

<b>Institution: University College London</b>
<b>Unit of Assessment: 18 – Economics and Econometrics</b>
<b>Title of case study: Setting national minimum wages</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>Research on the economic effects of minimum wages undertaken by Professor Stephen Machin and his co-authors changed the policy context before a National Minimum Wage (NMW) was introduced in April 1999. That and subsequent research, as well as Machin's appointment as Commissioner in 2007, have provided the guiding logic for the operations of the Low Pay Commission, the government body that makes recommendations on setting the NMW. As a result, research has directly influenced the annual setting of the NMW through 2008–2013, affecting the wages of over a million low-paid UK workers. Research has subsequently influenced policy debate in the UK, and in other countries including Germany, Hong Kong and Australia.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>The UK did not have a national minimum wage until its introduction to the UK labour market in April 1999. Prior to this, many academic economists and policymakers tended to think, on the basis of little rigorous evidence, that a minimum wage would cost jobs were it to be introduced; indeed some macroeconomic forecasters predicted, from models and no empirical analysis, that up to two million jobs could be lost from introducing a national minimum wage. Research by Stephen Machin at UCL (Professor of Economics, employed at UCL since 1988) provided empirical analysis that this was not the case.</p> <p>Research undertaken during the 1990s [a] directly contributed to altering this viewpoint by presenting evidence that minimum wages need not harm employment. This research, along with papers [b]–[e] (described below) are now viewed as seminal articles in the large body of minimum wage research that has subsequently been undertaken.</p> <p>The findings in [a] were supported by additional in depth research studies of the policy context and its interaction with evidence from a range of countries and time periods. For example, a large-scale project carrying out empirical work on minimum wage systems in Europe concluded that it was hard to find evidence that minimum wages harm employment, unless the minimum is set at too high a level [b]. This challenged the orthodox view that minimum wages always reduce employment. The research findings showed, instead, that a minimum wage pitched at the 'right' level both need not harm employment and had scope to give a significant wage boost to raise the incomes of the poorest workers in the economy.</p> <p>Research was also undertaken to study the economic impact of minimum wage introduction. In the years 1998 to 2001, a detailed data collection on workers in care homes before and after minimum wage introduction was undertaken [c]. Care homes were chosen as they employ many low wage workers and the sector was thus potentially very vulnerable to employment losses from minimum wage introduction. The research uncovered little evidence of serious disemployment effects from minimum wage introduction, and there was no evidence that care homes employing more low wage workers were any more likely to shut down [d]. In fact, the evidence points to a squeeze of profits occurring in response to the minimum wage [e]. Like the pre-introduction work, these pieces of research are repeatedly used in Low Pay Commission (LPC) deliberations and cited in subsequent academic research and commissioned research projects by other authors as key articles in the field.</p>
<p><b>3. References to the research</b> (indicative maximum of five references)</p> <p>[a] Dickens, R., S. Machin and A. Manning (1999) 'The Effects of Minimum Wages on Employment: Theory and Evidence From Britain', <i>Journal of Labor Economics</i>, 17, 1–22. DOI: <a href="https://doi.org/10.1086/209911">10.1086/209911</a>.</p> <p>[b] Dolado, J., F. Kramarz, S. Machin, A. Manning, D. Margolis and C. Teulings (1996) 'The Economic Impact of Minimum Wages in Europe', <i>Economic Policy</i>, 23, 317–72. <a href="http://www.jstor.org/stable/1344707">http://www.jstor.org/stable/1344707</a>.</p> <p>[c] Machin, S., A. Manning and L. Rahman (2003) 'Where the Minimum Wage Bites Hard: The</p>

**Impact case study (REF3b)**

Introduction of the UK National Minimum Wage to a Low Wage Sector', *Journal of the European Economic Association*, 1, 154–80. DOI: [10.1162/154247603322256792](https://doi.org/10.1162/154247603322256792).

[d] Machin, S. and J. Wilson (2004) 'Minimum Wages in a Low Wage Labour Market: Care Homes in the UK', *Economic Journal*, 114, 102–109. DOI: [10.1111/j.0013-0133.2003.00199.x](https://doi.org/10.1111/j.0013-0133.2003.00199.x).

[e] Draca, M., S. Machin and J. Van Reenen (2011) 'Minimum Wages and Firm Profitability', *American Economic Journal: Applied*, 3, 129–51. DOI: [10.1257/app.3.1.129](https://doi.org/10.1257/app.3.1.129).

The quality of research is demonstrated by publications [a]–[e] in top rated peer-reviewed leading general and field economics journals.

**4. Details of the impact** (indicative maximum 750 words)

In April 1999, the minimum wage was introduced to the UK labour market. The role of Machin's research in this decision is demonstrated by the fact that no fewer than 22 of his papers are cited in the first Low Pay Commission (LPC) report of June 1998 before the National Minimum Wage (NMW) was instituted [1]. Since then, and throughout the impact census period (2008–2013), the minimum wage has been set by the LPC, and underpinned by the guiding logic demonstrated by the research: that setting a minimum wage at an appropriate level does not harm the economy. Research papers [a–e] above continue to be cited in the LPC's annual reports almost every year [1]. Some indicative outcomes based on research during the impact period are described below.

**Impact on minimum wage policy**

i) A direct impact from the research, and from Machin's position as a Low Pay Commissioner, has been the raising of the NMW at the right level at the right time; to £5.73 per hour in October 2008, to £5.80 in October 2009, to £5.93 in October 2010, to £6.08 in October 2011, to £6.19 in October 2012 and to £6.31 in October 2013. These upratings were recommended by the LPC, and accepted by government following the principles laid down in the research that a minimum wage pitched at the right level need not harm employment [a], even in the context of the economic downturn when some argued that there should be a freeze of the minimum wage.

ii) At the same time, the research suggested that in an economic downturn, care had to be taken in raising the wages of younger low wage workers who are more prone to unemployment during recessions [b]. Following this logic, during the years of the economic downturn (through the upratings announced each October from 2010–2013), the LPC decided, for the first time, to not raise the youth development rate (the minimum for 18–20 year olds) by as much as the adult rate.

Thus the research, through the setting of the minimum wage, continues to have impact on over a million UK workers and on large numbers of businesses every year. In particular, it has been an important factor in ensuring the minimum wage was increased without harming employment levels.

**Benefits to low wage workers**

The principal beneficiaries are, of course, the large number of low wage workers in the UK: about 4 per cent of workers, around a million people, are in minimum wage jobs. Between 2008 and 2012, the LPC raised minimum wages by 8 per cent (in line with the research), whilst the wages of the 'typical' worker in the Labour Force Survey (at the 50th percentile in the wage distribution) grew by only 5 per cent (in nominal terms) [1]. Thus the NMW acted to keep up the relative wages, and by association the living standards, of low wage workers.

The NMW has been a highly popular and successful policy. A recent policy overview from the Institute of Government reported that the "minimum wage tops the chart of the most successful policies of the last 30 years" [2].

**Impact on the operation of the LPC and on government policy 2008–2013**

Every year, including during 2008–2013, the LPC recommends to government the level at which the NMW should be set and produces an annual report justifying this on the basis of evidence. These reports are presented to Parliament by the Secretary of State for Business, Innovation and Skills (BIS) [1]. Its recommendations are submitted to government in spring, and typically come into effect in October the same year.

## Impact case study (REF3b)

The LPC comprises a chair, three employer representatives, three employee representatives and two independents. Since 2007, Professor Machin has been one of the two independent members. Through this appointment, which was made on the basis of Machin's research expertise, he has brought evidence from research to bear on the debate within and decisions made by the Commission. This, as the chair of the LPC confirms in a written testimonial, has 'had a strong and wide-ranging impact on government policy on minimum wages'; he further notes that this research impact 'in interacting with policymakers and practitioners has been second to none amongst the academic economics community.' [3].

The evidence base for the LPC's annual recommendations to government comprises several dimensions, in all of which Machin and his research play an important role.

(i) Professor Machin has had direct impact on the LPC's use of academic evidence during the REF period by commissioning research projects undertaken by other academics and research consultants [4]. Thus the original research listed in section 2 has important knock-on effects to facilitate the next generation of minimum wage research. One clear example of this was a project commissioned by the LPC in 2012–13 that directly built on [e] listed in section 3 by looking at the impact of minimum wages on firm profitability from the upratings of the minimum wage in the REF assessment period [5]. In line with [e], they found profit margins were squeezed by the minimum wage over the longer time period 1999 to 2007. This was used in the LPC report released on April 2013 as evidence to take into account when setting the NMW (para. 2.139–140, p. 69–70).

(ii) Professor Machin has, along with other LPC members, taken evidence from a large number of groups each year and met them in presentations of oral evidence in a two day meeting in November of each year (these are listed in the LPC annual reports, [1]).

(iii) The LPC also conducts visits where commissioners meet employers, workers and other individuals potentially affected by the minimum wage. Many of these are in areas and industries with a high proportion of minimum wage workers. This consultation with relevant parties generates a wider impact through engaging members of the general public in the minimum wage setting process. An indicative example is of the LPC visit to Sheffield in November 2012, during which Debt Support Unit staff at a Citizen's Advice Bureau provided specific feedback on the problems faced by their clients on zero hour contracts [6].

Thanks to this robust evidence base, despite occasional objections against the proposed level by both employer and employee groups, to date, the government has always accepted the LPC's recommendations – which are informed by Machin's contribution based on his research – on the setting of the adult national minimum wage rates.

### Impacts on policy debate

The research evidence has shaped the debate on minimum wages in the policy arena. For example, the Resolution Foundation set up a Commission on Living Standards to study aspects of this – first coining the now commonplace phrase 'the squeezed middle'. Professor Machin was a member of the Commission and the evidence from section 2 was used in their report [7]. They also refer to the research work in their new venture on 'The Future of Minimum Wages' [7].

The role of the minimum wage in alleviating inequality has been acknowledged by the National Equality Panel (NEP), set up by the Right Hon. Harriet Harman MP through the Government Equalities Office, of which Professor Machin was also a member. The NEP emphasised the role of minimum wages in keeping wages up at the bottom end of the wage distribution, particularly for women, and drew upon the evidence of section 2 in doing so [8].

### Introduction of minimum wage in Hong Kong and experience of other countries

The evidence provided by research continues to be used in discussions of minimum wage in other countries, showing the international reach of this work. Professor Machin presented his research to policy audiences in Hong Kong in July 2008) as part of a search for evidence to inform minimum wage policy. In 2011, Hong Kong introduced a National Minimum Wage, affecting 10 per cent of its working population. This referred to the use of the LPC's assessments of the impact of minimum wages on employment as a justification for the level at which a minimum could be introduced without damaging employment [9]. The 2010 report of the Provisional Minimum Wage

## Impact case study (REF3b)

Commission, which set the parameters of implementation in Hong Kong, referred extensively and positively to the UK precedent, and cited eight separate research outputs by Machin and nearly every LPC report since 1999 [9].

The UK research evidence has also featured prominently in minimum wage discussions elsewhere, for example, the Australian Fair Pay Commission's Minimum Wage Research Forum in Melbourne in October 2008 at which Machin presented his research [10], while discussions in Germany (where Professor Machin presented his research to policy audiences in Berlin in April 2008) referred to the UK evidence and looked to the LPC as a model if an economy-wide minimum wage were to be introduced.

### 5. Sources to corroborate the impact (indicative maximum of 10 references)

[1] The first LPC report (1998) cited 22 of Machin's publications: <http://bit.ly/1dd4VpS> [PDF].

Machin was one of nine Low Pay Commissioners throughout the impact period; see for example, signature pages in all LPC reports 2008–2013 at <http://bit.ly/1945XQA>.

The ongoing impact of the research is demonstrated by the extensive citations in LPC reports and commissioned research projects at the webpage above during the impact period. For example, Low Pay Commission Report, 2009, cites [a], [b], [c] and [e]; Low Pay Commission Report, 2010, cites [d]; Low Pay Commission Report, 2011, cites [a], [c] and [e]; Low Pay Commission Report, 2012, cites [a], [c], and [e]; Low Pay Commission Report, 2013, cites [a], [c] and [e].

[2] Institute of Government, 'What makes a "successful" policy?', November 2010; <http://bit.ly/HPVUp5> [PDF]. The press release reported that the "minimum wage tops the chart of the most successful policies of the last 30 years". <http://bit.ly/H7oX7q>.

[3] Statement confirming important contribution of research to LPC recommendations and government policy provided by the Chair of the Low Pay Commission, 21 August 2013.

[4] List of research projects commissioned: <http://bit.ly/1fS0phm>.

Specific examples that build upon the research on employment effects of the minimum wage in [a], [b] and [c] are: 'The employment and hours of work effects of the changing National Minimum Wage' (2009) <http://bit.ly/Hc0233> [PDF]; 'The impact of the national minimum wage on the labour market outcomes of young workers' (2011) <http://bit.ly/1a1HBq2> [PDF].

Specific examples that build upon the work on the impact of minimum wages on profitability in [e]: 'Impact of recent upratings of the National Minimum Wage on competitiveness, business performance and sector dynamics' (2009) <http://bit.ly/HeOiMo> [PDF]; see also [5].

[5] The Impact of the National Minimum Wage on Firm Behaviour During Recession, LPC research project commissioned for the 2013 report by Rebecca Riley and Chiara Rosazza Bondibene (National Institute of Economic and Social Research), <http://bit.ly/GYVGMt> [PDF].

LPC report, April 2013: <http://bit.ly/1fzeiB2> [PDF].

[6] Commissioners normally go on three LPC visits per year and meet a wide range of workers, union and business representatives, etc. For example, a Sheffield visit in November 2013, <http://bit.ly/19KqJSf>; and issues raised by staff at a Citizen's Advice Bureau's Debt Support Unit: <http://bit.ly/1btQFVw>.

[7] Resolution Foundation – Report of Commission on Living Standards, 2012. <http://bit.ly/1fzdRqh> [PDF]. Future of minimum wage discussion paper <http://bit.ly/17qTSC5> [PDF].

[8] National Equality Panel – Report, 2010. <http://bit.ly/1enyK4D>.

[9] Research document referring to LPC research for Hong Kong Labour Department. <http://bit.ly/16cYKdT> [PDF]

Report of the Provisional Minimum Wage Commission (2010), Hong Kong, referring extensively to Machin's research: <http://bit.ly/1enyMcV> [PDF].

[10] Discussion of Australian Fair Pay Commission's Minimum Wage Research Forum in Melbourne in October 2008. <http://bit.ly/1cnPdFq>.