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THE MINIMUM WAGE: SILVER BULLET OR POISONED CHALICE?

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Summary

- In recent months, politicians have urged the Low Pay Commission (LPC) to consider a significant increase in the National Minimum Wage (NMW). In February the LPC recommended an increase of 3 per cent for October 2014, from £6.31 to £6.50, which was accepted by the government. This is a substantially smaller increase than suggested by the Chancellor of the Exchequer, who wanted the NMW to rise to £7 by 2015.

- The NMW has risen significantly relative to average earnings since its introduction in April 1999. During that time, the NMW increased by 75 per cent in nominal terms, whilst average earnings have increased by 61 per cent. Even since 2008, the NMW (14 per cent) has increased relative to average earnings (10 per cent), though more slowly than the price level.

- The idea the NMW can be safely raised stems from the belief that it has not had a negative effect on employment. The consensus view, however, is that minimum wages at moderate levels have a small negative impact on employment and that the level of the minimum wage matters. A recent HM Treasury submission to the LPC, for example, estimated that raising the NMW to £7 per hour would increase unemployment by 14,000 by 2018/19. There is also evidence of reduced working hours in response to NMW increases. International research suggests many of the negative effects operate after a long time period through reducing new job creation.

- Employment impacts of increases in the minimum wage are likely to disproportionately affect the young, the unskilled, the long-term unemployed and those in lower productivity regions. There is evidence that minimum wages lead firms to replace lower-skilled and less experienced younger workers with older workers. The 18-24 year old unemployment rate has risen from 11.5 per cent in April 1999 (when the NMW was introduced) to 17.9 per cent today. And of those unemployed within this age group, the proportion out of work for more than 12 months has risen from 14.4 per cent in 1999 to 31.8 per cent in 2013.

- The NMW is not a targeted poverty reduction tool. 46 per cent of those *individuals* in households defined as in poverty are workless: a minimum wage can do nothing to help them. Whilst many of those individuals currently on low pay would benefit from a NMW increase, many of the beneficiaries of a minimum wage are not in poor households. 44 per cent of low-paid workers are in households in the top half of the household income distribution.

- Some people have advocated a substantial increase in the NMW as a means of improving the public finances. However, the evidence suggests any net benefit is small. The improvement to the public finances of raising the NMW to £7 has been estimated to be just £30 million once all effects are considered.

- Claims employers are ‘subsidised’ by in-work benefits in the form of tax credits have some truth, but are exaggerated. Nearly a third of all tax credit recipient households do not have an adult in paid employment and a further million households work fewer than 30 hours per week. Reforming tax credits would be a better means of eliminating the degree to which tax credits subsidise the employers of the remaining full-time workers in receipt of credits.

- The ‘Living Wage’ is a misnomer for the three-fifths of those earning less than the Living Wage who are working part-time. Statutory implementation of a minimum wage at the Living Wage level could have a significant impact on employment and the viability of firms in a range of sectors. It has been estimated to cost 150,000 jobs, with substitution for older workers meaning 300,000 fewer young people employed.

- Recent proposals for the LPC's scope to be extended would fundamentally change its remit from seeking to set a minimum acceptable wage floor to more inherently subjective aims, such as reducing inequality or assessing wages by sector.

- In the absence of a decision to abolish the NMW entirely, we recommend the government:

  – commits not to widen the remit of the LPC, which could make it more intrusive for employers whilst fundamentally changing the LPC's aims

  – abolishes the minimum wage for apprentices and under 18s

  – suspends the minimum wage for all those under the age of 24 who have been unemployed for more than one year, for the first year of employment

  – instructs the LPC to regionalise the NMW from October 2015, taking into account regional productivity differentials. The LPC should examine each region on an individual basis, taking into consideration economic conditions and firms' ability to pay, with the main emphasis placed on private sector employment.

Context

As the economic debate has shifted away from macroeconomic outcomes to living standards, politicians across all parties have become increasingly interested in pay, particularly for those on low incomes. This has brought into focus the level of the UK's National Minimum Wage (NMW). Prior to the LPC's recommendation earlier this year, the Chancellor of the Exchequer, George Osborne[1], Secretary of State for Business, Innovation and Skills, Vince Cable[2] and Labour leader Ed Miliband[3] all stated that they believed the Low Pay Commission (LPC) should consider a significant increase in the minimum wage given its fall in real terms since 2007, despite the fact that over the same period it has increased by slightly more than average earnings (BIS, 2014). The Low Pay Commission has since recommended a 3 per cent increase in the level of the NMW from £6.31 to £6.50 for October 2014 – a real-terms increase. This proposed rise, whilst significant, was lower than that implied by George Osborne's suggested increase to £7 by 2015, and there is still political pressure for more significant increases in the NMW going forwards. More radical proposals to change fundamentally the remit of the LPC to focus on 'low pay' more broadly, to encourage the government to set out its longer-term ambitions for the minimum wage, and for the LPC to 'inform public debate over when employers

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1 'Osborne wants above-inflation minimum wage rise', *BBC News*, 16 January 2014 http://www.bbc.co.uk/news/uk-politics-25766558 (accessed 20 February 2014).
2 'Vince Cable Calls For Minimum Wage Increase', *Sky News*, 14 September 2013 http://news.sky.com/story/1141533/vince-cable-calls-for-minimum-wage-increase (accessed 20 February 2014).
3 'Ed Miliband: Labour will increase national minimum wage', *The Guardian*, 21 September 2013 http://www.theguardian.com/politics/2013/sep/21/ed-miliband-labour-minimum-wage (accessed 20 February 2014).

could go further than the NMW' have all recently been suggested by the Resolution Foundation. This Briefing presents both theory and evidence which implies these recent suggestions are flawed. It also addresses some of the justifications cited in public debate for a substantial minimum wage increase.

Introduction

Most developed countries impose minimum wage rates[4]. The first to do so was New Zealand, as long ago as 1896. Although the UK had long experience with Wages Councils[5] setting rates in particular industries and occupations, these bodies were largely closed under John Major's administration and there was no NMW until 1998, when Tony Blair's New Labour introduced it. The LPC of trade union representatives, employers and academics was set up to advise the government; successive administrations have usually, though not always, accepted its recommendations.

Now, however, politicians have begun urging the Low Pay Commission to raise the minimum wage significantly, and some want a much more ambitious framework for government intervention in low pay industries. This discussion has, in part, been driven by the emergence of a new target for low-pay campaigners - the Living Wage.

The argument favouring the principle of complete freedom of contract in labour markets, a case made perhaps most cogently in modern times by Richard Epstein[6], is now largely absent from contemporary discussion. In this classical liberal view any restriction on the wage set by the interaction of buyers and sellers of labour services is an

4 One exception is Germany: however at the time of writing it appears that Angela Merkel has agreed to introduce a minimum wage in order to secure SPD participation in her coalition government.
5 'Trade Boards' as they were initially known, were set up in 1909 to regulate pay in 'sweated' industries. Initially there were just four boards, though by 1920 63 trades were covered.
6 See, for instance, Epstein (2004).

abridgement of economic freedom, preventing mutually beneficial bargains being struck and giving powers to governments which they are likely to abuse.

Instead, most political discussion of minimum wages tends, on both the pro- and anti- sides, to be on the likely empirical consequences of such interventions. Historically, this has focused on the effects on employment of minimum wage rates set at various levels. This is still the most common area of discussion and disagreement. Yet other justifications have been expressed by politicians across all parties for increased minimum wages, including: poverty reduction, raising UK productivity, improving the public finances, and the concept that employers should pay their employees a 'Living Wage'.[7] The rest of this paper addresses whether increasing the NMW is the silver bullet implied, or rather is somewhat of a poisoned chalice, in each of the debates in turn:

1. Minimum wages and employment: theory
2. Minimum wages and employment: evidence
3. Unintended consequences of national minimum wage increases
4. National Minimum Wage increases and poverty
5. National Minimum Wage increases and the public finances
6. National Minimum Wage increases and the cost of living: a Living Wage?
7. A new role for the Low Pay Commission?

7 Many of the historical motivations behind setting minimum wages are on surprisingly shaky moral foundations. Thomas Sowell, the prominent African-American economist, has argued against minimum wages in the United States on the grounds that any negative employment effects fall disproportionately on young black workers. He buttresses his case (Sowell, 2013) by pointing to historical episodes where minimum wage laws were sometimes explicitly advocated to price minorities out of jobs: examples he cites include a 1925 law in British Columbia aimed at preventing Japanese immigrants undercutting Canadians in the lumber industry and interwar Australian legislation which was intended to protect white Australian workers' pay being dragged down by competition from Chinese immigrants. There are also dark antecedents in British political history; according to Thomas Leonard (2005, p: 212), the Fabian socialist Sidney Webb argued for minimum wages on eugenic grounds. For Webb a minimum wage would play the useful purpose of forcing 'degenerate immigrants' out of the workforce. While in today's European polities such explicit racism is mercifully taboo, it is possible to read some of the recent enthusiasm for higher minimum wages as a response to increasing immigration. And certainly trade unions are usually conspicuous in their support for minimum wages, to defend one group of workers at the expense of another..

Minimum wages and employment: theory

Elementary economics textbooks often use the imposition of a minimum wage on a labour market as a classic case of the undesirable effects of apparently beneficial government intervention. A wage set higher than the market-determined level will mean that fewer labour-hours are demanded, while workers wish to supply more hours.[8] Thus the gains to those receiving higher pay have to be weighed against losses of hours or employment to other individuals.

As so often in economic analysis, it is not quite as simple as this. In practice the benefits from jobs may involve non-pay elements such as the provision of training, attractive working conditions, staff discounts and other fringe benefits of one sort or another. Faced with the introduction of a minimum wage the employer may adjust these conditions rather than cut employment. Thus even those who gain from pay increases may lose out in other ways.

More optimistically, it has sometimes been argued that the 'shock' effect of the minimum wage can induce previously lethargic employers to search more effectively for ways of increasing productivity, which would in principle allow them to maintain or even increase employment[9]. In such circumstances there would be no obvious losers from the minimum wage.

Sir John Hicks argued (Hicks, 1932) that the elementary textbook case in effect assumed perfect competition in the labour market. If, on the other hand, there is monopsony – a single buyer of labour – profit maximisation would lead firms to pay less than the value of the marginal product of labour[10] and employ less labour-hours than would be the case in a competitive market. The implication is that when there is a strong element of monopsony in the labour market, the imposition of a minimum wage can lead to both an increase in pay per hour *and* an increase in hours of employment. Workers would gain unequivocally from the minimum wage, while previously exploitative employers would lose.

Examples of monopsony in modern labour markets – such as the 'company town' where everyone works for the same employer – are rare[11]. And low-paid sectors such as cleaning, retailing, hairdressing and hospitality and catering are surely highly competitive when we look at conventional indicators. However, some economists (notably Manning, 2003) have argued that all employment situations have an element of monopsony, as imperfect information and the costs to an employee of switching jobs give the current employer some market power over workers[12].

8 Workers will wish to supply more hours at the new minimum wage. The gap between the quantity demanded and the quantity supplied which is opened up is often interpreted as unemployment, although in practice this may not result in a rise in measured unemployment, which reflects statistical conventions and benefit regulations. It may be manifested as underemployment, which means that people with jobs wish to work longer hours. During the recent recession the number of UK underemployed rose quite sharply so that by 2012 just over three million workers were reported to want to work more hours.

9 If the increase came from improved organisation and the reduction of what economists call 'X-inefficiency' (Leibenstein, 1966), or investment in training and/or investment in labour-using technology. On the other hand, if productivity increases came through a switch to investment in labour-*saving* technology, the longer-run impact of the minimum wage might lead to larger reductions in employment than is the case in the short run.

10 A firm with a monopsony position faces an upward-sloping supply curve, which shows the average cost of employing labour. If the average cost of labour is rising, its marginal cost is also rising, and lies above the average cost. If the firm equates the marginal revenue product to the marginal cost of employing labour, the MRP must be greater than the average cost of labour, the wage rate.

11 It has sometimes been claimed that some areas of state employment – such as specialists in the National Health Service or some types of university lecturer – resemble monopsony (although not in the context of profit-maximising firms).

12 However it can equally well be argued that existing employees have some limited market power in relation to their employer in that it would be costly for the employer to dismiss them and recruit a replacement. For a critical discussion of Manning's argument see Kuhn (2004).

More recent developments in economic theory stress the *dynamics* of the labour market in a situation where the labour market is characterised by imperfect information (Meer and West, 2013). Adjustments to the introduction of a minimum wage take time and are not altogether predictable. In this framework, jobs last more than one period and are being created and destroyed all the time: the effect of a minimum wage is felt on both job creation and job destruction (or hiring and firing). Given that there may be costs associated with firing workers – such as redundancy payments, loss of expertise from the firm and psychological costs to managers, a reduction in hiring rather than sacking existing workers may be the optimal response to the introduction of the minimum wage. Indeed, work using Canadian data (Brochu and Green, 2013) suggests that in some cases firing rates may *fall* as minimum wages rise.

The effect of this on the actual level of employment may be that there are significant lags in adjustment, which tends to come about through natural wastage as workers leave voluntarily (Neumark and Wascher, 2007). There could even, in some plausible circumstances, be an increase in hiring. This would occur if the higher wage led to more intensive and effective searches for work by potential employees. If as a result there was an improvement in the quality of the 'match' between workers and firms, productivity could rise and with it the demand for labour[13].

The existence of significant lags in the effect of minimum wages makes it difficult to measure the effects of the introduction of, or changes in the value of, the minimum wage. Such effects may also be masked by other changes which are taking place, for example in demand for goods and services produced by low-paid labour.

13 However, as we shall see later, Meer and West's empirical work using US panel data over a long period, suggests that this does not happen in practice.

All of these theoretical wrinkles[14] suggest that the effect of a modest minimum wage may not be to produce significant reductions in employment in the short run - though none of them can be taken to suggest that very large increases in wage levels can be engineered without eventual reductions in jobs, hours worked or some combination of the two.

14 The examples mentioned do have the benefit of some theoretical plausibility. This cannot be said of the pseudo-Keynesian argument that minimum wages necessarily boost aggregate demand, as outlined by Reed (2013) and the trade unions, 'Boosting the incomes of the low paid goes straight into the economy and wage-led growth must be part of the recovery so we would have liked to have seen minimum wage rates go up further today,' (TUC Press Release, April 15 2013, http://www.tuc.org.uk/economic-issues/tuc-reacts-new-minimum-wage-rates). This argument ignores the fact that, even where employment is unchanged, minimum wages have to be paid for by higher prices and/or reduced profits, which have knock-on effects on demand elsewhere in the economy.

Minimum wages and employment: evidence

What light does empirical evidence throw on this issue? Two decades ago David Card and Alan Krueger (1994) put the cat among the labour economics pigeons by their claim that increases in the minimum wage did not in practice necessarily cause employment reductions: indeed, they could actually increase it. Their initial work was a case study of the response of fast-food restaurants in New Jersey to a rise in the state's minimum wage - which appeared to have led to employment rising. This work led to a lively debate, with the critics led by David Neumark and William Wascher (1995), who re-examined the New Jersey case using payroll data rather than the telephone survey which Card and Krueger had employed. Their analysis suggested that the New Jersey minimum wage increase had led to a 4.6 percent decrease in employment in New Jersey fast-food outlets relative to the control group of Pennsylvanian restaurants[15], where there had been no increase in the minimum wage.

Battle over these and many other studies has raged backwards and forwards ever since. The issues can get very technical as even the same set of data can yield different results depending on the method used and the econometric specification of models. Nevertheless a broad consensus view of the academic literature seems to have emerged[16]. This is that minimum wage laws as instituted tend to have a small but significant negative effect on overall employment levels, with the effect being greater for young adults (Williams and Mills, 2001; Neumark and Wascher, 2004) and in recessions (Dolton and Rosazza Bondibene, 2012). Empirical work in this area tends to be more common in the US than in the UK, where the data is available over a much longer time frame and regional variations create observations which are much more like natural experiments.

Nevertheless, this small negative effect appears to fit in with the UK Treasury's most recent estimate (BIS, 2014) of the effect of raising the NMW in the UK to £7 by 2015/16[17] relative to a counter-factual of £6.71, which they estimate will increase unemployment by 14,000. The Congressional Budget Office's forecasts relating to President Obama's proposed federal minimum wage hike likewise suggest an increase of unemployment of 500,000.[18] The work cited earlier by Meer and West (2013) suggests that negative effects will primarily result from reduced job creation by establishments which would otherwise be looking to grow, rather than through increased dismissals.

The evolution of the UK's NMW is shown in Table 1. The level of the NMW is recommended to the government each year by the Low Pay Commission[19], which bases its decision on evidence about the effects of the existing level of the NMW and on its sense of likely labour market conditions in the upcoming period. The minimum is thus intended to be affordable by businesses and is not explicitly linked to any index of 'need'. The Commission aims to avoid loss

15 The existence of different minimum wages in different US states provides the potential for 'natural experiments' when some rates are raised but not others. This is not the case in the UK and other unitary polities and is one reason why there is less empirical work on this topic here.

16 A fairly exhaustive survey of 102 (mainly US) studies is provided by Neumark and Wascher (2007). They conclude (p. 164) 'The preponderance of the evidence points to … disemployment effects….When researchers focus on the least-skilled groups most likely to be affected by minimum wages, the evidence for disemployment effects seems especially strong'.

17 i.e. restoring the real value of the national minimum wage to the same rate as observed in 2007/08, as outlined in BIS's LPC submission.

18 See, for example, Reuters: U.S. CBO projects job losses with minimum wage increase http://www.reuters.com/article/2014/02/18/usa-wage-cbo-idUSL2N0LN14Q20140218 (accessed 20 February 2014).

19 The Commission has nine commissioners; at the time of writing these consist of three union representatives, two academics, one with a civil service and business background, and three from business, one of whom has some small business expertise.

of jobs, particularly when the economy as a whole is in difficulties as it has been since 2008.

Table 1: National minimum wage

From	Adult Rate	Development Rate*	16-17 Year Olds Rate	Apprentice Rate
01-Oct-13	£6.31	£5.03	£3.72	£2.68
01-Oct-12	£6.19	£4.98	£3.68	£2.65
01-Oct-11	£6.08	£4.98	£3.68	£2.60
01-Oct-10	£5.93	£4.92	£3.64	£2.50
01-Oct-09	£5.80	£4.83	£3.57	–
01-Oct-08	£5.73	£4.70	£3.53	–
01-Oct-07	£5.52	£4.60	£3.53	–
01-Oct-06	£5.35	£4.45	£3.40	–
01-Oct-05	£5.05	£4.25	£3.30	–
01-Oct-04	£4.85	£4.10	£3.00	–
01-Oct-03	£4.50	£3.80	£3.00	–
01-Oct-02	£4.20	£3.50	–	–
01-Oct-01	£4.10	£3.50	–	–
01-Oct-00	£3.70	£3.20	–	–
01-Apr-99	£3.60	£3.00		

*For those aged 18-20, although until 1 October 2010 for those aged 18-21.

This relatively conservative approach to setting the NMW is reflected in Table 2, where the UK's minimum wage in relation to the median is seen to be in line with other developed countries. This has meant that, in the words of the Commission's 2013 report, their research has 'found few adverse effects on aggregate employment'[20]. Increases in pay at the bottom seem to have had only limited 'ripple effects' in boosting the pay of those further up the income distribution, so in addition to an increase in absolute levels of real pay, the evidence suggests that some measures of pay inequality[21] have been reduced after a long period in which they rose.

20 Low Pay Commission (2013: p.182).
21 For example the ratio of median pay to the lowest decile: see Plunkett and Hurrell (2013: p.17-18).

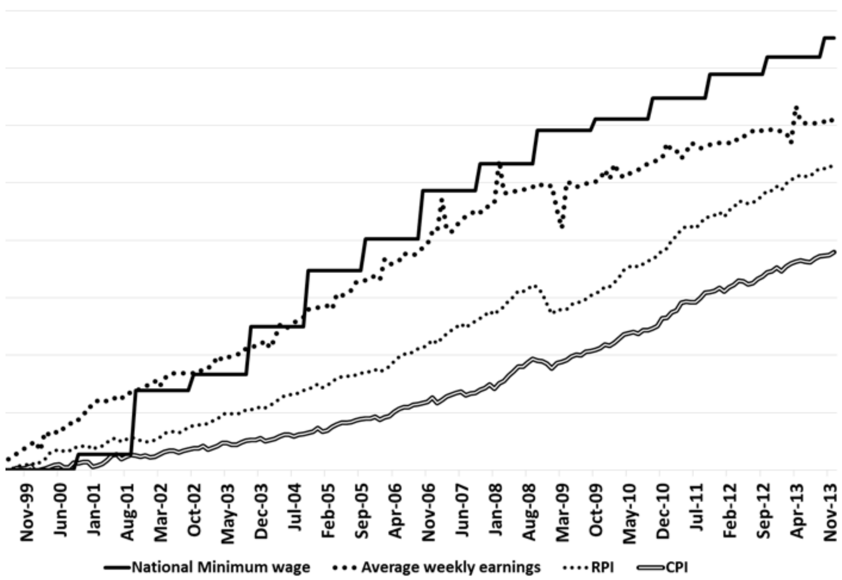
Table 2: Minimum wage as percentage of median wages of full-time workers, 2012

Australia	0.53
Belgium	0.51
Canada	0.45
Czech Republic	0.36
France	0.62
Greece	0.43
Hungary	0.54
Ireland	0.48
Japan	0.38
Netherlands	0.47
New Zealand	0.60
Poland	0.47
Spain	0.44
United Kingdom	0.47
USA	0.38

Source: OECD

Nevertheless, as Figure 1 below shows, the NMW has increased significantly relative to average earnings growth and two measures of the price level (the Consumer Price Index and the Retail Price Index) since its introduction in April 1999. During that time, the NMW has increased by 75 per cent, whilst average earnings have increased by 61 per cent and the Retail Price Index by 53 per cent. Thus, the bite of the NMW and its real value have increased.

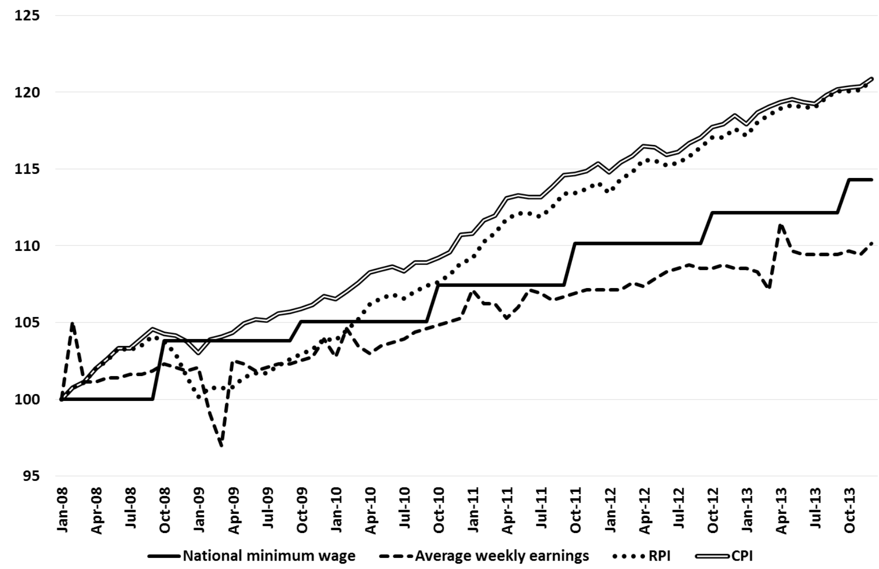
Figure 1: National Minimum Wage, Average Weekly Earnings and Price Indices (Apr 1999 = 100)



Source: Low Pay Commission and authors' calculations from Office for National Statistics data.

Though much has been made of the decline in the real value of the NMW since the financial crisis, Figure 2 shows the NMW has continued to increase relative to average earnings since 2008 – up 14 per cent compared to average earnings growth of 10 per cent.

Figure 2: National minimum wage, average weekly earnings and price indices (Jan 2008 = 100)



Source: Low Pay Commission and authors' calculations from Office for National Statistics data.

While the overall employment effect is believed to be small, we should be wary of drawing from the Commission's research the view that the minimum wage has been a harmless innovation in the UK. If overall employment did not fall, job opportunities for some groups may have fallen as employers altered their patterns of recruitment. Youth unemployment has risen to very high levels (currently 19.9 per cent), and the existence of a minimum wage, albeit less than the adult minimum, cannot have helped. For 18-20 year olds, HM Treasury currently estimates the rate has represented 75-80 per cent of median wages for that age group since 2010, much higher than the 'bite' associated with the main NMW (BIS, 2014). Overall unemployment for 18-24 year olds rose from 11.5 per cent to 12.2 per cent even during the long boom prior to the crisis, and now stands at 17.9 per cent. Perhaps more tellingly, even within the 18-24 year old unemployed population, the proportion of those unemployed for longer than 12 months rose from 14.4 per cent in April 1999 to 19 per cent prior to the financial crisis, and now stands at 31.8 per cent. In numbers, this represents an increase from 60,000 in 1999 to 234,000 today.[22] A recent assessment of young people in the labour market found that since 2000 (just after the NMW was introduced) the proportion of students with jobs has fallen from 41 per cent to 27 per cent (ONS, 2014). The same report explains how young people are most likely to work in low-skilled jobs such as kitchen assistants or waiters.

Eurostat statistics show that in April 1999 the unemployment rate of under-25s was 23.5 per cent in France and just 12.9 per cent in the UK. Today the gap has narrowed substantially with French unemployment 25.4 per cent against the UK's 20 per cent. Germany, which doesn't have a minimum wage, has youth unemployment of just 8 per cent, with very high levels of students in work (ONS, 2014).

Similar trends are observed for the duration of unemployment more generally. Office for National Statistics figures show the proportion of unemployed 16-64 year olds out of work for more than a year rose from 28 per cent in April 1999 to 36 per cent today. Those with no qualifications likewise saw their unemployment rate increase from 12.1 per cent in 1999 Q1 to 17 per cent by 2011 Q3 (Low Pay Commission, 2012).

It is also important to stress that in the sort of low-paid job where the minimum wage is paid, hours worked may fall rather than employment (Stewart and Swaffield, 2008). Workers in bars and restaurants, for example, especially those on 'zero-hours' contracts, may find that, faced with a hike in the minimum wage, employers simply cut the number of people they ask to come in during quiet periods. This is backed up by HM Treasury analysis which shows that since 2007, the growth of *weekly* wages for NMW wage workers has tended to be below the growth in the NMW (*hourly*) rate (BIS, 2014). There is some evidence that hours worked by young people

22 The proportion of unemployed 18-24 year olds out of work for more than 24 months rose from 5.9 per cent in April 1999 to 8.5 per cent in January 2008, but now stands at 15.5 per cent.

fell as a result of minimum wage increases during the recession (Bryan, Salvatori and Taylor, 2012). Similarly, Dickens, Riley and Wilkinson (2012) have suggested that the NMW reduced hours for female full-time workers during the same period.

At an industry level, Machin, Manning and Rahman (2003) had earlier found a small negative effect of the introduction of the NMW on employment in those care homes containing a high share of minimum wage workers. And there are concerns that the minimum wage may have differential effects regionally, perhaps unsurprisingly given the differences in the significance of minimum wages by region shown in Table 3. Work by Galindo-Rueda and Periera (2004), for example, has suggested that regions where very low median pay means that the minimum wage has a bigger 'bite' displayed slower growth in employment than other regions in the early years of the NMW. There is also huge regional variation in youth unemployment. The North East and West Midlands, for example, have unemployment rates for young people not in full-time education at greater than 24%, compared to just 15% in the South East and East of England (ONS, 2014). For these reasons, economists and politicians[23] have argued for regional variation in the minimum wage[24].

Some commentators simply dismiss this evidence and these concerns about employment and hours effects, and suggest that increases in pay consequent on the NMW can be passed onto consumers in those industries in the form of higher prices (see Chang, 2013). There is some evidence which suggests this can happen. Jonathan Wadsworth (2009) finds that prices in several 'minimum wage' sectors such as takeaway foods, canteen meals, hotel services and domestic services rose, after a lag, significantly faster than prices in non-minimum-wage sectors. This of course

23 Gordon Brown apparently advocated regionalising the minimum wage in 2007, although ironically he has recently, in the context of the approaching referendum, warned voters that an independent Scottish government might undercut minimum wages in the rest of the UK. (*The Scotsman*, 8 January 2014).

24 Those implementing such a policy would need to consider carefully the appropriate regions to use for different minima, to avoid variations within the same travel-to-work areas. A complementary policy might involve different regional rates of pay for public sector jobs.

can impact the standard of living of those who tend to purchase these products, which for the first two sectors listed we might expect to be many of the less well-off, including many who would not benefit from a NMW rise.

Table 3: National minimum wage as percentage of median hourly earnings by UK region, April 2012*

REGION	All	Public Sector	Private Sector
North East	0.59	0.49	0.66
North West	0.58	0.46	0.65
Yorkshire and the Humber	0.59	0.48	0.65
East Midlands	0.60	0.47	0.65
West Midlands	0.59	0.48	0.64
East	0.56	0.46	0.61
London	0.39	0.34	0.42
South East	0.50	0.44	0.53
South West	0.59	0.45	0.64
Wales	0.60	0.49	0.70
Scotland	0.55	0.44	0.63

Hourly pay excluding overtime for all employee jobs
Source: Authors' calculation from Annual Survey of Hours and Earnings data

Overall though, it is misleading to imply (as is often asserted) that there is no evidence of an employment effect from the NMW in the UK, though it's fair to say that the balance of evidence suggests the level has been set in such a way that overall employment effects have been small. Most theory and evidence suggests the level of the NMW does matter, however. Thus, simply extrapolating from saying the employment effects so far have been small in order justify a much higher level of the minimum wage does not mean future effects on employment will be so modest.

Unintended consequences of national minimum wage increases

There are other issues worth considering. One is that minimum wages tend to alter employment patterns. Employers become choosier about those whom they recruit, preferring more experienced workers to new labour market entrants. This is why young people find it more difficult to obtain a job even if overall employment remains roughly constant. And as the cost to employers of wrong hiring decisions increases with higher wages, firms may use various devices to minimise their costs. One is to try out young people via internships. In the UK, the Low Pay Commission (2013:133) says that there is evidence of 'widespread non-payment of the minimum wage for positions that appear to be work' but appears not to have any clear idea how to stop this[25].

More generally, employers may be less than fully compliant with minimum wage legislation. This seems to be a common complaint by trade unions and politicians, although evidence is sparse. A study by the National Institute for Economic and Social Research (le Roux at al., 2013) has indicated that paying less than the minimum wage is currently relatively rare in the UK – perhaps 1-1.5 per cent of employment – and many apparent cases of non-compliance may

25 It discusses monitoring advertisements as one possible approach. However many internships are not formally advertised. The Commission sees them as particularly prevalent in the Entertainment and Media industry, where freelance work and other non-standard forms of employment are also common as teams coalesce around one-off projects such as a theatrical production or film.

be either under-reporting or legitimate exceptions[26]. However, the numbers are more significant in relation to those who are low paid; moreover there is some indication that non-compliance may have risen and that increases in the minimum wage can encourage more 'cash in hand' activity in the shadow economy[27]. This has been noted especially in relation to immigrant labour, with subsequent calls to tighten enforcement (Knowles, 2013; Toynbee, 2014).

Another consequence may be that conditions of employment change even in the legitimate economy. For example, there has apparently been a significant increase in zero-hours contracts recently – arrangements where employers can vary the hours offered according to demand conditions (Pennycock et al., 2013). While this is an arrangement which suits some workers – for instance students, the semi-retired and those seeking extra work in addition to a main job – it may be one reason why there has also been a growth in those who would prefer to work longer hours than they are currently doing[28].

Another concern is that minimum wages may have a negative effect on skill acquisition in the longer term as a result of two mechanisms: first, by making work relatively more attractive than staying on in education, it may discourage completion of qualifications; second, by preventing wages from falling to cover the cost of training, it may discourage employers from offering training opportunities[29]. Some evidence from the USA (Neumark and Wascher, 2004) suggests that minimum wages can have such an effect.

26 For example, some employers paying regular bonuses may be exempt from paying the minimum wage, while those providing accommodation for employees can pay less (there is an official rate) than the NMW.

27 Although changes in tax and national insurance contributions are also important factors (Schneider and Williams, 2013).

28 ONS figures show that those who are 'underemployed' – working less than they would like to do – were 6.5 per cent of those in employment in 2006 but 10.6 per cent in 2013.

29 Historically, formal apprenticeships used this mechanism to make it worthwhile for employers to offer lengthy training. The apprentice would be paid a very low rate (and in many cases parents or guardians would have to pay a fee) during training periods of up to seven years. Although the UK National Minimum Wage has an apprentice rate to facilitate training, in practice only certain types of training are covered in this way.

Finally, policymakers are becoming increasingly aware of the effects of automation on low skilled service jobs. The most obvious example is supermarket checkout machines, but recent reports suggest that substitution of capital for labour may be on the way in jobs such as fast-food preparation and till staff.[30] This led the University of Chicago's John Cochrane to describe increasing minimum wages significantly as analogous to an industrial subsidy to those within an industry looking to automate.[31] Whilst automation and the productivity improvements they bring represent progress and ultimately lead to higher wages for individuals who remain in the labour force within an industry, it is unclear whether it is an intention on the part of policymakers to eliminate many of these low level jobs through artificial wage setting, with all the potential loss of on-the-job human capital and experience of the workplace that these opportunities bring.

30 See, for example, the '"Burger Machine" - Meet "Smart Restaurant"': The Minimum-Wage-Crushing, Burger-Flipping Robot http://www.zerohedge.com/news/2014-01-12/meet-smart-restaurant-minimum-wage-crushing-burger-flipping-robot (accessed 20 February 2014).

31 See John Cochrane, The Grumpy Economist: 'McDonald's and the Minimum Wage', September 19 2013 http://johnhcochrane.blogspot.co.uk/2013/09/mcdonalds-and-minimum-wage.html (accessed 20 February 2014).

National minimum wage increases and poverty

An increase in the minimum wage is often advocated as an anti-poverty policy – but it is not particularly effective in this. 5.1 million of the 11.2 million people defined as living in households in poverty are in workless households: a minimum wage can do nothing to help them. Furthermore, while many *individuals* on low pay would benefit from a minimum wage increase, many of the beneficiaries of a minimum wage are not in poor *households*. The Institute for Fiscal Studies has shown that 44 per cent of all UK low-paid workers are in families in the top half of the income distribution; 12 per cent are in the top fifth of the distribution (Institute for Fiscal Studies, 2014: 148). A similar pattern holds in the United States, where Sabia and Nielsen (2012) find that only just over 13 per cent of the beneficiaries of the 40 per cent increase in the USA's federal minimum wage between 2007 and 2009 were in households below the poverty threshold. Around a third of all beneficiaries lived in households whose income was over three times the threshold. They may, for example, be young people living with better-off parents, students who will get better paid jobs in time or part-time employees living with spouses who are in better-paid full-time jobs.

National minimum wage increases and the public finances

A more recent argument in favour of increases to the NMW is related to the public finances. Many advocates suggest that a substantial increase in the NMW would lead to an increase in tax revenues and a reduction in the tax credits bill such that the public finances will improve. Of course, the extent to which this is true shows the high marginal implicit tax rates that many individuals on low earnings face.

Lawton and Pennycock (2012), for example, argue that a nationwide implementation of a minimum wage at £7.45, with a rate of £8.55 in London (i.e. the then current levels of the Living Wage) would save £2 billion year.[32] But HM Treasury figures (2014) which examine the dynamic impact of minimum wage increases, and thus take into account the effects of lower labour demand, reduced corporate profits or higher prices (and their implication for various indexed-linked benefits) suggest that the overall savings to government would be much smaller at £30 million for a minimum wage increase to £7 per hour.[33]

32 This figure is ascertained by estimating net savings to the Treasury of £3.6 billion from increased tax revenues and lower spending on benefits and tax credits, offset by the direct costs of increased wages for those in the private sector.
33 See BIS (2014).

A more nuanced argument relates to the extent to which firms are being subsidised through tax credits, making a generous NMW necessary.[34] When the NMW and the Working Families Tax Credit were introduced, they were seen as complementary tools: both would improve the living standards of low-paid employees directly, whilst also increasing the difference between the low-paid and the economically inactive, thus strengthening incentives to enter the labour market in the first place. But recently commentators have highlighted the substitutability between tax credits and wages. In this argument, tax credits are really a subsidy to low-paying employers rather than low-paid employees: employers pay wages that are too low for people to live on, leaving it to the taxpayer to top up those wages.

A tax credit does act like a negative income tax. Theoretically tax credits reduce the lowest wage a worker is willing to accept a particular job, and weaken incentives, for example, to switch to better-paid positions or to go through the hassle of demanding higher wages. Yet the nature of the tax credit system means those in favour of substantial increases in the NMW exaggerate this effect, and ignore that it could be better ameliorated through tax credit reform, rather than increasing the minimum wage distortion.

Tax credits were initially supposed to be a wage supplement, and receipt was thus automatically limited to wage earners. In reality, Child Tax Credit (CTC), by far the most important element of the tax credit system, does not come with any work requirements attached. As a result, nearly a third of all tax credit recipient households – 1.4 million out of 4.6 million – have no adult in paid employment (HMRC and ONS, 2013a). Out of a total tax credit bill of £29.2 billion, those households alone account for £8.1 billion. Child tax credit is therefore really not a tax credit at all, but a means-tested benefit. It cannot be blamed for low wages when the recipients do not even earn a wage (HMRC and ONS, 2013b). Many other recipients of in-work tax credits likewise work hours substantially shorter than a full working week - out of the 3.2 million in-work tax

34 See, for example Flight (2014) and Jones (2014).

credit recipient households, 0.7 million work fewer than 24 hours per week, and 1 million more work fewer than 30 hours. For these groups, the high tax credit bill cannot be primarily blamed on low hourly wages. Short working hours among recipients account for a major share of the cost of tax credits – the benefits system is not subsidising low pay but a short working week.

Nevertheless, a third of tax credit recipient households (1.6 million) work a full-time workweek (HMRC and ONS, 2013a) – defined here as 34 hours a week or longer. For this latter group, low wages, not short working hours, are indeed the main cause of low income, and the basis of their entitlement to tax credits. Moving away from this need not require a substantial increase in the NMW, however, which could have other perverse effects. Instead we could aim to return tax credits to being a wage supplement rather than a wage substitute. This could entail: converting CTC into an actual tax credit by applying the same work conditions as for WTC; basing entitlement to tax credits not on the income that recipients actually earn, but on their full-time equivalent income, i.e. the income they would earn if they worked full-time at their given wage rate (meaning an increase in working hours would no longer lead to a loss in tax credit income; only an increase in the hourly rate would); and disentangling national insurance and income tax from the tax credit system in a revenue neutral way, such that no household can be an income tax/NI payer and a tax credit recipient at the same time (Niemietz, 2012: 158-159 & 181-184).[35]

There is therefore a genuine debate about the merits and demerits of tax credit reform versus a minimum wage hike, particularly seen in the US discussion. The pro-tax credit reform view tends to be that some individuals, particularly in a world with increasing automation, have relatively low productivity and so are unable to command wages high enough to allow an adequate standard of living. To the extent that this provides a social policy challenge, providing in-work transfers at least gives some of these individuals the opportunity to enter the labour market without the full cost being imposed upon employers or customers of the industry who have given them an opportunity in the first place. Tax credits are also fairly well targeted to the poorest households compared to NMW increases. Among the 3.2 million in-work recipient households, almost four out of five – 2.5 million – have annual incomes below £20,000 (HMRC and ONS, 2013a).

35 The idea is simply that a household paying e.g. £100 in income tax/NI, while receiving £150 in tax credits, should instead receive £50 in tax credits while not paying any income tax/NI at all. This would drastically lower effective marginal tax rates, restoring sensitivity of the low-paid to wage-rate differentials.

National minimum wage increases and the cost of living: a Living Wage?

The fact that the NMW has apparently had only a modest impact on employment, coupled with concern over the disproportionately rising cost of living for poorer families, and government awareness that the cost of in-work benefits (such as Working Tax Credit) has grown sharply, has led people across the political spectrum to argue for a substantial increase in the NMW – and to a growing interest in the concept of a ‘Living Wage’.

The Living Wage is an idea with roots in history, as a demand from the working class movement. In the nineteenth and early twentieth century the call was for a ‘family wage’ which would enable a male worker to keep his family in modest comfort while excluding women from most forms of paid work. In one version it was something advocated by the Catholic Church, with echoes of the medieval ‘just wage’.

In modern form, the Living Wage Campaign in the UK[36] currently proposes a wage of £8.80 an hour in London and £7.65 outside London, with the figures updated annually. They are calculated by two different bodies. In London, GLA Economics, a body which falls under the auspices of the London Mayor, sets the figure. Nationally,

36 Note that this is part of an international movement. In many US cities there are Living Wage ordinances: Mayor Bloomberg controversially vetoed a proposal to impose one on New York in 2012 but it was eventually carried. Living Wages are also pushed in countries such as New Zealand and Canada.

it is produced by the Centre for Research in Social Policy at Loughborough University. These bodies, using both expert opinion and focus groups, set a figure (based on a number of stylised households with different patterns of work and family commitments), which is said to suffice for an adequate level of warmth and shelter, a healthy diet and a reasonable level of social integration. In London, this needs-based approach is complemented with an analysis of those earning less than 60 per cent of median income for each household type (London Assembly Economic Committee, 2014). In both cases a weighted average living wage is produced reflecting the mix of households in the population.

The methodology can be challenged, but the point to be grasped here is that this figure, unlike the National Minimum Wage, is set without any reference to employer ability to pay. At the moment it is a purely voluntary target. A number of major private sector employers have signed up to it, proudly proclaiming that they pay all their workers at or above the Living Wage - although few are employers of significant numbers of low-paid workers. Some local authorities, particularly those controlled by Labour, have also signed up to the campaign, although there have been embarrassing cases where work outsourced by councils turns out to have been remunerated at less than the approved rate. Interestingly, there is a growing tendency for councils in major cities to develop their own living wage, based on local conditions which vary considerably outside London. This contrasts with the minimum wage, which remains nationally based despite the arguments touched on earlier.

Labour Party leader Ed Miliband has proposed that an incoming government might require all contractors for government work[37] to pay the Living Wage, and that a one-year tax break should be offered to employers who agree to sign up; some trade unionists have gone further to argue that it should form the basis for a much higher National Minimum Wage applying to all employers.

Analysis suggests the need for considerable caution, however. For one thing, the Living Wage is a misnomer. Three-fifths of those earning less than the Living Wage are working part-time, and they will not reach the proposed minimum living standard through wages alone. In many cases, however, this may not matter. A large proportion of part-time workers on low pay are students and other young people who have family and other support. To this extent the Living Wage is just a sound-bite – for most households in differing circumstances, the whole idea that the Living Wage would represent enough to live on will not hold.

The Institute for Fiscal Studies (2014) has also calculated that, of those families in which someone earns less than the proposed Living Wage, only 6 per cent are in the bottom 10 per cent of the family income distribution. By contrast 44 per cent are in the top half of the income distribution, with 5 per cent in the top decile. Relatively few adult workers who are sole family earners remain for long periods on very low pay levels. While such individuals and their families are a real concern, they are better supported through improved training opportunities and, where necessary, in-work benefits[38]. Their numbers are relatively small compared with the much larger numbers of people who are poor because they are out of work.

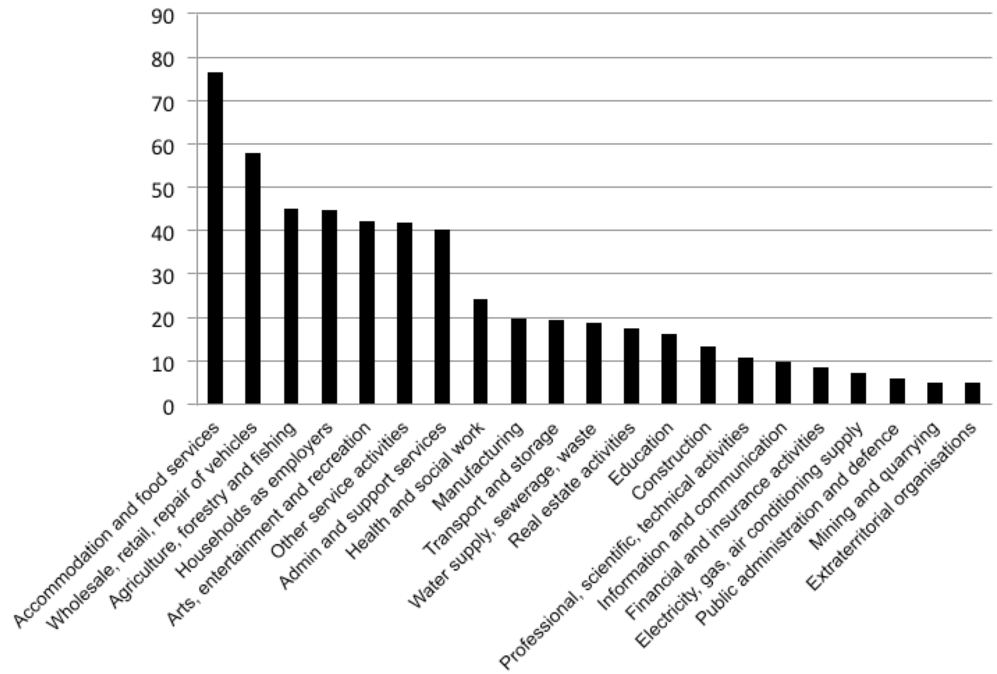
37 Living Wage ordinances in the United States typically impose a Living Wage (usually rather less than is proposed for the UK) on companies under contract to the relevant city, and/or those companies that receive some form of business assistance. These ordinances seem to have reduced employment, bringing modest gains for some workers and losses for others. The overall effect on poverty has been slight (Adams and Neumark, 2005; Neumark, Thompson and Koyle, 2012).

38 Although these need to be radically redesigned to reduce the disincentive effects of high withdrawal rates as earnings rise; see Darwall (2006).

The big danger, of course, is job losses or hours reduction as a result of implementing the Living Wage – which would be an increase of 39 per cent for someone in London compared to the current NMW. Unlike the Low Pay Commission, which has carefully ensured that all its recommendations for minimum wage increases bear in mind employer ability to pay, the Living Wage campaign is simply focused on living standards. If the cost of living goes up, the Living Wage goes up too, irrespective of the productivity of the employee and whether the employer can afford the living wage.

The impact would also fall very differently on different industries, as Figure 3 demonstrates.

Figure 3: Percentage of workers paid less than the Living Wage by industry



Using London/GB Living Wage as appropriate
Data from October 2010- September 2011 Labour Force Survey
Source: Adapted from Riley (2013)

The impact on the costs of particular sub-sectors of industry would be very marked. Plunkett and Hurrell (2013) calculate that the first-order[39] impact of applying the Living Wage across the board would be to increase the wage bill of medium and large-size firms by 6.2 per cent in bars and restaurants and 4.9 per cent in retailing. Both of these are major employers of young people, and it seems likely that many of these would lose their jobs or suffer hours reductions when employers are faced with a cost increase of this magnitude. On the other hand, the financial sector, several leading players in which have supported the Living Wage campaign, would only face a wage bill increase of 0.2 per cent.

Overall, a National Institute of Economic and Social Research study (Riley 2013) has suggested that 150,000 jobs would be lost as a result of statutory imposition of the Living Wage across the board. More worryingly, given we have a million youngsters out of work already, the model suggests that 300,000 young low-skilled workers would lose their jobs as employers substitute more experienced workers.

This seems likely to be an underestimate as the study does not take into account that paying the Living Wage would also involve higher National Insurance and pension contributions, which add to the cost. It also seems likely that there would be knock-on effects on the pay of other groups of workers. While the Low Pay Commission has found that pay at the bottom end of the earnings distribution has been compressed by the introduction of the NMW – in other words, differentials have been reduced – this would be unlikely to be the case with the large increases involved in imposing the Living Wage. If minimum-wage workers obtained increases of 20-30 per cent, those currently at or around the Living Wage (who may be supervising those paid the NMW) will likely expect that their pay would increase too.

39 That is, ignoring the knock-on effects on the pay of those currently paid at or above the Living Wage.

This suggests that an across-the-board statutory imposition of the Living Wage is highly inadvisable. However, partial introduction may also present difficulties. A requirement that all public sector employers and contractors employ nobody at less than the Living Wage could have a number of undesirable side-effects. It would increase the existing gap between public and private sector pay, which is particularly marked in regions with high unemployment, and thus make it difficult for private sector employers to attract certain types of employee. It would increase costs to the taxpayer, and in a continuing climate of austerity might lead to reductions in services provided. It would also make it more difficult for smaller businesses to compete for public sector contracts.

The Miliband proposal for ‘Make Work Pay’ contracts has been examined by the Institute for Fiscal Studies (2014: 168-170). This scheme involves a one-year tax rebate for employers who agree to increase pay so that all workers receive at least the Living Wage. The Labour Party has claimed that, if the Living Wage is maintained beyond the tax rebate period, the scheme will pay for itself through increased tax and national insurance payments and reductions in tax credits. However, the IFS points out the possibility of ‘gaming’ the incentive structure by altering the timing of wage increases. It is also concerned that, in order to show that 100 per cent of its staff receive the Living Wage, a firm may not take on some workers whom it would otherwise have employed, perhaps substituting capital equipment instead.

The London mayor’s promotion of the Living Wage, in contrast, does not offer significant incentives to employers but seeks to persuade major London employers to sign up to the campaign. The objective is ‘normalising the Living Wage by 2020’ (London Assembly Economy Committee, 2014: 7). Its strategy involves creating ‘Living Wage zones’ with a high proportion of Living Wage employers, and targeting key employers to set an example for others. While the principle seems unobjectionable, peer pressure could become oppressive and lead to merely nominal or incomplete compliance. Many of the claimed advantages for Living Wage employers – higher productivity, greater loyalty and lower absenteeism, for example

– may be ‘first mover’ advantages gained by pioneer Living Wage employers who attract motivated employees. They may not be replicated for firms who are followers.

A new role for the Low Pay Commission?

Recent reports by the Resolution Foundation (D’Arcy, Plunkett and Wilson, 2014; Bain at al, 2014), have suggested other ways of ‘strengthening’ the NMW, aside from a significant increase in its value. Whereas the NMW was justified on introduction as trying to eliminate exploitative low pay, brought about through the excessive market power of employers, the Resolution Foundation proposes the possibility of a very different role for the LPC – ‘to monitor overall low pay, assess its causes, consequences or costs, or advise on policy to tackle it’. It is suggested that the LPC needs more powers because for many the NMW floor looks more like a ceiling. Many employers face ‘little pressure’ to go beyond their legal obligation, and there have not been ‘ripple effects’ further up the income scale. This, of course, assumes away the possibility that employers do not pay more because they are able to use unskilled labour in that sector easily or else substitute it easily for more productive labour or capital.

Rather than placing heavy emphasis on economic outcomes such as employment, as within the current framework, the Foundation instead indicates that low pay (defined as two-thirds of median income) could be the variable that the LPC focuses on. This relative definition of ‘low’, in essence, would institutionalise the LPC as a body with a mission to reduce inequality by raising statutory minimum pay levels rather than to provide a minimum acceptable wage floor. Defining low pay in this way would also leave the LPC with a goal which was very difficult to ever achieve – to the extent that increases to the NMW lead to significant ripple effects further up the income scale, raising the NMW might not significantly reduce low pay as defined in this relative manner.

Their other recommendations include governments setting out long-term ambitions for a significantly higher minimum wage and for the LPC to be able to advise when employers could afford to pay more than the NMW. These would fundamentally change the remit of the LPC away from a body seeking to prevent extreme low hourly pay towards other more overtly ideological intentions, with the scope of the LPC extended over a larger hourly pay range or becoming more intrusive in analysing individual sectors. The encouragement for politicians to set longer term ambitions would also compromise the notional independence of the LPC, which would likely cease to place significant emphasis on economic conditions and the ability of employers to pay.

Conclusions

Debate on the UK's National Minimum Wage has shifted from the days of Gordon Brown, one of its keenest advocates, toying with the idea of regionalisation in 2007, to a position where members of all political parties urge a significant increase in the statutory level. This is to a large extent the result of a widespread belief that the minimum wage has not adversely affected employment in the UK. Though evidence does suggest it has adversely affected certain groups and has had other unintended consequences, the aggregate small effect on the overall labour market is largely because the Low Pay Commission has been sensitive to the NMW's economic impact. Yet theory and evidence suggest the level of the minimum wage still matters – evidence of small effects so far cannot be taken as justification for significant increases in the NMW's value. Furthermore, a national rate invariably leads to larger localised distortions. At a time when unemployment, and in particular youth unemployment, remains too high, the government would be much advised to focus its attention on measures to incentivise job creation, rather than imposing further cost burdens on business and barriers to labour market entry.

A complete change of remit for the LPC, as proposed by the Resolution Foundation, should be ruled out by the government. To the extent that the classical liberal argument against minimum wages is now ignored, the least damaging option is for the rate to be set by the LPC in such a way that it minimises the potential negative employment effects, taking account of firms' ability to pay, and the state of the economy. Targeting inequality or a cost-of-living estimate could have a profoundly damaging effect on jobs, and in particular opportunities for the young and unskilled.

In fact, given the current high level of unemployment and persistent youth unemployment, we believe that raising the NMW brings unnecessary risks for often ill-targeted gains. If the NMW is to be retained, we recommend the government:

- commits not to widen the remit of the LPC, which could make it more intrusive for employers whilst fundamentally changing the LPC's aims
- abolishes the minimum wage for apprentices and under 18s
- suspends the minimum wage for all those under the age of 24 who have been unemployed for more than one year, for the first year of employment
- instructs the LPC to regionalise the NMW from next year, taking into account regional productivity differentials. The LPC should examine each region on an individual basis, taking into consideration economic conditions and firms' ability to pay, with the main emphasis placed on private sector employment.

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