the one on the Taylor Premium and one-sided flexibility in the autumn and the other on the youth rates in spring 2019.

# Additional research: Informing our review of the Taylor recommendation on a premium for non-guaranteed hours

- **50.** The next two research projects were devoted to research to help the Commission in its deliberations on the recommendation from the Taylor Review of Modern Work Practices that the Low Pay Commission consider a premium for hours worked above those contracted.
- **51.** The first of these projects Incomes Data Research (2018) gathered evidence from employers on the extent to which low-paid workers work beyond their contracted hours, and the degree of volatility in those hours from week to week. The information was gathered from HR managers and other HR professionals using an electronic survey of around 40 questions, supplemented by semi-structured telephone interviews with a sub-sample of respondents. Respondents ranged from micro firms to large retailers covering many low-paying sectors, including many household names. It focused on firms that use some form of minimum-hours contract (MHC) or zero-hours contract (ZHC) for workers paid less than £10 an hour.
- **52.** Among respondents, ZHCs appeared to be more prevalent (widespread across companies) than guaranteed MHCs but tended to cover fewer staff. They also found that staff were generally not given a choice over the type of contract. The number of hours guaranteed under an MHC varied with individual circumstances with four and six-hour contracts common. Responses suggested that typical hours per week (around twelve) were similar for staff on ZHCs and MHCs with a minimum of four hours for MHCs and only 90 minutes for ZHCs. Staff were also working virtually full-time (up to 41.4 hours a week for MHCs and 38.4 hours a week for ZHCs) on both contract types. Around a fifth of respondents reported that these contracts were reserved for certain jobs such as sales assistants, housekeepers and cleaners.
- **53.** Respondents reported using these contracts to mainly manage demand and cope with temporary and seasonal increases in demand. Around two-thirds of respondents did not provide a minimum shift length. Those that did generally used 4-5 hours. Few firms used app-based software for shift scheduling with most respondents using phone calls, texts or a rota published on notice boards. The most common notice period for shifts was 2-4 weeks, but there was a high degree of variation around this. Hardly any respondents provided compensation for cancelled shifts. Employers provided ZHC staff with more flexibility to turn down or request an alternative shift than those on MHCs.

- **54.** Incomes Data Research (2018) concluded that the research had identified a wide range of scenarios for the use of variable hours contracts. This made it difficult to develop policies that would tackle some of the worse examples of poor employer behaviour without having unintended consequences on other practices. MHCs seemed to have more one-sided flexibility and more volatile hours than ZHCs. Further, variations in working hours appeared to be more seasonal than weekly, although employers did attempt to smooth earnings in various ways.
- **55.** The other Taylor Review-related commissioned research project D'Arcy and Rahman (2018) took on a more international perspective and investigated how other countries addressed insecurity of income for low-paid workers. Debates about atypical work have emerged amid a restructuring of typical working relationships across industrialised countries. Atypical work covers a wide range of employment relationships and involves different terminology across countries. While part-time work, ZHCs, temporary contracts and self-employment are all terms used to describe atypical work in the UK, elsewhere other terms can be used to describe very similar working relationships: on-call work, just-in-time scheduling, if-and-when contracts.
- **56.** International comparisons were not straightforward as the context varied by country, including: institutional frameworks; the industrial composition of the economy; the broader strength of the labour market; the extent of collective bargaining; labour market regulation; and enforcement.
- 57. In many countries, governments had introduced policy changes to enable both the increased flexibility required by firms and the security required by workers. This generally required a move away from the framework provided by the 'typical working relationship'. These can be broadly grouped into four types of responses: boosting legal protection for insecure workers; increasing the cost of insecure work; ensuring the social safety net catches such workers; or allowing market forces and tightening labour markets to resolve the issues.
- **58.** First, the most common approach was boosting legal protection. This included bans on ZHCs with some exceptions (as in France); or imposing a minimum number of hours at the minimum wage which must be paid (as in the Netherlands). Others had adopted restrictions on overtime and non-guaranteed hours. These included: needing to register and apply at the employment department (as in Luxembourg); imposing a maximum number of hours of overtime per year (as in Spain); restricting coverage to certain age groups (as in Italy) or certain sectors (as in Hungary); limiting the proportion of staff that can be employed on ZHCs (as in Norway); enabling transition from ZHCs to guaranteed hours after a period of time (as in Italy); imposing minimum shift notification periods (as in Germany); allowing workers the freedom to refuse hours without retribution (such as in New Zealand and New Hampshire, USA); imposing a minimum number of shifts (as in San Francisco, USA) or a minimum number of median hours offered (as in Seattle, USA); giving the right to request extra shifts, hours and timings (as in Emeryville, California, USA); or ensuring that additional hours must be offered to existing staff before new employees can be hired (as in San Jose, USA).
- **59.** A second approach taken was to try and increase the cost of insecure work. Examples included: casual loading premia (which are 25 per cent in Australia); enforcing an overtime premium linked to base wage (as in Austria) or the minimum wage (as in Newfoundland and Labrador, Canada, where there is a percentage premium on the minimum wage). The latter was the closest example to the Taylor Premium (a higher minimum wage for non-guaranteed hours), that we had found anywhere in the world. Other examples included imposing 'call-in' pay for unscheduled or cancelled

shifts (as in New York); and raising non-wage costs (such as varying social security contributions in Slovenia or introducing a flat rate for mini-jobs in Germany)

- **60.** The third approach identified was ensuring the social safety net catches such workers. These included: in-work benefits, such as tax credits, to offset the risk to workers of not working enough hours; a strong safety net to make insecure work less appealing; amendments to the treatment of the self-employed and others to broaden coverage within social security systems to cover insecure work; special protections for non-standard employment (some countries such as Belgium and Sweden have introduced such measures); and enabling collective bargaining agreements to enhance legal protections where they did not currently exist in law (as in Belgium).
- **61.** The fourth and final approach had been to not intervene and let the tightening labour market resolve any issues. However, that was not guaranteed to produce the desired outcomes.
- **62.** There was limited evidence so far on the effectiveness of any of the four approaches but there were some lessons on complexity and enforcement.
- different environments, legal structures and collective agreements that existed among countries and the consequent difficulties in applying insights to the UK context. Insecure work appeared to be a growing issue across many countries, with legal restrictions the most common approach adopted to tackle insecurity of work (and earnings). No other country had an existing premium that replicates Matthew Taylor's proposal exactly. The premium in Newfoundland and Labrador, Canada was probably the closest existing equivalent.
- **64.** These two Taylor Review-related research reports will be published this autumn, along with our response to the issues of one-sided flexibility raised in the Taylor Review.

# Review of the youth rates

- **65.** The final two projects are not due to report until the new year. The first is exploring how employers set pay for young people, while the second is looking at the labour market choices of young people.
- **66.** Hudson-Sharp, Manzoni, Runge and Rolfe (2018) are undertaking research that attempts to improve our understanding of how employers set pay for young people. It looks to: establish whether employers use youth rates and the reasons behind that decision; investigate whether practices have changed in light of the recent introduction of the NLW and the 21-24 Year Old Rate; and understand how the wider policy framework affecting young people's engagement with the labour market has changed over time, and whether that has affected employers' pay-setting decisions.
- 67. The research addresses these issues in two parts. First, conducting a review of the policy framework affecting employer behaviour in setting pay for young people to establish the context. Second, using qualitative research with employers, employer organisations and trade unions, they investigate how employers set pay for young people in practice.

- 68. The first stage of the project assesses how the landscape for employment of young people has changed since the NMW framework was first introduced in 1999. There have been changes in education and training policy, including the raising of the participation age in England from 16 to 18. There have also been changes to: financial support for young people (including student loans and fees); financial support for training and apprenticeships; benefit entitlement; tax, national insurance and pension contributions; legal frameworks linked with age restrictions; employment practices; and the labour market (for example, the increased use of migrants and older workers).
- **69.** Official quantitative data sets, such as LFS and ASHE, do not provide sufficient information to understand employer responses to the complex economic and political landscape when setting pay for young people. However, they do provide some evidence that there have been some spillover effects from the NLW to younger age groups. Little is known about how employers set pay for young people. This research attempts to address that by conducting qualitative research.
- 70. To understand how employers set pay rates for young people, the study conducts semi-structured interviews with the head of HR or Chief Executive Officer of twelve employers of young people in four low-paying sectors (retail, hospitality, cleaning and childcare) across Great Britain. The employers interviewed represent a range of locations, sizes and practices with regards to the age-related rates of the NMW. The interviews cover the importance of young workers to the sector, the jobs they do, their work patterns, factors covering local supply, and how pay rates are set. They also include the use of age rates (and how that may have changed since 2016), the variation across regions, the costs of employing young people, and productivity differences. These interviews are supplemented with interviews with some employer bodies. The findings will be reported in time to inform our review of the youth rates.
- **71.** The second project informing the review of youth rates Cerqua, Di Pietro and Urwin (2018) investigates whether the minimum wage has affected the labour market choices of young people aged 16-24. Using a novel administrative data set (Longitudinal Education Outcomes, LEO), it seeks to model the impact of local labour market conditions on the outcomes of young people and then assess whether the NMW or NLW has affected those outcomes.
- 72. The LEO data links administrative data sets on individuals, including data from the National Pupil Database (NPD), the Individual Learner Record (ILR), Higher Education Statistics Agency (HESA), HMRC employment data (P14 and P45), and DWP Benefits (mainly the National Benefit Database). The study follows young people from Key Stage 4 (at age 15) onwards. The researchers have access to cohorts from 2001/02 through to 2008/09. Although the data covers the whole population, it does have some drawbacks: incomplete work histories (missing data if self-employed, inactive or overseas); no information on hours; and no family background characteristics. However, the data available is sufficient for the needs of this project.
- 73. The first part of the research builds on previously commissioned research by Crawford, Greaves, Jin, Swaffield and Vignoles (2011), which had used the Longitudinal Survey of Young People in England, the LFS and ASHE, and that by De Coulon, Meschi, Swaffield, Vignoles and Wadsworth (2010), which had also used LSYPE and ASHE, as well as the National Pupil Database. It uses a linear probability model with standard errors clustered at the school level to look at the impact of the local labour market on the outcomes of young people, separately for those aged 17, 18 and 19.

- **74.** The second part of the research then assesses whether the minimum wage affects those labour market choices. Building on the methodology used by Dickens, Riley and Wilkinson (2010 and 2014) to analyse the impact of the change in age thresholds, they will use a regression discontinuity design (RDD) to investigate the impact of the introduction of the NLW in April 2016. Its findings will also inform our review of youth rates.
- **75.** Both of the research projects related to the youth review will be finalised prior to the publication of our review of youth rates. It is anticipated that we will report to the Government in spring 2019 on these issues.

# **Summary and Future Research**

- 76. In summary, the findings of the initial econometric research on the NLW can be summarised as that the NLW had led to a large increase in wages for the lowest paid, but had not led to any significant negative effects on employment or hours. However, there were some findings of negative employment effects for some groups, sectors and regions under certain specifications. But these negative findings were not robust and should be seen against a backdrop of record employment levels and rates. We will continue to closely monitor these effects and assess their robustness.
- 77. Instead of reducing jobs or changing hours, firms appear to have coped with the introduction of the NLW and its initial upratings by: a limited squeezing of differentials; a reduction in non-wage benefits; increasing prices; and accepting a squeeze in profits. These findings are similar to those found when the NMW was introduced. Future research will continue to monitor and assess the impacts of all the minimum wage rates on a variety of economic outcomes.
- **78.** We will commission further research for our 2019 Report to complement the ongoing research that we have already in progress.
  - The impact of the minimum wage on employment and hours, including on young workers – Stella Capuano, James Cockett, and Helen Gray (Institute for Employment Studies).
  - The NMW/NLW and progression out of minimum wage jobs in the UK Silvia Avram and Susan Harkness (Institute for Social and Economic Research, University of Essex)
  - Understanding employers' use of the National Minimum Wage youth rates –Nathan Hudson-Sharp, Chiara Manzoni, Heather Rolfe and Johnny Runge (National Institute of Economic and Social Research).
  - Does the minimum wage impact labour market choices of young people aged 16 to 24? – Augusto Cerqua, Giorgio Di Pietro and Peter Urwin (University of Westminster).

Table A2.1: Low Pay Commission Research Projects for the 2018 Report

Project title and researchers	Aims and methodology	Key Findings
Impact of the introduction of the National Living Wage on employment, hours and wages Andrew Aitken, Peter Dolton, and Rebecca Riley (National Institute of Economic and Social Research)	This project was an extended 18-month study investigating the impact of the National Living Wage on wages, employment and hours. It investigated the impact of the introduction of the National Living Wage in April 2016 and the subsequent uprating in April 2017.  This study adopted a difference-in-difference econometric approach to assess the impact of the NLW on wages, employment retention and hours. It used:  • the standard wage-based differences-in-differences approach, as previously used by Stewart (2004a, 2004b), Dickens and Draca (2005), Dickens, Riley and Wilkinson (2012), and Bryan, Salvatori and Taylor (2013). They compared a treated group (NLW-affected workers) with a control group (of workers aged 25 and over unaffected by the NLW); and  • alternative difference-in-difference approaches, which exploited the fact that workers aged 21-24 were not entitled to the NLW.  This approach and the way that the results are presented (with confidence intervals and minimum detectable effects) were intended to address some of the criticisms of the difference-in-difference methodology outlined in Brewer, Crossley and Zilio (2015).  The study used the Annual Survey of Hours and Earnings (ASHE), although the timing of ASHE may affect the identification of minimum wage effects in April 2016 and, to a lesser extent in April 2017.  The analysis was conducted separately for males and females, working part-time and full-time. It also covered low-paying occupations and industries, as well as regions and countries across Great Britain.	<ul> <li>The introduction of the NLW was a significant intervention, raising the hourly pay of minimum wage workers aged 25 and over by over 10 per cent in the year to April 2016.</li> <li>There was clear evidence of faster real wage growth for NLW workers compared with the control groups. The NLW raised real pay by an additional 4.0-7.0 percentage points in 2016 and by an additional 0.8-1.3 percentage points in 2017.</li> <li>These effects were evident in all low-paying industries and occupations and in all regions and countries of Great Britain.</li> <li>There was no conclusive evidence of an impact of the introduction of the NLW and its subsequent uprating in 2017 on overall employment retention or hours.</li> <li>However, consistent with previous research, they found evidence in some of their specifications of adverse employment retention effects on women working parttime.</li> <li>There was some evidence of a negative effect on employment retention for some of the lowest-paid workers in the retail industry.</li> <li>When considering hours using ASHE, they found no evidence of reductions in hours for treated workers following the introduction of the NLW or the uprating in 2017.</li> <li>The placebo tests gave some reassurance that the real quasi-experimental results were not spurious.</li> </ul>

### Aims and methodology

#### **Key Findings**

Impact of the minimum wage on employment and hours: interim report Stella Capuano,

**Helen Gray** (Institute for Employment Studies)

James Cockett, and

This project is an extended 18-month study investigating the impact of the NMW and the National Living Wage on employment and hours, including on young people. It will investigate the impact of the introduction of the National Living Wage in April 2016 and the subsequent upratings in April 2017 and April 2018. It will build on and complement the study by Aitken, Dolton and Riley (2018).

It will address the following areas:

- The impact of the introduction of the NLW and subsequent upratings on employment and hours for those aged 25 and over.
- The impact of the introduction of the NLW and subsequent upratings on employment and hours for those aged under 25.
- Whether the impact has differed by working hours (part-time and full-time) and age (16-17, 18-20 and 21-24).
- Whether the impact has varied by type of worker and employer.

They propose using two methodological approaches:

- The standard difference-in-difference approach comparing outcomes one year apart of a treatment group (those affected by the policy) with a comparison group (similar workers not affected) – falling before and after the introduction or uprating of the NMW/NLW.
- A difference-in-difference-in-differences model that also exploits two comparison groups: an age comparison group (those aged under 25 and ineligible for the NLW, but earning less than the forthcoming NLW); and a wage comparison group (those aged 25 and over earning slightly more than the forthcoming NLW).

They will also attempt to address several methodological issues, including reporting confidence intervals and minimum detectable effects, and placing greater emphasis on the economic significance of the results

The study will use the five-quarter longitudinal Labour Force Survey and the Annual Survey of Hours and Earnings (ASHE). To avoid the effects of the financial crisis, the study will focus on the years from 2011 onwards.

This interim report presents early findings from the analysis using the LFS.

Preliminary findings were:

- The only two years when the NMW/NLW upratings had any discernible effect on employment retention were 2014 and 2016.
- The uprating of the NMW in 2014 was associated with an increase in employment retention. This positive effect was found across all specifications.
- The introduction of the NLW in 2016 was associated with a reduction in employment retention. However, that finding was not robust.
- The researchers suggest that this finding may be as a result of small sample sizes rather than reductions in employment retention for those directly affected.
- The levels of statistical significance are generally low.
- The results suggest that the upratings of the NMW and the introduction of the NLW have had little economic impact.
- The small sizes of the estimated coefficients mean that even if the findings were statistically significant, the workers directly affected would still have a high probability of being employed after a minimum wage increase.
- None of the upratings of the NMW or the introduction of the NLW have had any discernible effect on hours in any of the specifications.
- It should be noted that the impact estimates are sensitive to changes in specification due to the small sample sizes.
- Future analysis will focus on subgroups, such as women working part-time, and replicating the analysis using ASHE.

## Aims and methodology

#### **Key Findings**

# The NMW/NLW and progression out of minimum wage jobs in the UK

#### Silvia Avram and Susan Harkness

(Institute for Social and Economic Research, University of Essex)

This project assesses the impact of the NLW on earnings, pay differentials and wage progression. It is an 18-month project that will present its final findings in time for our 2019 Report.

This interim report presents preliminary analysis investigating the wage progression of minimum wage job holders between 2009 and 2016. Its aims are:

- to examine whether the increases in the minimum wage rate during this period affected progression out of minimum wage jobs; and
- to investigate which individual and job characteristics are associated with progression out of minimum wage jobs.

The research uses Understanding Society (the UK Longitudinal Household Survey, which evolved from the British Household Panel Study in 2009) — a survey of around 40,000 households providing information on individual characteristics, current job and employer, and previous work history (including periods out of work).

They use an imputation procedure to derive an hourly pay measure for those not paid by the hour. This creates an earnings distribution that better matches that for hourly workers. They use this measure to define minimum wage jobs (those paid at or around the minimum wage and below the forthcoming minimum), low-paid jobs (those above the forthcoming minimum wage but below two-thirds of median hourly earnings), and higher-paid jobs (those paid more than two-thirds of the median).

It focuses on the job transitions of those aged 25 and over

Future research will extend this analysis to cover 2017, and also undertake the second element of the research project. This will use difference-in-difference techniques to examine the impact of minimum wage upratings on earnings distributions.

Preliminary findings were:

- Over the period under consideration, the minimum wage increased considerably relative to median pay.
- The share of workers covered by the minimum wage increased from around 4 per cent in 2009 to around 7 per cent in 2016.
- Consequently, the share of workers earning below the low pay threshold (two-thirds of median earnings) but above the minimum wage fell.
- In any given year, around a half of minimum wage workers left their jobs for higher pay. But four-fifths of these moved into higher-paying low-paid jobs. Only a fifth moved into higher-paid jobs.
- This finding is consistent with previous UK research on minimum wage transitions.
- They found considerable variation in transition rates across geographies. Whereas transitions from minimum wage jobs to higher-paying low-paid jobs varied little across areas, transitions to higher-paid jobs increased as the area-level wage increased.
- They found no evidence that transition probabilities out of minimum wage jobs were affected differently by changes to the bite when comparing low-wage areas with high-wage areas.
- They found no evidence that minimum wage increases had affected wage progression in the period under study.
- They found that individual and job characteristics were important determinants of transitions out of minimum wage jobs. The transition to higher pay was associated with higher qualifications; working in large firms or the public sector; and working on temporary contracts.
- Negative influences were from being female; working part-time; working in hospitality (accommodation and food services) or in the manufacture of food, beverages or textiles; previous unemployment; and duration in a minimum wage job.
- Spending longer periods in a minimum wage job decreases the likelihood of progression.

Project title and researchers	Aims and methodology	Key Findings
The impact of the recent increases in the minimum wage on the UK labour market: An areabased analysis.	cecent increases in the minimum wage are are unable on the UK labour market: An area-based analysis.  Richard Dickens and Kieran Lind  across Great Britain to assess the impact of the introduction of the National Living Wage in 2016 and its initial uprating in 2017 on wages, employment, unemployment, inactivity, hours of work, and self-employment.  It makes use of the fact that the minimum wage has greater impact and coverage in some areas than	<ul> <li>The key findings were:</li> <li>They found strong and significant wage effects from both the introduction in 2016 and the uprating in 2017.</li> <li>Significant spillover effects were found up to the 40th percentile of the area wage distribution in 2016 but only up to the 20th percentile in 2017.</li> </ul>
Richard Dickens and Kieran Lind (University of Sussex)		<ul> <li>up to the 20th percentile in 2017.</li> <li>The wage effects were stronger for women; going up to the median in 2016 and the 30th percentile in 2017. For men, the spillover effect was only evident in 2016 – reaching the 30th percentile.</li> <li>They found some significant negative effects on employment rates in 2017, but not in 2016, despite the wage effects being stronger in 2016.</li> <li>The employment effects found were larger and more robust for women than men.</li> <li>They were also largely robust to geographic definition.</li> <li>They found no evidence of effects on unemployment but some increases in inactivity.</li> <li>They also found no significant effects on hours of work or on youth employment.</li> <li>They did however, find some positive significant, but not robust, effects on self-employment.</li> <li>Their study requires some further robustness checks in order to have full confidence in the findings. Ongoing work will examine the sensitivity of the results to a range of factors.</li> </ul>

#### Aims and methodology

#### **Key Findings**

### Minimum wage and the propensity to automate or offshore

Grace Lordan

(London School of Economics)

The main aim of this research project was to provide a deeper understanding of how minimum wage policies have affected automation and offshoring, focusing on the impact on those workers with low or no qualifications.

This research extends that of Lordan (2017) by replicating her analysis using ASHE. That had followed a similar approach to Lordan and Neumark (2017), and Aaronson and Phelan (2017) looking at similar issues in the United States.

This research project was the first study to focus on the impact of the UK minimum wage on automation and offshoring. It:

- explored whether increases in the minimum wage affected the employment possibilities for low-skilled workers relying on automatable employment;
- assessed whether firms substituted their production process with cheaper labour from a different geographic location following a minimum wage increase; and
- gave a full picture of any labour-market adjustment by industry and a variety of demographic groups to uncover differential responses.

The Occupational Information Network (ONET) and the Employers Skills Survey were used to distinguish between occupations that were high in automatable and offshorable tasks by drawing on UK data to re-create accepted definitions from the US. These were then matched to the relevant occupation codes in the quarterly Labour Force Survey (LFS) using a consistent coding system as described in Lordan and Pischke (2016). The measure of routine task intensity (automation) was provided by Autor and Dorn (2013) while offshorability was derived using ONET.

The main analysis was conducted using UK data from the quarterly Labour Force Survey (QLFS) from 1992-2017 and supplemented by analysis using the Annual Survey of Hours and Earnings (ASHE).

The analysis was restricted to low-skilled workers and looked at effects by age and gender. Using LFS, it also assessed differences by ethnicity.

The key findings were:

- Minimum wage increases were followed by decreases in the shares of offshorable and automatable employment, but these effects were modest.
- A £1 increase in the minimum wage led to a .24 percentage point decline in the share of automatable employment (an elasticity of -0.055 if evaluated at the current NLW of £7.50).
- A £1 increase in the minimum wage led to a 0.15 percentage point decline in the share of offshorable employment (an elasticity of -0.034 if evaluated at the current minimum wage of £7.50).
- There were larger effects in manufacturing, particularly on automation. A £1 increase in the minimum wage led to a 0.58 percentage point decline in the share of automatable jobs and 0.34 percentage point decline in offshorable employment.
- Low skilled males and older workers are the demographic groups affected the most, with larger effects also evident for Black low-skilled workers.
- Low-skilled workers in automatable or offshorable employment are less likely to keep their jobs in the next period as compared with similar workers in non-automatable and non-offshorable jobs.
- They are also more likely to work fewer hours.
- The findings on automatable employment were robust to replication in ASHE.
- Those on offshoring were not.

It concluded by speculating about the future of jobs, suggesting that some low-skilled jobs would continue (social care, childcare and hairdressing) while others may disappear completely (delivery drivers and security).

# Aims and methodology

## Key Findings

Minimum and zero hours contracts and low-paid staff

Claire de Bond, Katherine Heffernan, Ken Mulkearn, Lois Wiggins and Louisa Withers

(Incomes Data Research)

This research addressed some of the issues raised by the Taylor Review of Modern Working Practices (2017), which had explored issues around the flexibility of employment, including variable hours contracts. It recommended that the Low Pay Commission consider a higher minimum wage (the Taylor Premium) for hours worked beyond those contracted.

This research examined variations in working time for low-paid workers on non-standard contracts — specifically those working on variable hours contracts (including minimum hours and zero hours contracts).

Its objective was to gather information from employers on:

- the extent to which low-paid workers work beyond their contracted hours; and
- the degree of volatility in those hours from week-to-week.

The research was based on information provided to the researchers by HR managers and other HR professionals. They used an electronic survey with around 40 questions, supplemented by semi-structured telephone interviews with a sub-sample of respondents.

They surveyed 40 employers of low-paid workers who used variable hours contracts. These employers had a combined workforce of around 460,000 people. The smallest firm employed 30 people, while the largest employed 73,000. Around three-quarters of respondents had at least 1,000 staff. The median headcount was 4,776. It covered firms across the economy, including in hospitality, retail, social care, manufacturing and the public sector.

The organisations surveyed had, on average, around 54 per cent of their workforce paid £10 or less. This ranged from an average of 28 per cent in the public sector to 80 per cent in retail and wholesale.

The key findings were:

- Employers often did not distinguish zero hours contracts from minimum hours contracts but regarded both as flexible contracts.
- Zero-hours contracts seem to be more widespread than minimum hours contracts but covered fewer workers.
   Zero-hours contracts were common in hospitality, while minimum hours contracts were more prevalent in retail and among large firms.
- The most common roles carried out by staff on minimum and zero hours contracts were retail assistants, waiting/ restaurant staff, administration staff, leisure assistants, cleaners and support staff.
- Most of the surveyed employers did not provide a choice regarding the type of contract on which staff are employed.
- Employers' responses suggested that actual working hours for staff on zero hours contracts varied more than for those on minimum hours contracts.
- Minimum hours contracts were more likely to fluctuate on a seasonal rather than weekly basis.
- The vast majority considered responding to fluctuations in demand (including seasonal variations) as the main driver for the use of zero hours or minimum hours patterns
- The use of technology for scheduling shifts was not widespread but where it was used, it was typically used in retail and hospitality, and mainly in the largest firms in these sectors.
- Most employers did not specify a minimum shift length.
   For those that did, it tended to be 4-5 hours.
- Advanced notice varied considerably from 12 hours to more than a month.
- Employers generally provided 24 hours' notice when cancelling shifts. Around 40 per cent provided compensation (but that was generally the offer of an alternative shift). The rest did not.

### Aims and methodology

#### **Key Findings**

# Atypical approaches: Options to support workers with insecure incomes

Conor D'Arcy and Fahmida Rahman

(Resolution Foundation)

This research also addressed some of the issues raised by the Taylor Review of Modern Working Practices (2017), which had explored issues around the flexibility of employment.

It had three primary aims:

- To explore the extent to which atypical work, one-sided flexibility and income insecurity arising from such work had been a feature of labour markets in other advanced economies of late.
- To assess the policies in place in a variety of countries that provide a framework for the labour market. The research focused on policies that would be most likely to affect those working non-guaranteed hours but also considered wider approaches to insecure work.
- To review the evidence on the impact of policies that were already in place.

This research project was based upon a literature review, alongside analysis of labour market data from a range of countries.

The literature review sought to identify: the discussions around these issues internationally; the kinds of policies that may act to counter concerns arising from their use; and, where available, evaluations of the effectiveness of such responses.

Relevant research was identified using a rapid evidence review, as well as contacting labour market experts in a range of countries and in international organisations to highlight policies of note.

Analysis of data from Eurostat, the OECD and the ILO were used.

First, to estimate the extent of non-standard work across countries. Second, as a means of testing whether such policies were associated with lower rates of non-standard work.

The key findings were:

- Experience in other countries varied. In some, particularly those most affected by the financial crisis from 2007 onwards, there had been steep increases in forms of involuntary part-time work. In others, this increase has been much less notable.
- In some countries, zero-hours or on-call contracts have received much focus. In others, temporary or fixed-term contracts, agency working, or self-employment have been discussed more.
- Countries had adopted three broad categories of approach.
- First, and the most common response, was to restrict atypical working and non-guaranteed hours through employment law:
- Banning zero-hours contracts.
- Restrictions on overtime and non-guaranteed hours.
- Second, and most closely related to the Taylor Review recommendation on a minimum wage premium for hours worked above those contracted, were policies that raised the cost of using non-guaranteed hours:
- Casual loading.
- Premium for overtime.
- Payment for unscheduled or cancelled shifts.
- Social security costs.
- Third, were policies that provided some form of protection against undesirable outcomes from atypical work or non-guaranteed hours through less direct means:
- Including atypical workers in social security systems.
- Trade unions or collective agreements providing protection.
- They concluded that the international evidence provided a variety of approaches. Responses were often specific to the legal, enforcement, industrial relations, political and labour structures that existed in each country.