NERI Nevin Economic Research Institute

Research for new economic policies

Submission to the Low Pay Commission,

Employment and other impacts of changes to the National Minimum Wage,

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SUMMARY

The minimum wage was first introduced in New Zealand in 1894. It was introduced in Ireland over a century later in 2000 and currently stands at €8.65 an hour. Legal national minimum wages now exist in most countries (including 21 European Union countries) and where national minimum wages do not exist there are invariably sectorally agreed minimum wages which operate as wage floors. Higher wages improve workers' welfare and diminish poverty. However, the minimum wage exists foremost to prevent exploitation, ensure minimum standards in terms of compensation and undermine a cut-throat race-to-the-bottom wage competition. It is a bulwark that protects migrant and other vulnerable groups from exploitation by employers. It also helps provide greater income equity by ensuring a minimum of equity between employer's profits and employee's wages.

There is a range of competing theories in the academic literature about the various impacts of the national minimum wage on outcomes such as total and sectoral employment, wages and prices, income equality and poverty. For example, one school of thought argues that minimum wages will promote efficiency and productivity of labour and therefore long-run growth. The idea is that excessively low wages act as subsidies to inefficiency preventing the rational displacement of labour by capital. A high minimum wage shifts the economy-wide competitive advantage to more productive firms and to more productive and high paying sectors and jobs.

The most common criticism of the minimum wage is that it could increase poverty by increasing the number of people who are unemployed or by reducing hours for those in employment. While the available empirical evidence is ambiguous, inconclusive and often contradictory with regard to employment effects, the conclusions of the most comprehensive meta-studies (studies of studies) strongly suggest that minimum wages exert no significant impact on an economy's overall level of employment. On the other hand there is evidence that wage floors help reduce the degree of income inequality in society including inequality levels between women and men. Finally, increases in the minimum wage are associated with increases in production costs and prices although most studies suggest the actual size of this effect to be very small.

THEORIES OF EMPLOYMENT IMPACTS

The strongest argument made against minimum wages is the prediction that they cost jobs. But is this argument empirically borne out at the firm level? If so, is it also correct at the economy-wide level? In attempting to answer this question we must consider the theoretical as well as the empirical literature. There are three main theoretical models purporting to explain the

employment effects of minimum wages and other wage floors (for a discussion see Hirsch, Kaufman and Zelenka, 2011). These theories are the *competitive* model; the *dynamic monopsony* model and the *institutional* model.

The stylised competitive model not only assumes perfect competition but also assumes that all firms are acting at peak efficiency. The prediction of the competitive model is straightforward. Binding wage floors will price some low-wage workers out of jobs and will therefore generate lower employment levels. These models argue that minimum wage laws amount to price fixing – in this case a price floor on the supply of labour. According to the 'iron' law of demand, if the minimum price is set above the equilibrium wage then a surplus of labour (i.e. unemployment) will result. Firms will 'buy' less hours of labour at the fixed price. With an excess of labour supply over labour demand firms will employ the more productive workers. Unemployment will be concentrated on the lowest skilled (least productive) workers. The competitive model therefore predicts higher wages for some low skilled workers but a loss of employment for other low skilled workers. The main criticism of the model is that it is unrealistically simplistic. Multi-sector models are more ambiguous in their predictions regarding net employment impacts.

The dynamic monopsony models describe a local economy with a single or dominant employer or 'buyer of labour' – the monopsonist. Monopsony or oligopsony can occur if there are rigidities in employee mobility or collusion between employers. Under monopsonistic conditions (e.g. a company town or a town or area with a dominant employer) the consumer of labour (the employer) has market power and can use that power to keep wages below the equilibrium rate that might otherwise prevail under perfect competition. The monopsonist is effectively in a position to pay workers below their marginal product and below the competitive level and monopsonistic models predict a lower wage rate than that prevailing under competition. The result is a market failure – labour sold under monopsony (the level of employment) is less than the optimal allocation (full employment) and this creates a deadweight loss to society.

One implication is that under conditions of monopsony a minimum wage higher than the market rate (but equal to or below the competitive rate) will raise the level of employment. Thus, raising the minimum wages of the workforce could in theory increase employment (see Schmitt, 2013). The main criticism of the model is that genuinely monopsonistic markets may be rare in the real world. More generally, minimum wages and other wage floors can reduce the costs of turnover to low-wage employers. A higher wage floor makes it easier to recruit and

retain employees, and this lowers turnover costs, which in turn frees up resources to maintain employment levels. In this way the monopsony models predict that higher wage floors could potentially have minimal or even no effect on overall employment.

Finally, the institutional models make no clear theoretical predictions about changes in employment and instead describe multiple 'channels of adjustment' through which increases in minimum wages can work their way through the economy. Institutional models are multi-sector and there is unlikely to be a single well-defined downward sloping labour demand curve. The economy and labour market are seen as a complex system with multiple elements; multiple interactions; multiple equilibria and, crucially, multiple channels of adjustment to wage and price changes. Channels of adjustment represent the ways that changes in wage floors impact upon the economy. As there are multiple channels of adjustment employment effects are seen as ambiguous and an empirical matter. A selection of alternative channels of adjustment to job losses (see Hirsch et al, 2011 and Schmitt, 2013) are sketched out below in Table 1.

Table 1: Theories of Employment Impacts (Sample Channels of Adjustment)

Channel of Adjustment	Description
Increased productivity	Efficiency wage effects – employee assigns a higher cost to job loss – higher performance standards – greater work intensity
Offsetting through higher aggregate demand	Increased spending power for low-income workers with higher marginal propensity to consume – offsetting losses to employment
Changes in composition of employment away from low wage sectors	Higher wages reduce subsidy to inefficiency – shifts economy-wide competitive advantage to more productive firms
Reduced churn	Reductions in employee turnover rates – lower recruitment and training costs
Higher prices	Firms respond to higher production costs by increasing their prices
Reductions in hours worked	Firms respond to higher costs by reducing hours
Reductions in non-wage Benefits and training	Firms respond by lowering the value of non-wage benefits, such as health insurance and pension contributions
Alternative cost savings	For example cutting waste
Wage compression	Compensating by cutting wages of workers nearer the top
Reductions in firm profitability	Labour's share of total income increases while capital's share of total income declines

Sources: Hirsch et al. (2011); Schmitt (2013) and author's elaboration

Under certain conditions the institutional model even allows for the possibility of positive employment effects. For example, the institutional model suggests that by increasing the spending power of low wage workers, and therefore increasing aggregate demand in the economy, higher wage floors can act as a growth and jobs stimulus in the economy. The aggregate demand effect is likely to be particularly pronounced during recessions or other periods when the economy is operating below its productive capacity. The institutional models also posit that higher wage floors may boost productivity through efficiency wage effects (see Katz, 1986).

EMPIRICAL EVIDENCE

Overall the weight of empirical evidence suggests that minimum wages have little or no net employment effect. See for example Doucouliagos and Stanley, 2009; Schmitt, 2013; and Wolfson and Belman, 2013; for reviews or 'meta-studies' of the empirical literature.[1] In the United Kingdom the Low Pay Commission (Metcalf, 2007, LPC, 2015) and the London School of Economics (CEP, 2008) have both found no impact on employment levels. The Low Pay Commission (2000 through to 2015) in the United Kingdom has now commissioned around 140 research projects that have covered various aspects of the impact of the national minimum wage on the economy. The 2012 report stated that "*we conclude that the lowest paid had received higher than average pay rises, and the research, on balance, generally finds little or no significant adverse impact of the minimum wage on employment*" (LPC, 2012). The 2013 report noted "*our overall conclusions from this work are that as a result of the NMW the lowest paid have received higher pay rises than their peers and that there remains little evidence of a significant adverse effect of the minimum wage on employment*" (LPC, 2013). The 2015 report once again found little evidence of adverse effects on employment or the economy (LPC, 2015)

The prevailing consensus prior to the 1990s was highly influenced by the findings of the Minimum Wage Study Commission (MWSC) in the 1980s. The MWSC conducted a major four year study between 1977 and 1981 (covering the US and Canada) which determined that minimum wages reduced teen employment and had a small but negative employment impact on young adults. The direction of impact on adults was inconclusive and uncertain. Overall the

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[1] Meta-studies of are widely used in medicine and are considered essential for consensus building on best practice treatments by the medical profession. The idea is that the results of many clinical trials can be combined to produce much more accurate estimates of the effectiveness of different kinds of treatments. Individual clinical trials are more likely to produce false or contradictory results or to have systematic bias and significant human error. The compiled results or 'estimates' from a multitude of trials or experiments is therefore accorded greater confidence than the estimate from a single study. For the purposes of minimum wage research the 'treatment' is a change in the minimum wage and the 'outcome of interest' is usually the change in employment levels.

MWSC found that dis-employment effects were small and limited to teenagers and, to a lesser extent, young adults.

The 'New Minimum Wage Research' methodology became popular in the 1990s. The Card and Kreuger (1994) study was the most famous of these attempts to simulate natural experiments. New Jersey had increased its minimum wage, while contiguous and similar Pennsylvania had not, and this policy difference provided the researchers with natural treatment and control groups. Card and Krueger (1994) computed estimates of the effects of the minimum wage increase on fast food sector employment in the contiguous counties and found that the effects of minimal wage laws were essentially non-existent – the rise in the minimum wage did not reduce employment in the fast food sector. The results of the study ran against the prevailing consensus and it was argued that the Card and Kreuger results were study specific and not generalizable (Neumark and Wascher, 2008). More generally, Neumark and Wascher criticised the experimental approach preferring their own reliance on time-series analysis.

However, a subsequent meta-study of 64 minimum wage studies published between 1972 and 2007 concluded that their overall results corroborated the Card and Kreuger overall finding of an insignificant employment effect from minimum-wage raises (Doucouliagos and Stanley, 2009). Doucouliagos and Stanley graphed over 1,000 employment estimates (weighted by statistical precision) and found the most precise estimates were heavily clustered at or near zero employment effects. They put the size of the effect at -0.01 suggesting the minimum wage would have to double to cause a 1 per cent decrease in teenage employment. In addition, Wolfson and Belman (2013) conducted a meta-study of 27 studies published since 2000. These studies contained over 200 employment estimates. There were mixed results but overall the results corroborated previous findings of no statistically significant employment effect.

Neumark and Wascher (2008) dispute the emerging consensus and note that their own qualitative review of the literature suggests minimum wages and wage floors do indeed have negative employment effects. However, Neumark and Wascher's review has itself been criticised as subjective for excluding many papers and overemphasising their own work (Schmitt, 2008).

Contemporary studies by Dube, Lester and Reich (2010), by Allegreto, Dube and Reich (2011), by Hirsch, Kaufman and Zelenka (2011), and by Addison, Blackburn and Cotti (2012) have all found no net employment effects from increasing the minimum wage. Dube et al. (2010) and Allegreto et al. (2011) argue that earlier minimum wage research was flawed because it failed to

control for the business cycle and regional differences (temporal and spatial heterogeneities) in employment growth that were unrelated to the minimum wage. By using contiguous United States counties across state borders as pairs they could control for spatial heterogeneities and were able to generalise the Card and Kreuger findings. The Dube et al. (2010) and Allegretto et al. (2011) studies found strong earnings effects and no employment effects from minimum wage increases once account was made for regional trends. Finally, Slonimczyk and Skott (2012) have estimated that an increase in the minimum wage can raise both total and low-skill employment, and produce a fall in inequality. Their results show that a decline in the wage floor can generate deterioration in the position of low-skill workers, both in terms of wages and employment.

Why might raising wage floors have little or no impact on employment levels? Schmitt (2013) argues that the 'cost shock' to employers is small relative to most firms' overall costs. He suggests that the most important 'channels of adjustment', or ways that increases in wage floors impact upon the economy, are: reductions in labour turnover; improvements in organisational efficiency; reductions in wages of higher earners; and small price increases.

POVERTY AND REDISTRIBUTION

The theoretical impact of the minimum wage on poverty is ambiguous. However, it is clear that any employment impact will heavily influence the poverty impact. Fields and Kanbur (2007) find there are theoretical situations in which a higher minimum wage raises poverty, others where it reduces poverty, and yet others where poverty is unchanged. The outcome depends on various factors e.g. the ratio of the minimum wage to the poverty line and the elasticity of labour demand. The empirical literature is also mixed although minimum wages are generally found to reduce poverty. For example Morley (1995) finds that poverty falls as the minimum wage rises in Latin America while McLeod and Lustig (1996) find that a higher minimum wage is associated with lower poverty in developing economies.

Minimum wages can have positive distributional impacts. For example, Di Nardo, Fortin and Lemieux (1996) find that the decline in the real value of the minimum wage explains a substantial portion of the increase in wage inequality in the United States between 1979 and 1988, particularly for women. The OECD (1998) found that minimum wages can reduce poverty rates and income inequality among working families while Brown (1999) finds that minimum wages compress the wage distribution. Metcalf (2007) argues that the minimum wage raised

the real and relative pay of low wage workers and narrowed the gender pay gap in the United Kingdom.

EXCHEQUER FINANCES

Higher wage rates will increase aggregate demand and consumption by increasing disposable income. This has positive implications for the Exchequer in terms of increased receipts from VAT and Excise. There are also positive implications for consumption in terms of the sustainability of household debt. There are potentially direct benefits to the public finances from income tax, USC and PRSI receipts although the scale of these benefits will depend on the level of the minimum wage and the number of hours worked. An increase in the minimum wage will also benefit the Exchequer through reduced benefit payments, for example Family Income Support (FIS) payments and costs related to medical cards and differential rent. FIS and similar payments represent taxpayers effectively subsidising the employers of very low paid workers.

In the UK, the increased burden on the exchequer was an important reason why government policy changed focus in the 1990s to put in place mechanisms to support the creation and enforcement of wage floors through the UK Low Pay Commission

CONCLUSIONS

On balance the weight of international empirical evidence suggests that the net employment effects of an increase in the national minimum wage are likely to be small or non-existent. On the other hand there are likely to be positive distribution effects and a boosting of wage equality between women and men. Minimum wages are not a particularly powerful anti-poverty measure but they are nevertheless an important bulwark protecting migrant and other vulnerable groups. Productivity impacts are not fully clear although minimum wages may have a positive effect to the extent the economy's comparative advantage shifts from low value added unskilled sectors towards high value added skilled sectors.

An increase in the minimum wage will reduce income inequality and benefit the low paid while the evidence for a negative employment effect is very weak. An intervention in the labour market to increase the minimum wage is appropriate at this time.

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