

# The Effects of a Minimum Wage on Family Incomes

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## I. INTRODUCTION AND SUMMARY

The Labour Party is proposing to introduce a national minimum wage (NMW) (Labour Party, 1990, p. 22). This would initially be set at half of male median earnings, rising over time to two-thirds of male median earnings.

Most of the discussion surrounding the introduction of a minimum wage has been concerned with its possible effects on employment. (See for example Gregg (1990) who argues that the employment consequences would in fact be small.) Less attention has been paid to the distributional effects. Here we make some assessment of what that distributional impact might be.

In particular in this brief study we look at the likely impact on family and household incomes. The results are clear cut. Those people most affected would be young single people living at home with their parents and the wives of working husbands. This means that the effects on poverty and inequality would in fact be small.

In this paper we make no attempt to model possible effects of the introduction of a NMW on unemployment, the wages of other workers or any other behavioural effects. Nor do we make any assessment of the desirability of a minimum wage for reasons other than the amelioration of poverty and inequality.

## II. EVIDENCE ON THE DISTRIBUTION OF EARNINGS

In the main part of this article we make use of the IFS Tax and Benefit Model to simulate the effects of introducing a NMW. First, however, we present some preliminary evidence on the distribution of low wages.

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Table 1 is drawn from Gregg (1990) and shows the proportions of various groups of employed persons on adult rates earning less than £3.10 per hour (his estimate of half male median earnings) in 1990. The figures are based originally on the New Earnings Survey.

TABLE 1  
Population Groups Affected by a NMW of £3.10 per Hour

Population group	Percentage of group earning less than £3.10 per hour	Approximate number in group (millions) <sup>a</sup>
Full-time adult males	4.3	10.7
Full-time adult females	13.6	6.3
Part-time males	40.2	0.9
Part-time females	39.8	4.5

<sup>a</sup> New Earnings Survey 1990, Part A, note 11.3.

Clearly a minimum wage set at around this level would affect only a small proportion of men in full-time employment. Those most affected would be women and part-time workers (the majority of whom are women anyway). This backs up the Labour Party's claims that around 80 per cent of those to benefit from the initial introduction of a minimum wage would be women (Labour Party, 1990).

## III. RESULTS

Earlier studies of a NMW such as that of Gregg have drawn on information from the New Earnings Survey (NES), which contains detailed information on the wages of 180,000 employees. However, the NES has no information on the families of the employees, or on other sources of income, which makes it of little use in assessing the distributional effects of wage changes on household or family incomes. Here, by contrast, we use data from the Family Expenditure Survey (FES), which combines a smaller sample size (approximately 18,000 individuals in 7,000 households) with a large amount of detailed extra data on the families of workers and on unearned income, taxes and benefits as well as on wages. The data used come from the 1987 FES, with incomes uprated to 1991.

For each of the households in the FES, the IFS Tax and Benefit Model<sup>1</sup> is used to compare the net incomes under the present tax and benefit system with the net incomes that would obtain if a minimum wage of £3.50 per hour were immediately introduced for all workers. The figures thus show not only the effect of the wage

<sup>1</sup> See Johnson, Stark and Webb (1990).



but also the consequent increases in tax bills and reductions in benefit payments. No change in either labour demand or supply is assumed. We assume a wage level would be fully enforceable. £3.50 per hour figure is above half male median earnings and below two-thirds of the median. Its choice as a base is purely illustrative. Further calculations showed that the pattern of results is similar for a NMW set a little below the level above this level. The numbers affected do, however, change dramatically depending on the exact level at which the NMW is set. Raising it from £3.00 per hour to £4.00 (just under two-thirds male median earnings) to £4.00 (just under two-thirds male median earnings) doubles the numbers affected. This indicates that the precise effects of a NMW may be quite sensitive to the exact level at which it is set. In practice, of course, a NMW might well be more sophisticated than we have assumed; for example, there might be a lower rate for part-time or young workers. Our calculations suggest that a minimum wage of £3.50 per hour would cause an increase in the gross wages bill of £6.7 billion per annum,<sup>2</sup> of which £2.3 billion would immediately be lost by workers in increased taxes and reduced benefits, leaving an average net increase in incomes of £146 p.a. per family. Table 2 and Figure 1 show the net average gains from the minimum wage in pounds p.a. by family type and equivalent income decile respectively.

TABLE 2  
Gains from a NMW of £3.50 per Hour  
(by family type)

Family type	Average gain (£ p.a.)	Percentage of group gaining	Number of gainers (thousands)	Average net income before change (£ p.a.)	Average income of those affected by change (£ p.a.)
Unemployed	—	—	—	2,300	—
Employed	286	26	2,110	8,600	4,500
Single parent family	22	10	100	7,100	7,300
Employed couple, no children	—	—	—	6,800	—
Employed couple with children	—	—	—	7,500	—
Single earner couple, no children	90	13	150	14,300	7,500
Single earner couple with children	40	6	120	15,500	8,900
Two earner couple, no children	256	30	880	19,600	14,200
Two earner couple with children	290	39	1,200	19,800	16,500
Single pensioner	4	1	20	5,500	6,900
Double pensioner	42	5	180	11,200	10,000
Overall	146	16	4,760	10,600	9,800

including employers' National Insurance contributions.

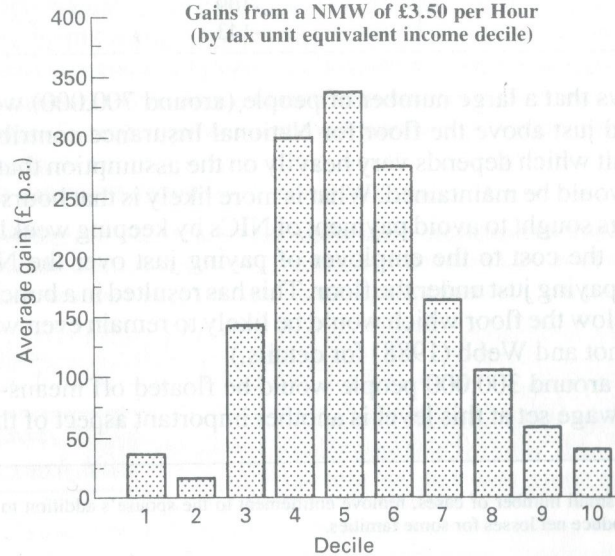
Just under 5 million families would gain from a minimum wage set at this level. Of these, over 2 million are two-earner couples and a further 2 million are single people with no dependants. The single people who stand to gain are largely young (mostly under the age of 25), and all but 160,000 still live at home with their parents or in other extended households.

Two-earner couples are on average the richest family type, with an average income of around £20,000 p.a. Those in this group who stand to gain from a minimum wage, however, are somewhat poorer than this, with an average income of around £14,200 for childless couples and £16,500 for couples with children, which is still in excess of the average income for single-earner couples. In nearly all of these cases it is the wife who earns below the minimum wage. It is also noticeable that the average income of those affected by the minimum wage is only a little lower than the average income of the population as a whole.

About half a million other families would gain from the change. Of particular interest is the very low number of gainers among single-parent families, a poor group which one might expect to help with a policy of this kind. This is a direct result of the way in which the benefit system works. It is frequently not in the interest of single parents to take low-paid, part-time work because the income earned may not be enough to offset benefits lost and the costs of child care incurred (see, for example, Walker (1990)). A minimum wage might increase potential earnings enough to encourage some in this group to take work which they might not otherwise have done. For this reason we may be underestimating the number of single parents who would benefit from the introduction of a NMW.

Figure 1 shows average gains in pounds p.a. by tax unit income decile. Gains are concentrated in the middle of the income distribution, but the gains would go all the

FIGURE 1  
Gains from a NMW of £3.50 per Hour  
(by tax unit equivalent income decile)





way up, with the richest 30 per cent actually having a larger net gain than the poorest 30 per cent. This is because the richest deciles contain families in which the wife may be in low-paid work while the poorest deciles are made up predominantly of non-earners. Many of those in the lowest income groups who would benefit from a NMW would also lose some means-tested benefit entitlement.

The figure shows the effects of the NMW on tax units. As such, no sharing within households containing more than one tax unit is assumed and hence the figure shows the low-paid young single unemployed, who are gaining, to be in low deciles.

A further result of the introduction of a NMW of £3.50 per hour would be a reduction in means-tested benefit entitlements and an increase in income tax and National Insurance liabilities.<sup>3</sup> Table 3 shows that around 700,000 people would be brought into tax as a result of the change. Of these, some 400,000 are married women with a working husband. Meanwhile over 200,000 families would be removed from housing benefit, over 130,000 of them single people. A saving of £250 million p.a. is made on family credit and income support, although the numbers floated off these benefits are small.

TABLE 3

## Exchequer Gains from a Minimum Wage of £3.50 per Hour

	Change (£m p.a.)	Extra taxpayers/ benefit recipients (thousands)
Income tax	+1,408	+720
National Insurance	+530	+700
Housing benefit	-86	-219
Family credit	-109	-35
Income support	-143	-59

Table 3 shows that a large number of people (around 700,000) would have their incomes pushed just above the floor for National Insurance contributions (NICs). This is one result which depends very heavily on the assumption that the number of hours worked would be maintained. What is more likely is that hours worked would fall as employers sought to avoid payment of NICs by keeping weekly wages below the floor, since the cost to the employer of paying just over the NI floor is high compared with paying just under the floor. This has resulted in a bunching of weekly earnings just below the floor which would be likely to remain even with a minimum wage. (See Dilnot and Webb (1988) for details.)

The fact that around 300,000 people would be floated off means-tested benefits by a minimum wage set at this level is another important aspect of the introduction

<sup>3</sup> It would also, in a small number of cases, remove entitlement to the spouse's addition to National Insurance benefits. This can produce net losses for some families.

of a NMW. This would reduce the effective marginal rates faced by these people. Thus it is not only in relation to single parents (as mentioned above) that a NMW might have a significant positive impact on the supply side of the labour market.

## IV. CONCLUSIONS

The clear implications of this study are that the introduction of a NMW is likely to have only limited effects on poverty even if there are no negative effects on the labour market. This is because, firstly, the main reason for very low income is lack of employment rather than low wages and, secondly, the large majority of those on very low wages are members of a family or household in which other members are earning higher wages. On the positive side we have shown that a large number of women would gain from its introduction and this may indicate that a NMW would be an effective tool in promoting equal pay.

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