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LOW PAY IN IRELAND

Brian Nolan

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GENERAL SUMMARY

Objectives of the Study

This study analyses the extent and nature of low pay among Irish employees, and the relationship between low pay and poverty. Previous studies of low pay in Ireland have been limited to certain sectors only. The nature of the data available has also meant that the links between the individual employee's low pay and poverty at the household level could not be studied – although it has often been taken for granted that a direct strong relationship exists. This study uses a representative national household sample for 1987 to analyse in depth the extent of low pay using various bench-marks, and identifies the distinguishing characteristics of the employees involved. It goes on to examine the extent to which low pay and poverty – measured in terms of household disposable income – in fact overlap. This has major implications for the likely impact on poverty of policies intended to assist the low paid, such as a minimum wage.

The Data Used

The study, like the earlier ESRI report on *Poverty, Income and Welfare in Ireland* (1989), makes use of data collected in a specially-designed household survey in 1987. This was designed to provide a nationally-representative sample of Irish households. The information obtained for employees in these households included details of their earnings, occupation and industry, hours worked, education, as well as age, sex, marital status etc. Comparison of the composition of employees in the sample in terms of age, sex, occupational group and sector with external information from the Census and Labour Force Survey suggests that they represent all employees well. The limited comparisons possible with external information also show average reported earnings in the sample to be broadly in line with expectations. The survey thus provides a basis for analysis of low pay across all sectors, which has not previously been available. While pay levels will have risen since that date, the structure of the earnings distribution tends to be quite stable and is unlikely to have altered markedly over that relatively short period. The fact that the survey covered not only employees but households means that the situation of an individual earner can be related to that of the household in which he or she lives, and the position of households affected by low pay can be

compared with other households. Thus, the data provides an ideal basis on which to examine the relationship between low pay, applying to an individual's earnings, and poverty, which is usually assessed at the level of the household.

What is Low Pay?

The definition of a particular pay level as "low" is of necessity rather arbitrary. Studies elsewhere generally relate low pay thresholds to the general level of earnings in the economy in question. For example, the average or median earnings of full-time adult employees – sometimes males only – may be taken as a reference point, and "low" pay defined as earnings below half or two-thirds of that figure. Given that there are no very strong arguments for concentrating on a particular bench-mark, though, several different thresholds are used here, spanning the range suggested by conventional approaches to deriving such thresholds. This allows the sensitivity of the results to the choice of threshold to be seen, and results which hold across a range of cut-offs, for example on the characteristics of the low paid, can be presented with more confidence. Most of the results in this study are therefore based on a "lower" and a "higher" hourly pay threshold, the former being £2.50 and the latter £3.25 in 1987 terms. (The corresponding figures in real terms at 1992 prices would be about £2.90 and £3.80 respectively.)

The Extent of Low Pay

Although the gap between these two thresholds is quite narrow in monetary terms, the earnings distribution is particularly dense in this area, so that while 14 per cent of full-time employees are found to be below the lower hourly threshold, 26 per cent are below the higher one. This illustrates the point that the extent of low pay is very sensitive to the precise cut-off chosen. Part-time employees are more likely than full-time ones to earn less than the hourly thresholds: 36 per cent of those working less than 30 hours per week were below the higher cut-off. The extent of low pay in Ireland appears to be similar to the UK, but greater than Belgium, The Netherlands, Germany or France, using for example half median earnings in each country as the low pay cut-off. The overall distribution of earnings among men is also similar to Britain.

Who Is Low Paid?

While the numbers measured as "low paid" are very sensitive to the precise choice of low pay threshold, the characteristics of those involved are by contrast rather stable. Low-paid full-time employees are

predominantly young: almost two-thirds of those below the lower hourly threshold are aged under 25. Among older full-time employees, women are much more likely to be low paid than men. Most low-paid part-time employees are also women, many of whom are married. The risk of being low paid is particularly high for women working in service or commercial occupations, or the retail or personal services industrial sectors. Regression analysis showed that age and education level attained were central determinants of an individual's probability of being low paid, but that sex, marital status and industrial sector were also important. For example, a male employee in the sample aged 35 who had not reached Group or Intermediate Certificate was estimated to have a one-in-three chance or risk of being below the £3.25 threshold, whereas a woman of the same age and education level had a one-in-two chance. Higher levels of educational attainment dramatically reduced the chance of being low paid.

Low Pay and Poverty

The extent of the overlap between low pay and household poverty was examined, and found to be quite limited. Only a minority of the individuals below the low pay thresholds are in households below relative income poverty lines. Even using the higher pay threshold and the highest, 60 per cent, relative poverty line, only about one in five low-paid employees are in "poor" households. This pattern corresponds to that found in other countries such as Britain and the USA, and in that sense is not particularly surprising, though it does not appear to be the common perception of the relationship. It arises primarily because most poor households do not contain an employee – social welfare and self- employment income dominate in such households. Most low-paid employees are in households in the middle and upper parts of the income distribution. The main factors determining the income ranking of households containing a low-paid employee are the extent to which the household relies on his or her earnings, and whether there are dependent children. Frequently, there are other earners in the household, or other members have income sources such as pensions or self-employment income. The probability of being in a "poor" household is highest where the low-paid individual is the household head and where there are children to support.

The relationship between low pay and poverty also needs to be seen in a dynamic perspective, however. While for some low pay is a transitional state, for others – particularly older employees- it is likely to be associated with other aspects of labour market disadvantage. For example, older employees in the survey earning below the low pay thresholds had experienced more unemployment in their careers than those above the

thresholds, and were less likely to be entitled to a pension when they retire. For such individuals, particularly those with low levels of educational attainment, low pay is to be seen as one aspect of more pervasive labour market disadvantage over time.

Policy Strategies

The appropriate strategies to deal with low pay depend very much on how the problem itself is framed. For example, one response is State intervention to set wage minima, either through an extension of the current Joint Labour Committee system or the introduction of a National Minimum Wage. The central objection to such intervention, and the focus of heated debate in Ireland as elsewhere, is the likely impact on employment: if the result is widespread job losses, then many of the intended beneficiaries of the policy would in fact suffer. This study does not attempt to assess the size of these employment effects, but establishes some important facts from which that assessment might begin.

First, it is shown that most of the low paid are not in sectors/occupations currently covered by Joint Labour Committees. Secondly, it is shown that most of the "gains" from a National Minimum Wage, if there were *no* effects on employment, would not go to households towards the bottom of the income distribution. Focusing on the relative small minority of households below income poverty lines which do contain an employee, though, about half these households would benefit, with about 25 per cent lifted above the 60 per cent relative poverty line. By focusing on the hypothetical construct of a fully effective minimum wage which had no negative effects on employment, this exercise reveals the limited impact which such a strategy could have on poverty. There may, however, be other objectives, such as improving the earnings of women, who would receive about 60 per cent of the hypothetical "gains'.

In terms of poverty alleviation, this analysis serves to highlight the importance of improved support directed specifically at the "working poor" with children. The ways in which such support could be provided include child income tax exemptions or allowances, means-tested Family Income Supplement, or universal Child Benefit. Increasing expenditure over time on Child Benefit rather than social welfare child dependant allowances, as recommended by the Commission on Social Welfare, would be costly but would assist many of the working poor while increasing the incentive to seek employment.

Chapter 1

INTRODUCTION

This study analyses the extent and nature of low pay in Ireland, the relationship between low pay and poverty, and the implications of the observed pattern for policy. The study is based on the detailed information on the earnings and other characteristics of a large sample, obtained through the Survey of Income Distribution, Poverty and Usage of State Services carried out by the ESRI. This provides a data base of a type not previously available for Ireland, which is particularly suited to the examination of the characteristics of the low paid and the households in which they live.

"Low" pay, like poverty, is not a clearly-defined unambiguous concept. Furthermore, the implications of low pay and the reasons why it is of concern also require elucidation. At one level, pay is earned by an individual and its determinants generally analysed with reference to the characteristics and preferences of the individual. Concern about low pay may arise from notions of equity and fairness in the treatment of individuals, in terms of avoidance of exploitation, for example. However, at another level, earnings are the dominant source of income for families and households, and concern about low pay arises because of its role in producing poverty. These perspectives are often combined and confused, and the present study highlights the value of maintaining the distinction. This is of major importance both in analysing low pay and poverty, and in considering policy responses.

Research on low pay in the Irish context has also been hindered by the data available. Analysis has had to be based for the most part on surveys of earnings where individual micro-level data were not available to the researcher. This meant that the scope for analysis of the factors influencing earnings at an individual level was limited. Generally, further information on the family or household in which the individual lived was not available. Thus, the crucial link between low pay at an individual level and poverty at the family/household level has not been made. Finally, the data on earnings available to previous researchers has been limited to particular sectors, so it has not been possible to get a picture of the overall distribution of earnings across the economy.

The present study has two main objectives. The first is to analyse in depth and describe in some detail the extent of low pay, the characteristics of those affected, and the industrial sectors and occupational categories in which they work. Through the estimation of earnings functions and models relating individual characteristics to the probability of being low paid, the key influences at an individual level on low pay are also identified. The second main objective is to link low pay to poverty, by examining the situation of the families/households of low paid individuals and the complex relationship between low pay and poverty.

The sample data employed here, from the survey carried out by the ESRI in 1987, is particularly suited to pursuing both these objectives. It obtained detailed data on the earnings and hours worked of employees, the characteristics of those employees, and the industries and occupations in which they worked. It also obtained information on the income from each source of all household members and on the composition of the household. Total household income related to household size/composition, can therefore be used in analysing poverty. Other information which is also useful in that context, such as measures of perceived financial strain and indicators of deprivation, were also obtained. Thus, the data base already used in a variety of studies of poverty and related topics (notably Callan, Nolan, *et al.*, 1989), is in many ways ideal for the analysis of low pay and poverty.

The study begins by briefly reviewing previous studies of low pay in Ireland, and the various approaches used here and elsewhere to setting low pay thresholds. Chapter 3 then describes the data base and assesses its reliability in the context of low pay. Chapter 4 examines the extent of low pay using different thresholds, distinguishing between full-time and part-time employees. Chapter 5 describes the characteristics of the low paid – defined in a number of different ways – in terms of age, sex and marital status, and education. Chapter 6 examines the occupational groups and industrial sectors in which the low paid work. Chapter 7 relates individual characteristics and industry/occupation groups to earnings and the probability of being low paid through a regression analysis. Chapter 8 examines the relationship between low pay and poverty, looking at the position of the households in which low paid individuals live.

Chapter 9 turns to the impact and role of direct intervention by the State in setting wage minima. The operation of the current Joint Labour Committee system is first described and assessed in so far as possible using the sample data. The introduction of a National Minimum Wage is then considered. Finally, Chapter 10 brings together the main findings and draws out their implications for policy.

Chapter 2

ANALYSING LOW PAY

2.1 *Introduction*

Clearly, before analysing the extent of low pay or the characteristics of the low paid, the term must be defined: what do we mean by "low" pay? No single generally-accepted definition exists, but a variety of approaches to setting a threshold below which pay is to be considered "low" have been adopted in previous research in Ireland and elsewhere. In this chapter we first discuss the various methods of setting a low pay threshold employed in research on low pay internationally. We then briefly review previous research on low pay in Ireland, concentrating on the nature of the data and the definitions of low pay used.

2.2 *Defining Low Pay*

There is no clear consensus on what "low pay" means, and a variety of approaches to setting a low pay threshold have been used in research or policy formation internationally. Drawing in particular on Metcalf (1981), two quite distinct perspectives can be identified however. The first looks at "low" pay relative to other earnings, while the second assesses pay relative to some poverty or standard of living criterion. While they are interrelated to a degree, it is useful to consider how the underlying approaches as well as the methods of implementation differ – and it must be emphasised that each can also be operationalised in a variety of ways.

Considering a particular level of pay to be "low" relative to the earnings available to others may derive from the notion of a "fair" or "just" wage. Distributive justice among wage-earners is thus taken to imply that "a fair day's pay for a fair day's work" is required. "Low" pay can then be assessed against, for example, average or median earnings, or a particular point in the earnings distribution may be taken as the threshold. Whatever the precise method, the standard being employed is based on other individuals' earnings.

The alternative perspective begins essentially with standard of living considerations, and asked what pay level is "low" relative to the income required to attain an acceptable or adequate standard of living – to avoid poverty, in effect? This is clearly not entirely unrelated in origin to notions

of "fairness" within the wage distribution. However, this emphasis leads to a comparison of pay levels with poverty standards, whether derived from social security support rates, other "official" poverty lines, or absolute or relative income poverty lines derived in other ways, rather than earnings-based standards.

Within each of the two broad approaches, then, there are various methods of operationalising the standard being applied, and the precise details of how this is done can have major implications for the extent of low pay produced. Taking the earnings-based approach, one procedure is to simply use average earnings as the point of comparison, so that a particular proportion of mean earnings acts as the low pay threshold. This is the approach recommended by a Committee of Experts of the Council of Europe, in considering how the right to a "fair Remuneration" might be interpreted. They proposed that about two-thirds/68 per cent of the national average wage be taken as a "decency threshold". Since the mean is quite sensitive to extreme values, median earnings has also been adopted as the basis for a threshold, and two-thirds of the median has been used quite widely as a low pay threshold internationally.

Still within the earnings-based approach, a rather different method is to select a point in the earnings distribution as the low pay threshold, for example, the level below which 10 per cent of workers fall. Simply defined in this way, of course, the extent of low pay would always be the same, and the emphasis would be on the composition of the low paid and how that changes over time or varies across countries. However, in practice the distribution-based method has usually been applied in a way which does not have this implication. Generally, rather than simply taking a point in the overall earnings distribution, the threshold has been derived from a narrower distribution, for example of earnings of full-time adult males (see, for example, Royal Commission on the Distribution of Income and Wealth (1978)). This procedure in essence takes the "norm" against which pay is assessed to be what a man working full-time at full rather than trainee rates earns. Thus, taking the bottom decile of *that* distribution as the threshold, 10 per cent of adult full-time males will be below that level but so also will a higher percentage of women, young trainee and part-time workers. The numbers found in low pay will then depend on the relationship between male and female, adult versus trainee and full-time versus part-time earnings' distribution. (In applying the mean/median-based approach, of course, the mean/median can also be calculated for a narrower group such as full-time adult men, rather than all employees.)

Turning to the standards derived from poverty line considerations, again a number of different methods are employed. Where there is an

official State-specified poverty line – or indeed a State minimum wage – this can be employed as the standard. Very often, of course, no such lines exist, and the rates of safety-net support provided by the social welfare system are taken to represent an implicit official line. Alternatively, poverty lines may be derived independently by other approaches, based for example on specifying and costing a minimum basket of goods and services, or relative lines related to average income, or other methods (see Callan and Nolan (1992) for a review). What must be emphasised though is that such poverty standards apply to families or wider households, not individuals. Thus a couple with two children will be taken to "need" a higher income than a single person, and this will be reflected in a higher poverty line. Low pay is being assessed on an individual basis, though, and generally takes no account of the different family circumstances of different workers. The conventional usage is to take the poverty standard – however derived – for a couple with two children as the basis of the low pay threshold, in other words a pay level which does not allow the worker to keep such a family "out of poverty" is deemed low. The relationship between low pay – an attribute of the individual – and poverty – which is usually assessed on a family or household basis – is however necessarily a complex one as a result (see Nolan (1989)).

Finally, the question arises as to whether low pay is to be measured in terms of hourly or weekly earnings, which has of course, major implications for the treatment of part-time workers. From a poverty perspective, the concern with adequacy relates to weekly earnings or indeed income over a longer period, such as a year. In assessing the "fairness" of a particular level of earnings, though, hours worked have to be taken into account and a focus on hourly earnings is appropriate. Even from a poverty/adequacy point of view, low weekly pay attributable to low hours worked represents a rather different phenomenon to low rates of pay. Generally, though not universally, then, low pay is measured either in terms of hourly earnings, or weekly earnings for full-time workers.

2.3 *Previous Research on Low Pay in Ireland*

Recent research on low pay in Ireland includes Blackwell (1986, 1987, 1989), McMahon (1987, 1988, 1992) and Blackwell and Nolan (1990). Blackwell's work was based on two data sources: the Structure and Distribution of Earnings in Industry, Distribution, Credit and Insurance Survey carried out by the CSO in 1979 (CSO, 1984) and the Household Budget Survey for 1980 (CSO, 1982). McMahon's analysis was also based primarily on the 1979 Structure of Earnings Survey. Blackwell and Nolan (1989) presented the first results from the analysis of low pay in the ESRI

Survey carried out in 1987, on which much greater detail is given in later chapters, and therefore will not be discussed at this stage.

Both Blackwell and McMahon employed a variety of approaches to deriving low pay thresholds, rather than relying on a single method, drawing on the methods applied in, for example, Metcalf (1981) and the work of the Low Pay Unit in Britain. Table 2.1 shows the methods they use, which can be fitted into the general schema outlined in the previous section. Blackwell calculated a number of thresholds based on mean/median earnings and lowest decile cut-offs. In doing so, he concentrated on earnings of full-time employees working in Transportable Goods Industries (TGI). Some thresholds were based on the earnings of both males and females, adults and "young" employees, whereas others concentrated on males and/or adults. In implementing the alternative approach using a poverty standard,

Table 2.1: *Approaches to Deriving Low Pay Thresholds in Previous Irish Research*

Method	*Blackwell*	*McMahon*
(a) *Earnings Standard*[a]		
– Average income	68 per cent of average earnings of all full-time adult employees	Ditto, and 80 per cent of that benchmark
– Median income	Two-thirds/half median income of all full-time male employees	
– Distribution-based	Lowest decile among full-time males	
	Lowest decile amongfull-time adult male employees (aged ≥18 or ≥21)	
(b) *Poverty Standard*		
– Supplementary Welfare Allowance	Gross earnings equivalent to SWA for couple with 2 children, + 1.4 times this amount	Ditto
– Family Income Supplement	Gross earnings eligibility level for couple with 2 children	Ditto
(c) *Other*		JLC adult minima (weighted average)

Sources: Blackwell (1986), Appendix 2, Table A. McMahon (1987,) Table 14.
Note: (a) All these thresholds were based on employees in Transportable Goods Industries only.

Blackwell took two different safety-net social welfare schemes. The first, Supplementary Welfare Allowance (SWA), applied to those not in work, while the second, Family Income Supplement (FIS), applied to those in work but earning below specified levels (and with a dependent spouse and children). The amount which would have to be earned (gross) to produce net earnings equivalent to SWA for a couple with two children (with no other income), and 1.4 times that amount, were calculated. Likewise, the level of earnings below which an employee with dependent spouse and 2 children became eligible for FIS was calculated.

McMahon (1987) employs thresholds derived from the SWA and FIS schemes in a similar manner. He also calculates the Council of Europe suggested threshold of two-thirds of average adult earnings (again he uses TCI only). A higher figure calculated from the same mean income benchmark and suggested at the time by the ICTU, of 80 per cent, is also calculated. In addition, he calculates an average across sectors of the minima specified by the Joint Labour Committees operating in various sectors (these are described in detail in Chapter 9 below).

Both Blackwell and McMahon estimate the numbers below the various thresholds they calculate, in the sectors covered by the 1979 Structure of Earnings Survey. The thresholds, and thus the percentage low paid, vary over a considerable range. By coincidence, both Blackwell and McMahon give particular emphasis to a figure of 23 per cent in low pay, though they derive that figure in different ways and apply it to different overall populations. Blackwell found 23 per cent of all employees in industry, distribution, credit and insurance to be below a weekly threshold derived as the lowest decile of earnings among male full-time employees in industry. This included both part-time and full-time employees. McMahon found a similar percentage of *full-time adult* workers in the same survey below a higher threshold derived following the Council of Europe approach.

Blackwell examined the composition of the low paid in the Structure of Earnings Survey by age, sex, industry and occupational group, and also looked at part-time versus full-time workers. Certain groups were clearly identified as facing a particularly high probability of falling below the decile threshold just mentioned. Women faced a considerably higher risk than men, even if working full-time, and also made up a much higher proportion of part-time workers. Retailing, clerical work and unskilled manual work made up a high proportion of the low paid. More recently, Blackwell (1989) presented some results from the 1980 Household Budget Survey. Unlike the Structure of Earnings Survey, this contained employees from all sectors, and it was seen that a relatively high proportion of employees in agriculture and personal services were also low paid.

2.4 *Conclusions*

This chapter has served to demonstrate that a variety of methods may be employed to derive a low pay threshold, and that the choice of a particular standard is necessarily rather arbitrary. It is therefore important that the sensitivity of results to the location of the threshold be assessed. The present study builds on previous research on low pay in Ireland, notably that by Blackwell and McMahon. Here, a more comprehensive and up-to-date data source will be employed to look in more detail at the extent and nature of low pay in Ireland. The 1987 ESRI Survey has major advantages for this purpose, apart from offering an opportunity to up-date previous research. First, it covers employees across all sectors, rather than only Transportable Goods Industries, or TGI plus distribution, credit and insurance covered by the 1979 Structure of Earnings Survey. The overall extent of low pay can therefore be assessed, and its incidence in different sectors compared, with full sectoral coverage.

Secondly, the wealth of information available on characteristics of the individual and his/her job, and the fact that the micro-data set itself can be directly analysed at an individual level, greatly increase the scope for analysis of the factors influencing earnings and their relative importance. Previous research has had to rely for the most part on cross-tabulations showing the characteristics of the low paid, the incidence of low pay by sector, etc. This is of considerable interest, and the present study presents detailed results in this form in Chapters 5 and 6. It is also possible, though, to analyse the key influences on low pay at an individual level through the estimation of earnings function and models relating individual characteristics to the probability of being low paid, as explored in Chapter 7.

The other feature of the data which opens up a new and crucial area for investigation is the fact that it is not simply a sample of *employees*. Rather, it is a sample of households which includes detailed information on not only the earnings etc. of employees but also the income from each source of all household members, and a range of other information on the household and its members. Thus, the position of low paid employees within the households in which they live, and the relationship between the earnings of individuals and the income of their families or households, can be examined. This means that rather than focusing simply on low pay and individual earners, the relationship between low pay and family poverty can be traced out. This is of central importance in assessing policy responses to low pay, in terms of their likely contribution to the alleviation of poverty.

Chapter 3

THE DATA BASE

3.1 *Introduction*

In this chapter the central data source to be employed in the remainder of the study, the Survey of Income Distribution, Poverty and Usage of State Services, is described. The nature of the sample, the range of information gathered on the characteristics of the individuals and households it contains, and the details obtained on earnings, deductions and hours worked for employees are discussed. The representativeness and reliability of the sample data in the context of the analysis of low pay are then examined.

3.2 *The Sample*

The survey was designed to provide a national sample from the population resident in private households. The sampling frame was the Register of Electors, from which a sample of names and addresses was drawn. Sampling was implemented using the RANSAM programme developed at the ESRI, which implements a multi-stage random sample incorporating both stratification and clustering, giving each individual on the Register an equal probability of being selected (see Whelan 1979; Keogh and Whelan 1986).

A target sample of 5,850 households was drawn, and interviewing was carried out between December 1986 and September 1987. Some of these households could not be contacted – mostly because they had moved or the person selected had died – or turned out to be institutions. Of the remaining 5,165 households, responses were successfully obtained from 3,294 or 64 per cent. Most of those who did not respond either refused to participate or were never available when the interviewer called.

In order to correct for possible biases introduced by the pattern of non-response, and by the fact that the initial sample was on the basis of persons rather than households, the sample for analysis was reweighted to correspond with information from external sources. This information, from detailed tabulations from the 1986 Labour Force Survey supplied by the CSO, covered the cross-tabulation of households by (i) urban versus rural location, (ii) number of adults in the household, (iii) occupation of the household head, and (iv) age of the household head. Reweighting cases by the ratio of population to sample figures in each cell, the

reweighted sample then corresponds with the Labour Force Survey in terms of this cross-tabulation.

3.3 *The Information Obtained*

The survey gathered a wide range of information on household and personal characteristics, income and indicators of style of living, views and attitudes, and usage of health services and education. This was designed to allow research on a variety of subjects, including poverty and income distribution, the labour market, the use of State services, and the operation of the tax and social welfare systems. Here we concentrate on the coverage of the areas of direct concern in the present study, namely individuals' labour force participation and earnings, and – in the context of the relationship between low pay and poverty – household income and composition. (A general description of the survey and its contents is provided in Callan, Nolan *et al.*, 1989, Chapter 4.)

For individuals aged 15 and over and not in full-time education, a detailed individual questionnaire covered the respondent's current labour force status and experience over the previous year, earnings and other income, occupation and industry, educational background, and labour market experience since leaving education. For those who were currently employees – that is, working for at least one hour per week for pay or profit and describing themselves as employees – detailed information on current gross earnings, deductions, and net earnings, as well as hours worked were obtained. In addition, any unusual features of current pay were identified, and usual net and gross pay were also requested where different from last receipt.

The detailed information on earnings and deductions sought from employees consists of the following:

(i) last take-home pay (including any overtime, bonuses or commissions);

(ii) itemised direct deductions, viz.
income tax,
PRSI contributions (employee),
superannuation/pension contributions,
trade union dues,
life assurance premia,
VHI subscriptions,
mortgage repayments,
regular savings,
other deductions.

(iii) Last gross pay before tax and other deductions;

(iv) amount of any tax refund or refund of business expenses by employer included in gross pay;

(v) whether the last wage/salary was affected by any of the following:
holiday pay or other pay in advance,
back pay,
different pay rate for unsociable hours/different shifts,
occasional bonus,
irregular paid overtime,
absence from work because of sickness,
emergency tax,
other (specify).

(vi) Whether the last wage/salary after deductions was the amount usually received when in work, and if not, the amount usually received both before and after all deductions.

Respondents were asked whether they were paid weekly/fortnightly/monthly, etc., and where possible were asked to consult a pay slip to obtain the details requested. On hours worked, they were asked:

(a) if paid weekly, how many hours they worked in the week covered by the earnings data provided, including overtime;
(b) for all employees, how many hours per week they *usually* worked, excluding overtime; and
(c) for all employees, how many hours (if any) paid overtime they usually worked per week.

The occupation and industry of each respondent was also sought, and the responses coded to the detailed 3-digit categories employed by the CSO in the Census of Population, Labour Force Survey, etc. Each individual was also asked about the highest level of education they attained, for example, Primary Certificate, Group Certificate, Intermediate Certificate, Leaving Certificate or University degree.

Information on any regular subsidiary job being done was also requested. This covered the type of job, the gross and net amount earned in the past year, and the hours usually worked.

Respondents were asked about their recent labour force experience – when they took up their present job, how long they had been continuously at work when interviewed, how many weeks they spent in work in the past

year, and how many weeks of unemployment and separate spells of unemployment they had in the past year. In addition, information was obtained about labour force history since leaving full-time education – the number of years spent in employment, unemployed, ill, in home duties or retired, and the number of different jobs and of unemployment spells experienced during that time.

For some individuals in the sample, it was not possible to obtain responses to the full personal questionnaire. This arose because, for example, that individual was never available/at home when the interviewer called, or was ill, or did not wish to complete the full questionnaire. In such cases, where possible, an abbreviated questionnaire was filled in, either with the co-operation of the individual concerned or some other household member. This questionnaire contained key information on age, sex, labour force status, gross and net (usual) earnings, hours usually worked, occupation and industry, and, education attained.

In addition to this information on employees, which is of direct relevance in the context of low pay, the survey sought detailed information on income from other sources for all household members – self-employment, occupational pensions, social welfare benefits, rent interest and dividends. A full picture of the composition of the household and the relationships of the various members was also sought. In this way the income position of the household, taking into account its "needs", can be examined, making possible *inter alia* the in-depth analysis of poverty and income distribution (see Callan, Nolan *et al.*, 1989) and, in the present study, of the relationship between low pay and poverty. In exploring this relationship it is critical to have detailed information not just on the distribution of earnings among employees, but also on that of income among families and households, how this income is made up and who in the household receives it. The contribution of low paid employees to the income of their households, the nature of the role which different low paid employees play in their households, and the reasons why some low paid employees are in poor households but many others are not, can then be teased out.

3.4 *Reliability and Representativeness*

The overall representativeness of the household sample was discussed in Callan, Nolan *et al.* (1989, Ch. 4). After reweighting, as already mentioned, the sample corresponds with the Labour Force Survey in terms of the detailed cross-tabulation by urban/rural location, number of adults in the household, occupation and age of the household head. The composition of the reweighted sample was then compared with external

sources in terms of the percentage of households with 0, 1, 2, 3 or more persons at work, and likewise the number unemployed, as well as the age/sex composition of all persons in the sample and the numbers in receipt of social welfare payments of different types. The sample corresponds well in most respects with the population, as indicated by external sources, in terms of these variables. Further analysis has shown that it also provides a satisfactory picture of the proportions in each of the three health service entitlement categories (which are determined on a means-tested basis), as well as the distribution of those liable for income tax by broad income category.

In the present context, it is particularly important to assess the representativeness of the employees in the sample, in terms of their characteristics and the distribution of earnings. This may be done by drawing on a variety of external data sources, most importantly the 1986 Census of Population, the Labour Force Survey (LFS), and the Quarterly Industrial Inquiry (QII). About 2,800 individuals in the ESRI survey were employees, of whom over 2,000 completed full individual questionnaires and the remainder abbreviated questionnaires. Most of the analysis to be presented in the study includes all these employees: where only those for whom full questionnaires are available are included this will be made clear. We now look at the characteristics of these employees in comparison with external sources, to see if the sample can be taken as representative of all employees in the population.

First, Table 3.1 shows the distribution of employees in the ESRI sample by sex and age group, compared with the corresponding figures from the 1986 Census of Population. The Census showed that 62 per cent of employees were male, 38 per cent female: in the ESRI sample the breakdown is very similar, with slightly more males – $63^1/_2$ per cent – and $36^1/_2$ per cent females. In terms of the age distribution, the ESRI sample has a lower percentage aged under 25 and more aged 25-34 than the Census – this is true of both males and females, but is more pronounced for the former. This may reflect both the common difficulty in sample surveys of obtained satisfactory response from young single persons – particularly those living in flats – and the particular problems which using the Electoral Register as the sampling frame may face in adequately representing such persons as well as newly-formed households (see Keogh and Whelan, 1986). However, the scale of the problem should not be exaggerated: the sample has 24 per cent of employees aged under 25 compared with 28 per cent in the Census, balanced by having 4 per cent more aged 25-34, and otherwise is close to the Census proportions.

We now turn to the classification of employees by occupation and

Table 3.1: *Employees by Sex and Age Group, ESRI Survey and 1986 Census of Population*

Age Range	*Percentage of all Employees*					
	Male		*Female*		*Total*	
	ESRI	*Census*	*ESRI*	*Census*	*ESRI*	*Census*
15-24	11.3	13.9	13.0	14.3	24.3	28.2
25-34	22.0	18.6	12.9	12.2	34.9	30.8
35-44	13.8	14.0	4.9	5.2	18.7	19.2
45-54	10.3	9.2	3.4	3.6	13.7	12.8
55-64	5.8	5.6	1.9	2.2	7.7	7.8
65 and over	0.3	0.6	0.5	0.5	0.8	1.1
Total	63.4	61.9	36.6	38.1	100	100

Source: Census of Population 1986 Summary Population Report – 2nd Series, Tables 18 and 19, and ESRI Survey 1987.

industry. Table 3.2 shows the distribution of employees in the sample by occupation, compared with the 1987 Labour Force Survey (LFS) results for employees, using the occupational groupings employed in the LFS. The ESRI sample has a higher proportion in the "producers, makers and repairers" category, and a lower proportion of professional/technical workers. Otherwise, there is reasonable correspondence between the two samples. A similar comparison for employees classified by industry is presented in Table 3.3. The ESRI sample has a higher proportion working in production industries and in public administration, and a lower proportion in professional services and building. Overall, though, the ESRI sample appears to reflect the industrial and occupational composition of employees quite well.

In addition to the representativeness of the employees in the sample in terms of key characteristics, it is also obviously crucial in the present context to assess the reliability of the information provided on earnings. While survey-based income information is known to be subject to particular problems (see Callan, Nolan *et al.*, 1989, Ch. 4), it is relevant that wages and salaries are generally considered to be one of the areas where these are least serious (see, for example, Atkinson and Micklewright (1983)). In addition, it is possible to carry out some checks on the reliability of the earnings data in the ESRI sample, by comparison first of all with the CSO's Quarterly Industrial Inquiry (QII).

Table 3.2: *Employees by Occupational Group, ESRI Survey and 1987 Labour Force Survey*

Occupational Group	*Percentage of all Employees*	
	ESRI Survey	*1987 LFS*
Agricultural Workers	1.9	2.9
Producers, Makers and Repairers	28.0	22.7
Labourers and Unskilled Workers (n.e.s.)	4.5	4.1
Transport and Communication Workers	8.7	7.7
Clerical Workers	13.8	15.6
Commerce, Insurance and Finance Workers	9.6	10.4
Service Workers	11.9	10.6
Professional and Technical Workers	15.0	19.4
Others	6.7	6.6
Total	100.0	100.0

Source: Labour Force Survey 1987 Table 17, and ESRI Survey 1987.

Table 3.3: *Employees by Industry, ESRI Survey and 1987 Labour Force Survey*

Industry	*Percentage of all employees*	
	ESRI Survey	*1987 LFS*
Agriculture, Forestry and Fishing	1.8	2.6
Building and Construction	3.9	6.4
Other Production Industries	30.6	26.1
Commerce, Insurance, Finance and Business Studies	17.6	19.4
Transport, Communications and Storage	8.4	7.0
Professional Services	17.0	21.5
Public Administration and Defence	12.2	8.5
Others	8.7	8.4
Total	100.0	100.0

Source: Labour Force Survey 1987 Table 12, and ESRI Survey 1987.

The QII covers "industry", including electricity, gas and water, which means that about one-third of all employees are included. Sectors which are not covered include agriculture, building and construction, public administration, retail and wholesale distribution, finance, and professional and personal services. In addition, the average industrial earnings series, which receives a great deal of attention, does not cover all employees in industry, but rather only what are termed "industrial workers". This category includes operatives, maintenance workers, storekeepers, packers, cleaners, etc., together with basic supervisory staff and apprentices. Clerical and managerial staff are not included. However, separate series covering the earnings of clerical and of managerial workers are now also published.[1] It is therefore now possible, in addition to having the average earnings of industrial workers, to estimate average earnings for all employees in industry. It is this wider figure which we use for comparison with the ESRI sample.

Average gross weekly earnings for industrial workers in Transportable Goods Industries in the period December 1986 to September 1987 – approximately the period covered by the ESRI survey – was about £194.[2] For clerical and managerial workers the figure was considerably higher, at £281.[3] For the "All Industries" grouping, the widest covered by the QII, which also includes electricity, gas and water supply, the corresponding figures were £196 for industrial workers and £286 for clerical and managerial workers.[4] An average for all employees may be computed, weighting on the basis on the numbers of industrial versus clerical/managerial employees.[5] This average is about £214 per week for TGI and £218 for "All Industries".

The weekly earnings figures in the QII refer to gross pay including overtime, shift and other allowances, commissions and regular bonuses, but excluding irregular (including annual) bonuses and commissions as well as back-pay and redundancy payments. They are therefore comparable

1. See *Irish Statistical Bulletin*, March 1988, pp. 60-65 for a detailed description of the series, and Tables 9, 10, 11.

2. *Irish Statistical Bulletin*, September 1988, Table 4, p. 449.

3. *Irish Statistical Bulletin*, September 1988, Table 9, p. 474.

4. *Irish Statistical Bulletin*, September 1988, Table 4, p. 449 and Table 9, p. 474 respectively.

5. See for example the numbers employed in December 1987, as shown in ISB September 1988 Table 3, p. 444. This shows that 76 per cent of all persons engaged in "All Industries" were industrial workers.

with current gross earnings in the ESRI survey, which includes any unusual features of the last weekly pay such as overtime payments, rather than usual pay.[6] Average gross current earnings in the ESRI sample for employees in TGI was £193 per week, and for all employees in the "All industries" grouping the figure was £199. The earnings figures in the QII are based only on establishments with 10 or more persons engaged, rather than a representative sample of all employees. Smaller establishments tend to have lower average wage levels than larger ones, so the QII figures would be expected to overstate earnings for all employees. Taking this into account, the average earnings levels in the ESRI sample appear broadly in line with expectations.

As well as the average level of earnings, the extent to which the sample reliably represents the distribution of earnings is obviously critical in the context of studying low pay. This can be assessed first by comparison with the quite limited data from other sources on the earnings distribution, notably the 1979 Structure of Earnings Survey carried out by the CSO. Such comparisons are discussed in detail in Chapter 4, when the results presented on the extent of low pay in the ESRI sample are compared with those of earlier studies. Here, without going prematurely into that discussion, it may be simply stated that the overall shape of the earnings distribution in the ESRI sample and some frequently-used summary indicators – such as the ratio of the lowest decile cut-off to the median – look quite similar to those shown by the limited data previously available for Ireland.

The other available source of comparative data is the statistics produced by the Revenue Commissioners on incomes reported for income tax purposes. The in-depth comparison in Callan (1991) between data published by the Revenue Commissioners and the ESRI survey looks *inter alia* on PAYE taxpayers, of particular relevance here given our focus on earnings. While there are difficulties in terms of definitions, etc., the ESRI survey is seen to have a broadly similar distribution of tax units by income range to that shown by the revenue statistics, with particularly close correspondence above £5,000 per year. This is again encouraging evidence on the reliability of the earnings distribution in the survey.

6. Current income in the survey excludes annual and other irregular bonuses and commissions, though it does include back-pay.

3.5 *Conclusions*

This chapter has described the survey on which the study is primarily based, the Survey of Income Distribution, Poverty and Usage of State Services. This survey provided a wealth of information on about 3,300 households, containing about 2,800 employees. The nature of the sampling procedure, response and reweighting were discussed. The information obtained was described in some detail, in particular the range of data on earnings and individual and household characteristics. The reliability and representativeness of the sample, especially in the context of the analysis of employees and their earnings, was assessed by reference to external information. A variety of such checks showed that the sample appeared to adequately represent employees in terms of age, sex, occupation and industry breakdowns, as well as their average level of earnings.

Chapter 4

THE DISTRIBUTION OF EARNINGS AND THE EXTENT OF LOW PAY

4.1 *Introduction*

In this chapter, the distribution of earnings and the extent of low pay in the ESRI 1987 sample are examined. In analysing low pay, a variety of thresholds is employed, in order to assess the sensitivity of the results to the exact low pay cut-off used. The position of full-time versus part-time workers is examined. As well as the number of employees falling below the thresholds, the extent to which they do so is also measured. The results on the extent of low pay are also related to those of previous Irish studies.

4.2 *The Distribution of Earnings*

In order to put the position of the low paid in context, we begin by examining the overall distribution of earnings among employees in the 1987 sample. This data base allows the distribution across all employees, not only those in industry, to be analysed for the first time. We focus on reported *usual gross* earnings, since current (i.e., last) pay may have been affected by unusual factors such as absence or occasional bonuses. In looking first at weekly earnings, attention is confined to full-time employees, defined for this purpose as (usually) working at least 30 hours per week. The earnings distribution is conventionally described in terms of the median, decile and/or quartile cut-offs, the median being the earnings level which divides the sample into two, the quartiles being the levels which divide it into quarters, and the deciles being the levels which divide it into tenths. A popular measure of dispersion in this context is the bottom decile as a percentage of the median, though a wide range of other measures may also be employed (see, for example, Cowell 1977).

Table 4.1 shows the mean, the median, the upper and lower quartiles, and the top and bottom decile cut-offs for weekly usual gross earnings for a number of different groupings of employees in the sample. Column (1) covers all full-time employees, irrespective of age, sex, or sector. It shows that average weekly gross earnings were £198, with the median slightly lower at £179 per week. (The median invariably lies below the mean in earnings or income distributions internationally.) Ten per cent of full-time employees earn less than £88.5 per week, and one-quarter earn less than £133. In the

top half of the distribution, one-quarter of all full-time employees earn more than £241.5, and 10 per cent earn more than £326. The lowest decile cut-off represents only 49 per cent of the median, whereas the highest decile represents 182 per cent of the median. This is one way of conveying the dispersion of earnings, then: in broad terms, the bottom 10 per cent of (full-time) employees all earn less than about half the median, and the top 10 per cent all earn almost twice that halfway point in the distribution.

These figures refer to all full-time employees. The picture may be rather different for particular sub-groups, though. For example, Cols. (2) and (3) show the pattern for men and women separately. Not only do men earn considerably more on average – £218 per week compared to £156 for women – the extent of dispersion towards the bottom of the distribution is also less. The bottom decile as a percentage of the median is 55 per cent for men but only 48 per cent for women – the lowest paid tenth of women are further away from median female earnings than the corresponding group in the male distribution. There is much less difference in the shape of the upper part of the distribution.

Table 4.1: *Dispersion of Weekly Gross Earnings, Full-time*[a] *Employees, 1987 ESRI Sample*

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	All	*Men*	*Women*	*Adults*[b]	*Adults in Industry*[c]	*Adult Males in Industry*
£ per week						
Mean Earnings	198.0	217.7	155.5	200.1	204.6	221.3
Median Earnings	179.2	195.0	145.0	180.0	185.0	200.0
Lowest Decile	88.5	107.4	69.8	94.2	110.0	125.0
Lower Quartile	133.4	150.0	105.0	135.0	140.0	150.0
Upper Quartile	241.5	263.0	191.6	245.1	240.0	260.0
Highest Decile	326.0	350.0	257.6	327.0	325.5	342.5
As % of median						
Lowest Decile	49.4	55.1	48.1	52.3	59.5	62.5
Lower Quartile	74.4	76.9	72.4	75.0	75.7	75.0
Upper Quartile	134.8	134.9	132.1	136.2	129.7	130.0
Highest Decile	181.9	179.5	177.7	181.7	175.9	171.2

[a] Working at least 30 hours per week.

[b] Aged 18 or over.

[c] "Industry" as in the Quarterly Industrial Inquiry "All Industries" grouping, which covers Transportable Goods Industries plus Electricity, Gas and Water.

If attention is focused on "adult" earners, defined for this purpose as aged 18 or over, Col. (4) shows that the mean and median are slightly higher and the degree of dispersion lower than when younger employees are included. The bottom decile now represents 52 per cent of the median. For reasons of data availability, quite often the distribution of earnings in industry only has been analysed and Col. (5) shows that concentrating on adults in industry rather than all adults further reduces measured dispersion towards the bottom of the distribution. The bottom decile now comes to 60 per cent of the median (with the median itself again higher than for all adults). Finally, focusing on adult *males* in industry only, mean and median earnings are higher again and the bottom decile represents 62.5 per cent of the median. The rest of the distribution is much less affected by the concentration on such sub-groups. The lower quartile, upper quartile and highest decile as a percentage of the median are almost the same for adults as for all employees, and while focusing on industry and/or males only does reduce the degree of dispersion, this is much less pronounced than for the bottom decile.

It is difficult to use these results to make comparisons with other countries or with the limited information available previously on the Irish earnings distribution because of differences in sources, coverage and definition. Differences in coverage arise, for example, because all employees, employees in certain sectors only (such as "industry", again variously defined), and/or in firms over a certain size may be included. Frequently, only "full-time adults" are included, with various different definitions of full-time and adult. The earnings measured may be last pay or "usual" pay, may or may not include overtime or bonuses, and those whose pay was affected by absence or some other unusual feature during the period may or may not be excluded. Only male employees, or sometimes male manual employees, are included in some cases.

As far as previous Irish data on the earnings distribution are concerned, the CSO published a series on earnings of employees in industry, derived from the Census of Industrial Production, for many years up to 1968 after which it was discontinued. The CSO also published the results of the once-off Survey of the Structure and Distribution of Earnings in Industry, Distribution, Credit and Insurance carried out in 1979, and the earlier survey confined to Distribution, Credit and Insurance sectors only carried out in 1974. These sources covered only the minority of all employees (see Blackwell, 1989) who worked in the sectors covered. In addition, the Structure and Distribution of Earnings Surveys included only those working in establishments which had 10 or more employees. In certain sectors the earlier Census of Industrial Production series also

excluded small firms. The published reports show the distribution of employees by ranges of earnings, the decile distribution was not published. Finally, these surveys were carried out by obtaining data from *employers,* not from interviewing *employees* as is the case with the present study.

Blackwell (1989) presented results based on special tabulations from the 1979 Structure of Earnings Survey showing the lowest and highest decile and the median level of earnings for full-time employees "paid in full", separately for Industry, Distribution, Credit and Insurance. These figures cover only those employees whose pay throughout the pay reference period was not affected by absence. Regular overtime and bonuses are included. The lowest decile as a percentage of the median in Industry was 58.8 for males, 64.1 for females, and 54.4 for males plus females together.[7] Exactly corresponding definitions of earnings and employees covered cannot be applied to the 1987 ESRI sample, but coming as close as possible, we can produce figures for full-time employees in industry who were not absent from work in the pay period.[8] The lowest decile as a percentage of the median for this sub-group was 58.4 for men, almost exactly the same as the 1979 Structure of Earnings Survey figure. For women, though, the 1987 figure is significantly higher, at 70, so the overall average is slightly higher at 57. However, remaining differences in definition and coverage as well as in the way in which the figures were produced mean that the comparison can only be suggestive.

It is worth noting that for employees in Industry, the lowest decile as a percentage of the median for female employees is *higher* than for male employees, both in the 1979 and 1987 surveys. As Table 4.1 showed, though, for all employees the lowest decile as a percentage of the median is lower for females than males. Only 25 per cent of full-time women employees work in industry, and the dispersion of earnings among women is much wider when those working in other sectors, particularly services, are included.

Blackwell has also presented the lowest decile as a percentage of the median for 1960 and 1968 derived from the CIP-based earnings series, for males aged 18 or over employed in Transportable Goods Industries only. The figure for 1960 was 62.1 per cent and for 1968 it was 60.7 per cent.[9]

7. See Blackwell (1989), p. 43.

8. Those excluded may then include some employees who were absent but whose pay was not affected.

9. Blackwell (1989), p. 45. It is not clear how these figures were derived.

Restricting our attention to this sub-group in the 1987 survey, the corresponding figure is 58.2 per cent. Again, there remain differences in definition, coverage and the nature of the data source which may influence the comparison.

Geary and O Muircheartaigh (1974) also presented estimated percentiles for the CIP-based series for males in TGI for earlier years, derived by interpolation from the published data, which provide an interesting perspective on longer-term trends. Taking their estimates of the lowest percentile and the median in 1968 produces a lowest decile/median ratio of 61.5 per cent, which compares with estimates of 47.2 per cent for 1938 and 53.0 per cent for 1947. As they point out, this represents a significant improvement in the relative position of low-paid men compared with other men in industry, though over a long period. Neither the 1979 Structure of Earnings Survey nor the 1987 Household Survey suggest this trend was maintained, though any firm conclusion would be hazardous given the differences in the data sources.[10] It should also be noted that males aged 18 or over working in TGI constitute (in the 1987 survey) only 21 per cent of all employees.

Comparisons with other countries are also problematic, because of similar problems in terms of data sources, coverage and definition. (For example, a recent comparative study on earnings distributions using the Luxembourg Income Study data base designed to maximise comparability focuses on *annual* earnings of men *employed year round* (Green, Coder and Ryscavage, 1992)). It is useful, though, to look at the statistics for Great Britain and Northern Ireland produced from the New Earnings Survey carried out annually there. These cover gross weekly earnings of full-time employees on adult rates of pay whose pay in the survey period was not affected by absence. Table 4.2 shows the lowest decile, lowest quartile, upper quartile and highest decile as a percentage of the median for gross weekly earnings drawn from this source for 1987, separately for men and women and for Great Britain and Northern Ireland. Figures derived for the Republic of Ireland from the 1987 survey coming as close as possible to the same coverage and definitions are also shown.

10. The figures for males from the Structure of Earnings Survey quoted above refer to full-time male employees in industry, while those from the earlier CIP-based series refer to males aged 18 or over in TGI. However, analysis of the 1987 data suggests these differences are likely to have little impact on the lowest decile/median ratio. The fact that the 1979 survey, and to a lesser extent the CIP series, did not cover those in small establishments could represent a more important source of bias in comparisons with the 1987 survey. However, probably the most important difference, which alone would rule out firm conclusions, is the fact that the 1987 figures are from a household survey whereas the earlier ones are from surveys of employers.

Table 4.2: *Gross Weekly Earnings of Full-time Adult Employees: Percentiles of the Distribution for 1987, Great Britain, Northern Ireland, the Republic of Ireland*

As % of Median	*Great Britain*		*Northern Ireland*		*Republic of Ireland*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*
Lowest Decile	59.4	64.2	58.6	60.9	58.9	50.3
Lower Quartile	75.7	78.1	74.0	74.7	75.6	77.0
Upper Quartile	132.5	133.5	137.3	138.4	133.9	140.8
Highest Decile	176.2	171.7	184.2	178.6	176.6	177.2
Median £stg/IR£	198.4	132.9	176.3	123.3	203.8	149.0

Source: Great Britain and Northern Ireland: New Earnings Survey 1987; Republic of Ireland: 1987 ESRI Survey (see text).

Notes: Great Britain and Northern Ireland: full-time employees (working at least 30 hours per week) on adult rates of pay whose pay was not affected by absence; Republic of Ireland: full-time employees (working at least 30 hours) aged 18 or over not absent due to illness during pay period.

The male distributions are very similar indeed across the three: the lowest decile as a percentage of the median is 59.4 per cent for Britain, 58.6 per cent for Northern Ireland, and 58.9 per cent for the Republic of Ireland. There is a striking difference, however, in the bottom tail of the earnings distribution for women, with the lowest decile as a percentage of the median coming to only 50 per cent in the Republic of Ireland, compared with 61 per cent in Northern Ireland and 64 per cent in Great Britain. Thus, the lowest paid full-time female employees in the Republic are a good deal further below the halfway point of the *female* earnings distribution. However, the relationship between the medians of the male and female distributions also differ. Where the median among women represents 67 per cent of the male median for Great Britain and 70 per cent of the male median for Northern Ireland, the figure for the Republic is 73 per cent. Thus, although there is greater dispersion of earnings around the median among women in the Republic, that median is closer to the mid-point of the male earnings distribution.

Finally, before concentrating on low pay, it is useful to look at the distribution of *hourly* rather than weekly earnings. All employees, not just full-timers, can now be included. Table 4.3 shows the median, lowest/highest deciles and lower/higher quartiles for hourly earnings in the 1987 sample, for all employees and for a number of sub-groups. Column (1) shows the figures for all employees in the sample, where we

see their mean hourly gross earnings (in 1987 terms) were £4.90. The median was lower, at £4.30, while 10 per cent of employees earned less than £2 per hour and 25 per cent earned less than £3.12. The top 25 per cent (in terms of hourly earnings) earned £5.88 or over, while the top decile earned £8.43 or over. The degree of dispersion is slightly greater than that seen for weekly earnings among full-time employees in Table 4.1 (Col. (1)). However, this is mostly because of the inclusion of part-time workers rather than the switch from weekly to hourly earnings. Column (4) of Table 4.3 shows the dispersion of hourly earnings among full-time employees only, and this is similar to the pattern for weekly earnings seen earlier.

Columns (2) and (3) compare the patterns for hourly earnings among men and women. The mean and median are lower for women (though the difference is less than for weekly earnings in Table 4.1), and the degree of dispersion is greater among women. This is largely because a higher proportion of women work part-time and many part-timers have particularly low hourly earnings. The degree of dispersion is less among full-time employees (Col. (4)) or adults only (Col. (5)) than all employees.

Table 4.3: *Dispersion of Hourly Gross Earnings Among Employees in 1987 ESRI Sample*

	(1) *All Employees*	*(2)* *Men*	*(3)* *Women*	*(4)* *Full-time*[a]	*(5)* *Adults*[b]
£ per hour					
Mean	4.90	5.25	4.30	4.79	4.95
Median	4.30	4.62	3.64	4.32	4.34
Lowest Decile	2.02	2.45	1.75	2.12	2.15
Lower Quartile	3.12	3.50	2.61	3.20	3.18
Upper Quartile	5.88	6.25	5.12	5.75	5.91
Highest Decile	8.43	8.62	7.67	8.00	8.50
As % of Median					
Lowest Decile	47.1	53.0	48.0	49.2	49.6
Lower Quartile	72.7	75.7	71.7	74.1	73.3
Upper Quartile	136.6	135.1	140.5	133.2	136.2
Highest Decile	196.1	186.5	210.5	185.3	195.9

Notes: [a] Working at least 30 hours per week.

[b] Aged 18 or over.

We now focus on those towards the bottom of the earnings distribution, discussing first in Section 4.3 the way in which "low pay" is to be measured in this study.

4.3 *The Definition of Low Pay*

The issues which arise in attempting to define a low pay threshold, and the various approaches to doing so, have been discussed in Chapter 2 above. Given the wide range of possible thresholds, and the absence of any firm basis on which to choose among them, we will not rely in this study on any particular threshold. Instead, the extent and nature of low pay will be assessed using a number of different thresholds, and particular attention will be paid to the sensitivity or otherwise of results to the precise location of the low pay cut-off.

None the less, it is useful to begin by looking at the level of low pay threshold which would be produced by the various approaches discussed earlier, to put the ones employed here into perspective. This can be done first by updating the thresholds used in previous studies. Table 4.4 shows a number of thresholds based on the "distributional cut-off" and the "social welfare-based cut-off" approaches, drawing on the earlier studies by Blackwell (1986, 1989). The distribution-based thresholds are derived from the 1979 Structure of Earnings Survey, updated to 1987 by indexation using the change in average industrial earnings over the period. The thresholds based on social welfare support rates are based on the rates in force during 1987. The thresholds vary over a wide range, from £85 to £156 per week, though most of the figures are clustered in the £115-£135 region.

It is interesting to compare the "distribution-based" thresholds produced by updating the Structure of Earnings Survey with those which can be derived from the ESRI survey for 1987 itself. In doing so, it is important initially to try to reproduce as closely as possible the coverage and definition of earnings employed in the derivation of bench-marks from the Structure of Earnings Survey. This means looking first at Transportable Goods Industries only. The thresholds derived from the Structure of Earnings Survey were based on "full-time employees paid in full", and to approximate to this we concentrate on those in the ESRI sample who are working at least 30 hours per week. The main threshold used in Blackwell (1986, 1989) was the lowest decile cut-off for males on adults rates in TGI, "full-time paid in full", which updated to 1987 was about £136 per week. In the ESRI sample, the lowest decile for full-time males in TGI aged 18 or over for *usual* gross pay is £123 per week. If instead we use last pay, but now exclude those whose last pay was affected

by absence, the lowest decile cut-off is £120 per week. Not all those aged 18 or over may be on adult rates: raising the age threshold to 21 would produce a lowest decile figure (usual pay) of £131. The ESRI survey thus suggests a slightly lower level for this particular bench-mark than updating the 1979 Structure of Earnings Survey figure.

Table 4.4: *Low Pay Thresholds Derived from Alternative Approaches, 1987*

(i) Updated Thresholds from Previous Studies	*£ per week*
Lowest decile, males on adult rates in TGI [a]	136
Two-thirds of median earnings of males on adult rates in TGI [a]	156
Half of median earnings of males on adult rates in TGI [a]	117
Two-thirds of average earnings of all employees on adult rates in TGI [a]	134
Gross earnings equivalent (after tax) to Supplementary Welfare Allowance, [c]	85
1.4 times SWA [b, c]	119
Eligibility level for Family Income Supplement [b]	123
(ii) Thresholds Derived from ESRI Survey:	
Lowest decile, adult males in TGI [d]	123
Lowest decile, adult males all sectors [d]	112
Two-thirds of median earnings of adult males, all sectors [d]	131
Half median earnings of adult males, all sectors [d]	98
Two-thirds of average earnings of adult employees, all sectors [d]	133

[a] Full-time employees paid in full, Structure of Earnings Survey 1979, updated (see text).
[b] Couple with two children; this takes into account PRSI which would be paid on earnings – no tax would be payable at this level.
[c] Including £5 addition for special needs.
[d] Full-time employees, usual pay, aged 18 or over.

Source for (i): Blackwell (1989).

This refers to TGI only, and it is also of interest to look at the corresponding figure for employees across all sectors. The lowest decile for all full-time adult male employees is £112 per week. For all full-time male employees irrespective of age the figure is £107. For all full-time employees, male or female, of any age and in all sectors, the lowest decile cut-off is £89. This illustrates that confining the sectoral coverage to include only those working in TGI, and the convention in this approach of deriving the threshold from *(full-time) adult males*, makes a great deal of difference to the earnings' level involved – including younger employees or women produces a considerably lower figure for the lowest decile cut-off.

The level of threshold derived from the "distributional cut-off" approach in any case depends on how that approach is implemented – a range of figures can be produced by taking various proportions of the mean or median rather than the lowest decile. For example, two-thirds of median earnings for full-time adult males (all sectors) would be £131, while half would be under £100. Two-thirds of mean earnings of full-time adults (male or female) would be £133. The "social welfare rate" approach similarly could be used to justify a number of different figures, with quite different levels implied in the rates paid under Supplementary Welfare Allowance compared with the eligibility level for Family Income Supplement (see Table 4.4). We will therefore proceed by applying a range of thresholds, rather than attempting to justify and concentrate on a single cut-off, since this is the more revealing strategy.

For the reasons discussed in Chapter 2, it is customary to measure low pay in terms of hourly earnings, or to apply a weekly earnings threshold to full-time employees only. While it is relevant from an adequacy/poverty perspective that a part-time worker earns less than a weekly bench-mark, this may be taken to constitute a "low pay" problem only where the hourly wage rate is low: someone who is well paid on an hourly basis but works short hours should not be classified as low paid.[11] Here we are interested in the overall relationship between employment, pay and poverty, and will

[11] That is not to imply that all those working part-time do so by choice. Some clearly face demand-side constraints and would work longer hours if they could. Blackwell (1989), on the basis of special tabulations from the 1988 Labour Force Survey, showed that a majority of regular part-time *male* workers stated that they could not find a full-time job. This was true of only a minority of female part-timers, however, most of whom stated that they did not want a full-time job or were working part-time due to family responsibilities. Even there, of course, some might prefer to work longer hours if alternative child-care arrangements were more widely available. The point being made here is that low weekly pay for part-time employees due to demand or other constraints on hours worked is to be distinguished from low rates of pay, which is the phenomenon to which the term "low pay" is generally applied.

therefore also touch on the position of part-time workers who are not low paid in hourly terms. In measuring low pay, though, we focus on hourly thresholds or apply weekly ones to full-time employees only. Weekly thresholds ranging from £80 to £140 will first be used to assess the sensitivity of the results, and the corresponding hourly figures (based on a 40-hour week) range from £2 to £3.50 per hour.

4.4 *The Numbers Falling Below Earnings Thresholds*

We begin by looking at the percentage of employees who have hourly gross earnings below these various thresholds. We concentrate on usual gross earnings, since current (i.e., last) pay may have been affected by unusual factors. (Usual and last pay in any case differ only for a relatively small proportion, 11 per cent, of all employees in the sample.)

Table 4.5 shows the percentage of employees in the sample who have hourly gross earnings below various thresholds, from £2 to £3.50. The extent of low pay is clearly quite sensitive to the precise cut-off chosen: for example, 27 per cent of employees are below £3.25 per hour compared with 15 per cent below £2.50. In the detailed analysis of the characteristics of the low paid and the relationship between low pay and poverty, we will for the most part use these two thresholds – using the full range shown in Table 4.5 would be unwieldy. We will refer to £3.25 per hour, corresponding to £130 per week, as the "higher threshold" and £2.50 per hour, corresponding to £100 per week, as the "lower threshold". To put these in perspective, it will be recalled that £130 is slightly higher than the lowest decile cut-off for full-time adult males in TGI in the sample – the cut-off most often used in previous Irish studies and in a number of international ones. The lower threshold of £100 per week is still above the gross earnings equivalent of the Supplementary Welfare Allowance or Unemployment Assistance rates for a married couple with two children.

Table 4.5: *Employees in ESRI Sample with Usual Hourly Gross Pay Below Various Thresholds*

Threshold (£ per hour)	*Percentage in Sample with Usual Hourly Gross Pay Below Threshold*
2.00	9.2
2.25	12.3
2.50	14.6
2.75	18.4
3.00	21.5
3.25	26.8
3.50	32.4

4.5 *Part-Time Versus Full-Time Employees Below Low Pay Thresholds*

The percentages below the various hourly thresholds shown in Table 4.5 refer to all employees, irrespective of the number of hours they work in the week. It is of interest to distinguish between part-time and full-time employees, particularly to see whether part-time workers are more likely to be low paid in hourly terms than full-timers. The definition of a part-time worker is not unambiguous. In the Labour Force Surveys, part-time/full-time workers are distinguished on the basis of self-description rather than actual hours worked. This is useful for some purposes, but in the context of measuring the extent of low pay it would not appear appropriate to treat differently two individuals working the same hours because one describes him/herself as part-time and the other does not. The ESRI survey did not in any case ask respondents whether they considered themselves part- or full-time employees. We therefore distinguish part-time workers on the basis of hours worked. In the main analysis those working 30 hours or more per week – a cut-off frequently used in other studies – are treated as full-time workers, those working less than 30 hours as part-timers. This is applied to the stated hours *usually* worked in a week. (Alternative hours cut-offs are examined below.)

Of the employees in the ESRI sample, 11 per cent were working less than 30 hours per week (as explored in the next chapter, most of these are women). Table 4.6 shows the percentage of employees with hourly earnings below £3.25 and £2.50, distinguishing between full-time and part-time workers. This reveals that a higher percentage of part-time workers are indeed low paid in hourly terms: 36 per cent of part-timers compared with 26 per cent of full-timers earn less than £3.25 per hour.

It is also interesting to look at the position of the remaining 89 per cent of employees in the sample, who are working 30 hours or more per week, *vis-à-vis* the *weekly earnings* thresholds. Of these full-time employees, 23 per cent have usual weekly gross earnings below the higher threshold of £130,

Table 4.6: *Employees Below Hourly Earnings Thresholds*

	Percentage Falling Below	
	£2.50 per hour	*£3.25 per hour*
Full-time Employees	13.7	25.6
Part-time Employees	22.5	36.4
All Employees	14.6	26.8

and 12 per cent are below the lower threshold of £100 per week. This is slightly lower than the percentage of full-time employees below the corresponding hourly thresholds shown in Table 4.5. This implies that some of those full-timers below the hourly threshold are working more than the 40 hours per week assumed in deriving the hourly threshold. Of course, the converse is also presumably occurring – some of those above the hourly threshold may be working fewer than 40 hours per week (though they are working at least 30 hours by construction) and thus falling below the weekly threshold. The weekly and hourly thresholds might therefore identify different individuals as low paid, even if approximately the same number fell below each.

This is investigated in Table 4.7. This shows that almost all of the full-time employees below the weekly earnings thresholds are in fact also below the equivalent hourly cut-off. Where 23 per cent of full-time employees are below £130 per week, for example, 22 per cent are below both this and below £3.25 per hour. Thus, very few full-time employees are above the hourly threshold but working few enough hours to be below the weekly one – only 1 per cent are above £3.25 per hour but below £130 per week, and even fewer, less than 1/2 per cent, are above £2.50 per hour but below £100 per week.

Table 4.7: *Full-Time Employees Below Weekly and Hourly Earnings Thresholds*

(a) £2.50/£100		*Hourly Threshold £2.50*		
		% below	*% not below*	*all*
Weekly Threshold £100	% below	11.6	0.3	11.9
	% not below	2.1	86.0	88.1
	All	13.7	86.3	100
(b) £3.25/£130		*Hourly Threshold £3.25*		
		% below	*% not below*	*all*
Weekly Threshold £130	% below	21.8	1.1	22.9
	% not below	3.8	73.3	77.1
	All	25.6	74.4	100

A larger, but still not very large, number are below the hourly threshold but above the weekly one – in effect, managing to stay above the weekly cut-off by working longer hours. About 4 per cent of all full-time employees, accounting for 15 per cent of those earning less than £3.25 per hour, are below that hourly figure but have weekly earnings above £130. About 2 per cent of full-time employees are below the £2.50 hourly cut-off but have weekly earnings above £100, representing 18 per cent of those below that weekly threshold. The conclusion which these figures point to is that using weekly earnings thresholds for full-time employees identifies individuals almost all of whom are also low-paid in terms of hourly earnings. However, in addition there are some individuals who are low-paid in hourly terms but manage to stay above the weekly thresholds by working longer hours.

4.6 *Low Pay and the "Wage Gap"*

The numbers falling below a particular earnings threshold are only one measure of the extent and severity of low pay. Clearly, looking at a range of thresholds, as we have done, provides a more complete picture than focusing on one cut-off. However, it is also useful to measure directly the extent of the shortfall or "gap" for those falling below the thresholds (see Metcalf, 1981, for example). For full-time workers below the £130 per week threshold, for example, the average "gap" – the difference between £130 and their actual gross earnings – is £39. Thus it would require a very substantial percentage increase, of about 40 per cent on average, to bring the earnings of the 23 per cent of full-time employees below that threshold up to £130 per week. An alternative way of expressing the aggregate wage gap which is sometimes employed is to frame it in terms of the percentage it represents of the total wage bill. The aggregate shortfall for full-time employees below £130 per week is about $4^1/_2$ per cent of the total gross earnings of all full-time employees in the sample. This is, however, of limited relevance to the direct impact on the wage bills of the employers who would be affected by an increase in earnings for the low paid.

The wage gap of part-time employees can also be calculated, first *vis-à-vis* the weekly thresholds. Unsurprisingly, the average gap for all part-timers below the £130 weekly threshold is much greater than for full-time workers, at £76. Concentrating on an hourly cut-off, though, part-time workers below £3.25 per hour are on average as much as £1 below that figure. This makes it clear that the extent of the shortfall below weekly thresholds for many low-paid workers reflects not just their hours worked but also the low rate of hourly pay they receive. Irrespective of the influence of hours worked, a very substantial increase in hourly pay rates would be required to bring them up that hourly earnings threshold.

4.7 *Alternative Definitions of Part-Time Working*

So far, in distinguishing between full-time and part-time employees, we have used a cut-off of 30 hours per week. This is widely used internationally and will continue to be the main definition of part-time/full-time in the remainder of the study. However, it is also useful to explore other definitions. In particular, it is of interest to look at those working under 18 hours per week, since employees working less than that were considered as part-time for the purposes of the PRSI system up to the extensions in the social insurance entitlements of part-time workers in 1991.

While 11 per cent of the employees in the ESRI sample were working less than 30 hours per week, only 4 per cent stated that their usual weekly hours were less than 18. Those working under 18 hours are, on average, earning less in hourly terms than those below 30 hours and are thus more likely to be below the hourly earnings cut-offs. Where 36 per cent of those working under 30 hours earned less than £3.25 per hour, almost half of those working less than 18 hours were below that figure. Using the £2.50 cut-off, the figures are 22 per cent versus 31 per cent for those under 30/18 hours respectively.

4.8 *Extent of Low Pay Compared with Previous Irish Studies and Other Countries*

It would clearly be of great interest to be able to compare the extent of low pay in Ireland in 1987, as measured in the present study, with earlier estimates for Ireland and with the situation in other countries. Such comparisons are bedevilled by the differences in sources, coverage and definition already referred to above in discussing such comparisons for the earnings distribution. It is useful none the less to try to fit our results into comparative context while emphasising that only "broad-brush" conclusions at best can be drawn from such comparisons.

The most widely quoted of the figures produced by earlier Irish studies has been the estimate derived from the 1979 Structure of Earnings Survey by Blackwell (1986). This showed 23 per cent of employees in the sectors covered by that survey falling below the lowest decile cut-off for weekly earnings of adult male full-time employees in TGI. As Table 4.4 showed, deriving this threshold for the 1987 sample produces a weekly earnings lowest decile cut-off of £123. The percentage of all employees in the ESRI sample falling below that weekly cut-off is 25.3 per cent. (This includes both part-time and full-time employees, so a weekly threshold is not appropriate, but the figure is of interest for comparative purposes.) The Structure of Earnings Survey, of course, covered only industry, distribution, credit and insurance, whereas the ESRI survey included employees in all sectors. This difference in coverage does not in fact have much impact on the aggregate

estimates: analysis of the ESRI sample shows a very similar percentage of the employees in the sectors covered by the Structure of Earnings Survey and of all employees falling below various thresholds.

As far as international comparisons are concerned, differences in data sources and methods loom even larger. However, we can draw on a recent cross-country study sponsored by the EC Commission (CERC, 1991) which attempted to harmonise, in so far as possible, the methods employed in measuring low pay. Results for nine member states, including Ireland, are presented, the Irish figures being derived from analysis of the 1987 ESRI survey.[12] The significant remaining differences between the countries in terms of nature of the data sources, coverage, definition of earnings, etc., are emphasised in the study, which is intended to highlight the gaps in the Community's knowledge in this area. The results may none the less be of some interest.

Low pay is measured in the study using thresholds derived as 50 per cent, 66 per cent and 80 per cent of median weekly earnings of full-time employees in each country. For Ireland, median earnings among full-time employees was £179 per week (see Table 4.1 above), so these thresholds were £90, £118 and £143 per week in 1987 terms. The percentage of full-time employees in each of the nine countries falling below thresholds derived in this way are shown in Table 4.8. Ireland had 10 per cent below half the median, 18 per cent below two-thirds of the median and 30 per cent below 80 per cent of median earnings. These were higher than the figures for The Netherlands, Belgium, Italy, Germany or France, very similar to those for Spain and – for the two higher thresholds – slightly below the UK figures. Portugal has a smaller percentage below the lower two thresholds than Ireland but about the same below the highest one.

In addition to differences in data sources and definitions, the study draws particular attention to the fact that certain sectors are not included for some countries – notably public sector employees and those working in local collectives in France, some agricultural employees in Portugal, the armed forces in the UK, and those working in domestic service in a number of countries. While very great caution is warranted, then, it does appear that the extent of low pay in Ireland is similar to that in the UK and Spain, and probably greater than in countries like Belgium, The Netherlands, Germany and France. The need for a harmonised data source if such comparisons are to be made on a reliable basis is clear.

12. Reports for individual countries were prepared by national experts and submitted to the Commission, serving as the basis for the comparative results in the CERC study. The consultant for Ireland was G. McMahon (DIT), for whom figures were produced from the ESRI survey.

Table 4.8: *Low Pay in Ireland Compared with Other EC Countries*

		% of Full-time Employees Below		
Country	*Year*	*50% of Median*	*66% of Median*	*80% of Median*
Belgium	1988	5	19	
The Netherlands	1988	5	11	24
Portugal	1985	4.5	12	31
West Germany	1986	6	13	25
France	1987		14	28
Italy	1987	9	14.5	25
Ireland	1987	10	18	30
Spain	1985	9	19	32
UK	1989	7	20	35

Source: CERC (1991), Table II-4, p. 39.

4.9 *Conclusions*

In this chapter the distribution of earnings and the extent of low pay in the ESRI sample has been examined. The bottom 10 per cent of (full-time) employees earned less than half the mid-point in the earnings distribution, and the top 10 per cent earned 180 per cent or more of that mid-point. The distribution of earnings among men was seen to be similar in shape to that found in Great Britain and in Northern Ireland. A number of different low pay thresholds were used, in order to explore different approaches to setting such thresholds and the sensitivity of the results to the cut-off chosen. Two main hourly thresholds were employed, a "higher" one of £3.25 representing the hourly equivalent to £130 per week, and a lower one of £2.50 per hour, equivalent to £100 per week. About 27 per cent of the employees in the sample were found to be below the higher hourly threshold and 15 per cent were below the lower one.

Part-time and full-time workers were then distinguished, using a 30-hour working week as the cut-off. About 89 per cent of the employees in the sample worked 30 hours or more. Part-time employees were considerably more likely than full-time ones to be below the hourly thresholds. Most of the full-time employees below the hourly thresholds also had weekly earnings below the corresponding weekly cut-offs. There

were, however, some full-time workers below the hourly thresholds but able to exceed the weekly earnings thresholds because they worked relatively long hours.

Low pay among full-time employees in Ireland appeared to be about as prevalent as in the UK, and more so than in Belgium, The Netherlands, France or Germany, using for example half median earnings in each country as the cut-off.

We now go on in Chapter 5 to look in some detail at the characteristics of the low paid employees in the sample, focusing in particular on age, sex, and marital status.

Chapter 5

CHARACTERISTICS OF THE LOW PAID

5.1 *Introduction*

In analysing the characteristics of those on low pay, the key features on which we focus in this chapter are the age, sex, marital status and educational attainments of the low paid compared with the rest of the sample, before turning to the occupation and industry in which they work in Chapter 6. To avoid the presentation of a large number of tables in the text for different thresholds we focus primarily on those below the hourly thresholds of £3.25 and £2.50 (in 1987 terms). The tables in Appendix 1 show in detail the composition of all employees in the sample, while those in Appendix 2 contain detailed results for full-time employees below weekly thresholds.

Section 5.2 analyses the age/sex profile of the low paid. Section 5.3 looks at the marital status of those on low earnings, highlighting the position of particular groups such as married women working part-time. Section 5.4 looks at alternative definitions of what constitutes part-time work. Section 5.5 examines the educational qualifications of those below the pay thresholds.

5.2 *Age and Sex Composition of Low Paid*

We begin by looking at the age and sex of employees below the hourly earnings thresholds, compared with all employees. Table 3.1 above showed the age/sex composition of the employees in the sample: the corresponding picture for those below the hourly thresholds is shown in Table 5.1.

Over half the employees below each of the thresholds are aged under 25, with almost 60 per cent of those earning less than £2.50 per hour in that age group. Only about 20 per cent of those below the thresholds are aged 35 or over. The age composition of the men and women below the thresholds is broadly similar, with a slightly higher percentage of women aged over 45.

These figures have to be seen against the background of the age/sex profile of all employees. Table 5.2 shows the striking variation across groups which they imply in the proportion falling below the earnings

thresholds, which may be termed the risk of being low paid. Over one-third of all those aged under 25 earn less than £2.50 per hour and 57 per cent earn less than £3.25. The percentage below the thresholds is much lower between the ages of 25-64, with 10-20 per cent below the higher threshold and 4-10 per cent below the lower one. (A high proportion of those aged 65 or over are below the thresholds but this is a very small group.) The differences in risk between men and women are substantial except for those aged under 25, with a much higher proportion of women below the thresholds. For the older age groups the gap is very wide indeed. For example, only 6 per cent of men aged between 45 and 54 are below £3.25, but 40 per cent of women in this age group earn less than that amount.

Table 5.1: *Employees Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	26.9	32.2	59.1	23.2	28.0	51.1
25-34	8.7	10.0	18.8	12.8	13.7	26.5
35-44	5.5	5.1	10.6	5.6	5.4	11.0
45-54	1.8	6.7	8.5	2.3	5.2	7.5
55-64	0.4	1.6	2.1	1.9	1.4	3.2
65 and over	–	1.0	1.0	–	0.7	0.7
Total	43.4	56.6	100.0	45.8	54.2	100.0

Table 5.2: *Risk of Being Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	35.4	36.9	36.2	55.7	58.5	57.2
25-34	5.9	11.4	7.9	15.7	28.5	20.4
35-44	6.0	15.1	8.4	11.1	29.3	15.9
45-54	2.6	28.6	9.3	6.3	40.3	15.1
55-64	1.1	13.0	3.9	8.5	19.6	11.1
65 and over	0.0	27.1	19.2	0.0	33.0	23.3
Total	10.2	22.8	14.6	19.6	39.9	26.8

Full-Time Employees

Clearly, the much higher proportion of women working part-time could contribute to this pattern since part-timers tend to be paid lower hourly rates than full-time employees, so it is necessary to look separately at full-time and part-time employees. Table 5.3 shows the composition of full-time employees (defined as working at least 30 hours a week) below the hourly thresholds by age group and sex. Though women are still significantly over-represented among the low paid, this is not as pronounced as it was for all employees. Women account for 32 per cent of full-time employees, but make up 48-50 per cent of those below the thresholds. Younger workers now make up an even greater proportion of the low paid: almost two-thirds of those below the lower threshold are aged under 25. It is also worth emphasising how little difference there is between men and women in the age profile of those below the thresholds: full-time low-paid women are as likely to be young as low-paid men.

While full-time low-paid men and women have similar age profiles, this represents rather different risks for men and women by age, because of the differences between the sexes in the age composition of full-time employees (see Appendix Table A1.1). About 25 per cent of all full-time employees were aged under 25, evenly divided between men and women. However, 24 per cent of employees were men aged between 25 and 34, compared with 12 per cent who were women in that age group, and 32 per cent were men but only 7 per cent were women aged 35 or over. As Table 5.4 illustrates, the *risk* of being below the thresholds is therefore higher for

Table 5.3: *Full-Time Employees Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	31.0	33.6	64.5	26.3	29.3	55.6
25-34	9.7	8.9	18.5	14.6	11.8	26.5
35-44	6.2	2.2	8.3	6.3	2.6	9.0
45-54	2.1	5.7	7.8	2.6	3.6	6.2
55-64	0.3	0.3	0.5	3.4	1.4	2.4
65 and over	–	0.3	0.3	–	0.3	0.3
Total	49.2	50.8	100.0	51.7	48.3	100.0

Table 5.4: *Risk for Full-Time Employees of Being Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	34.9	35.8	35.4	55.5	58.4	57.0
25-34	5.5	10.4	7.1	15.6	26.0	19.0
35-44	5.8	8.5	6.8	11.1	19.5	12.7
45-54	2.7	32.7	8.0	6.2	38.9	12.1
55-64	0.6	2.8	0.9	7.1	14.2	8.2
65 and over	0.0	54.0	18.6	0.0	100.0	34.5
Total	9.9	22.0	13.7	19.4	39.1	25.6

women than men except for the under 25 age group, with the gap being particularly pronounced for those aged over 45-54. It must be emphasised, though, that since the number of female full-time employees in the older age groups is itself small, these higher risks are not reflected in a high proportion of low-paid "older" women among the full-time low paid. The younger age groups dominate low-paid full-time employees.

Part-Time Employees

Turning to part-time workers, Table 5.5 shows the age/sex composition of those working under 30 hours per week with hourly earnings below the thresholds. What is most striking is how few low-paid part-time men there are: 86-88 per cent of those below the thresholds are women. The age distribution of the part-timers below the thresholds is also interesting: compared with low-paid full-timers, they are much more evenly spread over the age groups. Only 25-30 per cent are aged under 25, and about 60 per cent are aged between 25 and 54. Most of the male low-paid part-timers are under 25 however.

This pattern largely reflects the composition of all part-time workers. Three-quarters of all part-time workers are female, and only about 16 per cent are aged under 25 (see Appendix Table 1.2). The percentage of each age/sex group falling below the thresholds is shown in Table 5.6. Almost half the part-timers aged under 25 are below £2.50 per hour, and 60 per cent earn less than £3.25. The risk is much lower for older age groups, but about 20 per cent are none the less below the lower threshold and up to

twice that many are below the higher hourly threshold. The risk of being low paid is not higher for women than men aged under 25, but is in general for older part-timers, echoing the result for full-time employees. The higher risk for women is a secondary factor, though: low-paid part-timers are mostly women primarily because 80 per cent of all part-timers are women.

Table 5.5: *Part-Time Employees Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	7.1	25.3	32.4	5.1	20.6	25.7
25-34	4.0	15.7	19.8	2.5	24.0	26.5
35-44	2.1	19.5	21.7	1.3	21.1	22.4
45-54	–	11.9	11.9	0.7	14.1	14.8
55-64	1.3	8.5	9.8	2.6	5.3	7.9
65 and over	–	4.4	4.4	–	2.7	2.7
Total	14.5	85.5	100.0	12.2	87.8	100.0

Table 5.6: *Risk for Part-Time Employees of Being Below Hourly Earnings Thresholds by Age and Sex*

Age Category	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	55.2	45.3	47.2	64.1	59.7	60.6
25-34	18.7	15.8	16.3	18.7	39.0	35.4
35-44	10.6	26.2	22.9	10.6	45.8	38.3
45-54	0.0	22.1	18.6	10.9	42.5	37.5
55-64	9.4	27.2	21.8	30.9	27.2	28.3
65 and over	0.0	23.2	19.4	0.0	23.2	19.4
Total	17.7	25.5	24.0	24.0	42.6	38.9

The focus in this chapter has so far been on those below hourly earnings thresholds rather than weekly ones. It is also of interest to briefly look at the composition of a small group mentioned in the previous chapter. For full-time employees, we saw that most of those below hourly earnings thresholds are also below the corresponding weekly ones, so that the age/sex composition of full-timers below weekly thresholds is very similar to that shown in Table 5.4 (see Appendix Table 2.1). However, a small number were below the hourly earnings thresholds but above the weekly ones (because they worked more than 40 hours per week). Unsurprisingly, most of these are men – 79 per cent of those below £3.25 per hour but above £130 per week are male. About one-quarter are under 25, but half are aged between 25 and 34. This is therefore quite a distinct subset in terms of its age/sex composition.

We now turn to the marital status of the low paid, and how this relates to the age and sex profile just described.

5.3 *Marital Status and Low Pay*

About 39 per cent of the employees in the sample are single, $58^{1}/_{2}$ per cent are married, and $2^{1}/_{2}$ per cent are either widowed or state that they are separated, divorced or deserted. There is a quite different pattern for men than for women, as would be expected. Table 5.7 shows the marital status of male and female employees by age category. About 95 per cent of employees aged under 25 are single, whether male or female. For older age groups the percentage of married employees is consistently and significantly higher for men, with 90 per cent of the men aged 45-54 being married compared with 65 per cent of women employees of that age. In the older age ranges a significant percentage of female employees are widowed or separated etc., – for example over a quarter of those aged 55-64 – which for men is only the case for those aged 65 or over.

This overall picture masks a major distinction for women, between part-time and full-time workers. There is little difference between part-time and full-time male workers in the percentage married, both overall and within each age group (see Appendix Table 1.3). For women, though, only 35 per cent of full-time employees are married, but almost 70 per cent of part-timers are married. This difference holds throughout the age distribution (except for the very small number of women employees aged 65 or over), with about 85 per cent of part-time female employees between the ages of 25 and 54 being married compared with about 55 per cent of full-time female employees.

Having looked at the marital status of all employees, we now examine the low paid. Table 5.8 shows the percentage of male and female

employees below the £3.25 hourly earnings threshold who are married, by age group, distinguishing between part-time and full-time workers. Looking first at full-time employees, those below the threshold are much less likely to be married than those above. For men, whereas over two-thirds of all full-time employees are married, only one-third of those below the threshold are married. This is largely because such a high proportion

Table 5.7: *Marital Status of Employees by Age Group and Sex*

Age Category	*Men*			*Women*		
	Single	*Married*	*Widowed etc.*[a]	*Single*	*Married*	*Widowed etc.*[a]
			Per cent			
Under 25	94.4	5.2	0.3	93.1	6.9	–
25 – 34	26.9	72.4	0.7	35.9	62.0	2.0
35 – 44	14.0	85.6	0.4	24.8	70.1	5.1
45 – 54	6.8	90.5	2.6	26.0	65.5	8.5
55 – 64	9.3	85.8	4.9	24.5	49.2	26.3
65 and over	9.5	–	90.5	6.9	16.0	77.1
Total	31.2	67.6	1.2	52.6	42.7	4.7

a Widowed, separated, divorced or deserted.

Table 5.8: *Marital Status of Employees Below £3.25 per Hour: Percentage Married, by Age Group, Sex, and Part-/Full-Time*

Age Category	*Below £3.25 per Hour*			
	Percentage Married			
	Full-Time		*Part-Time*	
	Male	*Female*	*Male*	*Female*
		Per cent		
Under 25	3.9	1.4	0.0	29.9
25 – 34	62.8	59.4	85.0	88.2
35 – 44	72.3	53.3	0.0	87.7
45 – 54	78.3	52.0	0.0	94.5
55 – 64	58.0	57.0	100.0	42.2
65 and over	0.0	45.9	0.0	41.1
Total	34.6	23.5	38.8	71.2

of the low paid are young, but it remains the case *within* age groups that married men are under-represented among the low paid. For men aged between 35-44, for example, only 72 per cent of those below the threshold are married compared with 86 per cent of all full-time men. So the *risk* of being low paid is consistently higher for single than for married men within age groups. For example, for those aged between 35 and 44, only 9 per cent of married men are below the threshold compared to 22 per cent of single men.

For women working full-time the pattern is less straightforward. Again a lower proportion of those below the threshold are married – but the difference is very much less than for men, and is concentrated among those aged under 25. These make up a large proportion of the low paid, and in this age group only 1 per cent of those below the threshold are married compared with 6 per cent of all women employees. For other age groups there is little difference in marital status between the low paid and others.

Turning to part-time employees, for women the marital status of those below the £3.25 threshold is similar to that of all part-time women employees, with about 70 per cent married. Low paid part-time men are mostly single, but comprise a very small group. Thus, about two-thirds of all part-timers – compared with 29 per cent of the full-timers – below that threshold are married, and 62 per cent are married women.

5.4 *Implications of Alternative "Part-Time" Definitions*

The characteristics of those working less than 18 hours per week may also be briefly mentioned. Compared with all those working less than 30 hours, whose age, sex and marital status have been described above, employees working under 18 hours are even more likely to be married women aged between 25 and 54. Almost 80 per cent of those working under 18 hours are women, compared to 70 per cent of those working less than 30 hours, and most of these are married and aged between 25 and 54.

The same pattern is seen for those below the hourly thresholds and working these hours. Thus 70 per cent of those working less than 18 hours and earning less than £3.25 per hour are women aged between 25 and 54, compared with 60 per cent of those working less than 30 hours per week and below the same hourly threshold (see Table 5.5).

5.5 *Education and Low Pay*

The ESRI survey obtained information on the highest level of education attained by respondents, and it is particularly interesting to examine the qualifications of those falling below low pay thresholds compared with the rest of the population. Table 5.9 shows first of all the

highest level reached for all employees in the sample, and for those below the £3.25 and £2.50 hourly earnings thresholds. A relatively high proportion of those below the thresholds have the Intermediate Certificate as their highest qualification, while a relatively low proportion have a post-Leaving Certificate qualification. Apart from this, the differences between those below the thresholds and all employees are not striking, which might at first sight be surprising.

Table 5.9: *Educational Qualifications of All Employees and of Those Below Hourly Earnings Thresholds*

Highest Level of Education Attained	*All Employees*	*Employees Earning < £3.25 per Hour*	*Employees Earning < £2.50 per Hour*
		Per cent	
No certificate (i.e., before primary)	9.0	7.8	8.3
Primary Cert. (or equivalent)	8.8	8.9	7.4
Some second level	10.1	13.4	12.1
Group Cert. (or equivalent)	8.9	9.3	9.4
Inter. Cert. (or equivalent)	15.9	24.2	24.8
Leaving Cert./Matriculation (or Equivalent)	29.8	31.0	32.2
Post-Leaving Cert. Certificate or Diploma	7.5	3.6	3.8
University Primary degree (or equivalent)	7.8	1.2	1.8
University Higher degree (or equivalent)	2.2	0.7	0.2
All	100.0	100.0	100.0

However, the level of education attained is strongly related to age, with a much higher proportion of younger than older age groups having obtained the Leaving Certificate and higher qualifications because of the trend towards higher participation rates over time. Given that many of the low paid are in the younger age group, this "cohort effect" has a substantial impact on the education attainments of the low paid versus other employees in aggregate. It is important, then, to look at the educational

qualifications of the low paid and all employees within age groups. Table 5.10 shows the pattern for all employees and for those under the £3.25 per hour threshold. It is now clear that within the older age groups a considerably higher proportion of the low paid than of other employees did not attain the Intermediate or Group Certificate. Within the younger age groups, the proportion of those below the threshold whose highest level attained was the Intermediate/Group Certificate is also relatively high. For all age groups except the under-25s, the proportion of those below the threshold who have a post-Leaving Certificate qualification is also relatively low. It is worth emphasising the relatively high education levels attained by the young, whether below the threshold or not. Almost half of those aged under 25 and earning less than £3.25 per hour had a Leaving Certificate or higher qualification.

The educational profile of those below the £2.50 per week threshold is very similar to that of the employees below £3.25. Distinguishing between part-time and full-time employees did not reveal much difference between the two in educational attainment levels *within* age groups – overall, part-timers below the hourly earnings thresholds had lower proportions attaining the higher education levels than the full-time low paid, but this was largely because they tend to be in the older age groups.

Table 5.10: *Educational Qualifications of All Employees and of Those Below £3.25 Hourly Earnings Threshold by Age Group*

Highest level of Education Attained	*Age Group*									
	Under 25		*25-34*		*35-44*		*45-54*		*55 or over*	
	All	*<£3.25*	*All*	*<£3.25*	*All*	*<£3.25*	*All*	*<£3.25*	*All*	*<£3.25*
No Cert./Primary Cert./ Some Second Level	9.3	9.3	18.1	34.2	40.0	67.7	50.4	74.4	57.9	77.5
Inter./Group Cert.	33.2	42.0	27.8	33.0	20.8	16.4	16.9	15.9	9.9	8.3
Leaving Cert./Matric.	45.8	40.9	34.5	29.9	18.5	10.0	14.6	9.7	14.8	10.4
Some Post-Leaving Cert.	11.7	7.7	19.6	2.9	20.8	6.3	18.1	0.0	17.4	3.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.6 *Conclusions*

This chapter has described in some detail the composition of those falling below low pay thresholds in terms of age, sex, marital status and educational attainments. Different weekly thresholds and hourly thresholds have been employed, and full-time and part-time workers distinguished. Such a comprehensive and detailed breakdown has allowed the groups involved to be clearly identified. Key results are the importance of age, the high proportion of women, particularly among the older low paid, and the extent to which the low paid have relatively low levels of educational attainment compared with other employees in the same age group. In Chapter 7 a regression framework is employed to disentangle the effects of these various characteristics and assess their impact on the likelihood of being below the thresholds. The role of occupation and industrial sector will also be included in that analysis, and Chapter 6 first examines the composition of those below the thresholds in terms of the jobs they do.

Chapter 6

OCCUPATION AND INDUSTRY OF THE LOW PAID

6.1 *Introduction*

Having analysed the personal characteristics of those below the various earnings thresholds, we now look at the occupations and industries in which they work. We employ the broad categories for classifying occupation and industry used by the CSO, dealing with occupation in Section 6.2 and industry in Section 6.3. As in the previous chapter, in each case we look first at all employees below the thresholds, then separately at full-time and part-time employees. Once again, the detailed results presented are for those below hourly earnings thresholds, with the occupation/industry profile of all employees detailed in Appendix 3 and results for full-time employees below weekly rather than hourly thresholds given in Appendix 4.

6.2 *Occupation and Low Pay*

We first look at occupation, distinguishing the nine broad groupings used by the CSO in the Labour Force Survey. Table 6.1 shows the breakdown by occupation of those below the £2.50 and £3.25 hourly earnings thresholds, distinguishing between men and women. For men, the most important single occupational grouping is the "producers, makers and repairers" category, a wide grouping which includes electrical and engineering workers, woodworkers, food, beverage and tobacco workers, paper and printing workers, building and construction workers, and foremen and supervisors. Transport and communication, agricultural workers, commerce and "labourers" are also significant for men. Men are considerably less concentrated by occupational group than women, though. A very high proportion of women below the thresholds are in the services, clerical or commerce occupations – those three groups account for 46 per cent of all women below the lower threshold and 41 per cent of those below the higher one.

These figures for those below the thresholds have to be seen against the background of the overall occupational structure of all employees (shown in Appendix Table 3.1). Male employees are concentrated in the "producers etc." occupational group, which contains 37 per cent of all

men, and other large categories are transport and communication and professional and technical workers. The occupational profile of female employees is quite different: only 12 per cent are "producers", while 28 per cent are in clerical occupations, 19 per cent are service workers, 21 per cent are in professional and technical occupations, and 13 per cent are in commerce/finance. These five occupational groupings account for 93 per cent of female employees compared with 69 per cent of men.

Table 6.1: *Employees Below Hourly Low Pay Thresholds by Occupational Group and Sex*

Occupational Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Farmers and Agricultural Workers	5.7	0.4	6.1	4.0	0.2	4.2
Producers, etc.	16.9	5.8	22.7	18.4	8.6	27.0
Labourers and Unskilled Workers	4.7	0.2	4.9	5.0	0.4	5.5
Transport and Communication	5.3	1.2	6.6	5.9	0.9	6.8
Clerical	0.9	9.6	10.5	1.5	12.4	14.0
Commerce, Insurance and Finance	5.9	17.9	23.8	5.9	12.4	14.0
Service Workers	2.7	18.8	21.5	2.7	16.7	19.5
Professional and Technical	0.2	2.4	2.7	1.1	2.2	3.3
Others	0.9	0.3	1.3	1.1	0.2	1.3
Total	43.4	56.6	100.0	45.8	54.2	100.0

Expressing the numbers below the thresholds in each occupational group as a percentage of all employees in that group, the risk of being low paid by occupation is shown in Table 6.2. For men, the groups with the highest risk are employees in agriculture, labourers and unskilled workers and those in commerce etc. However, because these are occupational groups where only a relatively small proportion of men work, these high-risk groups contain less than 40 per cent of low paid men. A full 40 per cent of low-paid men are in the single group "producers etc.", because it contains 37 per cent of all male employees rather than because it is a very high risk group.

Table 6.2: *Risk of Being Below Hourly Low Pay Thresholds by Occupation and Sex*

Percentage below threshold

Occupational Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Farmers and Agricultural Workers	44.7	100.0	46.2	56.7	100.0	57.8
Producers, etc.	10.7	19.4	12.1	21.3	52.5	26.3
Labourers and Unskilled Workers	16.5	11.1	16.2	32.0	46.4	32.8
Transport and Communication	10.6	15.2	11.2	21.5	21.0	21.4
Clerical	3.7	13.7	11.2	11.9	32.5	27.3
Commerce, Insurance and Finance	17.8	55.7	36.4	32.3	71.6	51.6
Service Workers	8.4	39.9	27.2	15.7	64.9	44.9
Professional and Technical	0.5	4.6	2.6	4.2	7.6	6.0
Other	2.4	5.3	2.8	5.2	5.3	5.2
Total	10.2	22.8	14.6	19.6	39.9	26.8

For women, though, the low paid are more concentrated in what are also high-risk groups. The two groups with relatively very high risks of being below the thresholds (apart from the tiny number of female employees in agriculture) are commerce, insurance and finance, and service workers. About two-thirds of all women employees in these groups are below the higher threshold. These are also groups where a significant proportion of women work – about one-third of all women employees are in these two groups. The combination of high risk and a substantial number working in the groups produces the situation where 65 per cent of the women below the lower earnings threshold are in these two groups. It is worth noting, though, that another group which Table 6.1 showed to contain a substantial proportion of low paid women, namely clerical occupations, does not have a relatively high risk – in fact the risk of being low paid for someone in this group is below the average for all women. About half these low-paid clerical workers are typists or bookkeepers/cashiers, the remainder being general clerical workers (in, for example, the public service or financial institutions).

Finally, the gap between male and female employees in terms of risk for certain occupations may be highlighted. We have already emphasised the much greater risk facing women than men: with 40 per cent of women but only 20 per cent of men below the higher threshold, for example, women face twice the risk of men of falling below £3.25 per hour. For service occupations, though, the risk for women of being below that hourly earnings threshold is over four times as great as that for men.

Full-Time Employees

We now focus on full-time employees. Table 6.3 shows the composition of full-time employees below the hourly earnings thresholds in terms of occupational group. Men make up 49 per cent of the low paid full-timers and women 51 per cent, as discussed above. The occupational composition of low-paid full-time male employees is similar to that of all men below the thresholds, which is unsurprising given that there are relatively few part-time male employees. For women, though, there are some differences in occupation between low paid full-time workers and all those below the weekly thresholds. For full-time employees, those working as producers make up a larger group, and service workers a smaller one. Whereas service workers comprised 31 per cent of all women below the higher threshold, they account for only 23 per cent of the full-time women below this cut-off.

Again, these have to be seen in the context of the occupational structure of all full-time employees. For men there is almost no difference

in distribution across occupational groups between full-timers and all male employees (see Appendix Tables A3.1 and A3.2). For women, though, there are some important differences in occupational structure between full-timers and all employees. A higher proportion of full-timers are producers and clerical workers, and a lower percentage are service workers or in professional/technical occupations.

Table 6.3: *Full-Time Employees Below Hourly Earnings Thresholds by Occupation and Sex*

Occupational Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	6.5	–	6.5	4.4	–	4.4
Producers, etc.	19.6	6.5	26.2	21.3	9.5	30.8
Labourers and Unskilled Workers	5.6	0.2	5.8	5.9	0.5	6.4
Transport and Communication	5.5	1.2	6.7	6.5	1.0	7.4
Clerical	1.1	9.8	10.8	1.8	13.0	14.9
Commerce, Insurance and Finance	6.7	16.1	22.8	6.6	10.8	17.3
Service Workers	2.8	14.4	17.2	2.9	11.1	14.0
Professional and Technical	0.3	2.2	2.4	1.2	2.2	3.4
Other	1.1	0.4	1.5	1.3	0.2	1.5
Total	49.2	50.8	100.0	51.7	48.3	100.0

The *risk* of being below the thresholds for full-time men and women by occupation is shown in Table 6.4. Compared with the pattern for all employees there is little difference for men or women. Focusing then on the gap between men and women in terms of risk, it is worth emphasising that the difference in average risk for full-timers is as wide as it was for all employees. With 39 per cent of full-time women and 19 per cent of full-time men below the higher threshold, a woman faces twice the risk of a man. Particular groups exhibit a relatively high gap, and it is noteworthy that full-time female service workers face a risk over 4 times that of a man in this occupational group – a considerably larger gap than for any other occupational sector.

Table 6.4: *Risk for Full-Time Employees of Being Below Hourly Low Pay Thresholds, by Occupation and Sex*

Occupational Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	45.3	–	45.3	56.6	–	56.6
Producers, etc.	10.4	19.4	11.8	21.2	52.9	26.0
Labourers and Unskilled Workers	16.2	11.1	15.9	31.8	46.4	32.6
Transport and Communication	9.5	15.4	10.2	20.8	22.4	21.0
Clerical	3.8	12.8	10.4	12.0	32.0	26.6
Commerce, Insurance and Finance	17.0	56.8	33.7	31.2	71.1	47.9
Service Workers	7.7	41.1	24.0	14.6	59.3	36.4
Professional and Technical	0.5	5.4	2.7	4.3	10.1	6.9
Other	2.4	5.5	2.8	5.2	5.5	5.2
Total	9.9	22.0	13.7	19.5	39.1	25.6

Part-time Employees

Turning to part-time employees below the thresholds, Table 6.5 shows that they are very much dominated by women working in the commerce, etc., group or as service workers. Women in these two groups account for about 80 per cent of those below the thresholds. The only other substantial group is women in clerical occupations, accounting for about 9 per cent. Men make up only 12-15 per cent of the part-timers below the weekly thresholds, and are mostly producers,in transport and communications, commerce or service workers.

Table 6.5: *Part-Time Employees Below Hourly Earnings Thresholds by Occupation and Sex*

Occupational Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	1.9	2.1	4.0	1.9	1.3	3.2
Producers, etc.	3.5	2.2	5.7	2.2	3.0	5.1
Labourers and Unskilled Workers	0.6	–	0.6	0.4	–	0.4
Transport and Communication	4.5	1.1	5.6	2.8	0.7	3.5
Clerical	–	8.6	8.6	–	8.8	8.8
Commerce, Insurance and Finance	2.1	26.8	28.9	2.0	23.0	25.0
Service Workers	2.0	40.9	42.9	2.1	48.7	50.8
Professional and Technical	–	3.8	3.8	1.0	2.3	3.3
Other	–	–	–	–	–	–
Total	14.5	85.5	100.0	12.2	87.8	100.0

Part-time employees, whether low-paid or not, are dominated by women in clerical, commerce etc., service and professional/technical groups, who make up 71 per cent of all part-time employees (see Appendix Table A3.3). Men account for 23 per cent of part-timers but are concentrated in producers etc., and in professional/technical occupations. In terms of risk, then as Table 6.6 shows, the highest risk groups for women are those in commerce etc., and service workers, almost three-quarters of whom are below the £3.25 threshold. Part-time professionals, on the other hand, face a low risk both for men and women.

Table 6.6: *Risk for Part-Time Employees of Being Below Hourly Low Pay Thresholds, by Occupation and Sex*

Occupational Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	35.7	100.0	54.1	56.8	100.0	69.2
Producers, etc.	34.2	20.8	27.4	34.2	45.7	40.0
Labourers and Unskilled Workers	100.0	–	100.0	100.0	–	100.0
Transport and Communication	39.4	13.9	29.0	39.4	13.9	29.0
Clerical	0.0	22.2	21.2	0.0	36.9	35.2
Commerce, Insurance and Finance	64.0	52.6	53.3	100.0	73.1	74.7
Service Workers	25.1	37.9	37.0	42.6	73.1	71.1
Professional and Technical	0.0	3.3	2.4	3.8	3.3	3.4
Other	–	–	–	–	–	–
Total	17.7	25.5	24.0	24.0	42.6	38.9

Alternative Hours Cut-Off

When the 18 hour rather than 30 hour cut-off is used to distinguish part-time workers, the occupational profile is very much the same. A higher percentage of those working under 18 hours are in clerical, commerce, etc., and service occupations, and fewer are in professional and technical ones, than was the case for employees working under 30 hours. Over one-third of all those working below the 18 hour threshold are in service occupations, and about three-quarters are in the clerical, commerce, etc., or services occupational groups. Again, this is more pronounced when we concentrate on those below the hourly earnings thresholds – 55 per cent of those working less than 18 hours and earning less than £3.25 per hour are in service occupations, and 90 per cent are in one of the three occupation groups mentioned.

6.3 *Industry and Low Pay*

We now examine the industrial sectors in which the low paid work, rather than their occupations. The groupings employed are based on the 8-category classification used in the Labour Force Survey and the Census of Population reports, which comprise:

(i) Agriculture, forestry and fishing;

(ii) Other production industries
– includes manufacturing industries, mining, quarrying and turf production, and electricity, gas and water;

(iii) Building and construction;

(iv) Commerce, insurance, finance and business services;

(v) Transport, communication and storage;

(vi) Public administration and defence;

(vii) Professional services;

(viii) Others
– includes personal services and "other" (including not stated).

In the context of low pay it is however helpful to distinguish within some of these broad groups, and we employ the following sub-divisions:

(iv) is divided into
wholesale distribution,
retail distribution,
and insurance, finance and business services;

(vii) is divided into
professional services
teaching
health

and

(viii) "Others" is divided into
personal services
and other.

This produces a 13-category grouping, which is manageable but also allows the areas where the low paid are concentrated to be pinpointed.

Table 6.7 shows the employees below the hourly earnings thresholds categorised by these industry groups. For low paid men, the most important sectors are production industries, retailing, agriculture, building and construction, and personal services. Retailing and personal services account for over half the women below the lower threshold. Production industries, teaching and the health services, and public administration are also significant for women, though much less so than retail distribution and services.

These figures for those below the weekly thresholds have to be seen in the context of the overall distribution of employees by industry as shown in Appendix Table A3.4. This shows that women are relatively heavily concentrated in retail distribution, teaching, the health sector and personal services. Over one-third of male employees are in production industries, with transport and communications and public administration also substantial. However, the distribution of the low paid is more concentrated in particular industries than this overall distribution of employees itself would lead us to expect, producing differences in risk across industries shown in Table 6.8. For men, agriculture, retail distribution and personal services are relatively high-risk groups, with 36 per cent, 24 per cent and 32 per cent respectively of the male employees in these sectors falling below the lower threshold. For women, retail and personal services are even higher risk groups, with 50 per cent and 55 per cent respectively of women in those sectors falling below the lower

threshold. These two groups clearly dominate the risk pattern for women, with levels well above those for other sectors (ignoring the very small groups such as women employees in agriculture).

Table 6.7: *Employees Below Hourly Earnings Thresholds by Industry and Sex*

Industrial Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	4.1	0.7	4.7	3.3	0.4	3.7
Building and Construction	5.1	0.5	5.6	4.4	0.3	4.7
Other Production	11.3	6.8	18.1	15.1	11.1	26.3
Wholesale	1.8	0.7	2.5	1.9	0.7	2.5
Retail	8.8	17.4	26.2	8.7	13.7	22.4
Insurance etc.	0.2	1.0	1.2	0.2	1.4	1.6
Transport etc.	2.3	1.5	3.9	2.6	1.5	4.1
Professional Services	0.8	2.2	3.1	0.7	2.2	2.9
Teaching	1.0	2.4	3.4	0.8	2.2	3.0
Health	–	3.6	3.6	0.3	3.8	4.1
Public Administration	1.0	3.0	4.0	2.6	3.2	5.8
Personal Services	4.8	15.6	20.4	3.4	12.5	15.9
Other	2.3	1.1	3.4	1.8	1.1	2.9
Total	43.4	56.6	100.0	45.8	54.2	100.0

Table 6.8: *Risk of Being Below Hourly Low Pay Thresholds by Industry and Sex*

Industrial Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	35.9	62.4	38.2	52.8	72.1	54.4
Building and Construction	20.7	40.6	21.8	32.9	40.6	33.3
Other Production	7.3	13.3	8.8	17.9	39.7	23.3
Wholesale	14.4	22.0	15.9	27.6	38.8	29.9
Retail	24.3	50.1	36.9	43.7	72.4	57.7
Insurance etc.	0.9	6.0	3.4	1.8	15.9	8.8
Transport etc.	4.8	20.3	6.9	9.9	36.4	13.4
Professional Services	12.2	23.7	18.9	18.9	43.3	33.1
Teaching	5.3	8.1	7.0	8.2	13.7	11.6
Health	–	9.6	7.3	5.1	18.2	15.0
Public Administration	1.6	14.0	4.8	7.7	27.0	12.7
Personal Services	32.7	55.4	47.5	41.6	81.3	67.7
Other	25.5	18.8	22.8	37.3	32.7	35.4
Total	10.2	22.8	14.6	19.6	39.9	26.8

Full-time Employees

Focusing on full-time employees only, Table 6.9 shows the breakdown of such employees below the hourly thresholds by industry. Compared with all employees below the thresholds, a slightly higher proportion of the low-paid full-timers are in production industries, but overall there is little difference in industrial composition. Retail distribution, production industries and personal services remain the most substantial groups for low

paid full-timers. The risk for each group of falling below the weekly thresholds is given in Table 6.10. Agriculture, retailing and personal services remain the highest risk groups.

Table 6.9: *Full-Time Employees Below Hourly Earnings Thresholds by Industry and Sex*

Industrial Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	4.9	0.4	5.2	3.7	0.3	4.0
Building and Construction	6.1	0.7	6.8	5.2	0.4	5.5
Other Production	13.1	7.4	20.5	17.5	12.1	29.6
Wholesale	2.1	0.9	3.0	2.2	0.7	2.9
Retail	9.7	14.6	24.3	9.6	11.5	21.0
Insurance etc.	0.2	1.0	1.2	0.2	1.6	1.8
Transport etc.	2.8	1.4	4.2	3.1	1.5	4.6
Professional Services	1.0	2.3	3.3	0.8	2.3	3.1
Teaching	0.8	1.7	2.5	0.6	1.7	2.3
Health	–	2.9	2.9	0.4	3.0	3.4
Public Administration	1.1	3.2	4.3	3.0	3.0	6.0
Personal Services	5.3	12.9	18.1	3.5	9.1	12.6
Other	2.3	1.4	3.6	1.9	1.3	3.1
Total	49.2	50.8	100.0	51.7	48.3	100.0

Table 6.10: *Risk for Full-Time Employees of Being Below Hourly Earnings Thresholds by Industry and Sex*

Industrial Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	37.1	74.6	38.4	52.8	100.0	54.4
Building and Construction	20.8	40.6	21.9	33.1	40.6	33.5
Other Production	7.1	13.1	8.5	17.8	39.8	23.0
Wholesale	14.4	23.5	16.2	27.6	34.4	28.9
Retail	22.8	50.3	34.0	42.3	73.5	55.0
Insurance etc.	0.9	5.4	3.1	1.8	15.9	8.6
Transport etc.	4.8	16.9	6.3	9.9	34.5	13.0
Professional Services	12.2	22.6	18.0	18.9	41.2	31.4
Teaching	6.0	11.7	9.0	8.4	21.3	15.2
Health	–	7.5	5.5	5.3	14.7	12.2
Public Administration	1.5	14.0	4.5	7.6	24.2	11.6
Personal Services	31.1	58.5	46.6	38.8	77.6	60.7
Other	23.0	39.1	27.2	35.9	67.8	44.2
Total	9.9	22.0	13.7	19.5	38.8	25.7

Part-Time Employees

Looking at part-time employees, Table 6.11 shows that those below the hourly thresholds are again heavily concentrated in retailing and personal services, accounting for 65-70 per cent of all those below the thresholds. Although these sectors contain a substantial proportion of part-time employees, they are quite disproportionately represented among those

below the thresholds. About 30 per cent of part-time employees work in these two sectors (see Appendix Table A3.6), but as Table 6.12 shows they face a very high risk of being below the hourly thresholds. By contrast, about one-third of those classed as part-timers using the 30-hour cut-off are teachers, but very few of these fall below the hourly thresholds. Some other high-risk groups which should be mentioned include the transport sector and professional services for women – the latter including those working for accountants, solicitors, architects, etc.

Table 6.11: *Part-Time Employees Below Hourly Earnings Thresholds by Industry and Sex*

Industrial Group	*Below £2.50 Threshold*			*Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	–	2.1	2.1	0.7	1.3	2.0
Building and Construction	–	–	–	–	–	–
Other Production	2.3	3.8	6.1	1.4	5.6	7.1
Wholesale	–	–	–	–	0.8	0.8
Retail	4.6	30.9	35.6	3.6	26.8	30.4
Insurance etc.	–	0.8	0.8	–	0.5	0.5
Transport etc.	–	2.1	2.1	–	1.3	1.3
Professional Services	–	1.6	1.6	–	1.9	1.9
Teaching	1.9	5.8	7.7	2.1	5.4	7.5
Health	–	7.3	7.3	–	8.0	8.0
Public Administration	0.6	1.9	2.5	0.4	4.3	4.7
Personal Services	2.6	28.9	31.6	2.5	31.8	34.3
Other	2.4	–	2.4	1.5	–	1.5
Total	14.5	85.5	100.0	12.2	87.8	100.0

Table 6.12: *Risk for Part-Time Employees of Being Below Hourly Earnings Thresholds by Industry and Sex*

Industrial Group	*% Below £2.50 Threshold*			*% Below £3.25 Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	–	54.9	35.5	52.5	54.9	54.1
Building and Construction	0.0	–	0.0	0.0	–	0.0
Other Production	18.1	16.1	16.8	18.1	38.9	31.5
Wholesale	–	0.0	0.0	–	100.0	100.0
Retail	72.6	49.7	51.8	90.6	69.9	71.8
Insurance etc.	–	15.5	15.5	–	15.5	15.5
Transport etc.	–	57.4	37.4	–	57.4	37.4
Professional Services	–	35.0	35.0	–	66.5	66.5
Teaching	4.4	5.6	5.3	8.0	8.4	8.3
Health	–	21.0	19.4	–	36.9	34.1
Public Administration	19.0	13.5	14.5	19.0	49.4	43.8
Personal Services	65.8	49.5	50.5	100.0	88.3	89.0
Other	52.3	0.0	10.4	52.3	0.0	10.4
Total	17.7	25.5	24.0	24.0	42.6	38.9

Alternative Hours Cut-Off

Those working under 18 hours, rather than under 30 hours, per week are more likely to be in retailing or personal services, and less likely to be teachers. Over half of all those working less than 18 hours are in retailing or personal services (compared with 30 per cent of those working under 30 hours) and only 16 per cent are in teaching (compared with 34 per cent). Again, focusing on those below the hourly earnings thresholds accentuates this – 80 per cent of those working under 18 hours and earning less than £3.25 per hour are in retailing or personal services.

Chapter 7

THE DETERMINANTS OF LOW PAY

7.1 *Introduction*

In previous chapters, the characteristics of employees in the ESRI sample falling below various earnings thresholds have been described – focusing on age, sex, marital status, occupation and industry. There is considerable interest in this type of breakdown, which has been the main preoccupation of previous research on low pay in Ireland, and the 1987 survey has allowed a comprehensive, detailed disaggregation to be carried out. Such an approach has limitations, though, in terms of disentangling the role of different factors. We now proceed to bring together the various characteristics of the individual and his/her job for analysis in a regression framework. This allows the interrelationship between the variables and their impact on the probability of being low paid to be examined in an integrated and coherent way.

We first, in Section 7.2, look at the factors influencing the level of earnings. This involves estimating a conventional earnings function relating the level of hourly earnings to the characteristics of the individual and his/her occupation. Having identified the factors which appear to influence the level of earnings throughout the range, in Section 7.3 we go on to focus specifically on the factors influencing the probability of being low paid. This entails fitting logit regression models where the dependent variable is whether an individual is below/above a particular earnings threshold. In Section 7.4 the results are summarised and their implications considered.

7.2 *Determinants of the Level of Earnings*

Prior to the availability of the 1987 ESRI survey data, conventional earnings functions for a representative sample of Irish employees had not been estimated. Such functions, relating the wage to characteristics of the individual and, often, the occupation/industry, have been extensively studied elsewhere (see, for example, the survey by Willis in Ashenfelter and Layard, 1986). For Ireland, only studies of particular sub-groups such as redundant workers (Walsh and Whelan, 1976), young workers (Reilly, 1987) or academics (Ruane and Dobson, 1990) have been produced, all focusing on the differences between males and females.

The ESRI 1987 sample provides a database suitable for – indeed designed for – such analysis, for a representative sample of employees. The information sought on earnings and their composition, hours worked (with overtime identified), whether there was anything unusual about the last pay received, and if so what the usual level was, allows the dependent variable to be carefully specified. Information was obtained on individual characteristics which have been shown elsewhere to be important in this context – not just age, sex and marital status but also education, labour force history and family composition – as well as detailed descriptions of the occupation and industry in which individuals work.

These ESRI survey data have been used to analyse earnings in the context of male/female wage differentials and married women's labour force participation by Callan. Earnings functions for married women have been estimated and contrasted with those for married men, to see the extent to which the difference in hourly earnings between them can be attributed to factors such as educational qualifications and labour market experience (Callan, 1991). The relationship between earnings and education plus work experience/time out of the labour force on earnings for married women has also been analysed in studying the influences on their labour force participation (Callan and Farrell, 1992).

Here we first estimate earnings functions for the entire sample of employees, male and female, single and married. The dependent variable, as in most such studies, is gross hourly earnings (in log form). The independent variables available for the whole sample are age, sex, marital status, educational level achieved, occupation and industry. (We look below at the sub-set of about 70 per cent of employees who completed full personal questionnaires, for whom additional information on years spent in work, unemployed and in home duties is also available.)

We first look at the extent to which age, sex, marital status and education alone serve to predict hourly earnings, before taking occupation and industry into account. Table 7.1 shows the estimation results for the equation including these explanatory variables in Col. (1). (To facilitate comparison with other studies, the customary approach where age is entered as (age -15)/10 and $(\text{age-15})^2/1000$ is followed.) As expected, the predicted level of hourly earnings increases substantially with level of education attained. Educational attainment is entered as a set of dummy variables, Inter Cert being the omitted category. We see that all the education dummies are significant, with lower levels of education having negative coefficients and high levels positive ones. Both age and age squared are highly significant, the former being positive and the latter negative, reflecting the way in which hourly earnings rise sharply with

Table 7.1: *Estimated Earnings Function, All Employees*

	(1)	*(2)*	*(3)*
Intercept	–0.63	–0.67	0.69
	(21.25)	(15.12)	(15.22)
"Age"*	0.60	0.47	0.53
	(21.86)	(18.20)	(20.52)
"Age squared"**	–0.89	–0.77	–0.81
	(16.81)	(15.12)	(16.35)
Female	–0.11	–0.15	–0.13
	(5.41)	(6.57)	(6.15)
Married Man	0.19	0.15	0.15
	(7.48)	(6.03)	(6.45)
Education:			
Primary Only	–0.28	–	–0.21
	(9.56)		(7.32)
Some Secondary/	–0.08	–	–0.07
Group Cert.	(2.96)		(2.84)
Leaving Cert.	0.18	–	0.10
	(7.44)		(4.21)
Certificate/Diploma	0.35	–	0.15
	(9.64)		(4.34)
University Degree	0.62	–	0.30
	(18.38)		(7.80)
Occupation:			
Agricultural Workers		–0.07	0.30
		(0.90)	(0.40)
Producers, etc.	–	0.18	0.12
		(4.71)	(3.34)
Transport	–	0.16	0.10
		(3.56)	(2.24)
Clerical	–	0.37	0.21
		(8.78)	(4.90)
Commerce	–	0.27	0.14
		(5.68)	(2.91)
Service	–	0.15	0.08
		(3.18)	(1.71)
Professional	–	0.74	0.45
		(16.53)	(9.43)
Other	–	0.54	0.34
		(11.51)	(7.15)

Table 7.1 (Contd.)

	(1)	(2)	(3)
Industry:			
Agriculture	–	–0.26 (3.72)	–0.25 (3.69)
Building	–	–0.14 (3.51)	–0.14 (3.44)
Wholesale	–	–0.14 (2.66)	–0.13 (2.65)
Retail	–	–0.29 (8.76)	–0.27 (8.41)
Insurance, etc.	–	0.18 (4.34)	0.14 (3.49)
Transport	–	–0.001 (0.01)	–0.02 (0.54)
Professional	–	–0.17 (2.99)	–0.16 (3.06)
Teaching	–	0.14 (3.44)	0.62 (1.56)
Health	–	–0.10 (2.69)	–0.09 (2.52)
Public Administration	–	–0.02 (0.62)	–0.04 (1.33)
Personal services		–0.37 (9.08)	–0.34 (8.63)
Others	–	–0.08 (1.48)	–0.10 (1.80)
Number of observations	2,677	2,677	2,677
$\bar{R}^2$	0.48	0.53	0.56
F	277.6	125.2	118.3
Log-likelihood	–1,425	–1,296	–1,197

t statistics in parentheses below estimated coefficients.

* "Age" is constructed as (age-15)/10.

** "Age squared" is constructed as $(\text{age-15})^2/1000$. Omitted education category is Inter Cert.

Omitted occupation category is "labourers and unskilled" workers.

Omitted industry category is "other production".

age/experience initially but then at a declining rate. Women have lower hourly earnings than men, controlling for age and education. Marital status is often included as an explanatory variable in wage equations for men, married men generally having higher earnings than single, controlling for other influences – for reasons that are not well understood. Here a dummy variable "married" was significant with a positive effect, but testing a variety of sex/marital status combinations showed that the effect was confined to men – married women did not have higher (or lower) hourly earnings than single women, controlling for other influences. The overall explanatory power of the equation is satisfactory compared with similar studies of earnings elsewhere, and there is no evidence of heteroscedasticity.[13]

So far we have focused on personal characteristics – in effect human capital as measured by age (as a proxy for experience) and education, as well as sex and marital status. In Col. (2) of Table 7.1, the set of occupation and industry category dummy variables are included in the equation, instead of the education variables. The omitted occupation included in the intercept is "labourers and unskilled workers" and the omitted industry is "other production", so the estimated coefficients on the occupation and industry variables show the impact of being in the occupation/industry in question, relative to those categories. Most of the occupation dummies are significant with a positive sign, indicating higher hourly earnings than for labourers. Similarly most of the industry variables are significant, with insurance, finance and teaching having a positive sign and agriculture, building and construction, retailing, professional services, health and personal services having negative signs – that is, associated with higher/lower average earnings than in the "other production" sector. The coefficients show that being in a professional occupation or the insurance and finance industrial sector is associated with particularly high hourly earnings. The same is true of teaching, though here the relatively low numbers of hours worked per week by teachers has a substantial impact on average hourly earnings.

These differentials across occupations/industries could simply reflect differences in the level of education and training required of or attained by employees. In Col. (3) of Table 7.1 we include both the occupation/industry dummies, and the education variables, in a single equation. The education dummies are all still highly significant and show the same pattern as before, though the coefficients are lower than in Col. (1) where

13. The Breusch and Pagan (1979) heteroscedasticity test statistic was 67.8 with 9 degrees of freedom for the equation in Col. (1), well above the critical level, and the same was true for the equations in Cols. (2) and (3).

the occupation/industry variables were omitted. However, the occupation and industry variables which were significant in Col. (2) also generally remain so, even when education is included. Thus, employees in professional occupations or in the finance and/or insurance industry have relatively high hourly earnings, even when their level of education is taken into account.

It is also interesting to see if working part-time rather than full-time has an effect on hourly earnings, having controlled for the characteristics of the individuals and the type of work involved. A dummy variable identifying those working less than 30 hours per week was tried in the equations in Table 7.1, and in each case was insignificant. Interestingly, though, a similar variable identifying those working under the lower threshold of 18 hours per week proved significant, with a negative sign. Thus, employees working below that number of hours appear to earn less per hour than full-time workers with the same education, etc., and in the same occupations/industries – perhaps a reflection of the weak bargaining power of such part-time workers.

Some interaction effects were also tested, extending the "full model" in Col. (3) of Table 7.1 to include, for example, interaction terms combining sex and educational attainment. These were not generally significant, though it did appear that the gap between male and female average earnings – i.e., the negative impact of the "female" dummy variable in the estimated equation – was substantially lower for those with a University degree than others. In looking at low pay it may then be worth exploring the estimation of separate equations for men and women, which we pursue in the next section.[14]

7.3 *Low Pay*

Having looked at the relationship between an individual's personal characteristics plus occupation/ industry and the level of their hourly earnings, we now focus on the relationship between these variables and the probability that the individual will be low paid. For this purpose we use the hourly earnings thresholds of £3.25 and £2.50 employed in earlier chapters. The dependent variable is now not the level of hourly earnings, but a dichotomous variable with a value 1 for those below the threshold and 0 for those not below it. As Atkinson, Micklewright and Sutherland (1982) – who applied this approach to UK data – point out, it is in some

14. Callan (1991) estimated separate earnings equations for married men and married women, since the objective was to investigate differences between these two groups.

respects unnatural to replace a continuous variable (earnings) by a discrete one (low paid/not), but the procedure provides a more immediate link than estimated earnings functions with traditional research on low pay relying on single variable cross-tabulations. It also allows in a simple way for the possibility that the determinants of earnings may be different at different points in the distribution. We proceed by fitting a logistic regression model relating the same independent variables to this dependent variable, since an Ordinary Least Squares regression would not be appropriate for a dependent variable of this form.

Table 7.2 shows the results of estimating such a model for the whole sample of employees. In Col. (1), as before, age, sex, marital status (for men) and education are the only independent variables included, and the dependent variable is whether the employee was earning below £3.25 per hour. The estimates show the pattern we would expect having seen the results in Section 7.2: the probability of being below the earnings threshold declines with age but at a decreasing rate, is higher for women, lower for married men, and falls as level of education rises. Col. (2) shows for the same dependent variable estimates of the full model, where industry and occupation variables as well as personal characteristics are included. Once again, even having controlled for age, sex and education, there are certain occupations/industries where the probability of being low paid is particularly low – notably professional occupations – and others where it is particularly high – notably personal services. If the low pay threshold of £2.50 per hour is used instead, Cols. (3) and (4) of the table show that the pattern of the estimation results is very similar.

The magnitude of the estimated effects of the different variables on the probability of being on low hourly earnings is not easy to see directly from the coefficients, because of the nature of the logistic model (whereby the predicted effect of each explanatory variable depends on the value taken by all the others). To illustrate these effects, Table 7.3 shows the predicted probability for a number of cases, using the estimated equation in Col. (1) of Table 7.2 – that is, the probability that an individual earns less than £3.25 per hour is being predicted, and industry/occupation variables are not included. We take as baseline a single man aged 35 with primary education only. The estimated equation predicts that such an individual would have a probability of 0.33 – a one in three chance – of being below the earnings threshold. For a woman with the same education and of the same age, the probability would be considerably higher, at 0.50. The importance of age is shown by the fact that a man or woman aged 20 would have much higher probabilities, of 0.82 and 0.90, respectively, of earning less than £3.25. Likewise, the impact of education is shown by the

Table 7.2: *Estimates of Logit Regression for Probability of Being Low Paid, All Employees*

	Below £3.25 per Hour		*Below £2.50 per Hour*	
	(1)	*(2)*	*(3)*	*(4)*
Intercept	1.86 (10.60)	1.60 (5.42)	0.87 (4.93)	0.14 (0.40)
Age	–2.44 (13.99)	–2.35 (12.70)	–2.40 (12.15)	–2.34 (11.09)
Age squared	3.85 (11.28)	3.80 (10.52)	3.95 (10.07)	3.93 (9.44)
Female	0.68 (5.81)	0.89 (6.16)	0.47 (3.71)	0.71 (4.44)
Married Man	–0.97 (5.90)	–0.78 (4.48)	–1.34 (5.58)	–1.12 (4.52)
Education:				
Primary Only	0.79 (4.26)	0.49 (2.48)	0.64 (2.86)	0.45 (1.83)
Some Secondary/ Group Cert.	0.25 (1.50)	0.25 (1.44)	–0.02 (0.11)	–0.06 (0.28)
Leaving Cert.	–0.71 (4.99)	–0.42 (2.64)	–0.59 (3.86)	–0.27 (1.54)
Certificate/Diploma	–1.32 (5.47)	–0.68 (2.48)	–1.14 (3.92)	–0.41 (1.23)
University Degree	–2.06 (6.83)	–0.89 (2.43)	–1.88 (4.55)	–0.49 (0.99)
Occupation:				
Agricultural Workers	–	0.05 (0.11)	–	–0.46 (0.90)
Producers, etc.	–	–0.32 (1.29)	– –	–0.18 (0.61)
Transport	–	–0.41 (1.39)	–	–0.34 (0.94)
Clerical	–	–0.76 (2.64)	–	–1.11 (3.15)
Commerce	–	–0.51 (1.65)	–	–0.06 (0.18)
Service	–	–0.01 (0.02)	–	–0.11 (0.28)

Table 7.2 (Contd.)

	Below £3.25 per Hour		*Below £2.50 per Hour*	
	(1)	*(2)*	*(3)*	*(4)*
Professional	–	–1.80	–	–2.42
		(4.64)		(4.22)
Other	–	–1.37	–	–0.85
		(3.25)		(1.64)
Industry:				
Agriculture	–	1.69	–	1.57
		(3.82)		(3.12)
Building	–	0.66	–	1.17
		(2.56)		(3.94)
Wholesale	–	0.55	–	0.89
		(1.71)		(2.34)
Retail	–	1.36	–	1.41
		(6.35)		(5.80)
Insurance, etc.	–	–0.47	–	0.14
		(1.45)		(0.33)
Transport	–	0.02	–	0.74
		(0.07)		(2.40)
Professional	–	1.00	–	1.49
		(2.72)		(3.52)
Teaching	–	0.32	–	1.12
		(0.95)		(2.62)
Health	–	–0.46	–	0.17
		(1.58)		(0.44)
Public Administration	–	–0.10	–	0.11
		(0.43)		(0.33)
Personal Services	–	1.12	–	1.68
		(4.13)		(5.52)
Other	–	0.67	–	0.92
		(1.85)		(2.24)
Number of observations	2,677	2,677	2,677	2,677
% of cases correctly predicted	78.3	80.7	84.6	86.4
Log-likelihood	–1,235.8	–1,126.7	–953.1	–845.2
Chi-squared	859.1	1,077.3	562.6	778.4

Table 7.3: *Estimated Probabilities of Being Below £3.25 Low Pay Threshold*

Baseline Case: single man aged 35, primary education only	*Estimated Probabilities*
Baseline	0.33
Woman aged 35 with Primary Education	0.50
Man aged 20 with Primary Education	0.82
Woman aged 20 with Primary Education	0.90
Married man aged 35 with Primary Education	0.16
Man aged 35 with Leaving Cert.	0.10
Man aged 35 with University Degree	0.03

fact that a man aged 35 with a Leaving Certificate qualification would have a probability of only 0.10, and with a University education it would be as low as 0.03.

It is of interest that, even having controlled for age, sex, marital status, education and occupation/industry, part-time employees are found to have a significantly higher probability of being low paid than full-timers. When a dummy variable set at 1 for employees working less than 30 hours or 18 hours per week is added to the equations in Table 7.2, it is found to be consistently significant and positive. Thus, working part-time itself is clearly seen to increase the probability of being on low hourly earnings, having taken differences in the characteristics of part-time versus full-time workers into account. This could reflect lower levers of unionisation and bargaining power, for example, and/or a willingness by some (voluntarily) part-time workers to trade off earnings against being able to work shorter hours.

So far, all employees in the sample have been included in the analysis. However, for the sub-group who completed full personal questionnaires in the survey – about 70 per cent of all employees – further information is available that merits analysis in this context. For those individuals, detailed data on career experience since leaving full-time education was obtained, in terms of the number of years spent in work, unemployed, ill, and in home duties. Young adults living in the parental home were not generally asked to complete such a full personal questionnaire, but did fill in an

abbreviated one providing, *inter alia,* the data employed up to this stage, on earnings, age, education, occupation and industry. Since younger employees have a high probability of being low paid, the analysis of the full sample was essential here. However, it is useful to supplement this by looking at the sub-sample for which more information is available.[15] This allows us in particular to look at the impact of time spent unemployed or in home duties during one's career on the probability of being low paid when in employment.

We thus estimate the logit models for the probability of being below the £3.25 hourly earnings threshold for the 2,002 employees in the sample for whom this information is available, with years spent unemployed and years spent in home duties now included. To simplify the presentation, Table 7.4, Col. (1), shows the results when the sum of years spent unemployed and in home duties is added to the equation containing only age, sex, and part-time education as explanatory variables:[16] the inclusion of occupation and industry categories does not affect the conclusions drawn about this additional variable. The results show that time spent out of employment clearly has a significant positive effect on the probability of being low paid.

Whereas almost all this time spent out of employment by male employees represents unemployment, for women it is dominated by time spent in home duties.[17] It is of interest then to see if such "time out" has different effects for men and women on the probability of being low paid. It was also noted earlier that some of the other variables might have somewhat different effects on earnings for women than men. We therefore now estimate separate equations for men and women, the results being shown in Table 7.4 Col. (2) and (3), respectively. As far as time spent unemployed plus in home duties is concerned, the effects are not in fact very different for men and women, with an estimated coefficient of 0.14

15. Callan (1991) and Callan and Farrell (1992) were able to concentrate on the full information sub-sample since their concern was with married women's earnings and labour force participation. Estimated earnings functions for the full information sub-sample, distinguishing male and female, single and married employees, are presented in Callan and Wren (forthcoming).

16. Marital status, included in Table 7.2, was insignificant for this group (and for men and women separately) and is therefore omitted from the results presented at this stage.

17. For men, 96 per cent of total time spent unemployed plus in home duties was unemployment, whereas for women 91 per cent was time spent in home duties.

Table 7.4: *Estimates of Logit Regression for Probability of Being Low Paid (Below £3.25 per hour) for "Full Information" Employees*

	(1) *Men and Women*	*(2)* *Men*	*(3)* *Women*
Intercept	1.98	2.07	2.36
	(8.86)	(7.28)	(7.38)
Age	–2.81	–3.10	–2.34
	(13.96)	(11.14)	(8.09)
Age squared	3.94	4.44	3.19
	(9.81)	(8.14)	(5.53)
Female	0.69	–	–
	(5.16)		
Education:			
Primary Only	0.41	0.62	0.32
	(1.88)	(1.94)	(1.03)
Some Secondary/Group Cert.	–0.05	–0.08	0.23
	(0.27)	(0.30)	(0.74)
Leaving Cert.	–0.73	–0.49	–0.83
	(4.23)	(1.92)	(3.47)
Certificate/Diploma	–1.60	–1.00	–1.79
	(5.36)	(2.04)	(4.84)
University Degree	–2.15	–1.28	–2.76
	(5.58)	(2.47)	(4.93)
Years unemployed plus in home duties	0.12	0.14	0.10
	(8.21)	(3.85)	(5.20)
Part-time (< 18 hours)	0.83	1.59	0.67
	(2.64)	(1.64)	(2.00)
Number of observations	2,002	1,228	774
% of cases correctly predicted	80.7	86.3	72.8
Log-likelihood	–859.8	–440.4	–416.6
Chi-squared	670.1	318.2	227.4

for men and 0.10 for women. (It is also worth noting that if both years spent unemployed and years spent in home duties are included separately in the equation for women, there is little difference between the two in their estimated coefficients.) The evidence tentatively suggests, then, that time spent unemployed and out of the labour force in home duties have rather similar effects on the probability of being low paid.[18] As far as the other variables are concerned, there are some differences between the estimated coefficients for men and women, notably for a University degree. However, when these equations are used to calculate the predicted probability of being below the £3.25 threshold for different illustrative cases, the results are quite similar to those derived from the joint equation and shown in the illustrations in Table 7.3.

Here we have paid most attention to personal characteristics and their impact on the likelihood of being low paid. It will be of particular importance in further work to investigate the industry/sectoral effects which have also been identified. It is of central importance in the context of low pay to assess the extent to which there is labour market segmentation, into, for example, primary/secondary sectors or "good/bad jobs", and the contribution this makes to the observed pattern of low pay. Understanding the way in which educational experiences and qualifications actually affect earnings, whether through their effects on productivity or primarily through job screening, is also clearly of crucial importance.

7.4 *Conclusions*

This chapter has looked at the determinants of low pay for Irish employees. Using the data on employees in the 1987 sample, earnings functions were estimated. Hourly earnings were seen to be strongly related to age and educational qualifications. The results also showed married men earning more than single men, and women earning less than men, having controlled for age and education. When industry and occupation variables are added, a number are seen to be significant influences on hourly earnings, even having controlled for age, sex, marital status and education.

18. Callan (1991) notes the different pattern of male and female employment interruptions – with males having few interruptions longer than 5 years but some married females having much longer periods out of the labour force – which means that the precise way in which they are entered in such an equation may influence their estimated effects.

To focus directly on the implications of these relationships for the probability of being below low pay thresholds, logit models were estimated using the same explanatory variables but with a dichotomous dependent variable taking the value 1 for individuals below the threshold, 0 for those above. Age and education were again of central importance, but sex and marital status also had substantial effects. Whereas a single man aged 35 who had not reached Group or Intermediate Certificate had a one-in-three chance of earning below £3.25 per hour, a woman of that age and education had a one-in-two chance. Higher levels of educational attainment dramatically reduced the predicted probability of being below the earnings thresholds. Even controlling for age, sex, marital status and education, the industrial sector in which an individual was employed was seen to have a significant impact on the probability of being low paid. Part-time workers were also found to have a higher probability than full-timers of being on low hourly earnings, even having controlled for individual and sectoral characteristics. Earlier interruptions in time spent in work, due to unemployment or time spent in home duties, were also positively associated with current low pay.

Chapter 8

LOW PAY AND POVERTY

8.1 *Introduction*

We now turn to the topic which is of central importance in considering the implications of low pay, but where little information has been available for Ireland, namely the relationship between low pay and poverty. One of the main reasons for concern about low pay is of course the poverty with which it may be associated. This is not the only possible source of concern – considerations of equity may also arise focusing simply on the relationship between an employee and employer, between the work performed and the rate paid. However, it is clear from the content of public debate about low pay that its impact on poverty is of central concern. In this chapter we analyse this relationship, and show that it is a good deal less direct and more complex than is often assumed.

Research on this topic has been hindered by the unavailability of suitable data for analysis at micro-level. For example, the most commonly-used source for the study of low pay in Ireland has been the 1979 Structure of Earnings Survey, which has data on individual earnings but no information about dependants or the household to which the employee belongs. Since poverty is generally assessed on the basis of the family or household's situation rather than the individual, low pay could not then be related to poverty. The data in the 1987 ESRI survey is close to ideal for this purpose. In addition to the information on employees and their earnings analysed so far in this study, detailed information on the income, composition and life-style of the families and households in which they live was obtained. We now make use of this information to examine the position of the households in which individuals earning below the various low pay thresholds live. The contribution of the earnings of these individuals to the total income of their households is also analysed, and the types of low paid employees who are most/least likely to be living in low income households identified.

In Section 8.2 the way in which poverty is to be measured, and how this relates to the measurement of low pay, is discussed. Section 8.3 describes the pattern found in the sample in terms of the overlap between low pay and poverty measured using relative income poverty lines. Section 8.4

explores the factors contributing to this pattern, and highlights the characteristics of those low paid individuals most likely to be in households below the income lines. Section 8.5 touches on the relationship between low pay and other aspects of labour market disadvantage, particularly unemployment, which may link it indirectly to poverty. Section 8.6 brings together the conclusions.

8.2 *Measuring Poverty*

The Survey of Income Distribution, Poverty and Usage of State Services has already been used to study the extent and nature of poverty in Ireland, and related topics, in a series of studies (see especially Callan, Nolan *et al.*, 1989, Callan, Nolan and Whelan 1993). A variety of approaches to measuring poverty has been explored, and the different methods available critically reviewed (e.g., Callan and Nolan, 1991). One method of measuring poverty to which a good deal of attention has been paid in this research involves using relative income poverty lines. While not providing a unique "best" solution, this approach has a number of advantages in terms of underlying conceptual foundation and availability of comparable data over time and across countries, and has been widely adopted in studies and official reports elsewhere (see for example *EUROSTAT* 1990, Buhman *et al.*, 1988, DSS, 1990). It can usefully be supplemented by additional information, for example on direct indicators of deprivation (see Callan, Nolan and Whelan 1993).

The relative income poverty line approach has been applied in the Irish case in earlier work using the ESRI survey (Callan, Nolan *et al.*, 1989, Nolan and Callan, 1989), to derive a set of income poverty lines, rather than a single line. For present purposes this means that both the poverty line used to distinguish "poor" households, and the earnings threshold used to identify the low paid, can be varied. The sensitivity of the relationship found between poverty and low pay to such variation can thus be examined.

Relative income poverty lines are calculated as proportions of average disposable household income in the sample, taking differences in needs between households of differing size and composition into account. The incomes of households of different composition are therefore first brought to a comparable basis using a set of equivalence scales. A number of different scales have been used in deriving such poverty lines for the 1987 sample and the sensitivity of the results to the scales used has been assessed. Here we use the (approximate) set of scales or relativities implicit in the rates of payment of the Unemployment Assistance/Supplementary Welfare Allowance schemes and Child Benefit at the time of the survey. Taking the household head to be 1, this means that other adults in the

household are counted as 0.66, and children are counted as 0.33, in calculating the total number of "adult equivalent units" in the household. Equivalent income is then calculated by dividing the household's total income by the number of adult equivalent units. Average equivalent income across all households in the sample is then calculated, and this serves as the basis for the relative income poverty lines.

In previous work we have used lines set at 40 per cent, 50 per cent and 60 per cent of this average, and these will also be employed here. The poverty lines this produces, in 1987 prices, are at levels of about £34, £40 and £48 per week for a single adult (see Callan, Nolan *et al.*, Chapter 5). About 7-8 per cent, 17 per cent and 30 per cent of households in the sample were found to be below the 40 per cent, 50 per cent and 60 per cent lines respectively.

This general approach to deriving poverty lines has a great deal in common with the basic idea underlying the relative conception of low pay often used in setting low pay thresholds, discussed in Chapter 2. However, some key differences between low pay thresholds and income poverty lines, having a major bearing on the relationship between low pay and poverty, may be noted at this stage:

(i) low pay is assessed on the basis of the *individual's* earnings, poverty on the basis of the incomes of all the members of the household;

(ii) low pay focuses purely on *earnings*, whereas in measuring poverty *income from all sources* is relevant;

(iii) low pay focuses on *gross* earnings, while for poverty *income after tax* and PRSI contributions is relevant;

(iv) the low pay criterion takes no account of the individual's family circumstances and "needs", whereas the household's equivalent income used in measuring poverty depends not only on the income available to it but also on the number of people depending on that income.

(v) low pay may be measured in terms of *hourly* earnings while poverty is generally assessed on the basis of *weekly* income or income over a longer period.

The relationship between an individual's gross earnings and the disposable equivalent income of his or her household is by no means a straightforward one, implying a relationship between low pay and poverty which is equally complex.

This relationship can only be properly understood by examining the position of individuals falling below low pay thresholds in terms of their household income, *not* by analysis at the household level alone. The fact that in previous work on the ESRI sample about 10 per cent of households below the 50 per cent relative poverty line were found to be headed by an employee *cannot* therefore be taken as an indicator of the overlap between low pay and poverty. Most obviously, these household heads could well have gross earnings above the low pay thresholds, but be in households below such a poverty line because of the number of people in the household depending on those earnings, and/or be paying sufficient tax and PRSI contributions to bring disposable income below the poverty line (see Nolan and Callan, 1989). Conversely, employees with earnings well below the low pay threshold may not be in households below the poverty lines, because, for example, there are other earners or other income sources in the household. It is therefore necessary to combine both individual and household-level data to assess the overlap between low pay and poverty, which is the aim of the next section.

8.3 *The Overlap Between Low Pay and Poverty*

The extent to which low-paid individuals in the sample are in households below the relative poverty lines is shown in Table 8.1, using the hourly earnings thresholds of £3.25 and £2.50 to define "low paid". The degree of overlap is in fact seen to be limited. Very few of the low paid are in households below the 40 per cent relative line, less than one in ten are in households below the 50 per cent line, and about 20 per cent are in the household below the highest, 60 per cent poverty line. This pattern is not significantly affected by the choice of hourly threshold. Nor indeed does it differ if a simple weekly earnings threshold is applied to all employees, part-time or full-time.[19] This pattern comes about primarily because most employees are not in poor households, most poor households do not contain an employee. Only 8 per cent of all employees are in households below the 60 per cent relative line. A majority of these – about 63 per cent – are themselves below the £3.25 earnings threshold, but a substantial minority are not. The subset of employees who are both low paid and in poor households account for only a small percentage of all employees: only 5 per cent of all employees earn less than the £3.25 per hour threshold and are in households below the 60 per cent relative poverty line.

19. The overlap between low pay and poverty using a weekly earnings threshold for all employees was examined in Blackwell and Nolan (1990): the percentages below weekly thresholds and in households below the relative poverty lines were almost identical to those shown in Table 8.1

Table 8.1: *The Overlap Between Low Pay and Poverty*

Percentage of Employees in Households Below Relative Poverty Line	*Employees Below "Lower" Hourly Threshold*	*Employees Below "Higher" Hourly Threshold*	*All Employees*
		Per cent	
40 per cent line	2.7	2.2	0.8
50 per cent line	9.1	8.5	3.2
60 per cent line	21.0	18.9	8.1
Per cent of all employees	14.6	26.8	100

Likewise from a household perspective, only 12 per cent of the households below the 60 per cent poverty line and 9 per cent of those below the 50 per cent line contain an employee earning less than £3.25 per hour. (A small number of these households contains more than one low-paid employee). This again reflects the fact that most households below these poverty lines do not contain an employee: only 20 per cent of the households below the 60 per cent line, and 14 per cent of those below the 50 per cent line, contain an employee.

The limited degree of overlap between low pay and poverty in Ireland is quite consistent with the results of similar analyses for other countries. For example, an influential British study by Layard, Piachaud and Stewart (1978) showed that using a low pay definition which identified about 10 per cent of all employees as low-paid in 1975, 22 per cent of these were in households below a frequently used household poverty line (140 per cent of Supplementary Benefit rates). Taking a broader definition of low pay and poverty, of the bottom 30 per cent of employees, about 40 per cent were in the bottom 30 per cent of households ranked by income. More recently, Bazen (1988) showed that only between 11-21 per cent of low-paid workers in Britain came from families with net incomes below Supplementary Benefit rates. For the US, only about 8 per cent of the employees receiving the official minimum wage are in households below the official poverty line. Using an alternative, less stringent, definition of low-paid, Burkhauser and Finegan (1989) found that about 18 per cent of low-paid workers were below the official poverty line. Obviously, the precise extent to which low-paid workers are in poor households depends on the way in which the low pay threshold and the poverty line are defined, which differs across these studies. However, the broad message from these results is consistent with our findings for Ireland: many or most low-paid workers are not in poor households.

If most low-paid employees are not in poor households, where then are they located in the household income distribution? Returning to the Irish evidence, we first abstract from the influence of household size and rank households by disposable income. Table 8.2 shows that three-quarters of all full-time employees earning less than £3.25 per hour are in households in the top half of the disposable income distribution. About 20 per cent of employees below that threshold are in households in the top 10 per cent, only 7 per cent are in the bottom 30 per cent. This must be seen in the context of the location of all employees – whether low-paid or not – in the household income distribution, which is also shown in Table 8.2. The most striking feature is how few employees are in households towards the bottom of the income distribution. Only 3 per cent of all employees are in the bottom 30 per cent of the household income distribution and only 16 per cent of all employees are in the bottom half of that distribution. The households towards the bottom of the income distribution are mostly reliant on social welfare transfers, pensions or self-employment (include farming) income, and contain few employees. Low-paid employees are slightly more concentrated in households towards the bottom of the distribution than are all employees, but even so are mostly in the middle and upper parts of the household income distribution.

Table 8.2: *Employees Earning Below £3.25 per Hour and All Employees by Household Disposable Income Decile*

Household Disposable Income Decile	*% of Employees Earning < £3.25 per Hour*	*% of All Employees*
Bottom	1.0	0.3
2	3.1	1.0
3	2.8	1.3
4	10.2	5.3
5	8.6	7.8
6	11.8	11.4
7	10.9	13.1
8	14.6	16.0
9	17.2	19.8
Top	19.9	24.0
All	100.0	100.0

In assessing living standards and poverty status, household income relative to needs is employed. Table 8.3 shows the location of all employees, and of employees earning less than £3.25 per hour, when *equivalent* income is used for ranking households. In each case the proportion of employees now found towards the bottom of the distribution is substantially higher than in Table 8.2. None the less, only $8^1/_2$ per cent of all employees and 19 per cent of those earning less than £3.25 per hour are in the bottom 30 per cent of the household equivalent income distribution. Low-paid employees are now concentrated in deciles 5-9, which contain about 70 per cent of all those earning less than £3.25 per hour. Not only are most low-paid employees not in households below the relative poverty lines, then: most are in households well above the poverty lines. It is worth noting that a very similar pattern is seen if we concentrate on full-time employees and look at those below the weekly earnings thresholds.

Table 8.3: *Employees Earning Below £3.25 per Hour and All Employees by Household Equivalent Disposable Income Decile*

Household Equivalent Disposable Income	*% of Employees Earning < £3.25 Decile*	*% of All Employees per Hour*
Bottom	3.1	1.1
2	9.0	3.6
3	7.4	3.9
4	5.7	4.6
5	11.9	8.8
6	14.2	11.2
7	15.2	14.5
8	16.0	15.8
9	12.1	17.5
Top	5.3	19.0
All	100.0	100.0

Using the household as income recipient unit implicitly assumes that all members of a particular household have the same standard of living. It may in fact be the case that income sharing within households is most common between married couples and their dependent children. Other household members, such as non-dependent children, may be more financially independent and full sharing may not be customary. It is therefore also useful to look at the overlap between low pay and poverty using the narrower "family" or tax unit, comprising a single person or married couple together with dependent children if any, as the basis for assessing living standards/poverty. In earlier research using the 1987 sample it has been seen that the percentage of persons in tax units falling below relative poverty lines is not very different to the percentages in households below the corresponding lines. We now look at the extent to which employees below the low pay thresholds are in tax units below the relative poverty lines. Table 8.4 shows that the extent of overlap between low pay and poverty using the tax unit is in fact little different to that seen (in Table 8.1) using the household. Only 19 per cent of employees earning less than £2.50 per hour are in tax units below the 60 per cent relative poverty line, and only 16 per cent of employees earning less than £3.25 per hour are in such families.

Table 8.4: *The Overlap Between Low Pay and Poverty Using the Tax Unit Rather Than the Household*

% of Employees in Tax Units Below	*Employees Below £2.50 per Hour*	*Employees Below £3.25 per Hour*	*All Employees*
		Per cent	
40% line	6.2	3.9	1.3
50% line	9.3	7.7	2.8
60% line	19.2	15.7	6.9

8.4 *Understanding the Overlap Between Low Pay and Poverty*

To see why the degree of overlap between low pay and poverty is limited, it is necessary first of all to return to the levels of the earnings thresholds/poverty lines being applied. Low pay thresholds corresponding to £100 and £130 per week gross earnings have been employed, whereas even the highest relative poverty line – the 60 per cent one – is only about £48 per week disposable income for a single person. It is clear then that even after paying income tax and PRSI contributions, an employee living alone could be earning well below the thresholds and still be comfortably above the highest relative poverty line. To take a single employee earning £90 per week as an example, his/her tax and PRSI payable (in 1987) would have been about £18 per week, leaving disposable income of £72. It is not surprising, then, that most such earners without dependants are not below the relative poverty lines.

For low paid employees with dependants the situation can be quite different. The 60 per cent poverty line for a couple with two children is about £110, because the size of the family is taken into account in assessing needs. Employees earning below the £100 or £130 gross earning threshold would then have disposable income below that relative poverty line, *if* the household was entirely dependent on those earnings. Indeed with a larger family the employee could earn over the £130 threshold and the household still fall below the relative poverty line. Thus, it should not be assumed that employees in "poor" households are necessarily low paid in terms of the conventional earnings bench-marks. Family size and number of dependants, and the extent to which the household is relying on the earnings of the individual as the main or sole source of income, are thus central to the low pay/poverty relationship.

In this context it is useful to compare the characteristics of the low paid employees who are and are not in households below the relative income lines. Table 8.5 focuses on employees below the £3.25 per hour earnings threshold, and in household below/not below the 60 per cent relative poverty line. Those who are in households below the poverty line have slightly lower earnings on average, have a higher proportion working part-time, are less likely to be under 25 and slightly less likely to be female than those in households not below the line. The differences between the two groups in terms of such characteristics are not dramatic, however.

The striking difference, though, is in the proportion who are *household heads* or married men. Of the low paid in "poor" households, 41 per cent are household heads, compared with only 17 per cent of the low paid not in poor households. Likewise, 34 per cent of the former are married men compared with only 12 per cent of the latter. This points to the conclusion

that the main difference between the low paid in "poor" households and the remainder of the population is in the nature of the households of which they are members, and their position in the household, rather than in the individual employee's own earnings or occupation/industry.

Table 8.5: *Characteristics of Employees Below £3.25 Threshold Who Are/Are Not in Households Below 60% Relative Poverty Line*

	Employees Below £3.25 Threshold	
Characteristics of Employee	*In Households Below 60% Line*	*In Households not Below 60% Line*
Percentage female	51.3	54.9
Percentage aged under 25	40.1	53.7
Percentage part-time	23.1	13.0
Percentage in service occupations	21.5	19.0
Percentage in retail industry	21.7	22.6
Average weekly gross earnings	£81.77	£92.07
Average weekly hours	37.97	40.15
Percentage household heads	40.5	16.7
Percentage married men	33.6	11.8
Percentage married women	14.2	20.1

This is explored in Table 8.6, which focuses on the type of households in which the low paid live. Comparing those below the £3.25 threshold in households below the 60 per cent relative poverty line with those in households above that line, almost all the latter are in households with more than one income earner. They are also much less likely to be in households containing 2 or more children. About half the low paid in "poor" households are in households with two or more children, and 32 per cent are in households comprising two adults and two or more children. Where the low-paid employee is the only earner in a "poor" household, that employee is more likely to be male and not to be under 25 than other low-paid employees.

Table 8.6: *Employees Below £3.25 Threshold Who Are/Are Not in Households Below 60% Relative Poverty Line: Characteristics of Households*

Characteristics of Household	*Employees Below £3.25 Threshold*	
	In Households Below 60% Line	*In Households not Below 60% Line*
Percentage with more than 1 income earner	55.0	92.2
Percentage with 2 or more children	51.0	21.6
Percentage with 2 adults + 2 or more children	31.7	8.5
Net earnings of low-paid employee as % of total household income	55.0	32.0

Once again, we can look more generally at the low paid in households located at different points in the income distribution rather than simply below/not below a particular poverty line. Categorising households by equivalent disposable income decile, Table 8.7 shows the average earnings and characteristics of the low paid employees in each decile. There is not a great deal of difference in the level of weekly earnings of the low-paid individual across the deciles, with those towards the bottom of the household distribution earning about £80 (gross) per week on average and those towards the top earning about £100. Low-paid employees in households towards the top of the income distribution are more likely to be female, and in particular to be married women, than those towards the bottom. There is a more pronounced difference, though, in the percentage who are household heads: about 40 per cent of the low paid employees in the bottom four deciles are household heads, compared with 18 per cent or fewer for those through the remainder of the distribution. Most strikingly, the earnings of the low paid employee form a much higher proportion of total household income for those in low income households. The importance of these earnings declines steadily with the decile ranking of the household, making up, on average, 71 per cent of total household income for those in the bottom decile but only 25 per cent or less for those in households towards the top of the distribution. Thus, once again, it is primarily the nature of the household and the role which the low paid individual and his/her earnings play in that household, rather than the employee's own earnings etc. which determine where the low paid employees are located in the household income distribution.

While the overlap between low pay and poverty has been shown to be quite limited, low pay may still be important for the minority of poor households which contain an employee, so it is worth focusing specifically on these households. We have seen that only 20 per cent of the households below the 60 per cent relative income line contain an employee, and slightly more than half these contain an employee earning less than £3.25 per hour. Table 8.8(A) cross-classifies these "poor" households with an employee by number of children and by whether the household head, spouse, other member or no member is a low-paid employee. About 26 per cent have a low-paid head, 9 per cent a low-paid spouse, 19 per cent a low earner who is neither head nor spouse, and 46 per cent no low-paid individual. About 85 per cent of these households have children, three-quarters having two or more, and the households containing a low-paid individual are about as likely to have children as those without such an individual. While low pay is a contributory factor in producing low income relative to needs for a significant proportion of the "working poor", then, only about one-quarter have a low-paid head and even then family size also plays a part in most cases.

Table 8.7: *Employees Below £3.25 Hourly Threshold by Household Equivalent Income Decile*

		Employees below £3.25 Threshold					
Equivalent Disposable Income Decile	*Average Weekly Gross Earnings £*	*% Females*	*% Aged < 25*	*% Part Time*	*% Married Women*	*% Household Heads*	*Low Pay as % of Total Household Income*
Bottom	79	52	36	32	12	43	71
2	86	48	40	23	15	43	53
3	79	52	48	18	14	36	50
4	83	38	46	4	14	40	51
5	79	54	64	17	15	10	33
6	93	57	54	12	14	15	40
7	99	56	63	8	24	18	32
8	87	58	62	21	22	18	26
9	101	60	57	13	27	12	24
Top	106	50	55	8	21	12	20

It is thus also of interest to focus on the narrower group of households *headed* by an employee – constituting 63 per cent of all households below the 60 per cent line with an employee, 4 per cent of all households in the sample. Table 8.8(B) shows the same cross-classification for this smaller group. A slightly higher percentage – 87 per cent – contain children, and a slightly lower number – 46 per cent – contain a low-paid employee, but almost all the latter now have a low-paid head. Again, most of the households with a low-paid head also contain 2 or more children. Low pay therefore operates most often in combination with family size to produce low income relative to needs. The implications for policy, taken up in the next chapter, are that a broad approach incorporating child support will be much more effective in assisting the "working poor" than one focusing on low pay alone.

Table 8.8: *"The Working Poor": Low Pay and Child Dependants*

Per cent	*No Children*	*1 Child*	*2 Children*	*3 or More Children*	*All*
(A) Households Below 60% Line With an Employee					
Low Paid Head	3.7	0.7	8.9	12.5	25.8
Low Paid Spouse	0.5	1.6	1.4	5.8	9.3
Low Paid - Other	3.3	4.4	3.5	7.7	19.0
No Low Paid	7.1	1.9	6.3	30.8	46.0
All	14.6	8.6	20.0	56.7	100.0
(B) Households Below 60% Line With an Employee Head					
Low Paid Head	5.7	1.1	13.9	19.7	40.5
Low Paid Spouse	–	–	–	2.8	2.8
Low Paid - Other	–	–	0.5	1.6	2.2
No Low Paid	4.0	1.8	4.8	44.0	54.6
All	9.7	2.9	19.3	68.1	100.0

8.5 *Low Pay and the Persistence of Disadvantage*

In assessing the implications of low pay for poverty, it is important to look not just at the position of the low paid and the relationship between low pay and poverty at a point in time, but also to consider the relationship over time. As Atkinson (1973) points out, low pay may be an indirect as well as a direct cause of poverty. For example, someone working in a low-paid job for much of his/her working life will be less likely to have accumulated assets and pension entitlements by the time they retire than someone in well-paid employment, and thus will have a higher probability of being poor when elderly. Further, low pay may often be part of a more extended pattern of labour market disadvantage. Low-paid workers may be more likely to become unemployed, may have higher sickness absence rates, and are less likely to enjoy fringe benefits than well-paid workers.

Here we take a brief look at these factors, focusing first on the relationship between low pay and the extent of unemployment and labour market disadvantage. As discussed in Chapter 7, in the ESRI Survey, information was gathered for those who completed a full personal questionnaire on the number of years respondents had spent in the labour force, the number of years spent in unemployment and in illness/disability, the number of different jobs they have had, and the number of spells of unemployment. In addition, the number of weeks spent unemployed in the last twelve months was also sought. This information is available for about 2,000 of the 2,800 employees in the sample. In Chapter 7 we saw that years spent unemployed (or in home duties) were positively associated with the probability of being low paid. Table 8.9 now presents some data for these employees on the average number of years spent unemployed, number of years spent ill/disabled, on career spells of unemployment and number of jobs, and of weeks of unemployment in the past year, comparing those below and not below the hourly earnings thresholds. Attention is confined to those who have been in the labour force for at least 5 years, in order to be able to assess experience over a significant period – thus the "young" low paid are not included here.

Compared with all employees, those below the two hourly low pay thresholds have clearly had more years of unemployment and more unemployment spells, and more years of illness, in their careers as well as more weeks of unemployment in the previous year. It is most informative to make such comparisons within age groups. The table shows for most age ranges a considerable difference between those above/below the higher threshold in the total number of years of unemployment and illness experienced, in the number of unemployment spells, and in weeks of unemployment in the last year. For those aged between 35 and 44, for

Table 8.9: *Average Number of Years Unemployed, Unemployment Spells, Jobs in Career and Weeks of Unemployment in Previous Year for Low Paid/Not Low Paid*

	Number of Years Unemployed in Career	*Number of Spells of Unemployment in Career*	*Number of Jobs in Career*	*Number of Weeks Unemployed in Previous Year*	*Number of Years Ill/disabled in Career*
All employees (left education 5 years)[a]	0.6	0.7	3.2	1.4	0.1
All below lower threshold	1.3	1.9	3.5	4.0	0.6
All below higher threshold	1.0	1.3	3.2	3.9	0.3
Age 25-34					
All below higher threshold	0.9	1.1	3.2	4.6	0.2
All above higher threshold	0.3	0.5	2.6	0.8	0
Age 35-44					
All below higher threshold	1.0	2.1	4.1	3.4	1.1
All above higher threshold	0.5	0.5	3.6	0.8	0.6
Age 45-54					
All below higher threshold	1.4	1.4	3.6	3.4	0.2
All above higher threshold	0.6	0.6	3.9	0.8	0
Age 55-64					
All below higher threshold	1.3	0.7	3.0	4.1	0
All above higher threshold	0.6	0.7	3.5	0.6	0.5

a Those responding to full questionnaire only.

example, on average those below the higher threshold had spent 1 year unemployed in their career compared with 6 months for those below the threshold, had 1 compared with 0.6 years ill, had 2 compared with 0.5 spells of unemployment during their career, and had 3.4 compared with 0.8 weeks of unemployment in the previous year. It is interesting that there is much less difference between the two groups in number of jobs held.

Using information obtained on the full personal questionnaires, we can also look at the extent to which the low paid are less likely than other employees to receive fringe benefits. Table 8.10 shows the percentage of full-time employees who report receiving a variety of such benefits, and the corresponding figures for those below the two hourly earnings thresholds.

Attention is confined to full-time employees because few part-timers are in receipt of these benefits. Those below the thresholds are much less likely than those above to be receiving free or subsidised VHI, free or subsidised company products, a subsidised (non-mortgage) loan, share options or shares, or free or subsidised life assurance. There is little difference between the two groups in the percentage receiving free or subsidised meals/luncheon vouchers, or payment of educational fees (other than those related to one's job). Overall, 20 per cent of all employees but only 14 per cent of those below the higher threshold are in receipt of one of these fringe benefits. (This pattern is not produced by the difference in age profile between the low paid and other earners: as Table 8.10 also shows, the contrast persists if only those aged 25 or over are examined.) Respondents were also asked to estimate the value of the subsidy received in the last twelve months. The average value for recipients was rather similar, about £300-£400 pounds, for each of the types of benefit covered.

Table 8.10: *Receipt of Fringe Benefits for Full-time Employees*

				Age 25+	
Per cent Receiving	*All Employees*[a]	*Below Lower Threshold*	*Below Higher Threshold*	*All*	*Below Upper Threshold*
Free/subsidised VHI	4.2	1.3	1.2	4.7	1.9
Free/subsidised company products	4.6	1.5	2.5	5.2	2.1
Subsidised loan (other than mortgage)	1.3	0	0	1.6	0
Share options or shares	1.4	0	0	1.6	0
Educational fees	0.7	0.6	0.9	0.7	0.7
Free/subsidised life assurance	1.1	0	0.2	1.3	0.3
Free/subsidised meals or luncheon vouchers	10.7	11.8	9.9	10.4	12.3
Any of above	19.9	14.9	13.8	20.7	15.8

[a] Responding to full questionnaire.

The relationship between low pay and pension entitlements can also be analysed using data for those completing full questionnaires. Employees were asked whether they would be entitled to a pension from their work, and if so how the amount to be received was determined. Table 8.11 shows that those employees currently earning less than £2.50 or £3.25 per hour are very much less likely to have such a pension entitlement than other employees. Only 7 per cent of those below the lower threshold and 10 per cent of those below the higher figure say they will be entitled to a pension from their employer, compared with fully 65 per cent of those earning above the higher threshold. This is not simply due to the significant proportion of part-time employees among the low-paid: the table shows that the contrast is only a little less stark for full-time employees only. Nor is it attributable to age differences: within age ranges among full-time employees there is still a very wide gap between those above and below the higher threshold in the percentage having a pension entitlement. For example, in the age range 35-44 only 13 per cent of those earning less than £3.25 per hour compared with 71 per cent of those earning above that figure report entitlement.

It is also interesting to look at the differences between men and women in the likelihood of having a private pension entitlement. Overall, 59 per cent of male employees compared with only 39 per cent of female employees report such an entitlement. This is partly because part-time employees, most of whom are women, are less likely than full-timers to have pensions. (Only 29 per cent of those working less than 30 hours per week, compared with 55 per cent of those working 30 hours or more, report pension entitlements.) However, a substantial gap remains between male and female full-time employees, with 60 per cent of the former but only 44 per cent of the latter having a private pension. This gap is most pronounced within certain age groups, in particular the 35-44 one, presumably reflecting the broken labour force experience of many women in the middle age ranges.

The survey also sought information from respondents as to whether the pension level to be received on retirement was related to final pay or flat rate, and whether it would be adjusted after retirement in line with pay in the job or inflation, or fixed in nominal terms. Most of those reporting a pension entitlement said that the level to be paid was linked to final pay and would be uprated after retirement. There was no consistent difference between those above and below the hourly thresholds in the size of the relatively small proportion (about 15 per cent overall) who said they would be receiving a flat rate rather than an amount related to final pay, nor in the percentage (also about 15 per cent overall) who said the amount would not be uprated after retirement.

Table 8.11: *Pension Entitlements of Employees*

	Percentage Entitled to Pension from Employer
All Employees [a]	51.4
Below lower hourly threshold	6.7
Below higher hourly threshold	10.3
Above higher hourly threshold	65.3
Full-time Employees Only:	
All	54.5
Below lower threshold	8.4
Below higher threshold	12.6
Above higher threshold	67.2
Age < 25	
Below higher threshold	6.1
Above higher threshold	38.4
Age 25-34	
Below higher threshold	20.0
Above higher threshold	69.7
Age 35-44	
Below higher threshold	12.7
Above higher threshold	71.4
Age 45-54	
Below higher threshold	22.5
Above higher threshold	74.5
Age 55-64	
Below higher threshold	24.4
Above higher threshold	74.1

[a] All those responding to full questionnaire.

For those currently in low-paid employment, then, the probability of having a pension from their employer on retirement is much lower than for other earners. They are also quite likely to experience spells out of employment through unemployment or illness, which may affect their entitlement to social insurance contributory old age pension on

retirement, and would certainly hinder the accumulation of savings and other assets pre-retirement. Low pay when employed and low income when retired are therefore likely to be highly correlated at an individual level. In tracing through the implications for family or household living standards in retirement, it would be necessary to take into account the income of other family/household members in a manner analogous to the analysis of the currently low paid in Sections 8.3 and 8.4.

Clearly, the relationship over time between low pay, labour market histories, and pension outcomes merits in-depth analysis. The analysis here has served to highlight the importance of a dynamic perspective on low pay and poverty, to complement the picture of the relationship in a static setting.

8.6 *Conclusions*

The ESRI survey data has shown that the degree of overlap between low pay and poverty is limited, in that only a minority of employees below low pay thresholds are in households falling below relative income poverty lines, and only a small proportion of households below these lines contain a low-paid employee. This finding corresponds with the pattern shown in similar studies for other countries, and is in that sense not particularly surprising. It does not appear to be the commonly-held perception of the relationship, though, with a stronger and more direct one often apparently taken for granted.

This is not to be taken as meaning either that low pay does not produce poverty or that those on low pay levels are invariably "well-off", because they are in households with income from other sources. Some households are reliant on income from employment which is "low" relative to their needs, and are below or not significantly above the 60 per cent income poverty line, though these contain a minority of low paid employees. The nature of the household in which the employee lives, and the role which their earnings play in household income, are crucial in determining whether low pay is directly linked to household income poverty. The relationship between low pay and poverty is not just a static one, however. Low pay can be seen to be associated with other aspects of labour market disadvantage over one's career, including experience of unemployment, and relatively few of the low paid have entitlements to pensions from their employers. Thus labour market disadvantage, manifesting itself through low pay at particular points and unemployment at others, and with major implications from income in retirement, is a fundamental cause of poverty.

Chapter 9

LOW PAY, MINIMUM WAGES AND POVERTY

9.1 *Introduction*

The possible responses of policy to concerns about low pay and its effects take many forms, but intervention in the labour market to set wage minima is the most direct and probably also the most hotly debated. In this chapter we look first at the wage minima-setting machinery currently in operation in Ireland in the form of the Joint Labour Committee (JLC) system. Having described this system, the 1987 sample data is used to assess its effectiveness, in a necessarily tentative fashion. The size of the sample was not designed to allow the very detailed disaggregation of employees into particular industries and occupations covered by JLCs, which would be required for a comprehensive assessment. It is none the less valuable to see the extent to which the low paid in the sample appear to be outside the coverage of the JLC system rather than in the limited number of occupations which are covered.

Rather than setting wage minima for particular sectors, a National Minimum Wage covering all occupations and industries and setting uniform minima across them has recently been advocated by, among others, the Irish Congress of Trade Unions. The arguments for and against such a national minimum have been widely rehearsed elsewhere and will not be repeated here. In particular, the key issue of the likely impact on the level of employment and unemployment, which is central to any evaluation of the impact of a NMW, is beyond the scope of this study. It is useful, however, to employ the available data to quantify the impact which a NMW would have in a static setting, with no changes in behaviour, in particular no change in employment. This allows the scale of the wage increases which would be involved to be quantified, and the sensitivity to the level and design of the NMW to be seen. Given the data on families and households as well as individual employees available here, it also allows the "first round effects" of a NMW on poverty at a family or household level to be seen. Such first-round effects do not reflect the outcome one would actually predict: they do provide a firm basis not currently available from which an assessment can depart, taking into account possible employment and other effects.

Section 9.2 describes the JLC system. Section 9.3 looks at the occupations and industries where the low paid in the ESRI survey are working, using the most detailed disaggregation available, and relates the findings to the coverage of the JLC system. Section 9.4 looks at the National Minimum Wage, and Section 9.5 summarises the main findings.

9.2 *The JLC System*

Joint Labour Committees consist of trade union and employer nominees together with independent members nominated by the Minister for Labour, and each committee covers a particular occupation/sector as specified in its terms of reference. Each JLC sets legally binding wages and conditions of employment for the relevant workers. In 1987, JLCs covered the occupations/sectors listed in Table 9.1.

Table 9.1: *Joint Labour Committees, 1987*

Joint Labour Committee	*Number of Premises Registered*	*Estimated Employees Covered*
Aerated waters	42	460
Agriculture	4,813	21,000[a]
Brush and broom	6	48
Catering	1,319	2,149
Contract cleaning	24	1,994
Hairdressing (Cork)	120	230
Hairdressing (Dublin)	571	723
Handkerchief	12	119
Hotels	742	3,805
Law clerks	1,198	3,337
Provender Milling	68	36
Shirtmaking	34	696
Tailoring	60	1,291
Women's Clothing and Millinery	135	2,491
Total	9,114	38,379

Source: Dept. of Labour *Annual Report* 1987.

Note: Employee coverage relates only to employees in premises inspected during 1987, except (a) which is based on the Labour Force Survey

The table also shows the estimated number of employees covered by the system in 1987 – the year to which our sample data also apply. About 38,000 employees were then thought to be covered, though this figure needs to be carefully interpreted. Over half that total – 21,000 – were agricultural labourers, and this figure represents the number in that occupation in the population as estimated from the 1987 Labour Force Survey. For the occupations/sectors covered by other JLCs, though, the coverage figures apply only to employees in premises inspected by the Inspectorate during the year. Of these, the catering, cleaning, hairdressing, law clerks, hotels and women's clothing JLCs cover substantial numbers, of 2,000-4,000 employees. It is worth noting that some JLCs cover not just specific occupations/sectors, but apply only to particular geographical areas – the catering JLC sets minima which apply only outside Dublin, the hotels' one applies only outside Cork and Dublin, the contract cleaning JLC covers only Dublin, and the hairdressing JLCs cover Dublin and Cork only.

Most JLCs do not set a single minimum, but rather a set of minima varying with experience and level of skill/responsibility. The level of minimum payment specified also varies considerably across JLCs. For example, the agricultural workers' minimum weekly rate in 1990 was set at £121.61 for those aged 19 or over, falling in stages to only £66.89 for those aged 15. For shirtmakers, the minimum was £126.85 per week for those in the highest class of "cutter" falling to £107.22 for those with the lowest skill level and to as little as £67.55 for some learners. There is therefore no "minimum wage" implied across occupations/sectors by the JLC system, even if apprentices and those aged under, say, 18 are excluded from consideration.

9.3 *Low Pay by Occupation/Sector in the ESRI Survey*

We begin analysis of the ESRI survey data in this context by moving from the broad level of aggregation employed in earlier chapters to the most detailed categorisation available for the survey. This is the three-digit classification of occupations, and the similar schema for categorising industries, employed by the CSO for coding the Census of Population, etc., (see *Census of Population, 1986: Classification of Occupations*, and *Census of Population 1986: Classification of Industries*, both produced by the CSO).

To identify particular occupations where low pay is prevalent in the survey, we concentrate on the lower of the two weekly earnings thresholds employed in earlier chapters, viz., £100 per week. This threshold is a margin below the minima set by JLCs for adult fully-trained employees in 1987, and thus serves to identify individuals who – even taking imprecise survey responses into account – appear to be below those minima.

Focusing on full-time employees – taken to be those working 30 hours per week or more – we saw earlier that about 12 per cent of full-time employees in the sample earned less than £100 per week. Table 9.2 shows the occupations where these "low-paid" full-time employees were to be found. Only those occupational categories containing at least 10 such individuals in the sample are distinguished, the remainder of the low paid being under "other", because categories with smaller numbers could be misleading – the occupations distinguished contain 77 per cent of all the individuals below the threshold.

Table 9.2: *Occupations of Full-Time Employees Below £100 Per Week, ESRI Sample 1987*

Occupation	*Percentage of Employees Below £100*	*Percentage of All Full-time Employees*
	Per cent	
Agricultural labourers	2.2	0.7
Electricians/fitters	1.9	1.5
Motor mechanics	1.9	1.3
Other mechanics	2.3	2.8
Carpenters	1.9	1.2
Sewers/machinists	3.7	1.2
Meat canners, etc.	1.2	0.7
Packers and bottlers	2.7	0.9
Labourers and unskilled workers (not elsewhere)	6.4	4.6
Typists/keypunch operators	2.7	2.6
Bookkeepers/cashiers	3.3	3.6
Warehouse clerks	1.3	1.8
Clerical workers	5.9	5.8
Shop assistants	20.2	4.9
Bar attendants	3.3	0.8
Waiters, etc.	1.6	0.9
Chefs/cooks	2.3	0.9
Domestic servants	4.2	1.1
Cleaners	2.1	0.6
Hairdressers	6.0	0.9
Other	32.9	61.2
All	100.0	100.0

It is difficult to be precise about the extent to which some of these occupations are covered by JLCs, but certainly a number of categories can be identified which are not covered. The most important of these is by far the largest single occupational category for the low paid – shop assistant. This category contains 20 per cent of all those below the £100 weekly threshold, and was not covered then by the JLC system. Other categories which are less important but also do not appear to be covered include motor mechanics, labourers, typists and keypunch operators, bookkeepers/cashiers and other clerical workers, and domestic servants.

Certain occupational categories *do* appear to be covered, at least in part, by JLCs, and yet have significant numbers in the sample earning less than £100 per week. Agricultural workers are covered by their own JLC, and most sewers/machinists would probably be covered by the Shirtmaking, Tailoring or Women's Clothing JLCs. Waiters and chefs/cooks, and perhaps some bar attendants, would be covered by the Catering and Hotels JLCs, cleaners working for contract cleaning companies by the Contract Cleaning JLC, and hairdressers by two separate JLCs. However, as already noted, some of these JLCs, have limited geographical coverage – the hairdressing JLCs cover only Dublin and Cork, Contract Cleaning covers only Dublin, Catering covers only *outside* Dublin, and Hotels only outside Dublin and Cork. Other occupations such as packers, bottlers and meat canners would be covered only if in particular sectors/industries – by the "Aerated Waters and Wholesale Bottling" and "Provender Milling" JLCs.

Taking all the employees in these occupations, who would not in fact all be covered by a JLC for the reasons mentioned, they account for about 20 per cent of all the full-time employees below £100 per week, as seen from Table 9.2. Given the limited geographical/sectoral coverage of some JLCs, it is difficult in many cases to be sure whether the low-paid individuals in these occupations in the sample are actually covered by JLC minima. More crucially, though, as already made clear, JLCs do not set a single minimum for a particular occupation/sector in general, a range of minima depending on age and experience are instead specified. It is thus essential to look at the age of the low paid individuals in the various occupations. This is done for all the occupations containing a significant number of low paid individuals – whether covered by a JLC or not – in Table 9.3.

Table 9.3: *Age Breakdown of Full-Time Employees Below £100 Per Week by Occupation*

Occupation	*Age*		
	Under 22	*22+*	*All*
		Per cent	
Agricultural labourers	44	56	100
Electricians/fitters	100	0	100
Motor mechanics	67	33	100
Other mechanics	57	43	100
Carpenters	100	0	100
Sewers/machinists	66	34	100
Meat canners	100	0	100
Packers and bottlers	28	72	100
Labourers and other unskilled workers	39	61	100
Typists/keypunch operators	70	30	100
Bookkeepers, cashiers	57	43	100
Warehouse clerks	40	60	100
Clerical workers	61	39	100
Shop assistants	49	51	100
Waiters, etc.	61	39	100
Chefs/cooks	12	88	100
Domestic servants	10	90	100
Cleaners	0	100	100
Hairdressers	95	5	100

Focusing again on the occupations which are at least partly covered by JLC regulation, we see that the low paid in some occupations are almost all young. In the case of hairdressing, only 5 per cent are aged over 21, while only 33 per cent of sewers/machinists are above that age. However, there are a significant number aged over 21 in the case of agricultural workers, waiters, chefs and cooks, and especially cleaners – all the low-paid cleaners are in fact aged over 21.

It must be emphasised that the numbers in the sample in each occupation below the earnings threshold is small, and breaking these down by age is straining the reliability of the numbers involved. However, it does appear that small numbers of employees in certain occupations at

least partly covered by JLCs are below £100 per week and are *not* aged 21 or under. This need not arise because of actual breaches of JLC minima in some instances, given the partial geographic coverage of the catering and hotels JLCs for example. Even for agricultural workers, where the occupational category as a whole is covered for the entire country, it is possible that some payment in kind may accompany cash wages in some instances – the JLC regulations provide for such benefits to be set off, at specified rates, in lieu of payment in cash. Thus, it is difficult on the basis of household sample data of the type available to identify specific cases where JLC regulations are definitely being breached.

What the data do allow, though, is an analysis of the concentration of the low paid in particular occupations/sectors, and the extent to which these are covered by existing JLCs is an important factor in assessing policy options. We can see from Table 9.2, for example, that 20 per cent of full-time employees below £100 per week are shop assistants, an occupation not covered by a JLC at the time of the survey. We can further see from Table 9.3 that these are by no means all very young – over half are aged over 21.

The clerical occupations – typists/keyboard operators, bookkeepers/cashiers, and clerical workers – account in total for 12 per cent of the full-time employees earning below £100 per week, and again will not be covered by existing JLCs. Table 9.3 shows that a high proportion of the individuals involved are in the 16-21 age range – about 60-70 per cent – and again this would have to be taken into account in formulating a policy response. Analysis of the industrial sectors in which these low-paid clerical workers are employed shows relatively heavy concentrations in retailing, public administration, insurance and professional service industries.

The residual category "labourers and other unskilled workers" is also unlikely to be covered by existing JLC minima, and contains 6 per cent of the full-time employees below £100 per week. A majority of these are working in production or building industries, and they are *not* predominantly young – 60 per cent are aged over 21. Likewise, domestic servants – accounting for 4 per cent of the low paid – are mostly aged over 21.

Even if all the occupations which are at least partly covered by JLCs are excluded, then, up to 80 per cent of the full-time employees in the sample earning less than £100 per week worked in occupations *not* covered. The survey data suggest that if an extension of the coverage of the JLC system were contemplated, areas which merit particular attention include shop assistants and typists/clerical workers. A wider geographical coverage for some existing JLCs, notably hairdressing and cleaning, might also be worth consideration. In fact, a new JLC for the Retail, Grocery and Allied Trades

has recently been established, since May 1992, covering one of the most important gaps identified by this analysis.

The relatively small number of part-timers in the sample were also analysed by occupation and hourly pay, and an attempt was made to relate these to the coverage of the JLC system: however the numbers involved did not permit any meaningful and reliable results to be derived.

9.4 *A National Minimum Wage*

A National Minimum Wage (NMW) has been advocated by, among others, the Irish Congress of Trade Unions (see McMahon, 1990) and has been the subject of heated debate. Such a debate is also continuing in Britain, which has for many years had a limited system of wage setting through Wages Councils similar to the Irish JLC system. The abolition of these Wages Councils has just been announced by the UK government, while the British Labour Party is now committed to introducing a full National Minimum Wage. In the USA, the focus for debate has been not the introduction of a NMW – one has been in operation for many years – but uprating that minimum over time. The minimum wage issue has also been brought to the fore in Europe by suggestions that it form an element in EC social policy.[20]

The arguments for and against a minimum wage have been extensively rehearsed in Ireland and elsewhere. The central argument against such a policy is that it introduces rigidity in the labour market and reduces employment levels, damaging the employment prospects of those it is intended to help. A great deal of research on the employment effects of the minimum wage in the US has been carried out, and more recently there are also in-depth studies for other countries such as Britain, France and The Netherlands. (See, for example, the survey by Brown, Gilroy and Kohen (1982) and Geary and McCarthy (1990), recent studies by Katz and Kruger (1992) Card (1992a,b) and Neumark and Washer (1992), and the studies by van Soest (1989), Bazen (1990), Bazen and Martin (1991)). No such studies have been carried out using Irish data, so it would be necessary to base any predictions of the employment effects of a NMW here on results from elsewhere. This, and the fact that available studies for other countries vary considerably in the effects they find, makes such prediction a particularly uncertain exercise which will not be attempted here.

20. The Community Charter of the Fundamental Social Rights of Workers (1989) stipulates that "all employment shall be fairly remunerated" (Article 5). A later Commission Opinion (SEC(91) 2116) calls on member states to ensure the right to an equitable wage is respected, by means of contractual and/or legislative measures: the role of a minimum wage versus other approaches is not addressed.

With the data available here, though, it *is* of value to analyse the first-round effects of a NMW on pay and poverty – that is, where the "gains" would accrue if there were no change in employment levels or other aspects of behaviour. An exercise of this type aims to provide a point of departure for a comprehensive assessment which would take employment and other effects into account: it shows, in effect, what the *maximum* impact on poverty could be, if there were no disemployment effects. Two such exercises have recently been carried out for the UK, looking at the first-round effects of the introduction of a NMW on family incomes (Johnson and Stark 1991, Sutherland 1991). These focus on the distributional effects of a NMW, assuming no change in employment levels, etc., and quantify the gains accruing to families/households of different types and at different points in the income distribution. The results show that the gains from a NMW in the British case are largest in the middle of the income distribution. The gainers are mostly married women and young people. Sutherland's results show bottom income groups gaining more than do Johnson and Stark's, and there is also some difference in emphasis in the conclusions drawn for policy. Johnson and Stark conclude 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",[21] while Sutherland states that "the pattern of gains in terms of family incomes demonstrates that there is a role for a minimum wage in the relief and prevention of family poverty".[22] Both emphasise the positive impact of a minimum wage on the position of women, particularly married women.

These UK studies are based on full tax-benefit micro-models. Such models allow the impact of a change in gross earnings on income tax and social security contributions payable, and on (means-tested) social security transfers received, to be calculated for each tax unit affected by the simulation. A full simulation of this type is not possible for Ireland at this stage. A tax-benefit model of this type currently under construction by T. Callan at the ESRI is not yet complete.[23] When that model is available, a comprehensive simulation of the first-round distributional effects of a NMW will be possible. Here a more limited but still informative exercise is reported.

21. Johnson and Stark (1991) p. 93.

22. Sutherland (1991) p. 8.

23. The construction of this model and its use are described in Callan (1991), which also presents the results of a range of analyses using the tax elements of the model. The social welfare components are currently being incorporated in the model, and when complete it will provide the ideal basis for the full simulation of the first-round effects of a NMW.

This exercise concentrates on the impact of a NMW on earnings, and does not take into account the impact of increased earnings on social welfare transfers as a result of the operation of means tests. Most importantly, then, losses in Unemployment Assistance produced by an increase in spouse's earnings will not be taken into account, nor will the impact of increased family earnings on Family Income Supplement received. Further, though income tax and PRSI are taken into account in measuring the impact on net earnings, the income tax liable as a result of the increase in gross earnings is estimated simply on the basis of the tax exemption limits and the standard tax rate, rather than comprehensively modelled using the income of the tax unit. Despite these limitations, the exercise is informative about the general shape of the distributional effects of a NMW, and provides an upper bound for the likely impact on households at low incomes.

A NMW could be formulated in a variety of ways, based on hourly or weekly wages and with/without different minima for different ages. The most commonly-discussed formulation in the Irish context has been a weekly minimum, presumably applying to full-time employees. For example, the Labour party advocated in 1991 a NMW of £140 per week, which would be very close to the upper weekly earnings threshold of £130 per week in 1987 terms used in this study. It would seem reasonable to have lower minima for younger employees, a common feature elsewhere, perhaps along the following lines:

age 20	:	£110
age 19	:	£100
age 18	:	£90
age 17 or under	:	£65

Such a weekly minimum wage could hardly cover part-time workers however, and one formulated in terms of hourly rather than weekly income would also appear more appropriate to the objective of "fairness" or avoidance of exploitation in pay rates. Thus, we will use the hourly equivalents of these weekly amounts (based on a 40 hour week) in "simulating" a NMW and apply it to all employees, whether full-time or part-time. A weekly minimum applied to full-timers only is then briefly discussed. It should be noted though that, relative to mean or median earnings, this level is higher than that in force in many of the countries which actually have a NMW.[24]

24. A figure of £130 per week, as was seen in Chapter 4, represents about two-thirds of median earnings for full-time adult males in the 1987 sample. Minimum wages in operation in other countries are more typically set at up to about 55 per cent of this median.

The minima applied are therefore £3.25 per hour for those aged 21 or over, £2.75 for those aged 20, £2.50 for 19 year olds, etc. The gross earnings increase implied by the NMW for each employee below the minimum is simply the difference between gross hourly pay and the minimum for his/her age, multiplied by the number of hours worked per week. It is worth looking first at the impact on labour costs. In aggregate, these gross earnings increases would amount to about 4.1 per cent of the existing wage bill for all employers, and in addition, employers' PRSI contributions would be payable on the increases. The aggregate increase would form a higher proportion of the current wage bill in those industrial sectors where the low paid are concentrated and/or the wage "gap" between actual wages and the minimum is greatest. As Table 9.4 shows, the aggregate increase in wages would form a particularly high proportion of the current wage bill in agriculture, retailing, personal services and "other", reaching 24 per cent in the personal services sector. The increase would of course represent a greater percentage of labour costs on the employees involved. The additional cost would represent about 35 per cent of current gross wages bill of the employees affected.

Table 9.4: *Aggregate Increase in Wages from Hourly NMW Relative to the Wage Bill, by Industrial Sector*

	Increase in Gross Wages as % of Wage Bill
Agriculture	15.4
Building and construction	6.1
Other production	2.4
Wholesale	4.6
Retail	14.4
Insurance, etc.	0.9
Transport, etc.	1.9
Professional services	4.7
Teaching	1.6
Health	1.9
Public administration	1.4
Personal services	24.1
Other	4.9
All	4.1

From the point of view of the employee, it is the increase in take-home pay rather than in gross earnings which is relevant. Income tax and employees' PRSI contributions must therefore be deducted. Tax is estimated here simply by applying the standard rate (in force in 1987) to these additional earnings (above the exemption threshold). This will understate the liability of those who would pay tax at the higher rates. This will not be of relevance to single people, but may be for a married person whose spouse is at work. The impact on take-home pay is therefore overstated for some families. Since the effects of higher take-home pay on social welfare benefits are not taken into account, the impact on net incomes of families receiving means-tested benefits will also be overstated.

We look first at the extent to which the gains from the NMW – subject to the caveats mentioned – go to households below the relative poverty lines. About 25 per cent of all employees are affected by the NMW, as formulated. Only 9 per cent of these are in households below the 50 per cent relative poverty line, 20 per cent are in households below the 60 per cent line. Table 9.5 shows that about 22 per cent of the estimated total gains in take-home pay go to households below the 60 per cent line. The "gainers" who are in households below the lines gain only slightly more, on average, than those in households above the lines. The distribution of total gains is dominated by the location of the employees who gain, with variations in average gain not affecting the pattern very much.

Table 9.5: *Pattern of "Gains" from Hourly NMW, Categorised by Household Position* Vis-à-Vis *Relative Income Poverty Line*

Employees in Households	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per Week)*	*% of Total "Gains" Going to These Employees*
Below 40% line	2.4	23.5	2.9
Below 50% line	9.1	19.5	9.2
Below 60% line	19.9	20.6	21.5
Above 60% line	80.1	18.7	78.5
All	100.0	19.1	100.0

A similar breakdown for employees who gain from the NMW, categorised now by the disposable income decile of their household, is shown in Table 9.6.The average gain for those affected is relatively high in the bottom 2 deciles, not varying greatly over the remainder of the distribution. However, it is once again the distribution of the "gainers" which dominates, so that the top half of the income distribution, containing 72 per cent of the employees affected, receives 69 per cent of the total gains.

When "gainers" are categorised by their household's *equivalent* income decile, Table 9.7 shows that the lower deciles gain more. The average gain for employees affected is no longer much higher for the bottom deciles, but more of the gainers are in that part of the income distribution. The top half of the equivalent income distribution still contains 62 per cent of the gainers, though, and receives 56 per cent of total gains.

Table 9.6: *Pattern of "Gains" from Hourly NMW, Categorised by Household Disposable Income Decile*

Employees in Households in Decile	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per Week)*	*% of Total "Gains" Going to These Employees*
Bottom	1.1	39.6	2.3
2	3.3	31.1	5.4
3	3.0	18.8	3.0
4	11.2	19.0	11.1
5	9.1	19.2	9.2
6	12.5	20.8	13.6
7	10.8	19.1	10.8
8	14.3	16.5	12.3
9	16.6	17.8	15.5
Top	18.1	17.6	16.7

Table 9.7: *Pattern of "Gains" from Hourly NMW, Categorised by Household Equivalent Disposable Income Decile*

Employees in Households in Equivalent Decile	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per Week)*	*% of Total "Gains" Going to These Employees*
Bottom	3.4	23.0	4.1
2	9.6	17.6	8.8
3	7.5	22.7	9.0
4	5.9	23.9	7.4
5	11.7	23.2	14.2
6	14.2	19.3	14.3
7	14.5	19.1	14.6
8	16.1	16.4	13.8
9	11.8	15.5	9.7
Top	5.3	15.0	4.2

Using the same methodology, a weekly rather than hourly minimum wage was also "simulated" for purposes of comparison, since such a weekly minimum has been discussed in the Irish context. This simply applies the minimum of £130 per week to all those aged 21 or over and working 18 hours per week or more, with reduced weekly amounts for younger employees as already described. (Using a 30-hour cut-off would not greatly alter the results.) The full results corresponding to those in Tables 9.5-9.7 on the first-round distributional impact of such a weekly NMW for full-timers are given in Appendix 5, and are in fact very similar to the effects of the hourly NMW. About 22 per cent of employees are affected, the average net gain for these being slightly higher than with the hourly NMW (at £23 per week rather than £19). Almost the same percentages of gainers are in household's below the relative income poverty lines as in the case of the hourly minimum. A slightly higher percentage of the gains go to those below the 60 per cent relative line (23 per cent compared with 21.5 per cent), and the distribution of gains by income or equivalent income decile is little changed.

The estimated gains for individual employees/households may be overestimated here in certain cases because of the limited scope of the exercise, but the location of the "gainers" will not be significantly affected. Thus, the broad pattern shown by the results is likely to be a reasonably accurate reflection of where the first-round effects of a NMW would be concentrated. Most of the gains from a NMW will thus not go to households

towards the bottom of the income distribution/below relative poverty lines. Further, only a relatively small proportion of the households below relative income poverty lines will be assisted. Whether assessed in terms of overall target efficiency or effectiveness in helping poor households, then, a NMW does not appear likely to be particularly efficient or effective.

This arises primarily because most households below the relative poverty lines do not contain a low-paid employee, or indeed an employee.Most households containing employees have higher incomes than the groups which predominate at the bottom of the income distribution, namely those reliant on social welfare transfers and/or low self-employment income. The focus could however be narrowed to concentrate on what can be done to assist the minority of low-income households which *do* contain an employee. A minimum wage then has greater appeal in terms of effectiveness. About 20 per cent of households below the 60 per cent relative poverty line contain an employee, and 14 per cent are headed by an employee. The minimum wage as simulated benefits about half these households in all and lifts about a quarter of them above the 60 per cent line. The remainder of these households would not be helped, because the employee earns over the NMW but has a large enough family to bring the household below the poverty line. The target efficiency of the minimum wage remains poor – most of the gains go to households not below the poverty lines – but in terms of first-round effects it is more effective in assisting this specific group, the "working poor".

As an anti-poverty policy the NMW must be assessed not in isolation, then, but in comparison with other strategies which could be implemented to assist poor households which contain an employee. Still focusing on intervention at the level of wage-setting, an alternative is for collective agreements to attempt to favour the low paid. This has in fact been a feature of both the Programme for National Recovery and the Programme for Economic and Social Progress. The latter, for example, agreed pay increases in percentage terms, but where this would result in increases for full-time adult employees of less than a stated floor (e.g. £5 per week in the first year) the increase "could be adjusted to those levels by local negotiations and local agreement" (Appendix A, section 1). Experience elsewhere suggests that pay differentials tend to reassert themselves over time in such circumstances, however, and attempting to secure higher wages for the low paid in this way would be subject to the same low poverty reduction effectiveness as a minimum wage. It could also obviously have negative effects on employment.

Turning to social welfare strategies, targeting cash transfers to such households through means-tested programmes such as the Family Income

Supplement appears attractive but faces the major problem of low take-up (see Callan, Nolan *et al.*, 1989, Ch. 10). A high degree of concentration of resources on the target population is then achieved at the cost of a failure to reach many of the households who are deemed to require assistance. In addition, high effective marginal tax rates implicit in the scheme create significant poverty traps for recipients.

An alternative strategy to assist low-income families with children, including those relying on employment income, would be through increased universal cash transfers for children – Child Benefit. As discussed in Nolan and Farrell (1990) this has a number of potential advantages in terms of *effectiveness* in reaching such families and improving incentives (as well as in terms of horizontal equity between households with and without children). Once again much of the "gains" from such a policy would go to non-poor households, so purely from a poverty alleviation perspective it would not, however, represent a particularly *efficient* targeting of resources. A substantial increase in Child Benefit could be financed by making it taxable (see Callan, 1991). In that case, though, most of the gains for low-income employees above the exemption limits would be taxed away[25] (with Social Welfare recipients with children gaining and families paying tax at above the standard rate losing). A significant increase in "net" expenditure on Child Benefit would therefore be required if low-income employees paying income tax at the standard rate were to benefit.

Child additions to income tax exemption limits were introduced in 1987 and subsequently increased, in order to assist the "working poor" with children. These do remove significant numbers from the tax net, but obviously do nothing for those who remain in it. Those just above the exemption limits face particularly high marginal tax rates because of the operation of "marginal relief": raising the exemption thresholds means that more people face these higher rates (because there are more in the relevant part of the income distribution).

Neither FIS, Child Benefit nor child additions to the exemption limits assist those relying on low earnings but without children (who are, however, only a minority of the "working poor", as we have seen). Widening income tax bands/lowering the standard rate would benefit all low-income employees paying income tax, but would be expensive in terms of revenue forgone and would not, taken alone, target resources efficiently to those on low earned incomes.

25. The limited gains from such a strategy for low-income families with an employee are shown in Callan and Nolan (1992).

A comprehensive assessment of various strategies, in terms of their effectiveness and efficiency in helping the "working poor" and the low-income population generally, will not be attempted here: such an assessment will be possible using the tax-benefit model being developed using the 1987 ESRI sample as base (see Callan, 1991).[26]

The analysis here has served to show that a minimum wage alone, even if it lifted all the low-paid up to the minimum and had *no* disemployment effects, would not assist all those on low incomes relying on employment income, because many have earnings which would be above the minimum but have to support a large family. For this reason, it has been argued elsewhere that a minimum wage would have to be an element in a package of measures, including in particular enhanced benefits for children (see Atkinson 1989).[27]

Poverty alleviation is not the only objective towards which a minimum wage could be directed, though it is the one on which we have concentrated here. "Fairness" at the level of the individual worker, avoidance of exploitation, is another key element in the evolution of arguments for intervention in wage setting by the state, as discussed in Chapter 2. It is of particular relevance to the position of women in the labour market, since women make up a high proportion of the low paid and, as both the UK studies mentioned above have shown, much of the (first-round) gains of a NMW would go to women. The NMW exercises described here shows a similar concentration of gains among women: 55-60 per cent of "gainers" are women and they receive 55-64 per cent of total "gains" from the NMW, depending on whether the hourly or weekly formulation is employed. (A higher percentage of the gains from the weekly than hourly NMW go to women primarily because men work longer hours.) A NMW could thus be an effective tool in promoting the position of women in the labour market, abstracting from the impact on employment.

26. See also McMahon (1992) for a discussion of the various strategies which can be adopted to assist the low paid.

27. See Atkinson (1989) pp. 93-95 on the general type of strategy into which a minimum wage would fit coherently. Such a strategy would entail reaffirmation of the traditional goal of guaranteeing adequate income from work for all those able to work, with social security provided for those unable to work. An alternative strategy entails the provision of a basic income to everyone regardless of employment status, in which case a minimum wage would not be necessary.

No assessment of the benefits and costs of a NMW could abstract from employment effects, of course. The limited exercise described here represents a first analysis of the distributional pattern of the first-round effects of implementing a NMW in the Irish case. In addition to refining this analysis using a full tax-benefit modelling framework, research on the likely impact of a NMW on employment in an Irish setting is urgently required if the policy is to be properly evaluated. Such employment effects could be most serious for young workers and married women, and could significantly alter the distributional impact.

9.5 *Conclusions*

This chapter has focused on state intervention in setting wage minima as a response to low pay and poverty. The wage minima-setting machinery currently in operation in Ireland, in the form of the Joint Labour Committee system, was described. A disaggregation of employees in the 1987 ESRI sample by detailed occupation categories allowed a limited but useful analysis of the extent to which low paid workers were covered by the JLC system. While the sample size and differences in the categories used imposed constraints on the analysis, it did suggest that most low paid workers were in occupations/sectors *not* then covered by JLCs. One of the most important areas not covered by JLCs at the time of the survey, where a substantial number of low paid workers was found, was the retail sector, and a new JLC to cover this area was set up in 1992. Clerical workers, both typists/cashiers, etc., and those in general clerical work, also constituted a significant proportion of the low paid in the sample.

The first-round distributional effects of implementing a National Minimum Wage, abstracting from the crucial issue of the impact on employment levels, were also analysed using the sample data. The limited objective of such an exercise is to be emphasised: it simply aims to show where in the income distribution the *maximum* gains from a NMW, i.e., if there were *no* disemployment effects, would accrue. A full-scale simulation of the first-round effects on family net incomes using a tax-benefit micro-model was not possible at this stage. Instead, a more limited exercise looked at the "gains" in take-home pay, with tax liability estimated rather crudely, and not taking the impact on means-tested social welfare payments into account. However, the results indicated that it was the location throughout the distribution of the low-paid employees affected by the NMW which dominated the distributional pattern of first-round "gains", and this would probably not be substantially affected by the limitations of the exercise.

The NMW formulations examined applied to hourly or weekly earnings and involved a minimum of £3.25 per hour or £130 per week (in 1987 terms) for those aged 21 or over, with lower minima for younger workers. Such a NMW – which would be higher relative to median earnings than most of those operating elsewhere – would increase the aggregate wage bill for employers by about 4 per cent, with the increase being very much greater in certain sectors, notably personal services. The results showed that most of the employees gaining from the NMW were *not* living in households below the relative income poverty lines. About 22 per cent of the "gains" went to those in households below the 60 per cent relative poverty line. When households were ranked by equivalent disposable income deciles, the gains were greatest in the middle of the income distribution.

This arises primarily because most households below the relative income poverty lines do not contain an employee. A minimum wage will therefore not affect most of these households. The relatively small subset of poor households which do contain an employee pose particular problems for anti-poverty policy, however, and the first-round effects of a minimum wage would include gains for about half those households. Even abstracting from disemployment effects, though, a minimum wage would have to be complemented by improved benefits for families with children. Since most of the gains from a minimum wage would not go to households below the poverty lines, the policy is not attractive in terms of target efficiency in alleviating poverty. Other goals may also be involved, though, including improving the relative earnings of women. About 60 per cent of the first-round "gainers" from the NMW would be women.

Any assessment of the impact of a minimum wage would of course have to take the likely effects on employment levels into account. No research on this topic has been carried out for Ireland. Studies for other countries indicate that women and younger workers are the groups most likely to be adversely affected. The analysis of first-round distributional effects discussed here therefore urgently needs to be complemented by an examination of the scale and nature of such employment effects if the minimum wage is to be properly assessed. Similarly, tax and social welfare strategies to assist the "working poor", discussed here, need to be fully evaluated using the tax-benefit simulation model which is being developed based on the 1987 survey data.

Chapter 10

CONCLUSIONS AND POLICY IMPLICATIONS

10.1 *The Study*

This concluding chapter brings together the main findings of this study which has analysed the extent and nature of low pay in Ireland, and the relationship between low pay and poverty, using the data obtained in the 1987 ESRI Survey of Income Distribution, Poverty, and Usage of State Services. That survey, of a randomly-selected national sample of households, provided detailed information on about 2,800 employees. Compared with available information from external sources, this sample appeared to adequately represent employees in terms of such variables as age, sex, occupation, and industry, as well as average earnings. It represents a significant advance on previously available Irish data for the analysis of low pay, in terms of coverage and the potential for linking employee earnings to family and household living standards.

10.2 *The Extent of Low Pay*

The distribution of earnings among employees was examined, to put the position of the low paid in perspective. The bottom 10 per cent of full-time employees earned less than half the midpoint in the earnings distribution, while the top 10 per cent earned 180 per cent or more. The distribution of earnings among males was seen to be very similar to that found in Great Britain and Northern Ireland.

A number of different earnings thresholds were derived in measuring the extent of low pay, using approaches adopted in such studies elsewhere and in previous Irish research on low pay. The extent of low pay found was seen to be quite sensitive to the threshold employed. Since there was no firm basis for selecting a particular one, the analysis was carried out for two central thresholds – a higher one of £130 per week and a lower one of £100 per week, and corresponding hourly thresholds of £3.25 and £2.50 (based on a 40-hour working week) all in 1987 terms. (Note that £100 per week in 1987 terms corresponds to about £115 in 1992 prices, while £130 in 1987 corresponds to about £150 in 1992.) About 27 per cent of employees were earning less than £3.25 per hour and 14 per cent earned less than £2.50 per hour.

Part-time and full-time workers were distinguished and analysed separately, using two different cut-offs in terms of hours worked per week. Taking those working less than 30 hours per week as part-time, 89 per cent of the employees in the sample would be considered full-time workers. Of these, 26 per cent were below the £3.25 per hour threshold and 14 per cent were below the £2.50 figure. A slightly lower percentage of full-time employees were below the corresponding weekly wage thresholds, so some of those below the hourly figures were staying above the weekly cut-offs by working longer than 40 hours. Low pay among full-time employees appeared to be about as prevalent as in the UK, and more so than in some other EC countries such as Belgium, The Netherlands, France and Germany.

Of the 11 per cent of employees who work less than 30 hours per week, 36 per cent earned less than £3.25 per hour, and 22.5 per cent earned less than £2.50. Thus, a significantly higher percentage of part-time than full-time employees are low paid on an hourly basis.

An alternative hours cut-off was also applied focusing on those working under 18 hours per week – this being the cut-off employed in the social insurance system prior to the extension of entitlements of part-time workers in 1991. Only 4 per cent of employees in the ESRI sample usually worked less than 18 hours per week. Almost half of these part-timers earn less than £3.25 per hour, and 31 per cent earn less than £2.50. Thus this subset are more likely to be low paid on an hourly basis than the larger group working less than 30 hours.

10.3 *Characteristics of the Low Paid*

Among full-time employees below the hourly earnings thresholds, women are significantly over-represented – they make up one-third of all full-time employees but account for half of those below the thresholds. This is partly because low-paid full-timers are also predominantly young – almost two-thirds of those below the lower hourly threshold are aged under 25 – and a much higher proportion of full-time female employees (41 per cent) than males (18 per cent) are under 25. However, even among older full-time employees, women comprise only 25 per cent of all those aged 25 or over but 50 per cent of those earning under £2.50 per hour. Only 18 per cent of full-time employees below £2.50 per hour are men aged 25 or over.

Most low-paid part-time workers are women. About 88 per cent of employees working less than 30 hours per week and earning less than £3.25 per hour are women. This is primarily because 77 per cent of part-time employees are women, but the higher risk for women than men part-timers of earning less than £3.25 per hour also contributes. About 20 per

cent are women aged under 25, but about 60 per cent are women in the 25-54 age range.

Married men are consistently less likely than single men to be low paid, within age ranges. For women working full-time, there is no such difference between married and single in the probability of being low paid, except for the under 25s. A high proportion of low-paid part-time workers are married women; this simply reflects the fact that a high proportion of part-timers are married women, rather than a higher risk for married versus single part-timers.

Focusing on low-paid part-timers working under 18 hours a week, these are even more likely to be married women. Almost 80 per cent of all those working under 18 hours are women, most of whom are married and aged between 25 and 54. This becomes even more pronounced for those who earn less than the hourly earnings thresholds.

10.4 *Occupation and Industry of the Low Paid*

About 50 per cent of full-time employees below the hourly earnings thresholds are men, and these are heavily concentrated in the general "producers", etc., occupational group, reflecting the pattern for all male employees. Low-paid women are found in large numbers in clerical, service, and commerce/insurance/finance occupational groups. The percentage of low-paid women in service and commerce occupations is considerably in excess of the percentage of all women full-timers in those occupations, so that the *risk* of being low paid is also very high for those groups. For example, 16 per cent of *all* full-time employees below £2.50 per hour are women in the commerce, insurance and finance occupational group, and this means that over half of the full-time women in that group are below the threshold. Similarly, over 40 per cent of full-time women in service occupations are low paid in that sense. Although the risk of being low paid is much lower for females in clerical occupations – only 13 per cent earn less than £2.50 per hour – because it has such a large proportion of all women workers it also accounts for a significant number of low paid women.

Part-time workers earning less than £3.25 per hour are predominantly in service occupations. Half of all those working under 30 hours and earning less than that hourly figure are service workers, almost all of them women. Another quarter are in commerce, insurance and finance, and most of the rest are in clerical occupations. This is even more pronounced for those working under 18 hours per week.

Categorising employees by industrial sector rather than occupational group, full-time men below the hourly earnings thresholds are concentrated in the "other production" and retailing sectors, with some

also in agriculture, building and construction and personal services. Full-time women employees below the hourly thresholds are also heavily concentrated in "other production", retailing and personal services. In terms of risk, about three-quarters of the women working full-time in the retail or personal services sector earn less than the higher hourly earnings threshold of £3.25 per hour.

Part-time workers earning below £3.25 per hour, mostly women, are particularly heavily concentrated in retailing and personal services. About 32 per cent of all those working under 30 hours per week and earning less than that hourly rate are women working in personal services, while 27 per cent are women in retailing. While much less important, a significant proportion – 8 per cent – of such employees work in the health services. Once again, focusing on those earning under 18 hours leads to a greater concentration, with an even higher proportion of the low paid in retailing and personal services.

10.5 *The Determinants of Low Pay*

Detailed disaggregations of the low paid by characteristics such as age and sex, and by occupation and industry, are informative but have limitations in trying to disentangle the role of the various factors linked to low pay. A regression framework was therefore employed to analyse the relationship between such factors and earnings, and between them and the probability of being below the earnings thresholds. First, conventional earnings functions were estimated, and showed hourly earnings to be strongly related to age and educational attainments. Women were seen to earn less than men, and married men to earn more than single men, having controlled for age and education. Some industry and occupation variables also proved significant.

To focus directly on the implications for low pay, logit models were estimated using the same explanatory variables but with the dichotomous dependent variable set at 1 for the low paid and 0 for all other employees. Age and education were again of central importance but sex and marital status also had substantial effects. For example, whereas a single man aged 35 who had not reached Group or Intermediate Certificate was estimated to have a one-in-three chance of earning less than £3.50 per hour, a woman of the same age and education had a one-in-two chance. Higher levels of educational attainment dramatically reduced the predicted probability of being below the earnings thresholds. Part-time workers, those in particular industrial sectors, and those who had spent substantial periods in unemployment or home duties were also found to have a relatively high probability of being low paid, having controlled for other characteristics.

10.6 *Low Pay and Poverty*

Analysis of the survey data made clear that the degree of overlap between low pay and poverty is quite limited: only a minority of the employees below low pay thresholds – up to about one in five – are in households below relative income poverty lines. This corresponds with the pattern found in other countries, and arises primarily because most poor households do not contain an employee. The extent of overlap is not any greater when the narrower family/tax unit is used rather than the household in assessing poverty status. Most low paid employees are in households in the middle and upper parts of the equivalent income distribution. The main factor determining the position of low paid employees in the household income distribution is not the extent to which the earnings of that employee fall below the thresholds. Rather, it is the role they play in the household – in particular, whether there are other income earners in the household and how reliant it is on the low-paid employee's earnings, and whether there are children to support. Where the low paid employee is a married man and/or the household head, the probability that the household is below the poverty lines is increased considerably. Most of the households below relative income poverty lines headed by an employee contain children, (though less than half these household heads are in fact below the hourly earnings thresholds).

The relationship between low pay and poverty also needs to be seen in a dynamic perspective. Those currently in employment but below the earnings thresholds had substantially more experience of unemployment in the past than employees (in the same age group) above the thresholds, and were also much less likely to be entitled to a pension from their current employer on retirement. Low pay is thus to be seen as one aspect of more pervasive labour market disadvantage over time.

10.7 *Low Pay, Minimum Wages and Poverty*

State intervention to set wage minima is one possible response to low pay, and a national minimum wage has been advocated, and hotly debated, in the Irish context. Indeed the costs and benefits of minimum wages has been a perennial topic in policy discussion and academic debate internationally. Most of this debate focuses on the impact of the minimum wage on employment. There has been little or no research on this issue in the Irish context, and research elsewhere has produced rather varied results and does not provide a satisfactory basis on which to draw conclusions for Ireland. By identifying the sectors and occupations in which the low paid are concentrated, this study provides a starting-point for an assessment of the likely employment effects of a minimum wage – which would of course

depend in any case on the level and formulation adopted. In the present study, no such assessment was attempted but two aspects of the minimum wage debate were taken up. First, the operation of the current Joint Labour Committee system, setting wage minima for specific sectors/occupations, was examined. Second, the distributional pattern of *first-round* effects of a particular National Minimum Wage, *abstracting* from the impact on employment, was analysed. The object of this exercise is to see whether the hypothetical maximum "gains" from a minimum wage would largely go to the poor even if there was *no* impact on unemployment.

The data in the 1987 survey allowed the relationship between the areas where low pay was prevalent and the coverage of the Joint Labour Committee system to be explored. This involved disaggregating employees in the sample by detailed occupation categories. Both the sample size within such detailed categories, and the fact that they were frequently defined somewhat differently than the JLC occupations/sectors, were constraints. However, it did appear that most low-paid full-time employees in the sample – 80 per cent or more of those below £100 per week – were in occupations/sectors not then covered by existing JLC minimum wage regulations. (One extension, to cover retailing, was implemented in 1992.) The sample size meant that no strong conclusions could be reached about the effectiveness of JLCs in the very specific and often quite small occupations/sectors for which they currently specify minima.

One difficulty with attempting to deal with low pay by extension of the JLC system – apart from possible effects on employment – is that many of the low paid are not in occupations/sectors which could be easily distinguished and policed. For example, a significant number are labourers scattered across a variety of industrial sectors, or clerical workers/bookkeepers/clerks similarly spread across firms involved in many different activities. In such cases, establishing categories for which separate minima could be specified, and then effectively inspecting the implementation of such minima, would pose formidable challenges.

An alternative which has been widely canvassed of late is the introduction of a National Minimum Wage. Such a universal minimum, applying across occupations and sectors (though with scope for variation by age, experience, or even industry) would be much more transparent to both employers and employees. From that point of view it would mean that employees would be more likely to know their entitlements (though some might still not feel in a position to insist on receiving the minimum). This is not to say that enforcement would be easy – inspection across the entire sectoral range, involving very many small establishments, would clearly pose difficulties. It is important though to know what the distributional

effects, and impact on poverty, of an effective National Minimum Wage would be. Here a limited but informative exercise was carried out to see where the first-round "gains", abstracting from any effects on employment levels, would be felt: this serves to show that the "maximum" impact on poverty which a minimum wage could have is small, even if there were *no* impact on employment levels.

Two formulations of such a minimum were employed in the exercise, one applying hourly minima to all employees, the other entailing weekly minima for full-time employees only. These were set at £3.25 per hour/ £130 per week for those aged 21 or over, with lower minima for younger employees. The "gains" in terms of take-home pay were estimated for each employee, using simplifying assumptions about income tax and PRSI to be deducted and taking no account of the effects on means-tested social welfare transfers received by the family. The results showed that most of the first-round "gainers" were not in households below relative poverty lines/towards the bottom of the income distribution.

This arises primarily because most households towards the bottom of the income distribution do not contain an employee: social welfare recipients and the self-employed (including farmers) dominate. The relatively small sub-set of poor households which rely on income from employment pose particular problems for anti-poverty policy, however. The first-round effects of a minimum wage do include gains for about half those households, though for most of the "working poor" improved benefits for families with children would also be required. Objectives other than poverty alleviation may also be relevant in assessing a minimum wage, including equal pay: women would receive a large share of the first-round gains from a minimum wage.

The crucial objection raised to a National Minimum Wage is of course the possible impact on employment levels. An assessment of the likely effects on employment would require an intensive study of that topic, and research elsewhere has shown how complex an issue it is. The evidence generally suggests that minimum wages do reduce employment levels, but the estimates of the size of disemployment effects vary widely. To arrive at such estimates in the Irish context, it would be necessary to look in detail at the demand for labour across different industrial sectors, to estimate the likely responsiveness of that demand to the wage increases implied by imposition of a minimum wage, and to take into account the economy-wide impact on demand. Possible knock-on effects on wage demands through pressures to maintain differentials would also have to be taken into account.

To properly assess the likely impact of a National Minimum Wage, then, one would need to know much more about the way in which

different sectors of activity in the Irish economy actually operate – in particular the demand for labour and its responsiveness to wage increases, the responsiveness of demand for the product to prices, levels of profitability, and the scope for substitution of capital for labour. The present study accomplishes the essential first step, of identifying those sectors where the low paid are in fact concentrated, and on which such an analysis would therefore focus. While little research has been done on the nature of the key sectors involved, it is worth noting that the low-paid are predominantly in non-tradeable sectors. The extent to which these are currently making relatively high profits, or producing goods or services for which demand is relatively unresponsive to price increases, are the crucial elements in assessing the impact on unemployment of the wage increases which would be implied by a National Minimum Wage.

The present study has also served to highlight the need for greater clarity about the objectives which a minimum wage is intended to promote. Even if there were *no* negative effects on employment, most of the "gains" go to households in the middle of the income distribution. If the promotion of women's earnings or more general notions of "fairness" in the labour market, rather than simply poverty alleviation, underlie the case for a minimum wage, this needs to be made explicit and the implications for the evaluation of costs and benefits thought through.

More fundamentally, of course, an in-depth analysis of the likely impact of a minimum wage on employment levels is required before its merits can be assessed. As previous research on the 1987 survey (Callan, Nolan *et al.*, 1989) has shown, unemployment is the single most important cause of poverty in Ireland at present, and reducing unemployment would be the most direct and effective way to alleviate poverty. None the less the "working poor" should not be ignored, and not only for their own sake: measures which improved their financial situation could have the additional benefit of improving incentives to take up or stay in employment. The range of policy instruments available, other than direct intervention in wage-setting, include the income tax and PRSI systems, Child Benefit, and Family Income Supplement. Each faces particular problems, either in terms of effectiveness in reaching the target population, cost, or impact on marginal tax (including benefit withdrawal) rates creating or accentuating poverty traps. However, increasing expenditure on Child Benefit rather than social welfare child dependant allowances over time, as suggested by the Commission on Social Welfare, while costly, would assist most of the "working poor" and at the same time reduce unemployment traps.

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APPENDIX 1

Table A1.1: *Age/Sex Composition of Full-Time Employees in Sample*

Age Category	*Male*	*Female*	*All*
		Per cent	
Under 25	12.2	12.9	25.1
25 - 34	24.0	11.7	35.7
35 - 44	14.7	3.5	18.2
45 - 54	10.9	2.4	13.3
55 - 64	6.3	1.2	7.5
65 and over	0.1	0.1	0.2
Total	68.2	31.8	100

Table A1.2: *Age/Sex Composition of Part-Time Employees in Sample*

Age Category	*Male*	*Female*	*All*
		Per cent	
Under 25	3.4	13.0	16.4
25 - 34	6.4	23.5	29.9
35 - 44	5.2	16.8	21.9
45 - 54	4.0	12.1	16.1
55 - 64	3.1	7.1	10.1
65 and over	1.2	4.3	5.5
Total	23.3	76.7	100

Table A1.3: *Marital Status of Full-Time Versus Part-Time Employees: Percentage Married, by Age Group and Sex*

Age Category	*Percentage Married*			
	Full-Time Employees		*Part-Time Employees*	
	Male	*Female*	*Male*	*Female*
	Per cent			
Under 25	5.5	5.7	–	16.2
25 - 34	73.1	57.2	60.2	84.5
35 - 44	85.8	56.8	83.2	88.5
45 - 54	90.6	51.4	93.7	85.1
55 - 64	84.9	38.9	100.0	65.6
65 and over	80.4	45.9	100.0	11.7
Total	67.6	35.2	69.7	69.0

APPENDIX 2

Table A2.1: *Full-Time Employees Below Weekly Pay Thresholds, by Age and Sex*

Age Category	*Below "Lower" Threshold*			*Below "Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	29.7	37.9	67.6	26.9	33.6	60.5
25-34	6.6	8.4	15.0	10.7	11.5	22.3
35-44	5.2	2.6	7.8	4.6	3.0	7.6
45-54	2.0	6.7	8.7	2.2	4.2	6.4
55-64	–	0.5	0.5	1.4	1.0	2.4
65 and over	–	0.3	0.3	0.4	0.3	0.8
Total	43.5	56.4	100	46.2	53.6	100

Table A2.2: *Risk for Full-Time Employees of Being Below Weekly Earnings Thresholds, by Age and Sex*

Age Category	*% Below "Lower" Threshold*			*% Below "Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Under 25	28.9	35.0	32.0	50.5	59.7	55.2
25-34	3.2	8.6	5.0	10.2	22.6	14.3
35-44	4.2	8.9	5.1	7.2	19.9	9.6
45-54	2.2	33.7	7.8	4.7	40.5	11.1
55-64	–	5.2	0.8	5.1	19.1	7.4
65 and over	–	53.9	18.6	68.6	100.0	79.4
Total	7.6	21.2	11.9	15.6	38.8	22.9

APPENDIX 3

Table A3.1: *Employees by Occupational Group and Sex*

Occupational Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Farmers and Agricultural Workers	1.9	0.5	1.9	3.0	0.1
Producers etc.	23.4	4.4	27.8	37.0	11.9
Labourers and Unskilled Workers	4.3	0.2	4.5	6.8	0.7
Transport and Communication	7.4	1.2	8.7	11.8	3.4
Clerical	3.6	10.3	13.9	5.7	28.1
Commerce, Insurance and Finance	4.9	4.7	9.6	7.7	12.8
Service Workers	4.9	7.0	11.9	7.7	19.2
Professional and Technical	7.2	7.8	15.0	11.4	21.2
Other	5.7	1.0	6.7	9.0	2.7
Total	63.4	36.6	100.0	100.0	100.0

Table A3.2: *Full-Time Employees by Occupation and Sex*

Occupational Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Agricultural Workers	2.0	–	2.0	2.9	–
Producers, etc.	25.9	4.6	30.5	37.9	14.6
Labourers and Unskilled Workers	4.7	0.3	5.0	7.0	0.9
Transport and Communication	8.0	1.1	9.1	11.7	3.5
Clerical	3.9	10.5	14.4	5.7	33.0
Commerce, Insurance and Finance	5.4	3.9	9.3	7.9	12.1
Service Workers	5.0	4.8	9.8	7.4	15.2
Professional and Technical	7.0	5.6	12.5	10.2	17.5
Others	6.4	1.0	7.4	9.4	3.2
Total	68.2	31.8	100.0	100.0	100.0

Table A3.3: *Part-Time Employees by Occupation and Sex*

Occupational Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Agricultural Workers	1.2	0.5	1.7	5.1	0.6
Producers, etc.	3.7	2.6	6.4	15.9	3.4
Labourers and Unskilled Workers	0.8	–	0.8	3.2	–
Transport and Communication	2.9	1.8	4.7	12.5	2.3
Clerical	1.2	9.6	10.8	5.1	12.5
Commerce, Insurance and Finance	1.2	11.8	13.0	5.2	15.4
Service Workers	3.0	24.2	27.2	12.8	31.6
Professional and Technical	9.4	25.7	35.1	40.2	33.5
Others	–	0.4	0.4	–	0.5
Total	23.3	76.7	100.0	100.0	100.0

Table A3.4: *Employees by Industry and Sex*

Industrial Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Agriculture	1.6	0.2	1.8	2.6	0.4
Building and Construction	3.6	0.2	3.8	5.7	0.5
Other Production	23.0	7.5	30.5	36.3	20.5
Wholesale	1.8	0.5	2.3	2.8	1.4
Retail	5.3	5.1	10.4	8.4	13.8
Insurance etc.	2.5	2.4	4.9	4.0	6.6
Transport etc.	7.3	1.1	8.4	11.5	3.1
Professional Services	1.0	1.4	2.4	1.6	3.9
Teaching	2.9	4.3	7.2	4.5	11.8
Health	1.8	5.6	7.4	2.8	15.3
Public Administration	9.0	3.2	12.2	14.2	8.7
Personal Services	2.2	4.2	6.4	3.5	11.4
Other	1.4	0.9	2.3	2.2	2.5
Total	63.4	36.6	100.0	100.0	100.0

Table A3.5: *Full-Time Employees by Industry and Sex*

Industrial Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Agriculture	1.8	0.1	1.8	2.6	0.2
Building and Construction	4.0	0.2	4.3	5.9	0.7
Other Production	25.3	7.8	33.1	37.0	24.6
Wholesale	2.0	0.5	2.5	3.0	1.6
Retail	5.8	4.0	9.9	8.6	12.6
Insurance etc.	2.8	2.6	5.4	4.1	8.2
Transport etc.	8.0	1.1	9.1	11.7	3.6
Professional Services	1.1	1.4	2.6	1.6	4.5
Teaching	1.8	2.0	3.9	2.7	6.4
Health	1.9	5.3	7.2	2.8	16.7
Public Administration	10.0	3.2	13.2	14.7	10.0
Personal Services	2.3	3.0	5.3	3.3	9.4
Other	1.4	0.5	1.8	2.0	1.5
Total	68.2	31.8	100.0	100.0	100.0

Table A3.6: *Part-Time Employees by Industry and Sex*

Industrial Group	*Employees in Group as % of all Employees*			*% of Male/Female Employees in Group*	
	Male	*Female*	*All*	*Male*	*Female*
			Per cent		
Agriculture	0.8	0.9	1.7	3.5	1.1
Building and Construction	0.5	–	0.5	2.0	–
Other Production	3.6	5.5	9.1	15.3	7.2
Wholesale	–	0.5	0.5	–	0.7
Retail	1.4	14.0	15.4	6.2	18.2
Insurance etc.	0.5	1.2	1.7	2.2	1.6
Transport etc.	1.5	0.8	2.4	6.6	1.1
Professional Services	–	1.3	1.3	–	1.6
Teaching	10.6	23.3	33.9	45.6	30.4
Health	0.6	7.8	8.5	2.7	10.2
Public Administration	1.2	3.2	4.4	5.0	4.2
Personal Services	1.5	13.5	15.0	6.3	17.6
Other	1.0	4.7	5.7	4.4	6.1
Total	23.3	76.7	100.0	100.0	100.0

APPENDIX 4

Table A4.1: *Full-Time Employees Below Weekly Earnings Thresholds by Occupation and Sex*

Occupational Group	*% Below "Lower" Threshold*			*% Below "Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	2.7	–	2.7	3.6	–	3.6
Producers, etc.	18.1	8.9	25.5	19.0	10.5	29.5
Labourers and Unskilled Workers	6.0	0.6	6.4	5.6	0.6	6.2
Transport and Communication	4.6	1.2	6.1	5.7	1.2	6.9
Clerical	1.2	10.8	12.1	1.9	14.9	16.8
Commerce, Insurance and Finance	6.5	17.4	24.0	5.6	11.6	17.3
Service Workers	2.9	15.8	18.7	2.7	12.3	15.1
Professional and Technical	0.3	2.7	3.1	1.1	2.2	3.4
Other	0.1	0.5	1.5	1.0	0.2	1.3
Total	43.5	56.5	100.0	46.3	53.7	100.0

Table A4.2: *Risk for Full-Time Employees of Being Below Weekly Low-Pay Thresholds, by Occupation and Sex*

Occupational Group	*"Lower" Threshold*			*"Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agricultural Workers	16.3	–	16.3	41.8	–	41.8
Producers, etc.	8.3	19.0	9.9	16.8	52.1	22.2
Labourers and Unskilled Workers	15.0	19.4	15.3	27.0	46.4	28.1
Transport and Communication	6.9	15.4	8.0	16.4	24.8	17.4
Clerical	3.8	12.3	10.0	11.3	32.6	26.9
Commerce, Insurance and Finance	14.5	53.9	30.8	23.9	69.4	42.8
Service Workers	6.9	38.9	22.6	12.6	58.6	35.1
Professional and Technical	0.5	5.9	2.9	3.6	9.3	6.1
Other	1.8	5.5	2.3	3.7	5.5	4.0
Total	7.6	21.2	11.9	15.6	38.8	22.9

Table A4.3: *Full-Time Employees Below Weekly Earnings Thresholds by Industry and Sex*

Industrial Group	*Below "Lower" Threshold*			*Below "Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	2.2	0.6	2.8	2.8	0.3	3.1
Building and Construction	5.7	0.8	6.5	4.6	0.4	5.0
Other Production	11.5	8.5	20.0	15.5	13.1	28.6
Wholesale	1.2	1.0	2.1	2.1	0.7	2.8
Retail	10.8	16.3	27.1	8.8	12.6	21.4
Insurance etc.	0.2	1.2	1.4	0.4	1.8	2.3
Transport etc.	2.2	1.6	3.8	2.6	1.9	4.5
Professional Services	1.2	2.7	3.9	0.6	2.7	3.3
Teaching	1.3	2.1	3.4	1.0	1.9	2.9
Health	–	2.8	2.8	0.2	3.8	4.1
Public Administration	1.0	3.3	4.2	2.5	3.1	5.6
Personal Services	5.3	14.1	19.5	3.2	10.0	13.2
Other	0.9	1.6	2.5	1.9	1.2	3.1
Total	43.5	56.5	100.0	46.3	53.7	100.0

Table A4.4: *Risk for Full-Time Employees of Being Below Weekly Earnings Thresholds by Industry and Sex*

Industrial Group	*% Below "Lower" Threshold*			*% Below "Higher" Threshold*		
	Male	*Female*	*All*	*Male*	*Female*	*All*
			Per cent			
Agriculture	15.1	100.0	18.1	36.7	100.0	39.0
Building and Construction	16.9	40.6	18.1	26.3	40.6	27.1
Other Production	5.4	12.9	7.2	14.0	38.4	19.8
Wholesale	6.8	23.5	10.1	23.7	34.4	25.8
Retail	21.9	48.5	32.7	34.5	72.1	49.8
Insurance etc.	0.9	5.4	3.1	3.5	16.3	9.7
Transport etc.	3.3	16.9	5.0	7.5	37.9	11.3
Professional Services	12.2	22.6	18.0	12.2	43.9	29.9
Teaching	8.4	12.2	10.4	13.1	21.3	17.4
Health	–	6.3	4.6	2.9	16.6	12.9
Public Administration	1.1	12.3	3.8	5.7	22.3	9.7
Personal Services	27.8	56.4	44.0	32.4	77.0	57.7
Other	8.0	39.1	16.2	31.8	59.3	39.0
Total	7.6	21.2	11.9	15.6	38.8	22.9

APPENDIX 5

Table A5.1: *Aggregate Increase in Wages from Weekly NMW Relative to the Wage Bill, by Industrial Sector*

	Gap as % of Wage Bill
Agriculture	9.2
Building and Construction	5.1
Other Production	2.2
Wholesale	3.4
Retail	15.1
Insurance etc.	1.2
Transport etc.	1.8
Professional Services	5.5
Teaching	2.7
Health	2.9
Public Administration	1.7
Personal Services	25.0
Other	10.4
All	4.3

Table A5.2: *Pattern of "Gains" from Weekly NMW, Categorised by Household Position* Vis-à-Vis *Relative Income Poverty Line*

Employees in Households	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per week)*	*% of Total "Gains" Going to These Employees*
Below 40% line	2.1	41.7	3.9
Below 50% line	8.7	26.2	10.0
Below 60% line	19.9	26.2	23.0
Above 60% line	80.1	21.8	77.0
All	100	22.7	100

Table A5.3: *Pattern of "Gains" from Weekly NMW, Categorised by Household Disposable Income Decile*

Employees in Households in Decile	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per week)*	*% of Total "Gains" Going to These Employees*
Bottom	1.3	60.2	3.4
2	3.9	33.2	5.8
3	3.4	28.8	4.3
4	11.3	22.4	11.2
5	8.3	25.0	9.2
6	11.2	25.2	12.5
7	11.8	21.9	11.4
8	13.6	19.0	11.4
9	15.8	20.9	14.6
Top	19.4	19.1	16.3

Table A5.4: *Pattern of "Gains" from Weekly NMW, Categorised by Household Equivalent Disposable Income Decile*

Employees in Households in Equivalent Decile	*% of the "Gainers"*	*Average "Gain" for These Employees (£ per Week)*	*% of Total "Gains" Going to These Employees*
Bottom	3.3	32.7	4.8
2	8.9	23.0	9.0
3	8.3	26.8	9.9
4	6.8	24.8	7.5
5	11.3	26.3	13.1
6	15.4	20.2	13.7
7	14.3	20.3	12.8
8	14.8	22.3	14.5
9	11.3	19.5	9.7
Top	5.6	20.4	5.0

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