

BRITAIN TOO SANGUINE ON MINIMUM WAGE

Karthik Reddy

This article examines and summarises the history and research regarding minimum wages in the USA and the UK. Despite a gradual shift in opinions among policy-makers, empirical research generally confirms the traditional hypothesis that disemployment effects accompany the imposition of minimum wages that exceed the market wage.

Keywords: Minimum wage, employment regulation unemployment, Wages Councils.

Introduction

Eleven years after the implementation of the National Minimum Wage, the British political establishment has come to accept the policy as a success. Even David Cameron, who initially opposed the policy, has publicly stated that it 'turned out much better than many people expected'.¹ This cautious acceptance of the minimum wage among policy-makers is reflected throughout the developed world, where few countries remain without a statutory wage floor. Unfortunately, this shift in opinion does not reflect the economic reality of the minimum wage.

US evidence

Various studies have been undertaken to measure the effects of minimum wage laws in the 50 states. In 1977, the US Congress authorised the Minimum Wage Study Commission to investigate the economic effects of the minimum wage. In 1981, the Commission released its report, which found from analysis conducted over the previous decades, during which the real minimum wage was relatively high, that a 10% increase in the minimum wage generally increased teenage unemployment by 1–3%. This strong disemployment effect was well accepted by the academic and policy-making communities (Neumark and Wascher, 2007).

In the early 1990s, however, certain studies purported to show that the minimum wage may not have disemployment effects and, in some cases, may even increase employment. This research, and the veneer of legitimacy it provided for the use of the minimum wage as

a poverty-fighting tool, raised significant controversy and reignited debate among economists about the law's effects on the working poor, and prompted the undertaking of numerous studies of federal, state and local minimum wage laws.

The controversy began in 1992, when Card (1992a) published a paper suggesting that the April 1990 increase in the federal minimum wage from \$3.35 to \$3.80 had no adverse effects on teenage unemployment. This study was followed by others, namely Katz and Krueger (1992), Card (1992b) and Card and Krueger (1994), which purported to show positive employment elasticities as a result of minimum wage increases of up to 2.65, 0.35, and 0.73, respectively. Card and Krueger proceeded to publish a book, *Myth and Measurement*, which concluded: 'evidence suggests that the minimum wage does not have the effect on the labor market that would be predicted from the competitive neoclassical model' (Card and Krueger, 1995).

These data from the early 1990s were widely cited as evidence that the conventional understanding of the effects of the minimum wage was poorly conceived and that minimum wages in the USA did not have adverse effects. Though the prospect of such a simple and powerful tool to simultaneously raise employment and wages is attractive, the minimum wage unfortunately fails to accomplish both of these goals. Daniel Hamermesh (1995) aptly summarised the reality of the minimum wage when he wrote: 'I wish both Card and Krueger's wonderful results were correct. They are not.' Not only has the validity of the results from the early 1990s been questioned, but the studies

represent only a part of the whole body of US minimum wage research that has been conducted over the last two decades, most of which indicates significant disemployment effects that are felt disproportionately by young, unskilled and minority workers. Subsequent analysis of the results from the early 1990s, as well as further studies, demonstrate that the minimum wage does, indeed, displace workers and have adverse long-term effects.

First, and perhaps most importantly, David Neumark and William Wascher (2007) point out that many of the studies that have sought to measure the effect of minimum wages on employment have operated under the assumption that it would be felt rapidly, due to high turnover in the minimum-wage labour market. Concordantly, many such studies have neglected to look beyond a short-term analysis. Yet this may well be a serious error as it ignores the possibility that firms' demand for labour may decrease in the long run as they slowly adjust non-labour inputs. Much of the difference between those studies that purport to show no disemployment effect and those that do may be reconciled by the inclusion of time lags, a particularly salient observation raised by numerous critics. In particular, Neumark and Wascher (2000) replicated Card's methodology in the 1992 study of the federal minimum wage increase, but included the possibility of such a lag. They found that this addition produced a negative and statistically significant disemployment effect of the minimum wage. A 1999 study by Baker *et al.* on employment and minimum wage changes in Canada found that, while evidence is less clear over the short run, including lags generally produces statistically significant disemployment effects, and that Canadian data indicate an employment elasticity of -0.25 over the long term. The inclusion of lagged employment effects produced similar results in further US research.

Furthermore, some of the studies that found the minimum wage did not affect employment use other geographical areas as controls to measure the impact of the minimum wage. Yet such comparisons may not be appropriate, given differences in labour markets, regulatory standards and macroeconomic conditions between the studied and comparison groups. Neumark and Wascher (2007) have questioned the suitability of Card's (1992b) use of Georgia, Florida, and the Dallas/Fort Worth area of Texas as control groups for the Californian minimum wage, given that their labour markets differ significantly from those in California. Similarly, Deere *et al.* (1995) disputed the use of eastern Pennsylvania as a control for New Jersey in Card and Krueger (1994), citing substantially different teenage employment rates in the two areas.

Specific to the studies conducted by Katz and Krueger (1992) and Card and Krueger (1994), there exist questions about the reliability of the telephone surveys used to collect data, which in the words of Neumark and Wascher (2007), 'were not subject to the same rigorous standards as those used to develop the surveys used in government statistical programs'. Adie and Gallaway (1995) raised further concerns about Card and Krueger's *Myth and Measurement*. In addition to doubts surrounding the statistical significance and methodological integrity of the studies cited in the book, the two Ohio University economists suggest that Card and Krueger's exclusion of certain minimum wage studies from their discussion skewed the data.

Since the publication of the controversial minimum wage studies at the beginning of the 1990s, numerous economists have revisited the issue of the minimum wage and unemployment in the USA and have returned data indicative of disemployment effects that are particularly considerable for unskilled workers. Neumark and Wascher (2007), in a lengthy and comprehensive review of recent minimum wage literature published between 1992 and 2007, conclude: 'the preponderance of evidence points to disemployment effects'. Of the 33 studies examined in depth, 28 indicated disemployment effects. Neumark and Wascher examine the methodological processes and results of the studies at considerable length, and some of these studies are particularly telling. In 1992, for example, Neumark and Wascher published their own study of teenage unemployment and minimum wage statistics throughout the 50 states over the 1970s and 1980s, and found unemployment elasticities of between -0.1 and -0.2 for teenagers (Neumark and Wascher, 1992). In various other studies that focused on the effects of the minimum wage on both teenage employment and school enrolment, the two economists concluded that 'these results are consistent with a higher minimum wage causing employers to substitute away from lower-skilled teenagers (who are less likely to be in school) toward higher-skilled teenagers (who are more likely to be in school), with the resulting increase in the relative wages of higher-skilled teenagers inducing some of them to leave school for employment' (Neumark and Wascher, 2007). Considering enrolment, they estimated the employment elasticity to be -0.22 . Keil *et al.* (2001) found an employment elasticity of -0.11 for total employment and -0.37 for youth unemployment in the short term, while the long-run elasticities were even starker at -0.19 and -0.69 , respectively. The significance of these long-run elasticities prompted the authors to conclude: 'the cost of the minimum wage legislation, far from being negligible as claimed by its apologists, may be higher still than even the minimum wage hawks have argued' (Keil *et al.*, 2001). Burkhauser *et al.* (2000) estimated elasticities of -0.27 for the 1996 increase in the federal minimum wage, and -0.17 for the subsequent rise in 1997. Orazem and Mattila (2002) studied data from minimum wage increases in Iowa in the 1990s and found employment elasticities of between -0.31 and -0.85 . A comprehensive study of the states of Oregon and Washington between 1994 and 2001 by Singell and Terborg (2007) found negative employment effects of the three minimum wage increases in each state throughout that period. The results of these studies are complemented by a number of others reviewed by Neumark and Wascher (2007). More recently, in 2010, Danziger found that employment in small firms is particularly affected in a negative manner by minimum wage increases.

It should be noted that a comprehensive 2009 study by Addison *et al.*, using county-level data, found modest positive employment effects. However, the group's data did not measure hours worked and failed to distinguish between full-time and part-time work.

In all, the preponderance of studies from the USA indicate disemployment effects, substantiating Neumark and Wascher's (2007) conclusion: 'we view the literature – when read broadly and critically – as largely solidifying the conventional view that minimum wages reduce employment among low-skilled

workers, and as suggesting that the low-wage labor market can be reasonably approximated by the neoclassical competitive model'.

US academic opinion among economists remains strongly unresponsive of the monopsony interpretation of the labour market which can imply positive employment effects from a minimum wage. A 2007 survey of American Economic Association labour economists by the University of New Hampshire, for example, was particularly revealing (Fowler and Smith, 2007). The survey found that 73% of economists believe that a 50% increase in the minimum wage would decrease employment, only 6% stated that the minimum wage was a 'very efficient' anti-poverty policy, and 6% agreed that minimum wage increases would create employment. The conventional uncertainty about the effects of minimum wages is unwarranted, and theoretical suspicion, statistical evidence and academic opinion all indicate that unemployment effects of minimum wage increases are likely.

UK evidence

Data from the UK generally support the US evidence. The UK has, historically, used various price floors in the labour market. Until 1993, Wages Councils determined minimum wage standards in different sectors of the UK economy. These councils comprised representatives from industry, labour and government who would negotiate a legally binding minimum wage. Their predecessors were trade boards authorised by the Trade Boards Act 1909, which evolved and were eventually consolidated into Wages Councils by the Wages Councils Act 1979. By the end of the 1980s, there were 26 such councils, which covered over two million employees in the UK. These councils were abolished with the passage of the Trade Union Reform and Employment Rights Act in 1993.

The UK had no minimum wage from the passage of the 1993 Act until a national minimum wage was authorised by the National Minimum Wage Act 1998, which came into force on 1 April 1999. In contrast to the Wages Councils, the comprehensive National Minimum Wage Act was essentially universal and established two different minimum wage categories: one would apply to workers aged 22 years and older, and another, slightly lower wage floor, would apply to young people between the ages of 18 and 21 years. Initially, the former minimum was set to £3.60 per hour, and the latter to £3 per hour. The wage rates have been revised upwards annually since the passage of the law, and the law currently prohibits hourly work compensated at less than £5.93 for those 21 years and older, £4.92 for those between 18 and 20 years, and £3.64 for a third category introduced in 2004 applying to those under the age of 18 who have satisfied state educational requirements.

Several studies have been conducted to attempt to measure the effects of wage floors in the United Kingdom on employment. The first wave of these studies attempted to gauge the effects of the Wages Councils, and their subsequent abolition, on employment. Machin and Manning (1994) indicated that the Wages Councils did not adversely affect employment. Dolado *et al.* (1996) concluded that the abolition of the Wages Councils did not result in employment changes in industries covered by the Wages Councils that differed from

the rest of the economy. This research coincided with the general US reconsideration of the economic effects of the minimum wage in the early 1990s, and contributed to the passage of the National Minimum Wage Act 1998. As in the USA, however, there remain questions about this early research. Neumark and Wascher (2007), in response to the 1996 study, find that employment grew in Wages Councils industries faster than in non-Wages Councils industries after their abolition.

The second wave of studies has concentrated on the introduction of the National Minimum Wage in 1999. Machin *et al.* (2003) found that the minimum wage imposition did have unemployment effects, with negative elasticities of -0.08 to -0.38 for employment, and -0.15 to -0.39 for hours worked. Stewart and Swaffield (2006) studied the effect of the minimum wage on hours worked and found statistically significant reductions in hours worked when lagged effects are included. The pair found that the weekly hours that a worker was employed declined by between one and two hours, with the reduction occurring one year from the minimum wage implementation.

Given these data, it is hard to conclude that the National Minimum Wage was the resounding success that its supporters contend. Though the modesty of the wage when introduced, along with the inclusion of a youth sub-minimum, may have muted the effects of the minimum wage in the UK, it has nevertheless been shown to have negative employment effects and mirrors the US. More troubling than the existence of the wage floor in the UK, however, is the frequency and magnitude of increases to it. Whereas in the USA, the federal minimum wage is adjusted only periodically by Congress, allowing for its long-term real value to stay relatively constant, legislators in the UK update the minimum wage annually, and have consistently increased it by amounts that exceed inflation. While the consequences of the minimum wage, though generally negative, are relatively minor at low levels of the wage, they are likely to be stronger and clearer at higher levels. Few economists, for example, would contend that a doubling of the minimum wage to more than £10 per hour would have no negative effect on employment or hours worked. Yet the general trend in the United Kingdom has nevertheless been in the way of real growth in the minimum wage.

Measurement issues

There do exist significant problems that complicate the measurement of the effects of the minimum wage. Minimum wage increases that have been studied in the USA remain quite small as a proportion of the wage in total, rendering it difficult to find clear and discernible effects of the minimum wage, and the proportion of workers earning the minimum wage is very small. As Keil *et al.* (2001) note: 'An intrinsic problem with event studies in this context is that the sought effect is acknowledged to be small compared to ambient fluctuations in employment rates.' Moreover, there may be substantial endogeneity bias present that skews the data in a way that masks the negative effects of the minimum wage. Minimum wage increases do not happen randomly, and are instead controlled by political and economic conditions. As such, wage

hikes may only take place in jurisdictions in which economic and employment conditions are good or improving, and may be resisted by governments in jurisdictions where such conditions are poor or worsening. This bias would indicate that studies of minimum wage increases may not fully recognise the full disemployment effect of the increase. Indeed, the effects may not be felt until many years later when the economy moves into recession and individuals find it more difficult to find employment after they have lost their jobs: the minimum wage could then be particularly problematic as workers are then seeking possible 'second-best' employment opportunities whilst their skills deteriorate. Thirdly, there is the significant difficulty of finding an adequate comparison group to serve as a control by which to measure the effects of minimum wage increases. These difficulties have undoubtedly contributed to the perception of uncertainty surrounding the effects of minimum wages.

Conclusion

Far from having positive effects for the working poor, the implementation of the minimum wage in the UK is likely to have had a negative effect on employment. This effect of the minimum wage is demonstrated by data from the USA and some studies from the UK. Nevertheless, the minimum wage has been routinely raised at a rate greater than inflation, resulting in a tremendous increase in the real value of the minimum wage. This rise is particularly problematic for workers during times of recession. The present government could alleviate the difficulties of the minimum wage by resisting the urge to raise it further and gradually allow inflation to reduce its real value. A slow death of the wage floor would stimulate employment and permit Britain to regain a competitive edge.

1. Lord Morris of Handsworth, 'National Minimum Wage Debate', United Kingdom Houses of Parliament, <http://www.publications.parliament.uk/pa/ld200910/ldhansrd/text/100311-0010.htm> (accessed 1 August 2009).

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Karthik Reddy (karthikreddy@zedat.fv-berlin.de)