

Institution: University of Sussex

Unit of Assessment: UoA 18 Economics

Title of case study: Improving the labour market experiences of young people through Britain's National Minimum Wage

1. Summary of the impact

Around 55,000 young workers in Britain have benefited from a 20 per cent wage increase as a direct result of research by Richard Dickens of the University of Sussex. His work led to a legislative change (which became effective in October 2010) whereby the starting age for eligibility for the adult National Minimum Wage (NMW) was reduced from 22 to 21 years old.

More generally, Dickens' research on the wage and employment effects of the NMW has long informed the recommendations of the Low Pay Commission (LPC) – on the rate at which the NMW is set, on the associated regulations and on the LPC's evaluation of the impact of the NMW. His research has provided the LPC and the government with strong validation for the use of the NMW as a policy tool for tackling low incomes and wage inequality. It also allays fears that the NMW might lead to a damaging wage-price spiral.

2. Underpinning research

Dickens' research on minimum wages dates back to the early 1990s, but the research underpinning this specific impact occurred in the period 2007–12. All the research cited was undertaken for the Low Pay Commission (LPC) and presented in various LPC annual reports. Dickens' co-researchers on these studies were Riley and Wilkinson (National Institute for Economic and Social Research, NIESR), Dolton (Sussex), Butcher (LPC) and Manning (LSE).

Estimating the impact of the NMW in Britain has proved problematic since no sizeable groups are excluded from coverage. Consequently, finding a suitable control group with which to compare outcomes is difficult. In their work for the LPC's 2010 Report, Dickens *et al.* (2010) [see Section 3, R2] and (2013) [R6] exploit the age-related structure of the NMW to investigate the effects of turning 22, and qualifying for the adult NMW.

The study uses a 'regression discontinuity' design to analyse the effect on the various labour-market outcomes of the legislated difference that existed between 1999 and 2009 in the NMW for 21- and 22-year-olds. The results suggest a 3–4 percentage point increase in the employment rate of low-skilled individuals as a result of the higher NMW paid at age 22, explained in part by declines in male unemployment and female inactivity. They find no such effect before the NMW was introduced and no robust impacts at ages 21 or 23. The research concludes that there would be little negative effect on employment from paying the adult minimum wage to 21-year-olds.

More broadly, existing evidence on the effects of the NMW on all workers suggested that, while it raised the pay of affected workers, it had no impact on employment. But this work had not focused on the most vulnerable workers in terms of low pay and it used data from a period when economic conditions were buoyant. Dickens *et al.* (2012) [R5, R7] use data on individuals' employment histories between 1994 and 2010, a period including the late 2000's recession. The study uses a 'differences in differences' approach to compare changes in employment retention among those directly affected by the NMW with a group of workers who are paid slightly more than the NMW. It finds that, for the most vulnerable workers – namely part-time females – the NMW appears to be associated with reductions in employment. In addition, the effect of the 2008 recession, combined with the NMW, appears to lead to further falls in employment among this group.

The results of Dickens and Dolton (2011) [R3] are based on data for wages-council sectors from the 1970s to the 1990s. The study examines the impact of industry-level minimum wages for the recessions of the early 1980s and 1990s but, in contrast to the results in R5, it finds no

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employment impact from the minimum wage and no additional impacts in the recession years.

Finally, Butcher *et al.* (2012) [R4] examine the impact of the NMW on pay distribution. Although the NMW never affects the pay of more than 5 per cent of workers, inequality at the bottom end of the pay distribution has declined, with relative wage increases up to the 25th percentile. This research develops a theoretical model of ‘spillovers’, whereby changes in the NMW have effects further up the wage distribution. The empirical findings provide support for modest spillovers from the NMW since its introduction that explain a sizeable proportion of the observed changes in wage inequality.

3. References to the research

Publications

- R1** Dickens, R., Riley, R. and Wilkinson, D. (2009) *The Employment and Hours of Work Effects of the Changing National Minimum Wage*. London: Low Pay Commission, Technical Report.
- R2** Dickens, R., Riley, R. and Wilkinson, D. (2010) *The Impact on Employment of the Age-Related Increases in the National Minimum Wage*. London: Low Pay Commission, Technical Report.
- R3** Dickens, R. and Dolton, P. (2011) *Using Wage Council Data to Identify the Effect of Recessions on the Impact of the Minimum Wage*. London: Low Pay Commission, Technical Report.
- R4** Butcher, T., Dickens, R. and Manning, A. (2012) *Minimum Wages and Wage Inequality: Some Theory and an Application to the UK*. London: LSE, Centre for Economic Performance Discussion Paper No. 1177: <http://cep.lse.ac.uk/pubs/download/dp1177.pdf>.
- R5** Dickens, R., Riley, R. and Wilkinson, D. (2012) *Re-Examining the Impact of the National Minimum Wage on Earnings, Employment and Hours: The Importance of Recession and Firm Size*. London: Low Pay Commission, Technical Report.
- R6** Dickens, R., Riley, R. and Wilkinson, D. (2013) ‘The UK minimum wage at age 22: a regression discontinuity approach’, *Journal of Royal Statistical Society A*, ISSN 1467-985X.
- R7** Dickens, R., Riley, R. and Wilkinson, V. (2012) *A Re-Examination of the Impact of the UK National Minimum Wage on Employment*. Brighton: University of Sussex, Department of Economics Working Paper No. 4612: <http://www.sussex.ac.uk/economics/documents/wps-46-2012.pdf> (forthcoming *Economica*).

Note that the academic publications R6 and R7 derive from Technical Reports R2 and R5. Outputs can be supplied by the University on request.

Research grants

- Low Pay Commission, 2007–08 ‘*The Employment and Hours of Work Effects of the Changing National Minimum Wage*’, with Riley and Wilkinson (NIESR).
- Low Pay Commission, 2009–10, ‘*The Impact on Employment of the Age-Related Increases in the National Minimum Wage*’, with Riley and Wilkinson (NIESR).
- Low Pay Commission, 2010–11 ‘*The Minimum Wage in the Recession*’, with Dolton (then Royal Holloway, now Sussex).
- Low Pay Commission, 2011–12, ‘*Re-Examining the Impact of the National Minimum Wage on Earnings, Employment and Hours: The Importance of Recession and Firm Size*’, with Riley and Wilkinson (NIESR).

4. Details of the impact

A 2010 survey of British political scientists by the Institute for Government voted the National Minimum Wage (NMW) the most successful government policy of the last 30 years (<http://www.instituteforgovernment.org.uk/events/policy-reunion-national-minimum-wage>). As Tim Butcher, LPC Chief Economist, notes in his written testimonial, ‘Professor Dickens’ work has

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played an important role in achieving that outcome'. Direct impacts of this research have included raising the wages of thousands of young workers.

Research by Dickens and colleagues [see Section 3, R2, R6] on the age from which the NMW for adults is paid had a direct impact on young workers through a change in legislation in 2010 whereby 21-year-olds became eligible for the adult NMW (NMW Regulations 2010). This research was commissioned by the LPC (Project LPC 2009–10) and findings were presented to the LPC in the form of a report and presentations to Commissioners and the Secretariat in April and October 2009.

The LPC had previously recommended to the government that the adult rate should apply at age 21 rather than age 22. The government rejected this proposal but the LPC persisted. In reporting to the government in 2009–10, the LPC cited R2 and R6 in re-asserting their case. The research by Dickens *et al.* was instrumental in persuading the government to finally accept the LPC recommendations [see Section 5, testimonials]. The change in legislation came into effect in October 2010 [C7]; workers aged 21 years were to be paid at the adult rather than the youth (development) rate of the NMW. This resulted in a 20 per cent increase in the legislated minimum wage for 21-year-olds. The LPC estimated that 55,000 young workers benefited from this pay increase (see LPC 2010, p. 118) [C3].

The conclusions from the research were that there was no evidence of any harmful effects on employment from paying 21-year-olds the adult rate. These conclusions, and the reasoning behind them, were presented to the LPC through a number of mechanisms outlined below. The 2010 LPC Report stated that:

The research [R2] suggested that lowering the starting age of the adult rate to 21 could actually increase employment of 21-year-olds. They concluded that there would be little harm to the employment prospects of 21-year-olds in legislating to start the adult minimum wage rate at age 21. We continue to believe there is a case for applying the adult rate from age 21.

Other studies by Dickens *et al.* [R1, R3, R5] are heavily cited by the LPC in various reports (LPC 2009, 2011, 2012, 2013) [C2, C4–C6]. The LPC seeks to build consensus across employee, employer and independent members of the Commission and relies on an evidence base in its deliberations. The evidence in R5 and R7 of negative impacts on employment effects for part-time women was discussed extensively at an LPC workshop in October 2011. This and the work on the age-related structure of the NMW [R2, R6] informed subsequent LPC deliberations over the impact of the NMW on vulnerable workers in the recession. Independent Member, Machin states:

It (the research by Dickens, Riley and Wilkinson) also fed in to discussions in the last few years where the uprating of the youth development rate was detached from that of the adult minimum because of concerns about the employment position of younger workers during the economic downturn.

R4 informs understanding of both the policy effectiveness of the NMW and the methodological issues that may arise in the analysis of its employment effects. After almost two decades of rising wage inequality, pay differentials at the bottom of the distribution began to fall in the late 1990s. This work strongly supports the view that the NMW was largely responsible for the observed falls and excludes most other explanations such as migration, skill changes, etc. This provides the LPC and the government with strong validation for the use of the NMW as a policy tool and also allays fears that the NMW would lead to a significant wage-price spiral as workers above the NMW try to maintain differentials. For example, LPC Chief Economist Butcher's testimonial states:

This research, along with previous econometric analysis of the impact of the NMW on differentials, suggests that this does not appear to have happened to any significant extent. As a consequence, Commissioners have not placed as much weight on these concerns as they did in the earlier years of the Commission.

All the underpinning research cited was either funded by the LPC or conducted jointly with LPC Chief Economist Butcher. As such, a number of interim and final reports have been written and presented to the LPC over the years 2007–08, 2009–10, 2010–11 and 2011–12. The methodology employed is presented in the LPC's methodology workshop in April of each year, where

Commissioners and other researchers are invited to comment on it. The final results are presented – directly to Commissioners – at the annual research workshop in September and policy conclusions discussed. A final report is then prepared in time for the LPC deliberations in December each year and published the following April.

5. Sources to corroborate the impact

- C1** Low Pay Commission Report 2008
http://webarchive.nationalarchives.gov.uk/20130708092703/http://lowpay.gov.uk/lowpay/report/pdf/2008_min_wage.pdf
- C2** Low Pay Commission Report 2009
<http://webarchive.nationalarchives.gov.uk/20130708092703/http://lowpay.gov.uk/lowpay/report/pdf/7997-BERR-Low%20Pay%20Commission-WEB.pdf>
- C3** Low Pay Commission Report 2010
http://webarchive.nationalarchives.gov.uk/20130708092703/http://lowpay.gov.uk/lowpay/report/pdf/LPC_Report_2010.PDF
- C4** Low Pay Commission Report 2011
http://www.lowpay.gov.uk/lowpay/report/pdf/Revised_Report_PDF_with_April_date.PDF
- C5** Low Pay Commission Report 2012
http://www.lowpay.gov.uk/lowpay/report/pdf/8990-BIS-Low%20Pay_Tagged.pdf
- C6** Low Pay Commission Report 2013
http://www.lowpay.gov.uk/lowpay/report/pdf/9305-BIS-Low_Pay-Accessible6.pdf
- C7** The National Minimum Wage Regulations 1999 (Amendment) Regulations 2010 No. 1901 Regulation 5: <http://www.legislation.gov.uk/uksi/2010/1901/regulation/5/made>

Testimonials

LPC Chief Economist. Excerpt from written testimonial:

Professor Richard Dickens has been one of the most important contributors to the evidence base of the LPC since it was established in 1997... His most influential work has probably been on the impact of the minimum wage on the employment of young people... They concluded that there would be little harm to the employment prospects of 21-year-olds in legislating to start the adult rate of the NMW at 21. This was a very important factor in strengthening our evidence base sufficiently to convince the Government to change policy. The starting age of adult rate was changed to 21 in October 2010.

Deputy Director, Analysis, Briefing and Minimum Wage, Department for Business, Innovation and Skills. Written testimonial:

I, Bill Wells, as the civil servant responsible for National Minimum Wage policy can confirm the research on young workers undertaken by Dickens, Riley and Wilkinson. The LPC were considering at what age the adult rate of the NMW should begin. This resulted in a recommendation that the adult rate should be lowered from age 22 to 21. The research by Dickens, Riley and Wilkinson was an important contributor to the recommendation from the LPC and also to our advice that ministers should accept the recommendation.

Independent Member, LPC. Excerpt from written testimonial:

I am writing ... as one of the nine Low Pay Commissioners to confirm the importance of the research by Professor Dickens (and colleagues) on the age variation of the UK National Minimum Wage. The research they undertook (*The Impact on Employment of the Age-Related Increases in the National Minimum Wage*, with Riley and Wilkinson) had an important impact on the LPC deliberations on age-based variations in the minimum wage, and on the Commission's recommendations to government on this matter.