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Minimum Wages: Possible Effects on the Distribution of Income

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I. INTRODUCTION

Since the 1980s, there has been increased interest among unions and two opposition parties in the possibility of introducing a national minimum wage (NMW). The central argument for a minimum wage is a social justice one: a minimum wage is deemed necessary to prevent some employers exploiting workers with little bargaining power by paying them less than the value of the goods and services they produce. The aim of this paper is to establish what sort of people might be affected by a minimum wage, how this might have changed over time and how far a minimum wage can be used as a tool to redistribute income from the rich to the poor. No attempt is made to simulate the effect of a NMW on employment and prices, and obviously any complete analysis needs to take these effects into account. Recent research (see the discussion below) on this issue, however, indicates little evidence that a 'moderate' minimum will have any effect on employment and it is thus likely that the 'first-round effects' described in this paper are informative.

The impetus for a minimum wage has not come from a growing concern about the level of labour market inequality, but from the fact that the lowest labour market incomes in the economy have successively fallen further and

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further behind the rest. In 1977, for example, the ratio of tenth percentile hourly earnings to the fiftieth percentile was 0.586; in 1994, it fell to 0.530.² Analyses of the growing gap between rich and poor have also shown a doubling in the numbers of working families with income below 60 per cent of average overall income (including families with no workers) between 1977 and 1991 (Goodman and Webb, 1994). These changes cannot be entirely explained by falls in the relative productivity of unskilled workers, as the dispersion of wages within groups of low-educated workers of the same age has also risen. It may therefore be the case that the balance of power between workers and employers in some of the new sectors of employment is such that there has been an increase in the numbers of workers who are paid less than the value of the goods and services they produce. It is this potential increase in the exploitation of low-paid workers that explains the growing pressure for a legally imposed wage floor.

The traditional economist's case³ against any wage floor is that, at best, it can have no effect on wages and, at worst, it will be counter-productive. The resultant fall in employment and increase in prices will mean that the poorer members of society will bear the costs of the increased real incomes of the lowest paid. The assumption here is that labour markets are structured so that all workers are paid the value of their marginal product. If wages were higher than this, then firms could increase their profits by reducing their work-forces. Employers that pay less than this going rate will lose all their employees. Similarly, any industry that persists in paying workers less than the value of the extra goods and services that they produce will face competition from new firms wishing to gain a share of these extra profits. It is these competitive pressures which force wages up to what economists term the 'market clearing level' — the level at which all workers are paid the value of their marginal product. In this scenario, any enforced increase in wages can only result in firms attempting to increase productivity by reducing their work-forces. Moreover, the increased costs of production will raise prices and result in a fall in the level of real consumer demand.

But if the competitive pressures described above are weak, it may be the case that some wages will actually be lower than the marginal product of workers. For example, women with children may find their need to work near a child-minder or school a large barrier in moving to a better job. Their employers will then be able to get the sorts of workers they need at low wages, wages that are in fact lower than the marginal product of their employees. Similarly, workers in industries with many small firms may not know what the wage rates offered by other similar firms are. This lack of knowledge enables firms to take a large share in the gap between the value of what the employees produce and the lowest

² Author's calculations from the Family Expenditure Survey; see Gosling, Machin and Meghir (1994) or Gregg and Machin (1993) for a complete description of these changes over the 1980s.

³ See, for example, the discussion in Polachek and Siebert (1993) on unemployment.

wage they are prepared to accept. The introduction of in-work benefits to encourage workers back into the labour market will, in these cases, lead to a fall in offered gross (excluding the in-work benefit) wage rates, rather than a rise in employment.⁴ This argument strengthens the case for a minimum wage by explaining why wages may be 'too low'. It also implies that a wage floor may be able to raise wages *without* affecting employment, so long as it is set so that wages are still no more than the value of goods and services produced.

Theoretically, then, the predicted effect of a wage floor on employment depends on the structure of the labour market. If informational and transaction costs are insignificant, so that all workers are paid their marginal product, then any wage floor set above existing wages will reduce employment. On the other hand, if these costs are large, then the wage that an employer is prepared to pay (i.e. the value of the marginal product) will be larger than the minimum that some workers are prepared to accept. A wage floor set between the extremes in this case will raise wages and not reduce employment. In fact, the increase in wages may encourage more individuals into the labour market and hence employment to increase. The crucial question is therefore an empirical one: 'is there a significant range of wages for which a wage floor can have the desired effect?'. Four findings have emerged from recent UK studies to suggest that such a range may indeed exist.

First is the fact that there is no evidence that the 1975 Equal Pay Act, which made it illegal for firms to pay women less than men for doing the same job, reduced female relative employment. In fact, Manning (1996) uses this Act explicitly to test whether the labour markets in which women work are monopsonistic (firms face upward-sloping supply curves for labour). Second, Machin, Manning and Woodland (1993) have looked in detail at a particular low-paying labour market,⁵ that of care workers in nursing homes on the south coast. They find a significant variance of pay not attributable to worker quality, which they attribute to labour market frictions causing a gap between wages and marginal product. Third, Machin and Manning (1994) present evidence from the

UK wages councils that suggests that the wages set by the wages councils 'bit' in the sense that they forced some firms to pay higher wages than they otherwise would and they did not reduce employment.⁶ Last, after the abolition

⁴ This fear that subsidies to low-wage workers benefit their employers rather than the workers themselves is not new. Critics of the 'Speenhamland System' of a subsidy directly tied to the difference between the price of bread and the wages of agricultural workers in the early nineteenth century made exactly this point, arguing that the system allowed farmers to reduce wages and left the workers no better off than before.

⁵ The average wage of care assistants in their sample was £3.00 an hour.

⁶ Previous research on the effect of the wages councils on employment has been inconclusive, with Craig, Rubery, Tarling and Wilkinson (1982) finding no adverse employment effects and Morgan, Paterson and Barrie (1985) finding a negative effect of a minimum wage on employment in the clothing industry. Bazen (1990) finds small employment falls. For the US, the survey of studies by Brown, Gilroy and Cohen (1982) found a small negative relationship, but recent research has been more controversial. Card and Krueger (1995) found no

of the wages councils in 1993, wages fell in the industries covered and employment did not rise (Dickens and Manning, 1995). This range of results, when taken in conjunction with the observations on economic theory, do not necessarily mean that any NMW would have no adverse effects on employment, but they do imply that one set at the right level would not adversely affect employment.⁷

The other possible consequence of any floor to wages is on prices. There are two reasons why a NMW may cause prices to rise. First, if the minimum wage is set above the marginal product of affected workers, then prices will rise if firms can pass some of the increase in costs to consumers.⁸ Second, if a minimum wage results in workers further up the wage distribution increasing their wage demands in order to restore differentials, then overall prices will rise because of the increase in costs. There is no direct evidence on the effect of a NMW on prices in the UK, but Machin and Manning (1994) suggest that the wage council minima only affect the bottom of the wage distribution, implying that spillover effects are small. In the US, Card and Krueger (1994) found mixed evidence that an increase in the minimum wage caused prices to rise in the New Jersey fast-food restaurants they sampled.⁹

The structure of this paper is as follows. Section II looks at the proportion of the work-force who would be directly affected by various possible levels of minimum wage. Section III considers the direct effect of a minimum wage on the distribution of income and discusses how this might have changed over time. While no attempt is made in Section III to control for the possible employment effects, the available empirical evidence discussed above suggests that these, if present at all, will be small. Section IV looks at the possible impact on the numbers claiming, and expenditure on, in-work benefits, while Section V concludes.

II. HOW MANY PEOPLE WOULD BE AFFECTED BY A MINIMUM WAGE?

The preferred formula among some trade unions and the Low Pay Unit for determining the level of a minimum wage is 'half median earnings'. Table 1

evidence of a negative relationship from their various establishment-level studies, but this has been criticised by some (see the debate in the July 1995 edition of *Industrial and Labour Relations Review*).

⁷ It may also be the case that wages councils, consisting of employer, worker and independent representatives, operating separately in each industry will be more likely to be able to find the range of wages for which a wage floor will have the desired effect than a centrally-imposed minimum.

⁸ However, if a minimum wage is set somewhere between existing wages and the marginal product of labour, then prices will not change. In fact, if employment increases due to increased supply, then prices will in fact fall as firms face downward-sloping demand curves.

⁹ To be more specific, they found that prices rose faster in New Jersey as a whole but that the restaurants with bigger imposed wage increases due to the increase in the state minimum did not have bigger price rises.

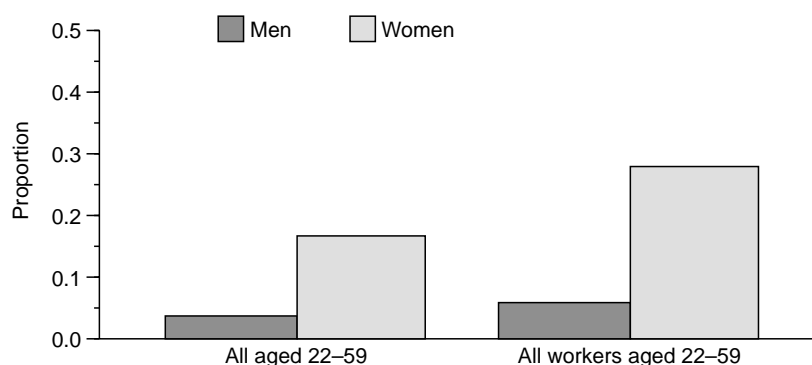
TABLE 1
Various Possible Levels of Minimum Wages

<i>Wage</i>	<i>Formula</i>	<i>Sampling</i>	<i>Data source</i>
£3.02	Half median hourly wage	All workers between 18 and 60 exclusive	Family Expenditure Survey 1994–95 (first quarter 1996 prices)
£3.68	Half median hourly wage	All full-time workers on adult rates	New Earnings Survey April 1996 (April 1996 prices)
£3.67	Half male median hourly wage	All male workers between 18 and 60 exclusive	Family Expenditure Survey 1994–95 (first quarter 1996 prices)
£3.95	Half male median hourly wage	All full-time males on adult rates	New Earnings Survey April 1996 (April 1996 prices)
£4.26	Half male median weekly earnings including overtime divided by average basic hours excluding overtime	All full-time males on adult rates	New Earnings Survey April 1995 (April 1995 prices)
£4.41	Half male median weekly earnings including overtime divided by average basic hours excluding overtime	All full-time males on adult rates	New Earnings Survey April 1996 (April 1996 prices)
£4.67	Half male average (mean) hourly earnings	All full-time males on adult rates	New Earnings Survey April 1996 (April 1996 prices)

Sources: New Earnings Survey published tables; author's own calculation from the Family Expenditure Survey.

shows that, depending on the sample used, this can give many different wage floors. The lowest wage shown is £3.02 an hour, which is half overall median hourly wages of all adult workers derived from the Family Expenditure Survey (FES). Constructing the same measure using the 1996 New Earnings Survey (NES) (which undersamples part-time and lower-paid workers)¹⁰ gives a figure of £3.68. Similarly, half male median earnings gives a figure of £3.67 from the FES and £3.95 from the NES. The headline figure of £4.26 is constructed by taking half male median full-time weekly earnings (including overtime) and dividing by average hours excluding overtime using the 1995 NES. The same calculations would give £4.41 in 1996. Half male average earnings would give a figure of £4.67 an hour. As no political party has committed itself to a precise level of a NMW, and the preferred £4.41 an hour, the following analysis will concentrate on four possible wages in and around this range.

¹⁰ This is because the sampling frame is all workers who pay National Insurance contributions, which are generally not paid by those working part-time on low wages.



Note: Wages have been updated to January 1996 prices.
 Source: Family Expenditure Survey, 1994-95

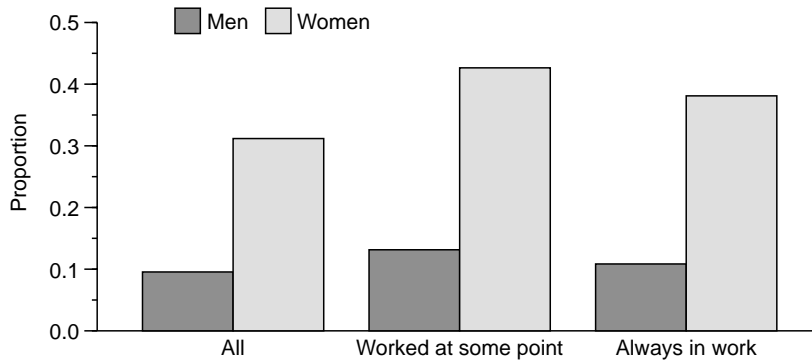
Figure 1 uses data from the 1994-95 FES to predict the proportion of workers who would be affected by the introduction of a NMW at four possible levels — £3, £3.50, £4 and £4.50. Many more women than men would be affected by these wages, so much so that over 40 per cent of women would be affected by a minimum wage of £4.50, compared with 20 per cent of men. Even a minimum wage set at £3 would affect about 7 per cent of the work-force.

The data from the FES show the proportion of workers affected at any point in time, but if people move into and out of low-paid jobs, to or from higher-paid jobs or unemployment, the numbers affected will be much larger. Data from successive waves (1991-94) of the British Household Panel Survey (BHPS) can be used to demonstrate this point. In the following stages of the analysis, the numbers receiving less than half male median earnings (about £3.65 an hour) have been used.¹¹

To compare the numbers affected by a NMW at any one point in time with those who might be affected over a longer period, Figure 2 gives the proportions of the BHPS sample between the ages of 22 and 59 who had earnings less than the male median both for the entire sample (including the unemployed) and for workers. As can be seen, the proportions here are consistent with the FES data shown in Figure 1. Figure 3 shows the proportions who ever held a low-paying job between 1991 and 1994, split by gender and employment status. The first pair of bars take the population of working age as a whole. As can be seen, 10 per cent of men and 30 per cent of women born between 1934 and 1969 had at least one low-paid job between 1991 and 1994. This can be compared with the first pair of bars in Figure 2, where just under 5 per cent of men and 17 per cent

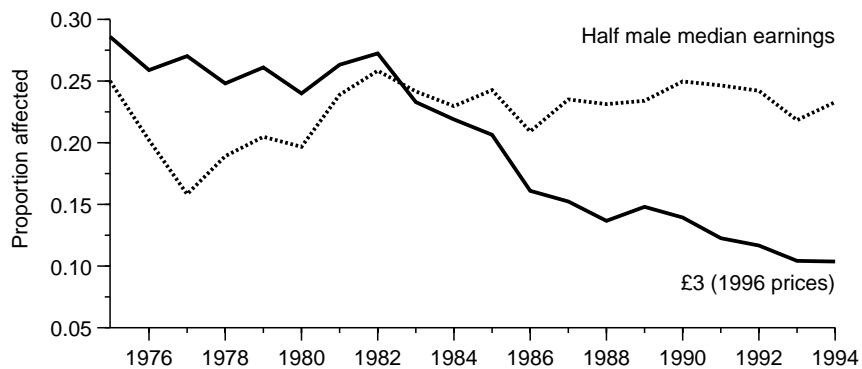
¹¹ As many people between the ages of 18 and 22 are in full-time education, the sample has been reduced to cover only those who were between 22 and 59 (inclusive) between 1991 and 1994 (the years covered by the BHPS).

FIGURE 2
Proportion Paid Less than Half Current Median Earnings



Source: Pooled British Household Panel Surveys, 1991-94.

FIGURE 3
Proportion Born between 1934 and 1969 who Ever Worked in a Job Paying Less than half Current Male Median Earning between 1991 and 1994



Source: Pooled British Household Panel Surveys, 1991-94.

of women of working age are in a low-paid job at any point in time. The next pair of bars in Figure 3 select those who had some spell of employment over the period. As expected, the numbers are higher: 12.5 per cent of men and 42 per cent of women who worked over the period worked in a low-paid job. The final pair of bars look at those who were in work throughout the period, and the proportions here lie somewhere between the first and second set of bars. This means that there are movements between low-paid jobs and unemployment as

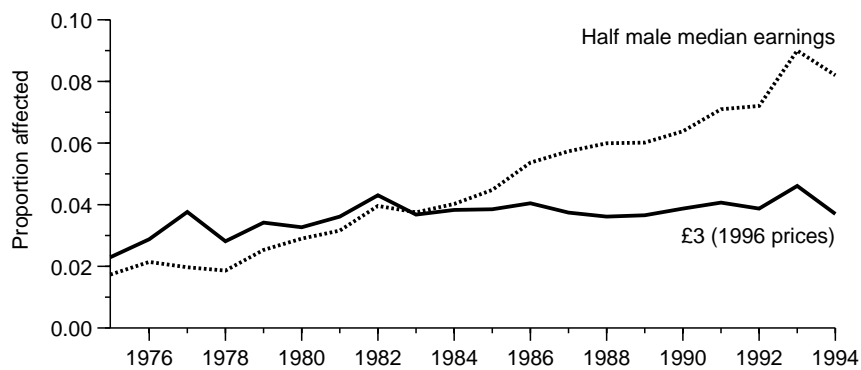
well as moves up the earnings ladder from low pay into high-paid jobs. This churning between low pay and unemployment means that the effect of a minimum wage may be more redistributive in terms of lifetime income than in terms of income at one point in time. This is because the unemployed now may benefit from a minimum wage job at some point in the future.

An important issue surrounding the setting of a minimum wage is how much it should change over time. As average wages grow, a minimum wage set in real terms will cover fewer and fewer people over time if all wages are growing in real terms and will imply that those on low wages will not share in increases in overall living standards. On the other hand, a minimum wage tied to median or average earnings will affect more and more people if the underlying distribution of wages is getting wider. As we do not know what is going to happen to the level and distribution of wages in the future, the possible importance of this cannot be assessed. However, Figures 4 and 5 show what would have happened over the 1970s, 1980s and 1990s to the coverage of two hypothetical minimum wages set in 1975. The first is an index-linked minimum of £3 an hour in 1996 prices and the second an earnings-related minimum of half male median wages.

Looking at men first (Figure 4), we can see that a minimum wage tied to prices (the solid line) would have affected about 2 per cent of male workers in 1975. This figure rose to about 4 per cent during the period 1975-77 (when most wages fell in real terms due to the social contract) and remained at this level over the rest of the period. This is because male wages at the bottom of the distribution have not risen in real terms since 1978. A minimum wage tied to median earnings, on the other hand, would have affected only 2 per cent of working men in 1975 but 8 per cent in 1994. This is because the rise in earnings inequality over the period has been driven by the failure of wages at the bottom of the distribution to keep up with the median.

FIGURE 4

Proportion of Male Workers affected by Two Hypothetical Minimum Wages

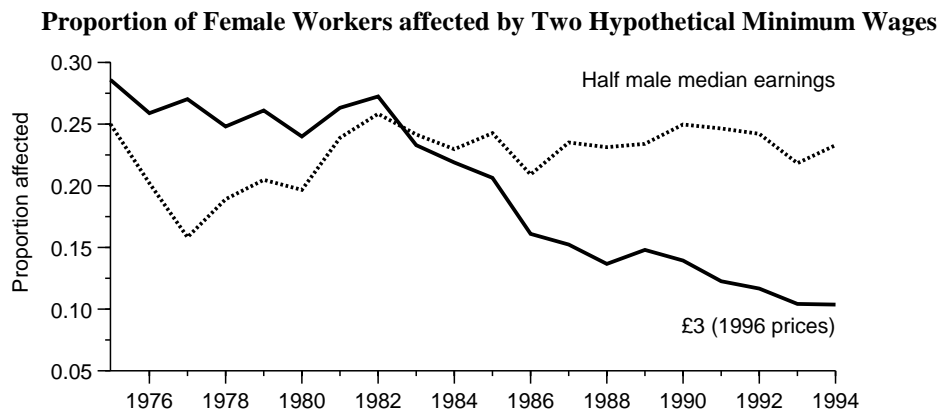


Source: Family Expenditure Surveys, 1975-94.

The picture for women (Figure 5) is slightly different, mainly because female relative wages have been rising fast over the 1970s and 1980s. A minimum wage tied to male median earnings would have affected about a quarter of women workers in 1975. This decreases slightly over the following two years — the period in which the social contract was being enforced and the Equal Pay Act was coming into effect. The number who would have been affected by such a minimum wage rose in the late 1970s but remained at about 25 per cent of the female work-force over the 1980s. This is because female wages at the bottom of the distribution have risen as fast as male median earnings.¹² The numbers who would have been affected by a minimum wage tied to prices fell sharply over the whole of the 1980s.

Thus it is clear that the choice of uprating mechanism for a minimum wage during a period in which the underlying distribution of wages is changing is at least as critical as the choice of initial level. A minimum tied to prices in 1975, for example, would have done nothing to halt the increase in earnings inequality over the last 20 years.¹³ However, the danger of tying a minimum wage to the median or mean is that any large decrease in relative productivity of the lowest-paid (such as arguably happened over the 1980s) is likely to cause unemployment. A minimum that is linked to median wages over a period in which the underlying demand for skill is changing may therefore need to be

FIGURE 5



Source: family Expenditure Surveys, 1975-94

¹² See Harkness (1996) for a full description of the changes in female relative wages.

¹³ In the US context, where wages below the median have actually been falling in real terms, a minimum wage tied to prices would, in fact, affect more and more people over time.

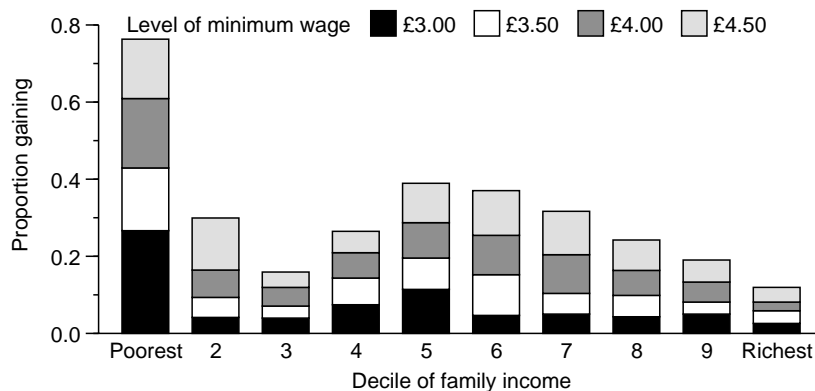
accompanied by other policies (on education and training in particular) that will increase the relative productivity of the lowest-paid. This remains the case even if the initial minimum was at a level where it would not harm employment.

III. WOULD A MINIMUM WAGE REDUCE INCOME INEQUALITY?

Although any complete understanding of the effect of a minimum wage on the distribution of income needs to incorporate the possible effects on prices and unemployment, it is still informative to look at the direct effects of a NMW. In order to incorporate any effect of changes in tax liability and benefit entitlement, the IFS tax and benefit model, TAXBEN, has been used to simulate the effect of a NMW on net disposable incomes. The incomes have also been equivalised (using the McClements scale — see McClements (1977)) to control for differential household and family size.

Figure 6 looks at the redistributive effects of a minimum wage on the distribution of income of benefit units¹⁴ with at least one worker. Here, almost 80 per cent of the poorest 10 per cent of working families will experience an increase in net incomes after the introduction of a minimum wage of £4.50 an hour, although the gains persist throughout the distribution. This suggests that a

FIGURE 6
Proportion of Working Families Gaining



Source: Family Expenditure Survey, 1994-95

¹⁴ We use the terms benefit units and families here to mean any family type considered by the tax and benefit system to be a single unit. This includes couples (with or without children), lone parents and single people. Young adults still living with their parents, or elderly people living with their children, are treated here as separate units.

minimum wage would reduce inequalities of income amongst working families, as many workers on low wages are either single people or have partners who are also paid low wages.

FIGURE 7
The Possible Effect of Minimum Wages on Poverty



Source: Family Expenditure Survey, 1994-95

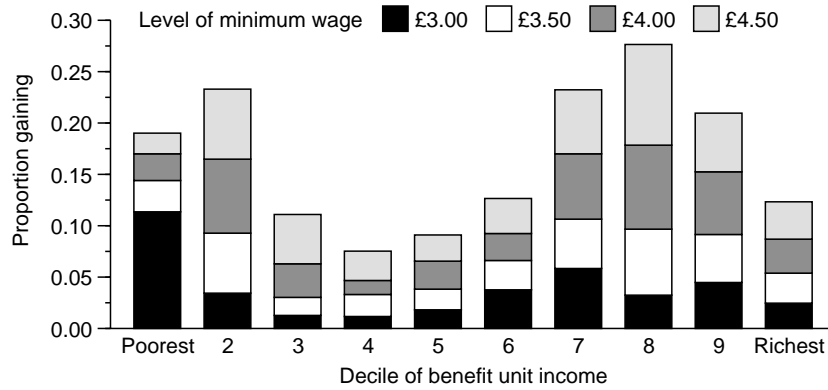
It is important to stress, however, that working families are in general much better off than the unemployed and poorer pensioners. Obviously, a minimum wage will never be able to improve the incomes of those who do not work,¹⁵ but the fact that a minimum wage might impose costs that are borne by society as a whole, such as an increase in prices or increased government expenditure on goods and services produced by low-waged workers, means that it is important to look at the redistributive effects for all families, including those who do not work.

Figure 7 shows by how much the numbers of benefit units with less than one-third, one-half and two-thirds of mean income would fall after the introduction of a minimum wage. As can be seen, a minimum wage set at these levels would have very little effect on overall poverty levels. Even a minimum wage of £4.50 an hour, which would affect 30 per cent of the work-force, will only reduce the proportion of benefit units with less than two-thirds mean income by 1.4 percentage points. This suggests that low pay is a relatively minor contributor to overall family poverty in the UK in 1994.

¹⁵ Although Figure 3 suggests that those who are the unemployed now may be affected by a minimum wage in the future.

FIGURE 8

Proportion of Benefit Units with Increased Income after Introdution of NMW



Source: Family Expenditure Survey, 1994-95

Figure 8 shows the proportion of benefit units in each income decile that would potentially gain from the introduction of a minimum wage. Taking the distribution of family income first, it is clear that a very low minimum wage of £3 an hour will benefit poorer benefit units the most. However, *increases* in the minimum above £3 an hour will help benefit units in the middle of the distribution more than poor benefit units.

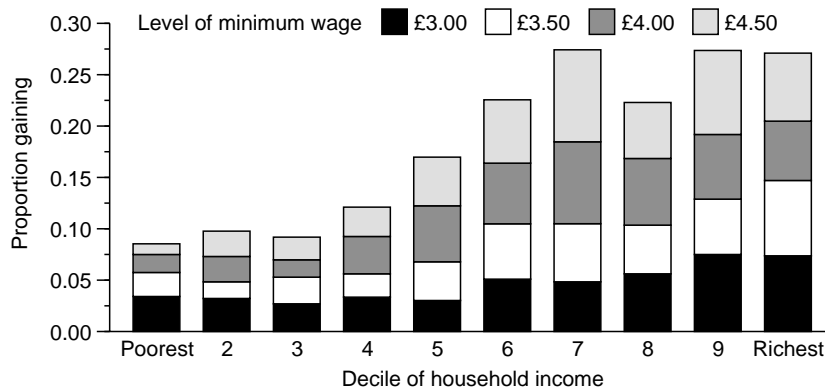
FIGURE 9

Proportion of Households with Increased Incomes after Introduction of NMW



Family Expenditure Survey, 1994-95

FIGURE 10
Proportion gaining by Family Type



Family Expenditure Survey, 1994-95

Many households are made up of two or more benefit units living together — grown-up children living with their parents or couples looking after elderly relatives — and it may be the case that these sorts of households share their resources, so that a young person living at home is fully subsidised by his or her parents, for example. If this is the case, it is wrong to consider single people with little independent income in rich households as poor. Figure 9 looks at the distributive effects of a minimum wage on *household* income, which allows for such sharing across families and within households. Here, we find that a minimum wage of even £3 an hour benefits those households in the top of the distribution more than those at the bottom.

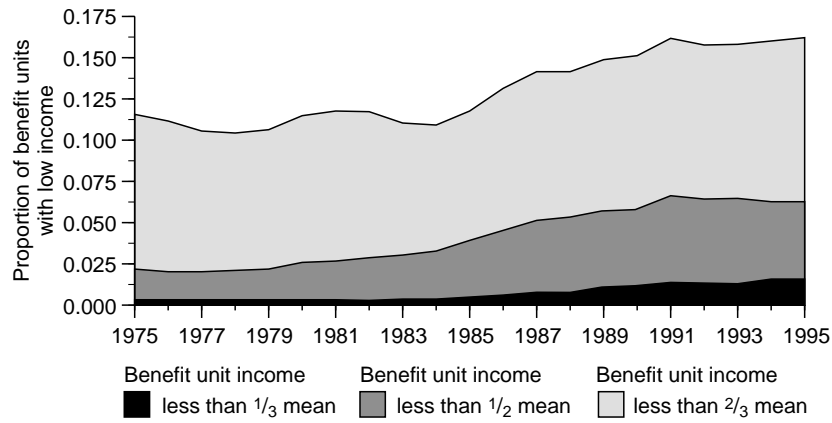
In Figure 10, the FES sample has been split by type of family. This suggests that the people who are most likely to be on low wages are single non-householders (usually young adults living with their families). Of this group, it is those in poor households (those with less than median income) who are on low wages, which explains the small numbers who gain in the bottom half of the distribution of household income. In terms of numbers, however, the most important gainers are two-earner couples. These people are relatively rich in comparison with those couples where both people are unemployed.

The Growth of the Working Poor over Time

Another interesting question is how the possible redistributive effect of a minimum wage might have changed over time. One feature of the 1980s has been the change in composition of the poor. In particular, the poor in 1993 are far more likely to be working than the poor in the early 1980s. Figure 11, using

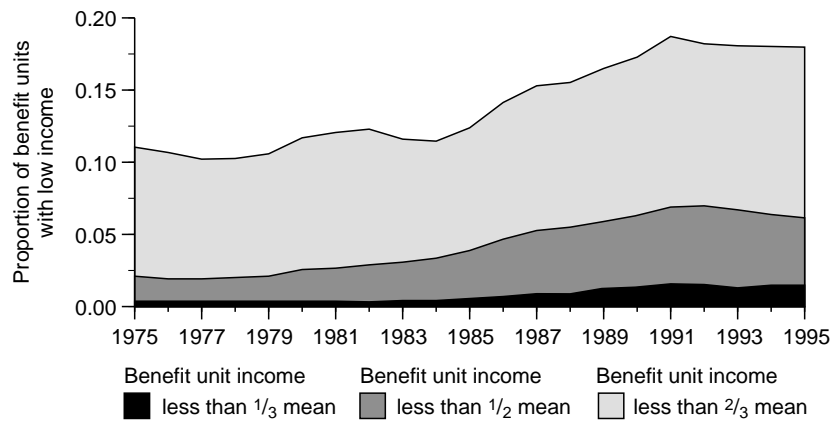
data from the FES, shows this quite clearly. Here, the changes in the proportion of working benefit units that are below various poverty lines are plotted. Although the numbers of families with at least one worker have actually fallen over the 1980s (see Gregg and Wadsworth (1996)), the numbers of the working poor have risen.

FIGURE 11
Proportion of Working Benefit Units with Incomes Less than One-Third, One-Half and Two-thirds of the Average



Source: Family Expenditure Surveys, 1975 to 1994-95

FIGURE 12
Proportion of Workers Paid Less than Half Male Median Wages who are in Benefit Units with Incomes Less than One-Third, One-Half and two-Thirds of the Average



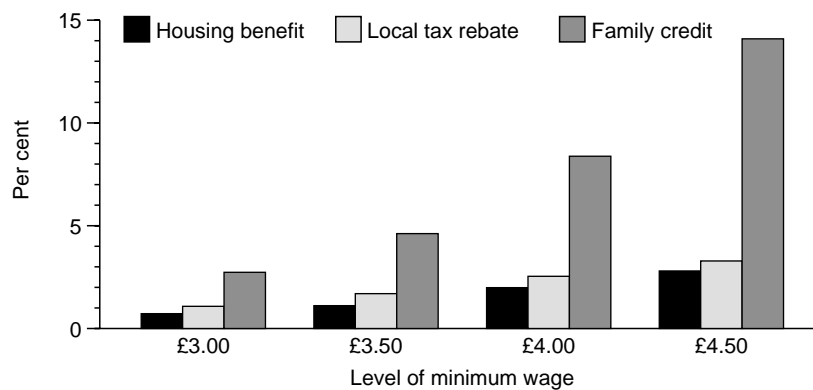
Source: Family Expenditure Surveys, 1975 to 1994-95

But would a minimum wage set at half male median earnings have affected this growing number of working poor? Figure 12 shows that about 10 per cent of those workers affected by a minimum wage in 1975 were from benefit units whose income was less than two-thirds of the average. By 1991, this had almost doubled. Thus, while most of those who gain from a minimum wage are not among the very poor, this is not as true now as it was in the mid-1970s. It may be the case that a minimum wage could act as a brake on further increases in benefit unit income inequality.

IV. A MINIMUM WAGE AND IN-WORK BENEFITS

One other advantage of a NMW is that it might float low-paid workers out of the benefit system. Aside from the obvious exchequer cost issue is the fact that in-work benefits may have distortionary effects on the labour market. First, they may act as a subsidy to employers rather than to encourage people into employment. Second, the increased marginal tax rates for affected workers will discourage mobility between jobs, making it more likely that pre-benefit wages will be below marginal product. Last, in-work benefits sometimes have perverse effects on labour supply.¹⁶

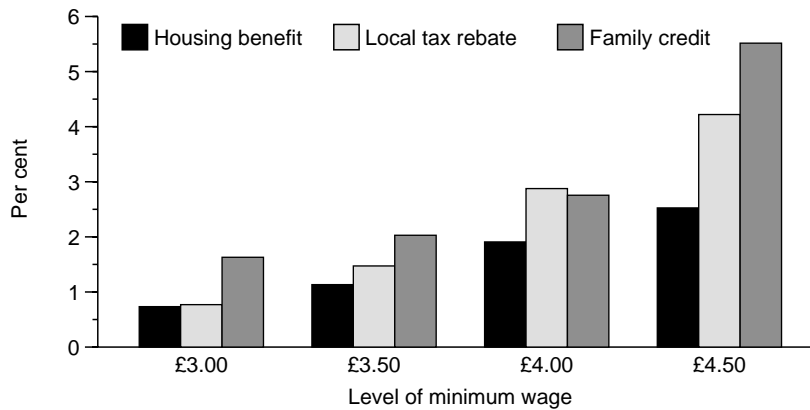
FIGURE 13
Percentage Fall in Expenditure on In-Work Benefits



Source: Family Expenditure Surveys; TAXBEN

¹⁶ The flattening of the budget line may make some people reduce their hours of work and, because partners' earnings are also taxed at up to 90 per cent, may reduce participation rates of women married to or cohabiting with low-paid men.

FIGURE 14
Percentage Fall in Numbers of Non-Pensioners Claiming In-Work Benefits



Source: Family Expenditure Surveys; TAXBEN

Figure 13 shows the percentage falls in expenditure on benefits received in work after the introduction of a NMW at the four levels considered, while Figure 14 looks at the percentage fall in numbers claiming. As many of the old also receive housing benefits and council tax rebates, we have concentrated on non-pensioners. As can be seen, there is a fall in both expenditures and numbers claiming each of the benefits, the largest fall, not surprisingly, being in family credit. These figures may seem rather small, but for some families wages may need to be as high as £7 an hour to lift them out of benefits. However, if in-work benefits were extended to the childless, as is currently being proposed, one would expect the effects to be much greater, as more of the childless would be affected and the subsidy at given wage and hours levels would be much lower.

A minimum wage will also affect the government budget by increasing tax revenue and perhaps increasing the government pay bill if some public sector workers would be affected. Trinder (1995) argues that the public sector pay bill is unlikely to rise by very much, as very few workers earn less than £4.50 an hour in the public sector. However, many services that have been contracted out do employ low-waged workers and it is likely that the increased costs will be passed on to central and local government. There is thus a potential increase in government expenditure resulting from a minimum wage. Revenue losses could also accrue from reduced corporation tax receipts if a minimum wage results in a fall in profits. Thus the effect on the government budget overall is difficult to predict, but there may be specific welfare gains from the reduced expenditure on in-work benefits provided, of course, that labour markets are structured so that a NMW causes less of a distortionary effect than in-work benefits.

V. CONCLUDING REMARKS

This paper has looked at a few possible first-round consequences of the imposition of a national minimum wage. As half median earnings can mean any minimum between £3.02 and £4.41 depending on the sample and dataset used, we have looked at the effect of four possible minima between £3.00 and £4.50 an hour. The most overwhelming finding is the sheer extent of low pay, especially amongst female workers: a good 30 per cent of the labour force earn less than £4.50 an hour and about 7 per cent earn less than £3.00 an hour, and it is mostly women who are in these situations.

Because most of the poor are not in work, a minimum wage is not a good way to redistribute income from the rich to the poor. Most of those who gain will be couples where both partners work and young single people living with their parents. These people are richer than the unemployed or many pensioners. There are two caveats to this, however. First, as there is movement between unemployment and low pay, the unemployed now may benefit from a minimum wage in the future. Second, the increase in the numbers of working poor over time suggests that a minimum wage would be more redistributive now than it would have been in the past.

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