The National Living Wage and falling earnings inequality

Abigail McKnight and Kerris Cooper

Contents

CASEbrief 38
March 2020

Centre for Analysis of Social Exclusion
London School of Economics
Houghton Street
London WC2A 2AE
CASE enquiries – tel: 020 7955 6679

Key findings

- Inequality in weekly and hourly earnings has fallen since the introduction of the National Living Wage in April 2016. This is the first rapid fall since at least the late 1970s.

- The replacement of the National Minimum Wage with the more generous National Living Wage for employees aged 25 and over has led to a compression in the lower half of the wage and weekly earnings distributions.

- The National Living Wage now touches the 10th percentile of the wage distribution for all employees (which includes lower paid part-time employees) and the gap between the minimum wage rate and the 10th percentile of the wage distribution for full-time employees has narrowed markedly.

Implications for policy and practice

- Set high enough, with sufficient 'bite', minimum wages can be effective at reducing wage and earnings inequality.

- Without a minimum wage (set either through collective bargaining or legislation), market set wages result in low paid workers being paid even lower rates. Increases in their wage rates, to rates approaching 60% of median pay, can be achieved without substantial loss of employment.

- Extensive low pay can have consequences for public expenditure through in-work benefits being required to top-up their earnings.

- Although increases in minimum wages have raised the earnings of many low paid workers and reduced earnings inequality, income inequality remains high and in-work poverty rates have increased (covered in our forthcoming paper). This highlights the complex relationship between wages, household incomes and risks of poverty.

The National Living Wage and falling earnings inequality

The National Minimum Wage and the National Living Wage

In 1999 the National Minimum Wage (NMW) was introduced by the Labour government in conjunction with a more generous system of in-work support (including the introduction of tax credits). With greater rewards available from work the concern was that an increase in labour supply and the knowledge that workers' wages would be topped-up through in-work benefits, wage rates would fall. The minimum wage was therefore designed to both increase the wages of the lowest paid and create a new wage floor.

In July 2015, in the Conservative government's first budget after winning the May 2015 general election, the then Chancellor of the Exchequer George Osbourne announced the National Living Wage (NLW) which would be introduced in April 2016, replacing the NMW for employees aged 25 or older, at £7.20 per hour. The government tasked the Low Pay Commission to make recommendations for future increases in line with achieving 60% of the median wage by 2020.

This announcement marked a departure from the way minimum wage rates had been set previously. This had involved the Low Pay Commission (LPC) making uprating recommendations to government on a biannual and then annual basis after the introduction of the NMW in April 1999.

These recommendations had to be consistent with the LPC's terms of reference which were largely that it should recommend levels for the minimum wage rates that help as many low-paid workers as possible without an adverse impact on employment or the economy.

A Review of the Future of the National Minimum Wage organised by the Resolution Foundation and headed by Professor Sir George Bain in 2013/14 had raised concerns that this approach had led to very cautious setting of minimum wage rates and that neither the government nor the LPC had a long term vision or goal. One of the main recommendations of this review was that a minimum wage rate of 60% of the median wage should be set as the long term goal by the government and the LPC should be tasked with working out the best way this could be achieved. As quoted by the Chancellor in his summer 2015 budget speech the Conservative government was taking up the main recommendation of the Bain Review. He explained that the motivation for doing so was to address the concern that taxpayers were subsidising, through the tax credit system, the businesses who pay the lowest wages, which he referred to as ‘unfair subsidies’. The idea was that a higher minimum would reduce public expenditure on tax credits. So the introduction of the NMW and the NLW were both motivated by a notion that tax-payers shouldn’t be subsidising low paying employers.

Earnings inequality and the NMW / NLW

Although the Conservative government’s motivation for a higher minimum wage was to reduce public expenditure, another potential impact is lower earnings inequality. Previously, the UK minimum wage rates didn’t have enough ‘bite’ to have a significant impact on inequality but this was more likely with higher minimum set to increase to 60% of the median wage. In this policy brief we examine changes in the UK hourly earnings (wage) and weekly earnings distributions before and after the introduction of the National Living Wage in 2016 to assess its impact on inequality.

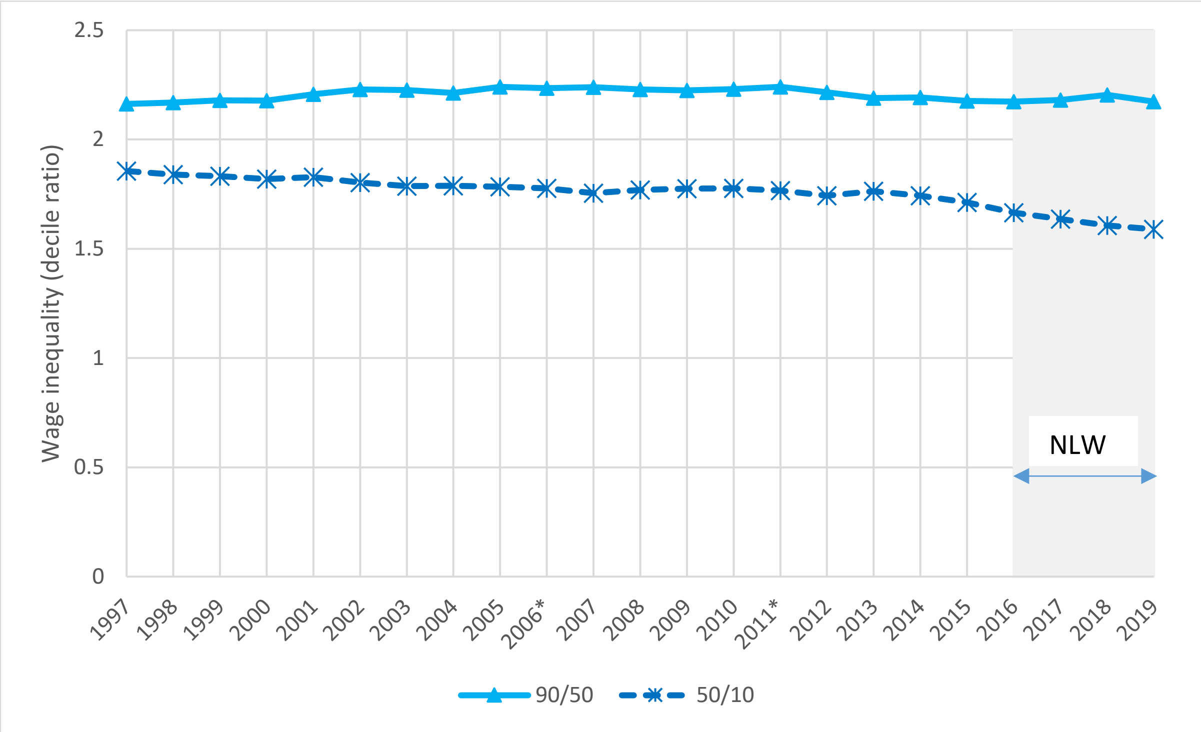
In the following series of figures we chart trends in wage and weekly earnings inequality using data from the Annual Survey of Hours and Earnings (ASHE). ASHE data are regarded as the highest quality information on wages and earnings available in the UK due to its sample size and random nature of the sample (approximately a 1% random sample of PAYE records), and the reporting of earnings by employers (usually from payroll systems), although there is recognition that its coverage of the very highest earnings is incomplete. Using this data source we can track trends in inequality between 1997 and 2019.

We use two measures of inequality. The 90/50 ratio measures inequality in the top half of the distribution by comparing wages/earnings of employees at the 90th percentile (the point above which are the highest paid 10% of employees) with median wage/earnings – for example, a ratio of 2 means that employees at the 90th percentile earn twice as much as employees at the median. The 50/10 ratio measures inequality in the lower half of the distribution by comparing wages/earnings at the 10th percentile (the wage beneath which are the lowest paid 10% of employees). Higher minimum wage rates are most likely to reduce inequality in the bottom half of the distribution as even if there are 'ripple effects' where employees above the minimum try and maintain wage differentials this is unlikely to have an impact above the median.

As shown in Figure 1, wage inequality among all employees (full-time and part-time) was unchanged around the time the NMW was introduced but since then inequality in the lower half of the wage distribution followed a slow downward trend. What is more remarkable is the fall in the 50/10 ratio since the NLW was introduced in 2016. In fact inequality in the lower half of the distribution fell by more between 2015 and 2019 than in the 17 year period leading up to the introduction of the NLW (7% versus 6.6%) which is a remarkable acceleration. [Previous research] suggests that this is the first rapid fall in earnings inequality since at least the late 1970s. Figure 2 shows that a similar fall in wage inequality is evident among full-time employees, Figure 3 for male full-time employees and Figure 4 for female full-time employees.

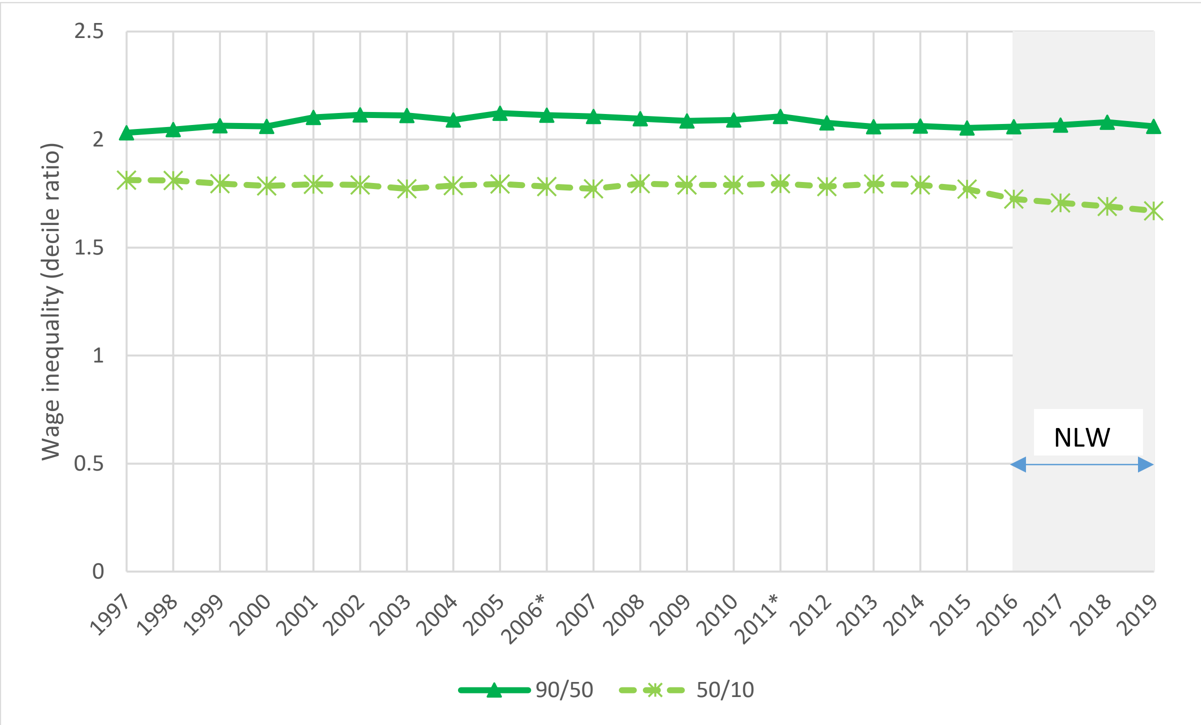
Figure 5 charts trends in weekly earnings inequality among full-time employees. One concern is that, among other changes such as reducing breaks and cutting allowances, employers may reduce hours to limit the impact of a higher minimum on wage bills. However, if the higher minimum wage led to higher weekly earnings among lower paid workers then inequality could fall. In Figure 5 we observe a similar falls in inequality in weekly earnings (50/10) for full-time employees as we found for hourly earnings after the introduction of the NLW. Figure 6 charts the trends in weekly earnings inequality among all employees. The 50/10 ratio for weekly earnings is particularly influenced by part-time employees who are, on average, lower paid (hence the much higher 50/10 ratio for weekly earnings) but we also observe a fall in inequality in the lower half of the distribution following the introduction of the NLW in 2016. This suggests the introduction of the NLW has not had an inverse impact on employers reducing hours of work.

Figure 1: Wage inequality among all employees



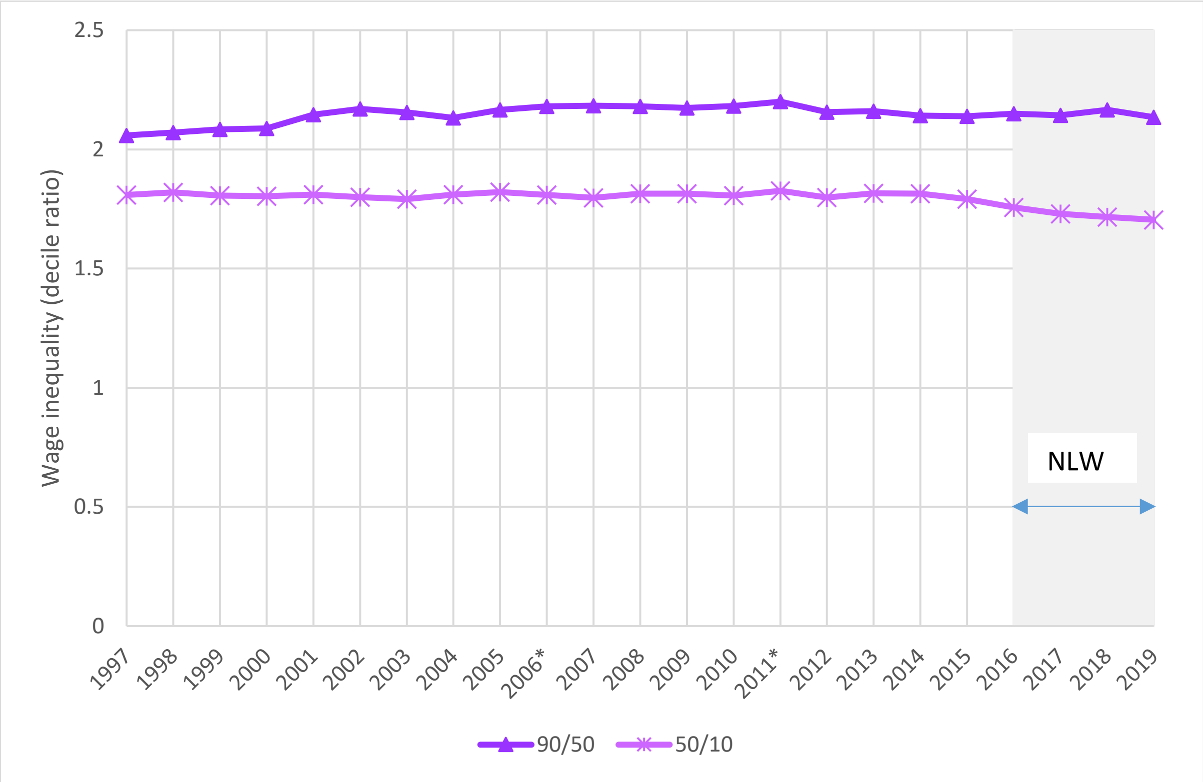
Source: Authors' analysis of ASHE (see Data Appendix)

Figure 2: Wage inequality among full-time employees



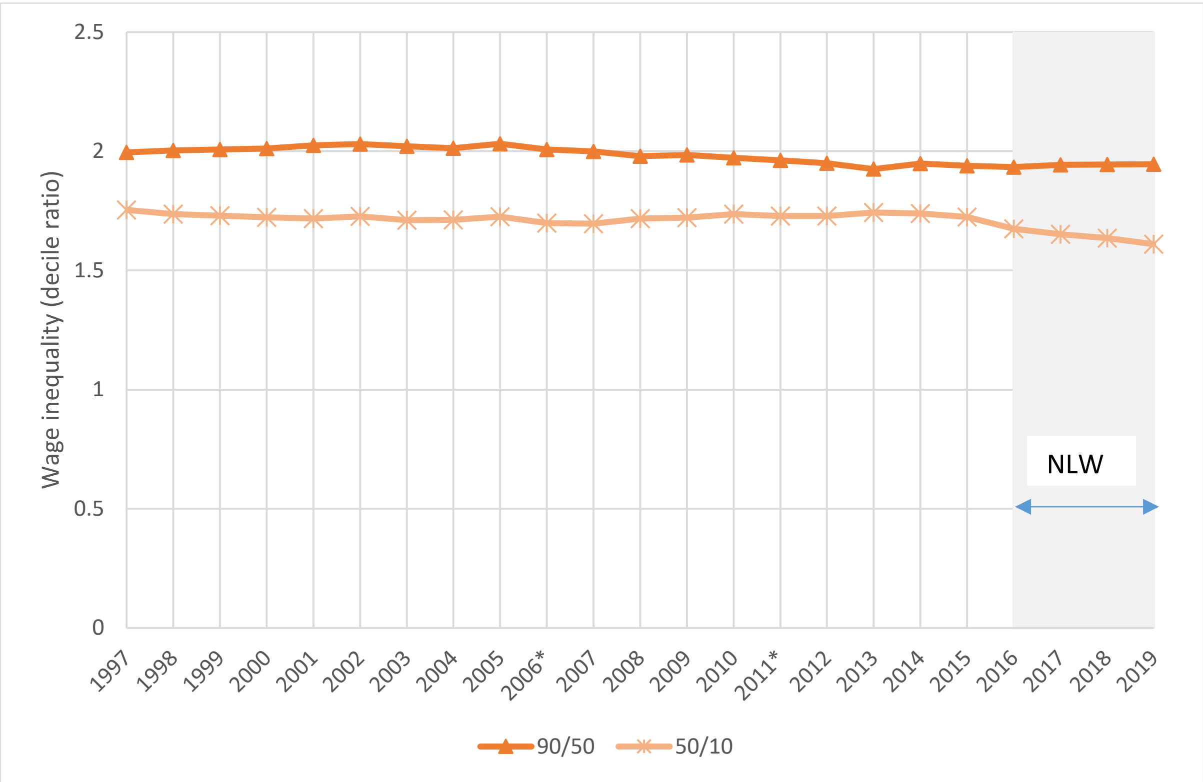
Source: Authors' analysis of ASHE (see Data Appendix)

Figure 3: Wage inequality among male full-time employees



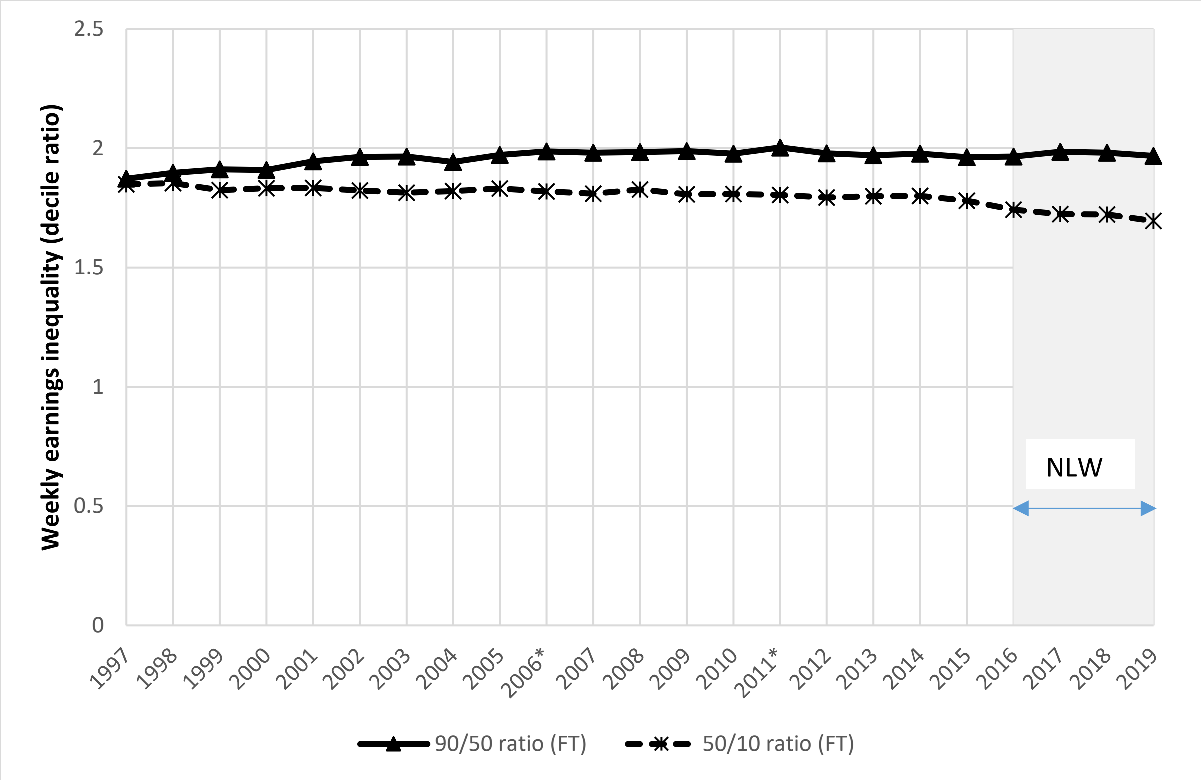
Source: Authors' analysis of ASHE (see Data Appendix)

Figure 4: Wage inequality among female full-time employees



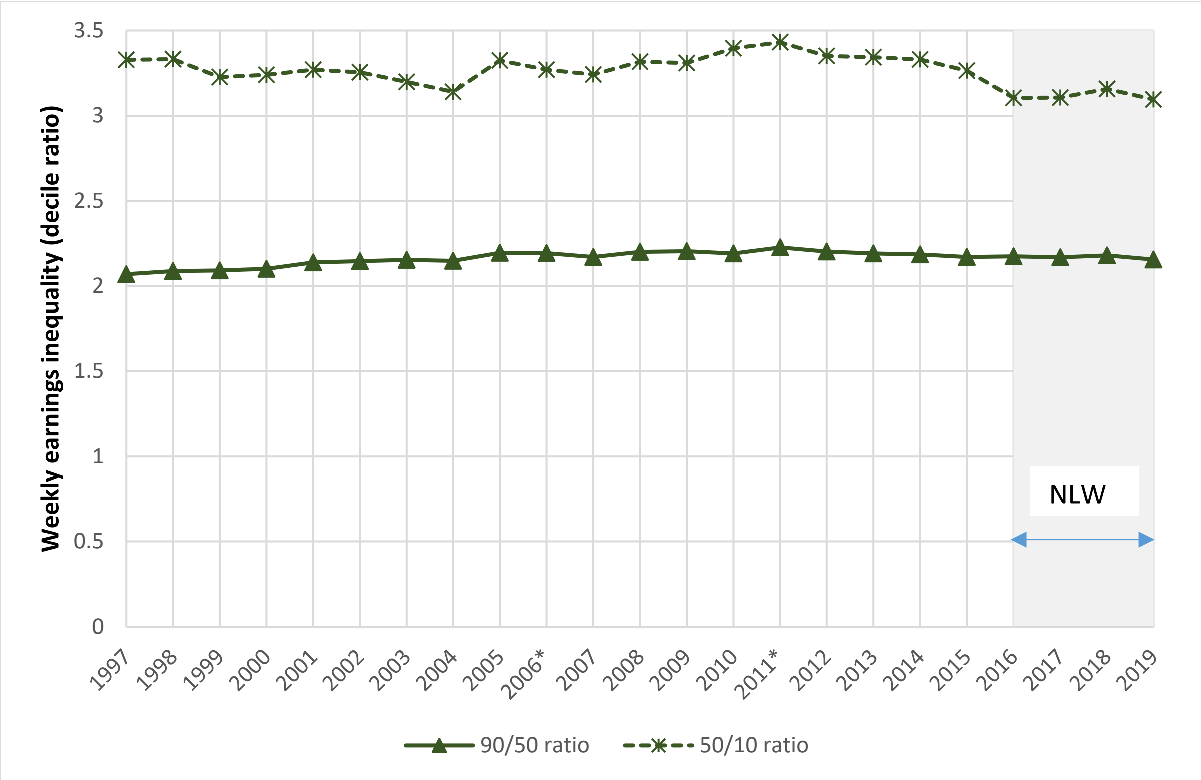
Source: Authors' analysis of ASHE (see Data Appendix)

Figure 5: Weekly earnings inequality among full-time employees



Source: Authors' analysis of ASHE (see Data Appendix)

Figure 6: Weekly earnings inequality among all employees

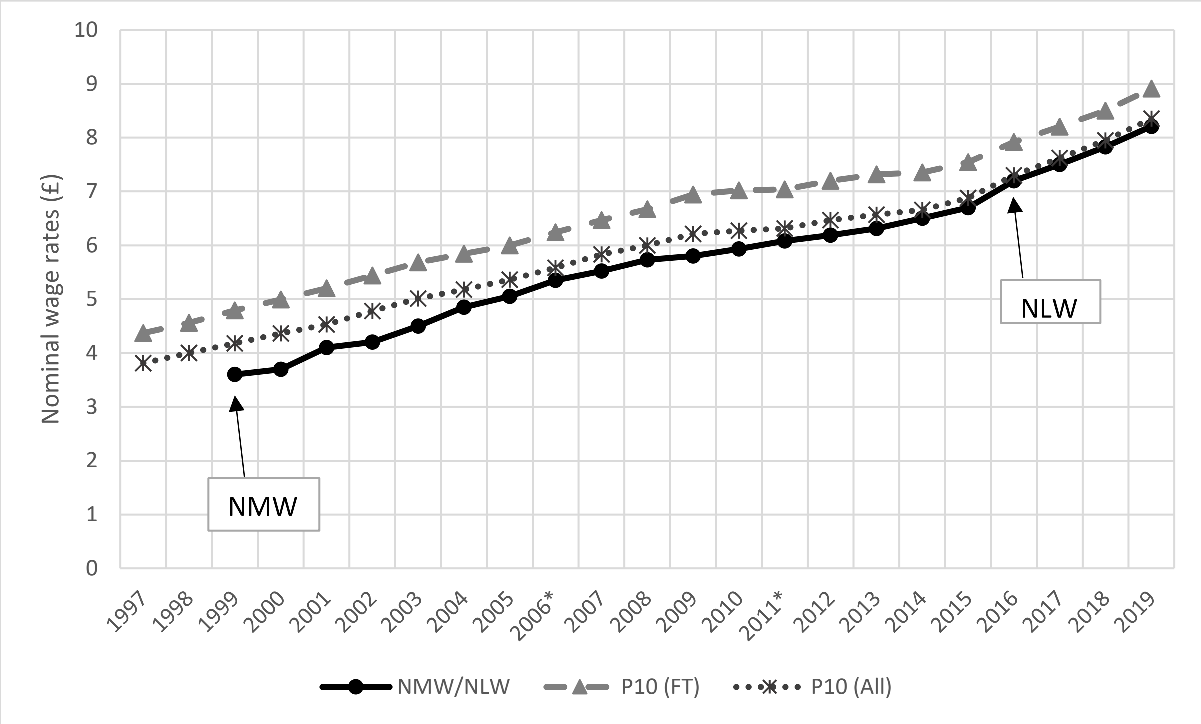


Source: Authors' analysis of ASHE (see Data Appendix)

Relationship between NMW / NLW and earnings at 10th percentile

Our measure of inequality in the lower half of the earnings/wage distribution is the ratio of earnings at the median (average earnings) with earnings at the 10^{th} percentile. It is therefore of interest to understand the relationship between the NMW/NLW and wages at the 10^{th} percentile as a higher minimum relative to the 10^{th} percentile is likely to have a greater impact on inequality. When the NMW was introduced in April 1999 it was set at around 75% of full-time employees wage at the 10^{th} percentile (P10) and 42% of their median wage. Among all employees it was 86% of their wage at the 10^{th} percentile and 47% of their median wage, the difference highlighting lower wages of part-time employees (Figure 7). As we saw above this had little impact on wage inequality in the lower half of the wage distribution. We can see that there doesn't appear to have been any impact at the time on wages at the 10^{th} percentile (for both all and FT employees). As fewer low paid employees were covered by the NMW than anticipated and as there was no evidence of a significant negative impact on employment following its introduction, the NMW was increased by over 10% in October 2001. This increase led to a narrowing in the gap between the NMW and P10 wages (Figure 7). Between 2008 and 2010 the gap between the NMW and wages at P10 widened due to only very modest increases in the NMW following the financial crisis and subsequent wage growth stagnation. The introduction of the NLW in April 2016 saw both a narrowing of the gap with P10 wages and growth in P10 wages most likely due to wage differentials being maintained above the higher minimum. The NLW represents around 98% of P10 wages among all employees and although it is below the P10 wage for full-time employees, the knock on effects have been to compress the lower half of the wage distribution as P10 wages have grown faster than median wages.

Figure 7: The nominal value of the National Minimum\Living Wage and nominal wage at the 10th percentile for full-time (FT) and all employees



Source: Authors' analysis of ASHE (see Data Appendix)

Minimum wages can reduce inequality when set high enough

The introduction of the NLW in 2016 and the subsequent fall in inequality in earnings/wages has demonstrated that when generous enough (i.e. with sufficient 'bite') minimum wages can reduce inequality. This is the first rapid fall in inequality since at least the late 1970s. We consistently find a fall in inequality in wages for all employees, male and female full-time employees as well as reductions in weekly earnings inequality. The evidence also suggests potential adverse effects of employers reducing working hours to offset rising costs has been avoided. These findings have important implications for continued setting of rates for the NLW and for minimum wages more generally, introduced elsewhere.

Data Appendix: Annual Survey of Hours and Earnings

ASHE is based on a 1% sample of employee jobs taken from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) records. Consequently, individuals with more than one job may appear in the sample more than once. The sample size is approximately 300,000. ASHE data are available back to 1997, except for annual earnings data which are available back to 1999. ASHE covers employee jobs in the United Kingdom. It does not cover the self-employed, nor does it cover employees not paid during the reference period. Hourly and weekly estimates are provided for the pay period that included a specified date in April. They relate to employees on adult rates of pay, whose earnings for the survey pay period were not affected by absence. Data for 2019 are provisional and will be revised when the provisional data for the following year are released. There have been a number of changes to the ASHE methodology over the years, which has resulted in three breaks in series: in 2004, 2006 and 2011. Figures either side of a break are not directly comparable so caution should be exercised when interpreting long-term trends over time. More information provided by ONS is available here.

Acknowledgements

This research is part of a larger programme of research funded by the Nuffield Foundation, whose funding the authors gratefully acknowledge.

The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare, and Justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics and the Ada Lovelace Institute. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit www.nuffieldfoundation.org

The paper draws on Office for National Statistics (ONS) statistics which are subject to Crown copyright and are reproduced under the Open Government Licence v.3.0.

Social Policies and Distributional Outcomes research programme

The central objective of the SPDO research programme is to provide an authoritative, independent, rigorous and in-depth evidence base on social policies and distributional outcomes in 21st century Britain. The central question to be addressed is: What progress has been made in addressing social inequalities through social policies? The research programme is ambitious and comprehensive in scope, combining in-depth quantitative analysis of trends in social inequalities and social divides with detailed and systematic public expenditure and social policy analysis across ten major social policy areas over the period 2015-2020, together with broader reflection on the changing nature of social policies and distributional outcomes over the 21st century.

The programme of research adds to (and will reflect on) the previous Social Policies in a Cold Climate (SPCC) research programme covering the period 1997-2015. The SPDO programme will update, extend and broaden our analysis of public expenditure, social policies and distributional outcomes using the most recent datasets available, resulting in a unique evidence base on trends in social inequalities and social policies going back to 1997. Innovative extensions included within the SPDO research programme include: coverage of additional areas of social policy (e.g. physical safety/security and complex needs/homelessness); emphasis on the new context for social policy making (e.g. devolution and BREXIT); assessment of a broader range of multidimensional outcomes within our quantitative analysis; and the inclusion of additional breakdowns (e.g. migration status). This programme will also have a forward looking component, identifying the key challenges for social policy in the 2020s.

About the publication and the authors

This brief reports findings from: McKnight, A., and Cooper, K. (forthcoming). 'The Conservative's Record on Employment: Policy, Spending and Outcomes 2015-2020'

Dr Abigail McKnight is Associate Director and Associate Professorial Research Fellow at the Centre for Analysis of Social Exclusion (CASE, LSE. Her research interests include labour market inequalities, low pay, minimum wages and social mobility. She was a member of the Bain Review and has long advocated for a more generous minimum wage. Her related publications include: Low pay and in-work poverty: preventative measures and preventative approaches (with Stewart, K., Himmelweit, S. M., and Palillo, M), Low wage employment in Europe: a review of the evidence (with Lucifora, C., and Salverda, W.), Low paid work: Drip feeding the poor

Email: abigail.mcknight@lse.ac.uk

Dr Kerris Cooper is a Research Officer at the Centre for Analysis of Social Exclusion (CASE), LSE. Kerris completed her PhD in Social Policy at the LSE in 2017. Kerris' research interests include poverty, disadvantage and inequality in the UK and the impact of related social policies. She is one of the two main analysts on the SPDO research programme. With a focus on inequalities, her recent research has included What does Brexit mean for social policy in the UK? (with Stewart, K. and Shutes, I.), Physical safety and security policies (with Lacey, N.), as well as forthcoming papers on the recent development of employment policies (with McKnight, A.) and social security policies (with Hills, J.).

@CooperKerris

The authors are happy to be contacted with any comments and questions, and for press enquiries.

Centre for Analysis of Social Exclusion

The Centre for Analysis of Social Exclusion (CASE) is a multi-disciplinary research centre based at the London School of Economics and Political Science (LSE), within the Suntory and Toyota International Centres for Economics and Related Disciplines (STICERD). Our focus is on exploration of different dimensions of social disadvantage, particularly from longitudinal and neighbourhood perspectives, and examination of the impact of public policy.

In addition to our CASEbriefs, we produce a discussion paper series (CASEpapers), and reports from various conferences and activities in CASEreports. All these publications are available to download free from our website. Limited printed copies are available on request.

For further information on the work of the Centre, please contact the Centre Administrator, on:

UK+20 7955 6679 case@lse.ac.uk sticerd.lse.ac.uk/case