

**GENDER and PAY in the  
INFORMATION TECHNOLOGY  
and RETAIL SECTORS in  
NORTHERN IRELAND**

**by Dr. Tony Dignan**

**Economic Research and Evaluation**

**Equality House  
7 - 9 Shaftesbury Square  
Belfast  
BT2 7DP**

**Telephone : 028 90 500600**

**Fax : 028 90 248687**

**Textphone : 028 90 500589**

**Email :**

**information@equalityni.org**

**Web : www.equalityni.org**

**ISBN 1-903941-29-6**

**Commissioned by  
Equality Commission  
for Northern Ireland**

**Equality Commission**

**FOR NORTHERN IRELAND**

**Funded by  
European Union**



## Table of Contents

<b><u>1</u></b>	<b><u>Background</u></b> .....	<b>1</b>
<b><u>2</u></b>	<b><u>The Economy Wide Gender Pay Gap</u></b> .....	<b>5</b>
<b><u>3</u></b>	<b><u>The Retail and Wholesale Sector</u></b> .....	<b>25</b>
<b><u>4</u></b>	<b><u>The IT Sector</u></b> .....	<b>43</b>
<b><u>5</u></b>	<b><u>Conclusions and Recommendations</u></b> .....	<b>57</b>



# 1 Background

## Introduction

- 1.1 This is a report on a study of gender and pay in the Information Technology (IT) and Retail sectors in Northern Ireland. It has been prepared for the Equality Commission for Northern Ireland as part of the Commission's contribution to a trans-national research project funded by the European Commission. The other countries participating in the study are the Republic of Ireland, Finland and Sweden.
- 1.2 Entitled *Developing Sectoral Strategies to Address Gender Pay Gaps*, the trans-national study aims to explore the gender pay gap in certain sectors with a view to identifying strategies and actions to reduce this gap. This aim is in turn underpinned by the hypothesis that approaching the gender pay gap by concentrating on particular sectors has the potential to contribute substantially to achieving greater gender equality in employment.
- 1.3 The results of the research were presented and discussed at the International Conference on the Gender Pay Gap at Sectoral Level, on the 13-14 February 2003, at Dublin Castle.
- 1.4 This document is a summary version of the Northern Ireland report, which was submitted to the Equality Commission in December 2002. It has been prepared in order to present the main findings of the research in a form that is accessible to all those with an interest in policies to address the gender pay gap. The more detailed statistical analyses contained in the full report are available on the Equality Commission's web-site ([www.equalityni.org](http://www.equalityni.org)).

## Aim and Objectives of the Research

- 1.5 The specific objectives of the study addressed in this report are to:
  - Review and comment on the economy-wide evidence on the gender pay gap.
  - Assess the scope for developing Northern Ireland-specific recommendations on actions to reduce the pay gap.
- 1.6 In relation to the IT and Retail sectors, the objectives are to:
  - Quantify, decompose and analyse the gender pay gap as far as the data will permit.
  - Assess the extent to which the pay gap can be explained statistically by "objective" factors (e.g. qualifications) and the extent to which it is "unexplained".

- Analyse relative patterns/characteristics of human resource development practices, recruitment, promotion and mobility of men and women and the impact of these patterns on the pay gap.
- Examine the role of wage setting mechanisms and collective bargaining processes.
- Compare the gender pay gap in both sectors with the economy-wide pattern.

## Approach

- 1.7 There are two principal sources of data on earnings of men and women in Northern Ireland:
- The New Earnings Survey (NES).
  - The Labour Force Survey (LFS).
- 1.8 The NES is the main source of data for descriptive analysis of the gender pay gap. It is an annual survey of pay and hours worked by employees whose pay is covered by pay-as-you-earn (PAYE) schemes. The LFS is a quarterly survey of the adult population designed to collect information on labour market activities and the characteristics of people in the labour market. It also includes a question on earnings.
- 1.9 Both of these data sources suffer a number of limitations<sup>1</sup> in the analysis of the gender pay gap. For example, the NES provides only limited information on the characteristics of workers. But the available research indicates that it is necessary to take account of differences in factors such as qualifications and work experience in explaining the gender pay gap.
- 1.10 The LFS also does not provide information on people's previous work experience, though it is a rich source of data on other attributes such as qualifications.
- 1.11 In light of the above, the statistical assessment of the economy-wide pay gap is comprised of the following key ingredients:
- Analysis of NES data to provide a descriptive overview of the main trends in the gender pay gap, both overall and with reference to factors such as industry and occupation.

---

<sup>1</sup> The limitations of the NES and the LFS are discussed in detail in Dignan (2002).

- Statistical analysis of LFS data with the objective of updating Borooah and Forsythe's 1997 study titled *Gender and the Earnings Gap in Northern Ireland*.
- 1.12 A key finding from the Borooah-Forsythe study, which was based on LFS data for 1993/94, was that the gender pay gap in Northern Ireland owed more to the 'unequal treatment' of women than to differences between men and women in their labour market characteristics (age since left school, qualifications, social class, and so on). According to Borooah and Forsythe, in the absence of unequal treatment, women's average hourly rate of pay would have been 14 per cent higher than was actually the case. Thus, one of the research tasks for this study is to examine, so far as is possible with the LFS data, the trend in the extent of unequal treatment of women in the NI labour market.
- 1.13 Neither the LFS nor the NES are sufficiently large datasets to facilitate comprehensive statistical analysis of the IT and retail sectors. Given its small scale, the problems of data availability are especially acute in meeting the study objectives related to the IT sector. Further, because it is based on a survey of the population, the LFS does not provide information on organisational-specific processes such as progression within pay structures and promotion.
- 1.14 For both of the above reasons, it was decided to adopt a case study approach to the analysis of the gender pay gap in the IT and retail sectors, based on the following programme of work:
- Statistical analysis of survey datasets. It is possible to undertake some descriptive analysis of NES and, to a lesser degree, LFS data for the retail sector along the lines specified for the review of the overall gender wage gap.
  - The IT sector is more problematic. However, some data has been made available from a survey of computer services firms. These data give information on pay structures at the point of recruitment and the gender composition of employment across seven different skill levels within the IT sector. It is therefore possible to look at the wage gradient by skill level in the IT sector and compare this with the female share of employment at each level.
  - Review of other data sources on pay structures. For example, Income Data Services (IDS) publish detailed information on pay structures in larger firms. This is of particular relevance to the retail sector, as the larger firms regularly feature in the IDS reports.
  - Case studies of selected firms in the IT and retail sectors, primarily to provide qualitative information to contribute to the objectives of analysing relative patterns/characteristics of human

resource development practices, recruitment, promotion and mobility of men and women, as well as wage setting mechanisms.

- 1.15 A key feature of the sector case studies was the inclusion of face-to-face interviews with personnel and human resource managers in selected IT and retail firms. Based on discussions with the Equality Commission, and drawing on its monitoring databases, a number of firms were contacted to seek their co-operation in the study. Of the firms that were contacted, 16 firms from the retail and wholesale sector and eight IT-related organisations participated in the study. Their co-operation is greatly appreciated.

## Structure of the Report

- 1.16 The structure of the report is as follows.

- **Section 2** provides an overview on the gender pay gap at whole economy level, distinguishing full-time and part-time workers and documenting both the current position and the main trends. The Section also includes an assessment of the extent to which the whole economy pay gap can be 'explained' by differences between men and women in their respective labour market characteristics. Based on this, a view is offered on the trend in the extent of unequal treatment of women.
- **Sections 3 and 4** report on the data gathered for, respectively, the retail and IT case studies. Each Section begins by looking at the gender pay gap within the sector and considering the extent to which this can be explained by the composition of employment within the sector and the characteristics of persons working in the sector. The discussion then moves on to consider processes of recruitment and promotion that affect the occupational composition of employment in each sector and also the pay structures that operate in each sector. Each Section concludes by reporting on the views of firms on the question of equal pay.
- **Section 6** presents the conclusions and recommendations from all of the above.

## 2 The Economy Wide Gender Pay Gap

### Introduction

2.1 The objectives of this Section of the report are as follows:

- To establish the latest position regarding the whole economy gender pay gap, for both full-time and part-time workers.
- To describe the trends in relative earnings of both full-time and part-time workers.
- To assess the extent to which the gender pay gap can be 'explained' by differences between men and women in their labour market characteristics.
- To provide an overview on the sectoral dimension of the gender pay gap, with a specific focus on the rationale for a sectoral approach.
- To provide a comparative overview on the IT and retail sectors.

2.2 In this report, the term 'relative earnings' is used to describe average earnings of women expressed as a percentage of average male earnings. The term 'gender pay gap' as used here refers to the difference measured in percentage points between women's relative earnings and a position of parity in average earnings of men and women. For example, a *relative earnings* position of 85 per cent means women's average earnings are 85 per cent of the male average, giving a *gender pay gap* of 15 percentage points below parity (100 minus 85).

2.3 Relative earnings can be measured in a number of different ways, including:

- Average weekly earnings.
- Average gross hourly earnings from all sources of pay.
- Average hourly earnings excluding overtime.

2.4 The trend in average weekly earnings is highly correlated with the trend in average hourly earnings. Hence, this report follows the usual convention by focusing on hourly earnings in order to remove the effects of variations in hours worked. In addition, it makes little difference to the size of the gender pay gap whether relative earnings are measured on a gross basis, including overtime, or excluding overtime. In order to ensure a degree of consistency between the NES and the LFS, this report uses gross hourly earnings as the measure of pay for computing relative hourly earnings.

## The Latest Position

2.5 In April 2002 in Northern Ireland, average hourly earnings for all women were 85 per cent of the average for all men, giving a whole economy gender pay gap of 15 percentage points (Table 2.1). The average whole economy gender pay gap was therefore wider than the gap measured for full-time women employees compared to their male counterparts (11 percentage points). It was also wider than the gap between part-time women and part-time men. Indeed, average hourly earnings of part-time women were virtually on a par with average rates of pay for part-time men.

**Table 2.1 Average hourly earnings of men and women: Northern Ireland, 2002**

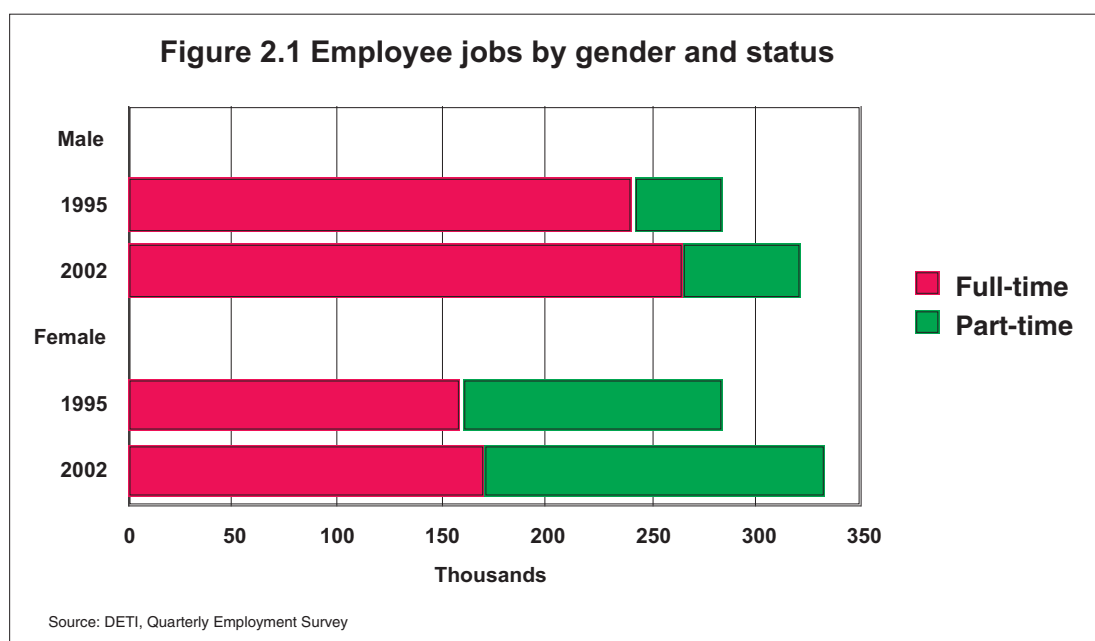
	Full-time	Part-time	All	<i>Part-time as % of full- time</i>
<b>Earnings</b>				
▪ Men	£10.26	£7.01	£10.13	68.3
▪ Women	£9.16	£6.97	£8.62	76.1
▪ All	£9.85	£6.98	£9.48	70.9
<b>Relative earnings</b>				
▪ Women as % of men	89.3	99.4	85.1	
▪ Women as % of full-time men	89.3	67.9	84.0	

Source: DETI, New Earnings Survey.

2.6 The reason that the whole economy gap is wider than the gaps for part-time and full-time employees considered separately reflects two factors:

- The relative lower pay of part-time workers. The average hourly pay for both male and female part-time workers is considerably below that of full-time workers. In 2002, the average rate of pay of part-time workers was 71 per cent of the average full-time rate (Table 2.1).
- Gender differences in the full-time/part-time split. In 2002, 49 per cent of employee jobs held by women were part-time, compared to 18 per cent of employee jobs occupied by men (Figure 2.1).

2.7 In short, women are much more likely (by a factor of about 2.8) to be employed in relatively lower paid part-time jobs than are men. Primarily for that reason, the analyses in this report distinguish between part-time and full-time employees.



2.8 This in turn suggests the adoption of a common point of reference between full-time and part-time women for the computation of relative earnings ratios and their associated gender pay gaps. Following the approach adopted by Anderson *et al* (2001), which informed the Kingsmill Review (2001), this report takes full-time male earnings as the common point of reference for the computation of relative earnings of full-time and part-time women employees.

2.9 In fact, because women account for almost three in four part-time jobs, the use of the full-time male rate as a common reference point makes very little difference to the whole economy relative earnings ratio. As shown in Table 2.1 above, the whole economy relative earnings ratio calculated with reference to average hourly earnings of male full-time employees (84 per cent) is only one percentage point below the ratio calculated with reference to all male employees (85 per cent). This simply underscores the point that it is the labour market experience of women that most affects the relative pay of part-time workers considered as a whole.

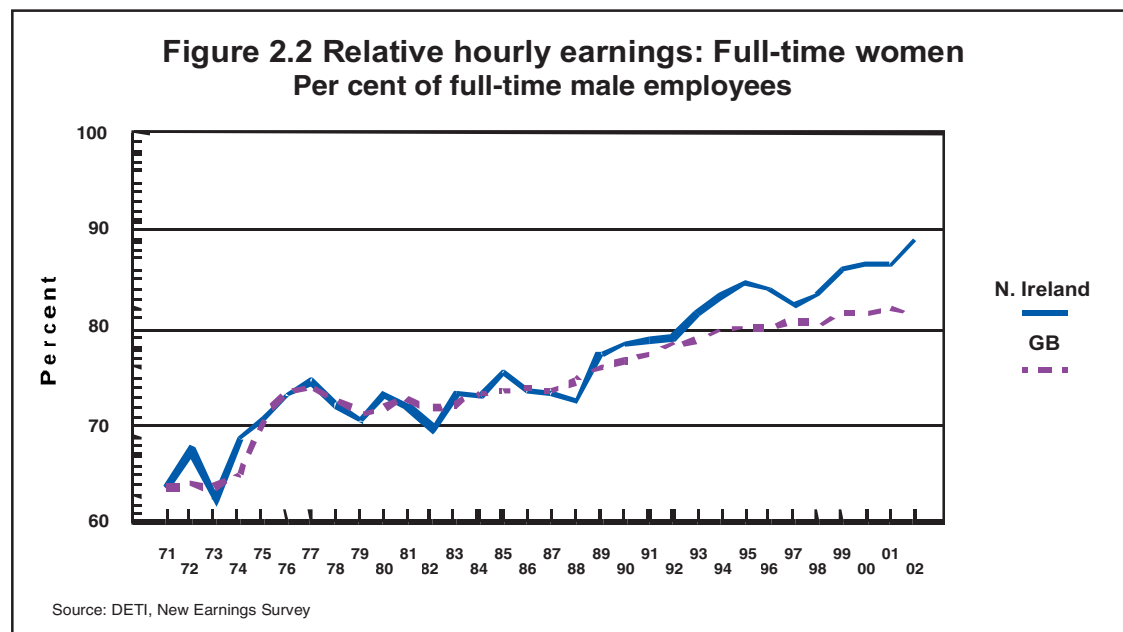
2.10 Of course, the use of the full-time male rate as a comparator for part-time women is potentially misleading, since these two groups of workers differ in a number of important respects, including the sectors in which they work, the occupations in which they are employed, the positions they hold in the workplace and their attributes such as qualifications and experience.

2.11 A number of these factors are considered below, for full-time women as well as those working part-time. Prior to considering the influence of variations in workers' attributes and employment composition on relative pay rates, this Section next documents the main trends in relative earnings and the gender pay gap.

## Main Trends

### Full-time employees

2.12 The period following the passing of the Equal Pay Act in 1970 saw a sharp increase in relative hourly earnings for full-time women, from 64 per cent of the male full-time average in 1971 to 75 per cent by 1977 (Figure 2.2). A similar pattern was observed in Great Britain, where average earnings also rose from 64 per cent to 75 per cent in the period from 1971 to 1977.



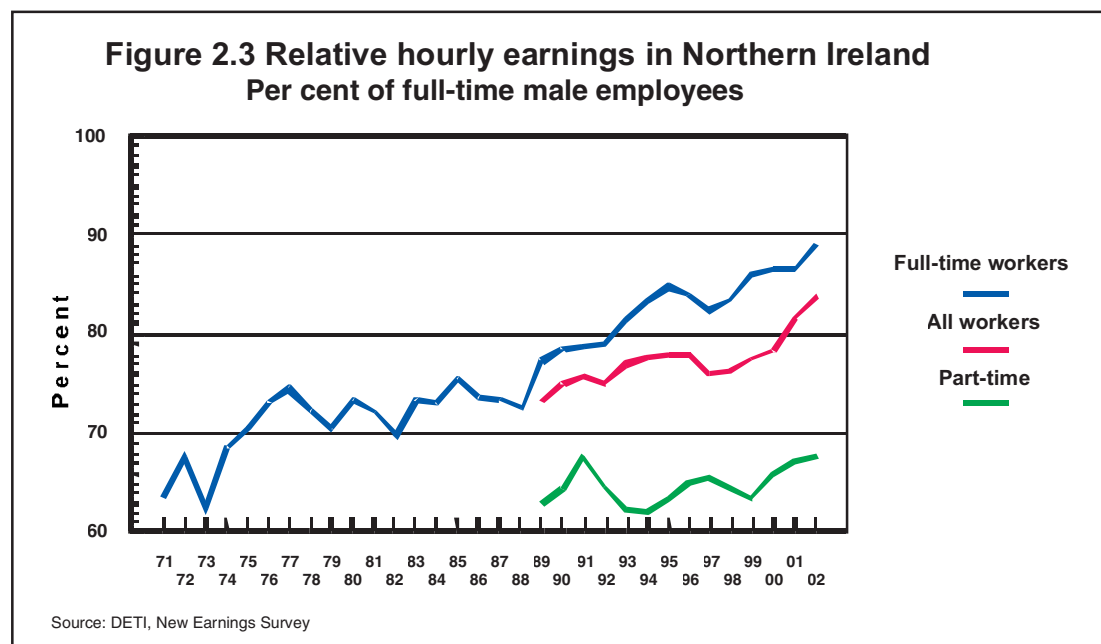
2.13 As in Great Britain, relative earnings of full-time women workers in Northern Ireland fell slightly in the late-1970s, but the bulk of the gains made in the wake of the Equal Pay Act proved to be durable. By the mid-1980s, relative earnings had climbed back above 75 per cent. Since then, they have been on a steady upward trend.

2.14 Thus, over the period 1971 to 2002, relative earnings of full-time women in Northern Ireland have improved by almost 26 percentage points, representing a steady rise of 0.8 percentage points per annum.

### Part-time employees

2.15 While it is possible to examine relative full-time earnings over an extended period of time, the same cannot be done in respect of relative part-time earnings. This is because New Earnings Survey data for part-time workers in Northern Ireland are only available from 1989 onwards.

2.16 The data that are available, however, suggest that the trend in relative earnings for part-time women has not been as positive as has been the case for full-time employees.

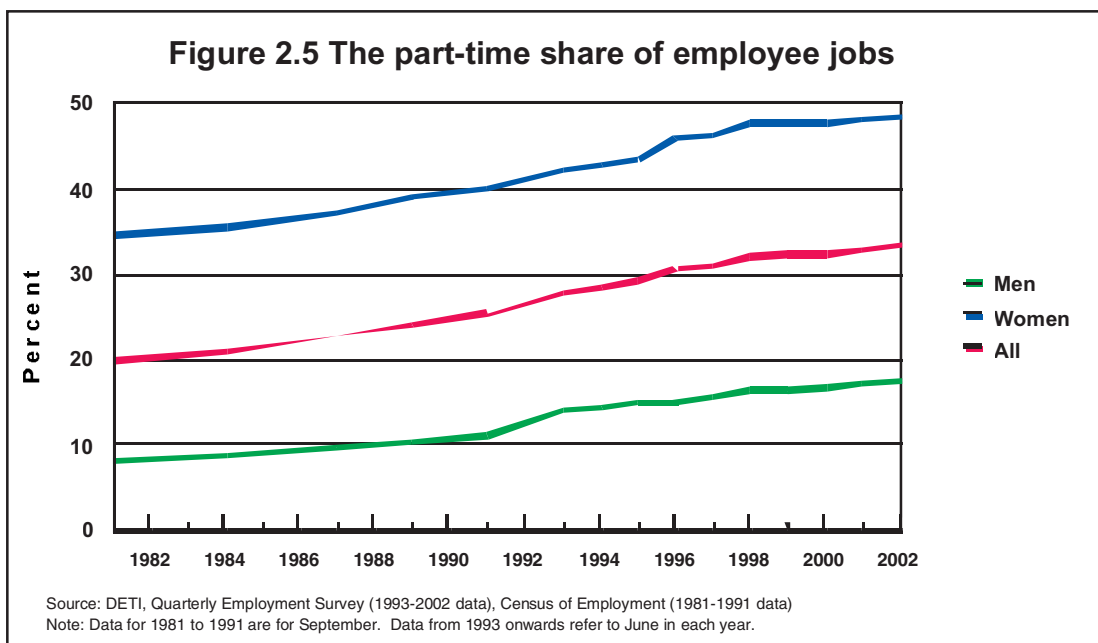
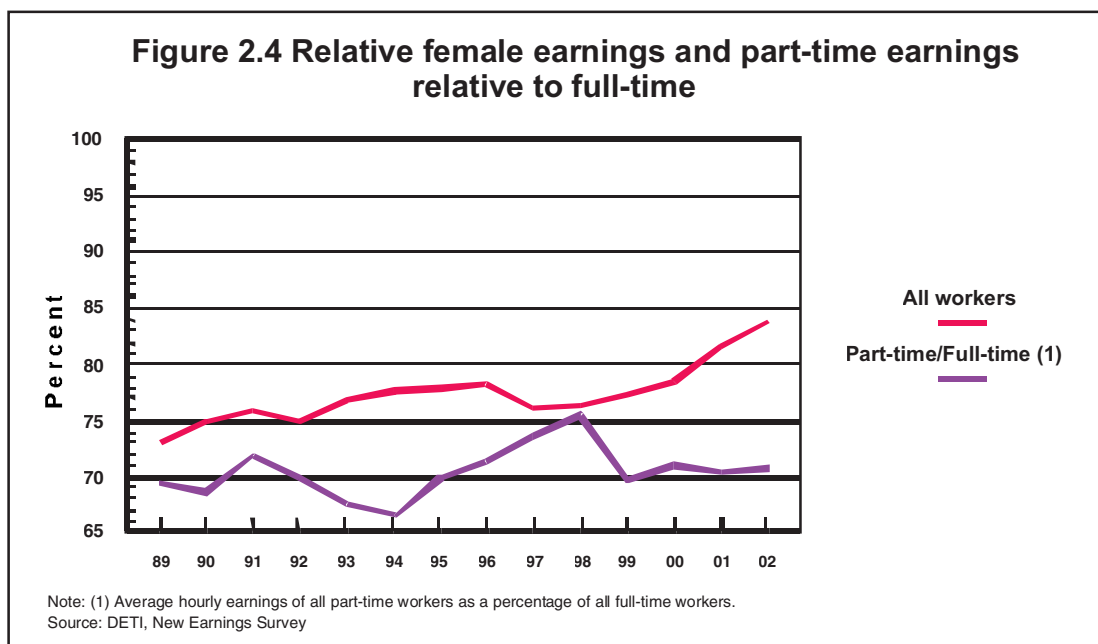


2.17 From 1989 to 2002, the relative earnings of part-time women rose by five percentage points, from 63 per cent of full-time male earnings to 68 per cent (Figure 2.3). But if 1991 is used as the starting point, at which time relative earnings were also 68 per cent for part-time women, it would appear that there has been no improvement in the relative earnings of part-time workers in the period up to 2002. Overall, in contrast to the situation for full-time employees, there is not a well-established upward trend in the relative earnings of part-time women.

### Whole economy relative earnings

2.18 Following a 2.5 percentage point rise between 1989 and 1991, the whole economy earnings ratio was relatively flat in the period up to 1998 (Figure 2.3). From 1998 to 2002, however, the whole economy ratio surged, rising by six percentage points to 84 per cent. This has happened despite a fall in the ratio of part-time earnings to full-time earnings, from 75 per cent in 1998 to 70 per cent by 2002 (Figure 2.4).

2.19 Partly, this is a compositional effect, reflecting a levelling off in the part-time share of employee jobs held by women. Up to 1998, the part-time share had been rising at a rate of about 0.7 percentage points per annum, from 35 per cent of employee jobs held by women in 1981 to 48 per cent by 1998 (Figure 2.5). Since then, the part-time share amongst women has risen at a much slower rate than hitherto (0.2 percentage points per annum).



2.20 The implications of this for whole economy relative earnings are as follows. So long as the part-time share of employee jobs held by women is rising, then an increasing proportion of women’s employee jobs are concentrated in relatively lower-paying positions. Holding the relative pay of part-time and full-time employees constant, an increasing concentration of women in part-time jobs tends to offset, at least in part, the positive effect on the whole economy ratio of a rise in the relative earnings of full-time women employees.

## Key Issues

- 2.21 While it is recognised that progress is being made, nonetheless there remains the question of why, some 32 years after the introduction of the Equal Pay Act and over a quarter of a century since the 1976 Sex Discrimination Order, is it still the case that full-time women employees earn less per hour than men? Similarly, in respect of part-time women, why is it that there remains no well-established upward trend in their relative hourly earnings?
- 2.22 It is not the purpose of this report to provide definitive answers to what are very difficult questions. Nonetheless, these issues must be addressed insofar as the data will permit in order to assess the scope for and utility of developing sectoral strategies and actions to reduce the gender pay gap. Following the approach adopted by Borooah and Forsythe (1997), it is useful to distinguish three possible sources of the whole economy gender pay gap, that is:
- Human capital characteristics.
  - Structural characteristics.
  - Unequal treatment.
- 2.23 Human capital characteristics include worker-specific attributes such as qualifications, experience and skills acquired through further training and development. If men and women differ in terms of their average levels of human capital, then this would be expected to lead to some differences in pay.
- 2.24 Structural characteristics refer to what Borooah and Forsythe term 'the environment in which people work'. Rates of pay vary by industry and occupation. If women and men are distributed differently by industry and/or occupation, this may in turn lead to differences in average pay rates. For example, the average hourly rate for all women may be lower than that for men because women are more highly concentrated in lower-paying occupations and/or industries.
- 2.25 The third factor listed above, unequal treatment, can be thought of as reflecting pay differences between men and women that cannot be attributed to differences in human capital and structural characteristics. It is inferred if the average woman earns less per hour than the average man even after adjusting for or allowing for differences in human capital and structural characteristics<sup>2</sup>.

---

<sup>2</sup> This would indicate that the 'economic returns' to human capital and structural characteristics, or the effect of these on pay rates, differ between men and women. That is, women are rewarded for a given bundle of attributes at a lower rate than men, hence the term 'unequal treatment'.

- 2.26 As defined above, unequal treatment represents the portion of the gender pay gap that cannot be 'explained' by differences between men and women in human capital and structural characteristics. To that extent, it may also be interpreted as measuring the extent to which the gender pay gap reflects discrimination against women in pay determination.
- 2.27 Such an interpretation needs to be applied cautiously. Discrimination *per se* is not directly observable at the whole economy level. Thus, the extent to which unequal treatment is found to be a component of the pay gap at any one point in time may be a reflection of past discrimination in pay or ongoing discrimination or some mix of these. This is because once they become embedded inequalities due to discriminatory processes can take quite some time to unravel.
- 2.28 Further, it is always dangerous to treat human capital and structural characteristics as being separate from discrimination. If women suffer a structural disadvantage because they tend to have lower levels of work-related skills or experience or an over-representation in low-paying occupations or industries, a full account of discrimination would seek to establish why such a situation should have arisen in the first place. This may reflect disadvantages faced by women in the spheres of recruitment, promotion, career development and access to training and development that may in turn have shaped the currently observable occupational and/or sectoral distributions of women and men. As Borooah and Forsythe note, the distributions amongst men and women of human capital and structural characteristics at any one point in time may themselves reflect previous inequalities in access to opportunities that in turn lead to currently observed inequalities in pay outcomes.

## Returns to Characteristics

- 2.29 Clearly, human capital and structural characteristics are not immutable. Positively affecting the distribution of these characteristics amongst women is an important aspect of the design of policies and strategies to narrow the gender pay gap. Indeed, in the legislative arena, this is the focus of the Sex Discrimination Order of 1976, which aimed, *inter alia*, to equalise access by men and women to employment opportunities, including recruitment and promotion.
- 2.30 Nonetheless, it is also the case that the steady narrowing of the gender pay gap that has taken place in the last two decades has occurred in the absence of any major additional impetus comparable to the enactment of the Equal Pay Act in 1970. It is therefore of interest to examine the extent to which the narrowing of the gender pay gap reflects changes in the characteristics of women employees and/or a reduction in the unequal treatment of women.

2.31 One of the more significant changes in the characteristics of women in the labour force has been their relatively more pronounced improvement in qualifications in comparison with men. As recently as 1993/94, men participating in the labour force were slightly more likely to have a degree and much more likely to possess an A-level equivalent qualification (Table 2.2). The difference in the incidence of A-level qualifications was entirely due to the significantly higher proportion of men with a trade apprenticeship. On the other hand, women were more likely to possess a higher qualification other than a degree.

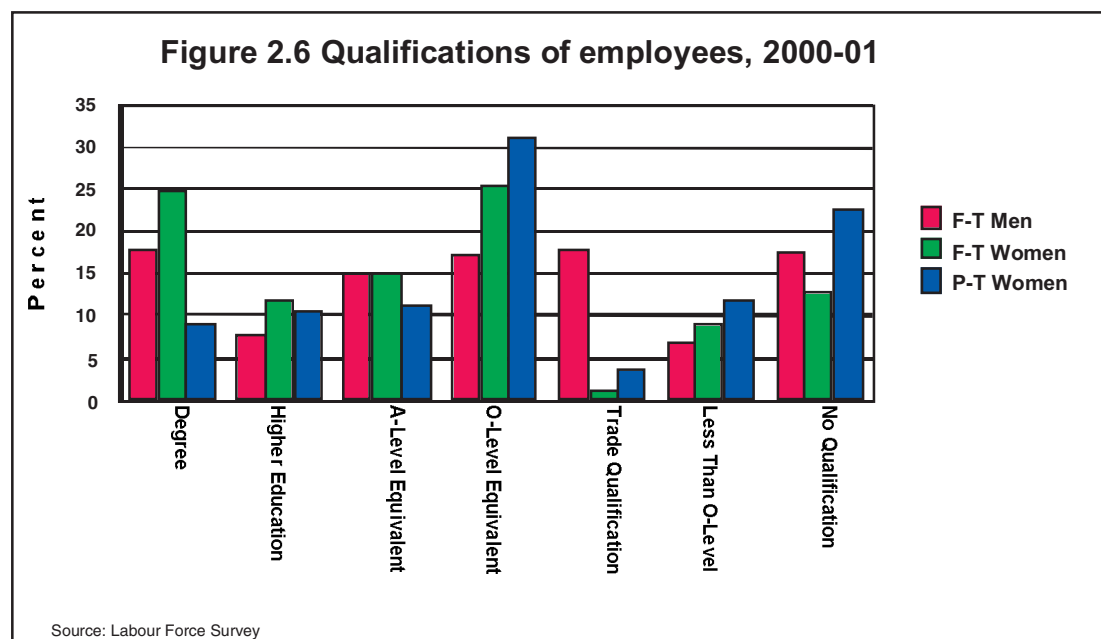
**Table 2.2 Highest qualifications of persons in the labour force**

	Male			Female		
	1993/94	2000	Change	1993/94	2000	Change
	%	%	pps	%	%	pps
Degree	12.8	17.6	4.8	11.6	19.2	7.6
Other higher qualification	6.7	6.5	-0.2	12.1	10.5	-1.6
A-Level or equivalent	34.1	33.2	-1.0	12.7	17.3	4.6
▪ Trade apprenticeship	24.0	18.7	-5.3	3.3	2.0	-1.3
▪ Other	10.1	14.5	4.4	9.4	15.2	5.8
O-level or equivalent	13.2	15.9	2.8	24.9	26.4	1.6
Less than O-Level	6.3	7.0	0.7	10.7	10.1	-0.7
None	26.9	19.8	-7.1	27.9	16.5	-11.5
All	100.0	100.0		100.0	100.0	

Source: Labour Force Survey

2.32 From 1993/94 to 2000, there was a general upward shift in the possession of qualifications amongst persons in the labour force. This was accompanied by a marked reduction in the percentage with no qualification and a substantial increase in the proportion holding a degree. This upward shift was, however, more pronounced amongst women. For example, the proportion of women holding a degree increased by 7.6 percentage points compared to a rise of 4.8 percentage points amongst men. Consequently, by 2000, the proportion of women with a degree exceeded the rate for men in the labour force.

2.33 The position does, however, vary between full-time and part-time women workers. As illustrated in Figure 2.6 overleaf, the qualifications of full-time women employees compare very favourably with those of their male counterparts. Thus, in 2000/01, one in four full-time women held a degree while a further 12 per cent had a higher qualification. By contrast, fewer than one in five full-time men held a degree with a further eight per cent having a higher qualification.



- 2.34 The situation was quite different for part-time women. Fewer than one in ten held a degree while 23 per cent had no qualification at all. This still represented a substantial improvement on the 1993/94 position, when 43 per cent of part-time women had no qualification. Nonetheless, the qualifications profile for part-time women indicates a greater vulnerability to low pay than is the case with full-time workers.
- 2.35 Overall, however, these trends would suggest that, at least in terms of qualifications, there has been a relatively faster upward shift in women's skill levels, which would be expected to have helped to close the gender pay gap and also to have boosted women's employment prospects in a situation of expanding demand for skills. Indeed, the fact that full-time women employees are now, on average, better qualified than men poses the question as to why there still exists a gender wage gap for these women.
- 2.36 Because it is not directly observable, the question of unequal treatment is inherently difficult to address. One way of approaching the issue is to estimate gender-specific wage equations that seek to quantify the effects of characteristics such as age, qualifications and experience on average hourly earnings. If this can be done for two periods in time, then some indication of the trend can be inferred.
- 2.37 There are standard methods for doing this (e.g. Borooah and Forsyth, 1997; Harkness, 1996; Barrett *et al*, 2000). What is required is a dataset that contains information on relevant characteristics of individual employees and their average hourly earnings. Given such a dataset it is then possible to undertake multivariate statistical analysis, or linear regression, as a means by which the effect on earnings of specific individual characteristics can be estimated, while holding other factors constant. As was noted in Section 1 above, the LFS meets many, though not all, of these requirements.

2.38 The use of the LFS for this purpose is more fully described in the main report (Dignan, 2002) from which this summary is derived. Briefly, gender differences in returns to characteristics were analysed by estimating separate wage equations for all full-time male employees, all full-time female employees and all part-time female employees. This follows the approach used by Harkness (1996). In order to identify the trend in returns to characteristics, models were estimated for 1994 and a pooled dataset for 2000/01. In each year, the explanatory variables or measurable characteristics used were as follows:

- Qualifications.
- Industry sector in which the person's main job is located.
- Social class based on occupation in the person's main job.
- Tenure in the present main job, measured in months.
- Years since left school, a measure of potential work experience.

2.39 These estimated wage equations were then used to decompose the gender wage gap in each period into two parts:

- The *composition effect*, or that part of the wage gap that is due to measurable differences in the characteristics of men and women.
- The *residual effect*, or that part of the wage gap that reflects differences between men and women in estimated average 'returns' to measurable characteristics. The residual effect would be expected to encompass that part of the wage gap that is due to unequal treatment of men and women in the labour market, or discrimination.

2.40 The results are reported in Table 2.3. The main finding for the composition effect on the relative earnings of full-time women is that, if their average 'returns' to measurable characteristics had been the same as those for men, then full-time women would have earned 4-5 per cent more than full-time men in both periods. Instead, they earned about 19 per cent less in 1993/94<sup>3</sup> and, according to the LFS, seven per cent less in 2000/01<sup>4</sup>. Based on the LFS data, the gender pay gap for full-time women entirely reflected a residual effect. There are two important points to note in that regard.

---

<sup>3</sup> Interestingly, Harkness (1996) reports a similar effect for full-time women in Great Britain.

<sup>4</sup> For reasons discussed in Dignan (2002), this may be an under-estimate.

**Table 2.3 Decomposition of wage gaps: 1993/94 to 2000/01**

	Female full-time versus male full- time %	Female part-time versus male part-time %	Female part-time versus female full-time %
<b>1993/94</b>			
Wage gap	18.5	40.1	20.8
Composition effect	-4.4	7.0	17.9
Residual effect	22.9	33.1	2.9
<b>2000/01</b>			
Wage gap	7.1	30.3	14.8
Composition effect	-4.9	12.9	11.7
Residual effect	12.0	17.4	3.1

2.41 First, the residual effect is unlikely to be entirely due to unequal treatment, and is probably affected by non-observable differences in the work experience characteristics of men and women.

2.42 Second, the magnitude of the residual effect fell sharply from 1993/94 to 2000/01, by close to 11 percentage points. This was a significant reduction. This finding would indicate that, while it has not disappeared, unequal treatment of full-time women employees is on a downward path in Northern Ireland.

2.43 Comparing part-time women employees with male full-time employees suggests a very large residual effect in 1993/94 which was significantly reduced by 2000/01. The comparison of part-time women with full-time men is, however, also likely to be affected by unobservable characteristics that may lead to the estimated residual effect being an over-estimate of the extent of unequal treatment, especially in 1993/94.

2.44 For that reason, it is useful to compare part-time women with full-time women. The key finding, shown in Table 2.3 is that, both in 1993/94 and 2000/01 the bulk of the wage gap between full-time and part-time women reflects the more favourable characteristics of full-time women. Interestingly, for part-time women the size of the composition effect declined in the period to 2000/01, from 18 per cent to 12 per cent. This would indicate that their labour market characteristics registered an improvement relative to full-time women.

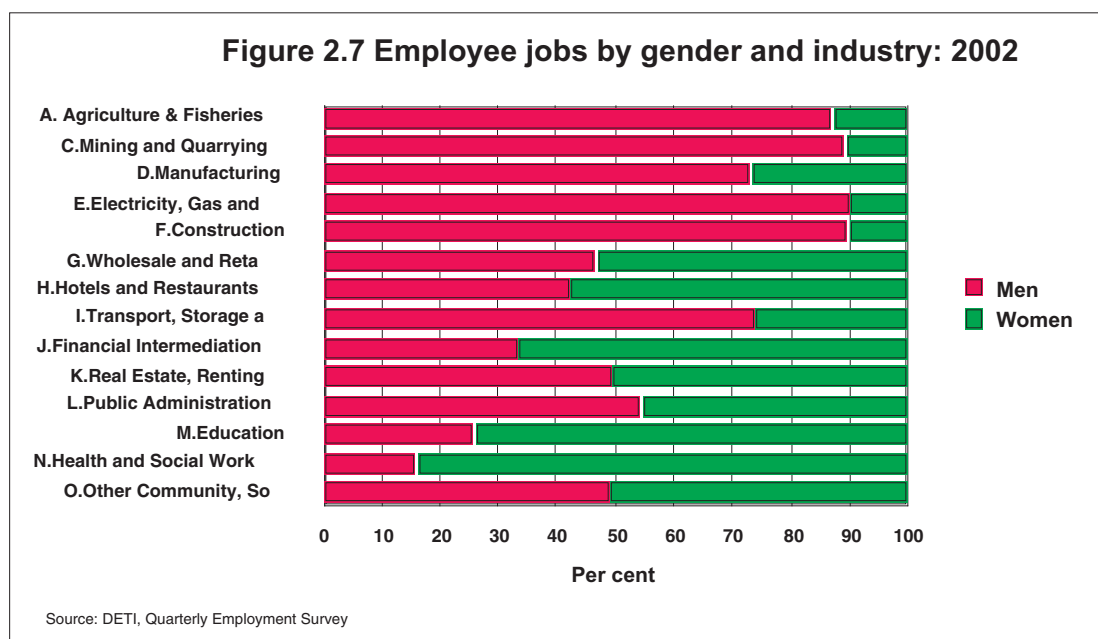
2.45 Overall the main conclusions to be drawn are as follows:

- Differences in measurable characteristics do not explain the gender wage gap for full-time women. That is, the results suggest that full-time women's earnings should at least be on a par with those of men.

- Regarding part-time women, the results suggest that their relative earnings are significantly influenced by differences in characteristics. That is, a lower level of skills, on average, is one of the reasons why part-time women have a lower hourly rate of pay than full-time employees, both male and female.
- For both full-time and part-time women, the size of the residual effect that may be due to unequal treatment has declined significantly in the period since the early-1990s. This would suggest that working women now face less discrimination in the labour market compared to previous periods.

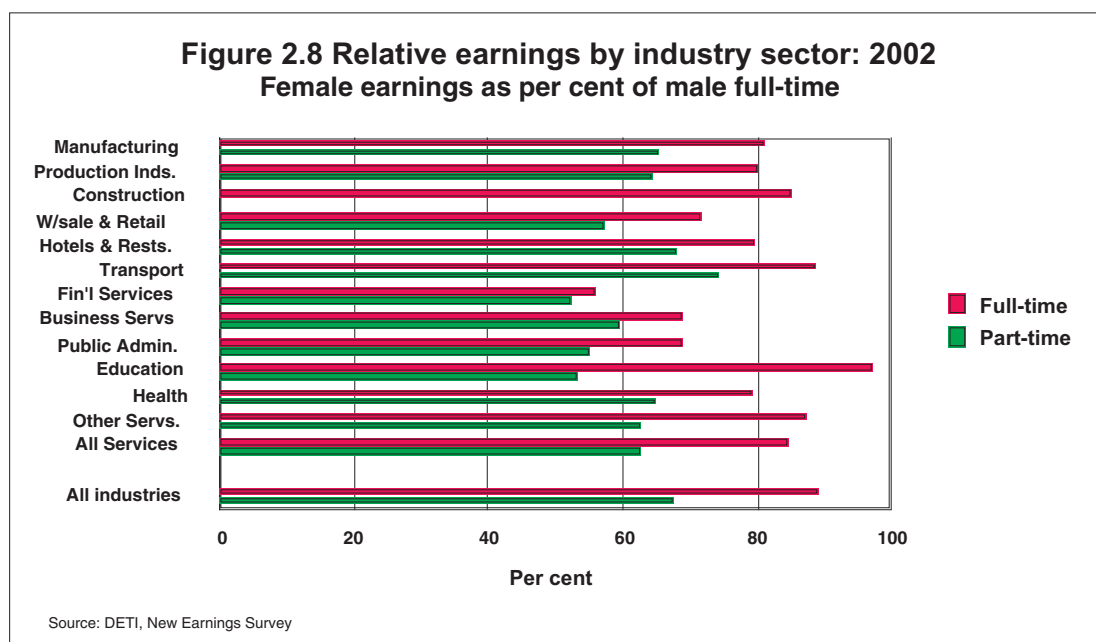
## Sectoral Patterns

2.46 As noted above, the sectoral dimension is one element in the set of structural characteristics that may affect the whole economy gender pay gap. One reason for this is that the share of employee jobs held by women varies sharply across industry sectors (Figure 2.7). There are also wide variations between industry sectors in average hourly rates of pay, from an average of £5.85 per hour in agriculture to £13.17 in financial intermediation services.



2.47 From that perspective, it is useful to consider if the whole economy gender pay gap reflects a higher degree of concentration of women's employment in low-paying sectors. There are two main points to note in addressing this issue. First, both part-time and full-time women are more heavily concentrated than men in industry sectors dominated by public sector employment. On average, gross hourly earnings are higher in the public than in the private sector and this should have a positive compositional influence on the gender wage gap.

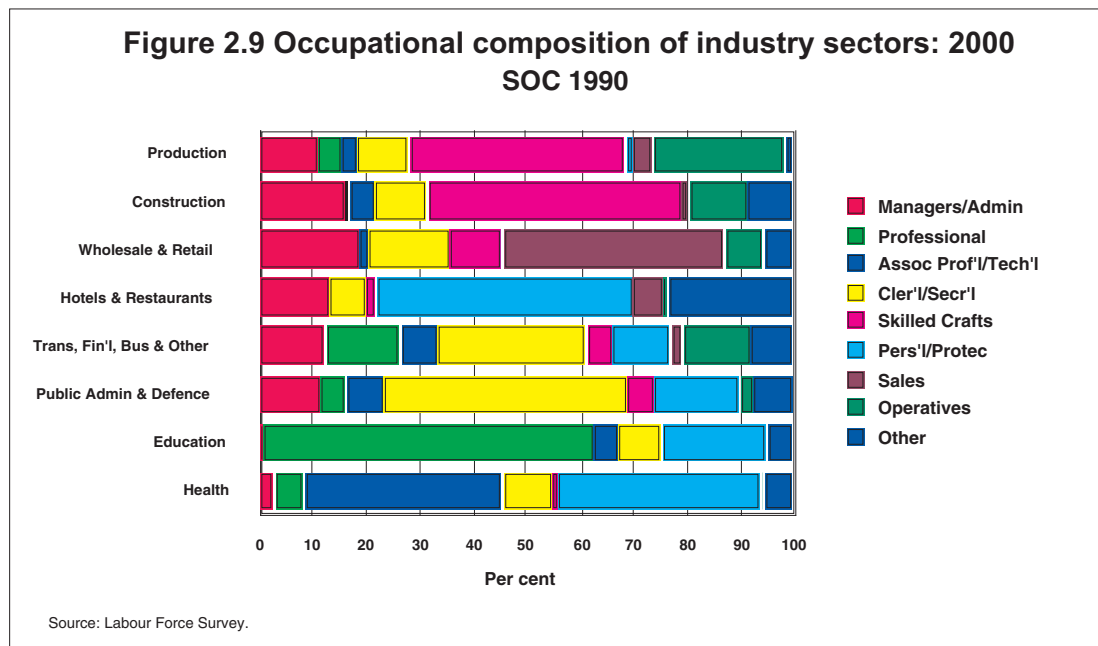
- 2.48 Second, within the private sector, it is the case that part-time women employees are disproportionately concentrated in the relatively lower-paid wholesale and retail and hotels and restaurants industries. This would tend to exert a negative influence on the whole economy gender pay gap.
- 2.49 Overall, the public sector effect is stronger, so that the influence of industry composition on women's earnings is more positive than negative. That is, from the perspective of the whole economy wage gap, women employees, especially full-timers, have a comparatively favourable industry structure<sup>5</sup>. The main issue from a sectoral perspective is therefore to increase relative earnings *within* industry sectors, rather than, for example, to re-distribute women's employment so that the sectoral composition matches that of men's employment.
- 2.50 Indeed, the NES data show a considerable variation between industry sectors in the relative earnings of both full-time and part-time women (Figure 2.8). In 2002, relative earnings of full-time women ranged from a low of 56 per cent in financial services<sup>6</sup> to a position of near-parity (98 per cent) in the education sector. In general, relative earnings tend to be higher in government services sectors such as education and health, and lower in private sector services. For example, in 2002, average earnings of full-time women working in the private sector were 79.3 per cent of male earnings compared to 89.8 per cent for public sector workers. As illustrated in Figure 2.8, a broadly similar pattern holds for part-time workers.



<sup>5</sup> The detailed analysis on which this result is based can be found in Dignan (2002).

<sup>6</sup> This sector is termed 'financial intermediation' (Section J of the SIC 92) in official statistics.

2.51 Clearly, the existence of large earnings gaps within industry sectors is an important element in the rationale for identifying strategies and actions at sectoral level. A second element of the rationale for a sectoral dimension is that industry sectors vary considerably in the intensity of their demands for different types of occupational skills (Figure 2.9). For example, sales occupations are almost all to be found in the retail and wholesale industry.



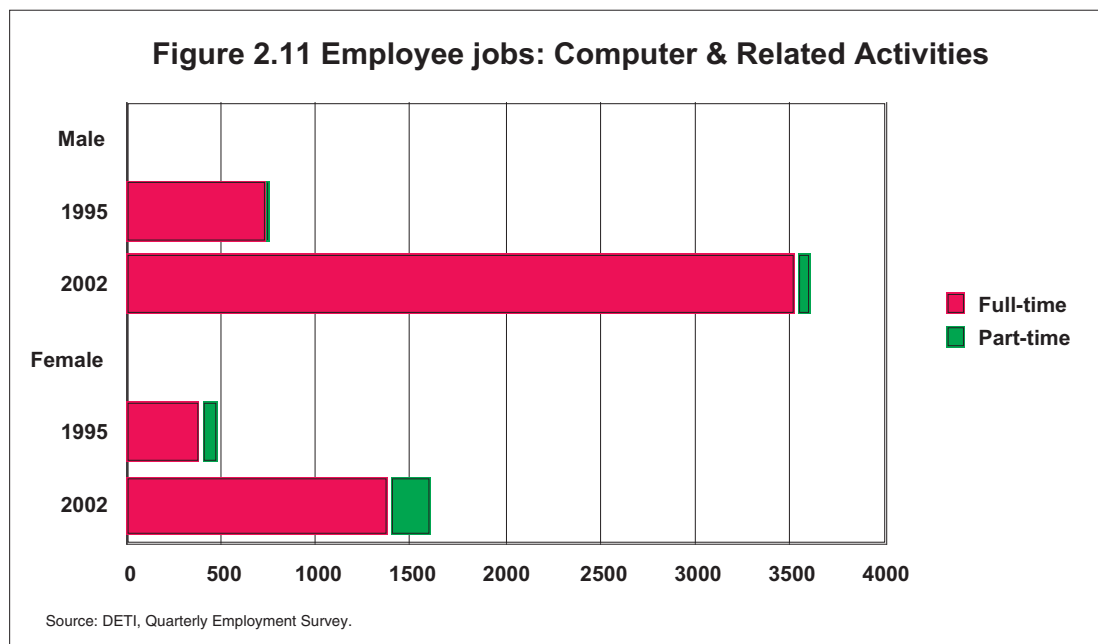
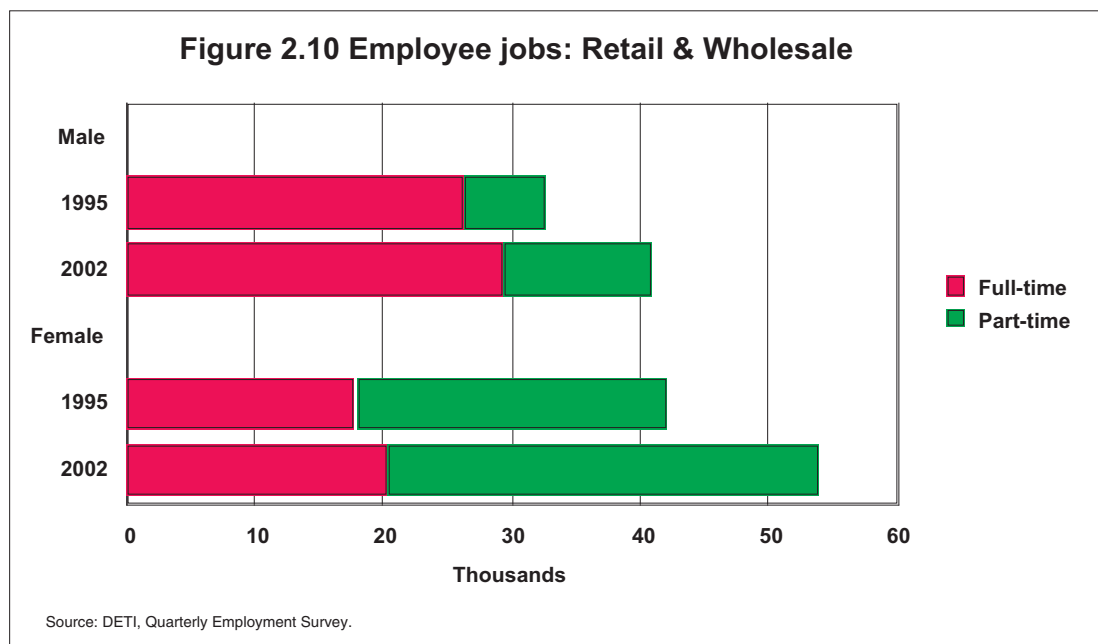
2.52 This is important because occupational segregation, or the tendency for women and men to be concentrated in different occupations, has been strongly linked to the gender pay gap by a number of researchers. Anderson *et al* (2000) highlight occupational and workplace segregation as being important components of the gender wage gap in Great Britain. The Kingsmill Review pointed to the “tendency for part-time workers to be concentrated in a limited number of industries and occupations with relatively low wages” as being a significant factor in the gender pay gap over and above differences that may exist between men and women in human capital characteristics.

2.53 In the specific context of Northern Ireland, the influence of occupational segregation on the gender pay gap varies both by status, whether full-time or part-time, and also by the extent to which occupations are linked to public services employment. Part-time workers are clearly concentrated in lower-paying occupations. In 2000, almost four in five part-time employees worked in occupations where the average earnings of male workers were less than 75 per cent of the male mean in 2000. The gender pay gap for these women is a function both of their greater concentration in lower-paying occupations and gender wage differences within occupations.

- 2.54 For full-time workers taken as a whole, occupational composition accounts for only a small part of the gender pay gap. Closing the gender pay gap primarily relies on equalising wage rates *within* occupations. However, it is also the case that occupational composition exerts a stronger influence on the gender pay gap of full-time workers for that sub-set of occupations which are predominantly employed in the private sector.
- 2.55 To the extent that occupational segregation has a sectoral dimension, then a sectoral approach may well offer a useful 'point of entry' for strategies to address the gender pay gap by reducing the effects of such segregation. For example, there may be commonalities between firms within particular industries in relation to processes such as recruitment, promotion, and training and development that are critical in shaping occupational structures that in turn affect average rates of pay of men and women. This is the equal opportunities rationale for a sectoral dimension to strategies to reduce the gender pay gap.
- 2.56 There is also, in principle at least, an equal pay rationale for a sectoral dimension. This is because wage-setting mechanisms may vary considerably from one industry to another. Indeed, it is likely that the way in which pay is set within industries will itself reflect factors that are industry-specific, such as trends in the pressure of demand in product markets and the balance between demand and supply of labour. Further, firms within particular industries may well use average rates of pay within their industry as a means of benchmarking or setting pay for different occupations within the firm.
- 2.57 These issues are further explored in this report through case studies of the IT and retail sectors. Prior to presenting the research results in Sections 3 and 4, this Section concludes with a comparative overview on the two sectors.

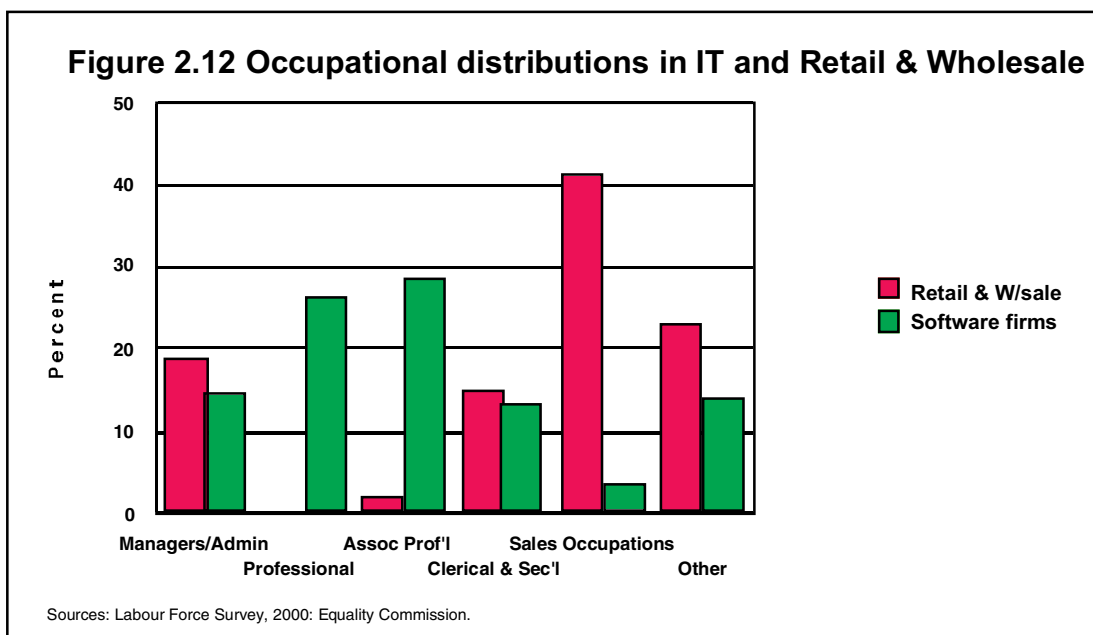
## The IT and Retail and Wholesale Sectors

- 2.58 Though the retail sector is well-defined, the same cannot be said about the IT sector. To a certain extent, the IT sector may be better understood as an occupation or skill-type that can be found in a range of different industries. One way of addressing this definitional problem is to follow the approach adopted by the NIERC in its 2000 study of the Northern Ireland labour market for IT skills and focus on the computer and related services industry. Defined in that way, the IT and retail and wholesale sectors present an interesting contrast in many respects:
- **Scale.** There are over 95,000 employee jobs in the retail and wholesale trades, accounting for 14.5 per cent of total employee jobs in Northern Ireland. As of mid-2002, there were just over 5,200 employee jobs in computer and related activities, representing 0.8 per cent of employee jobs in Northern Ireland.

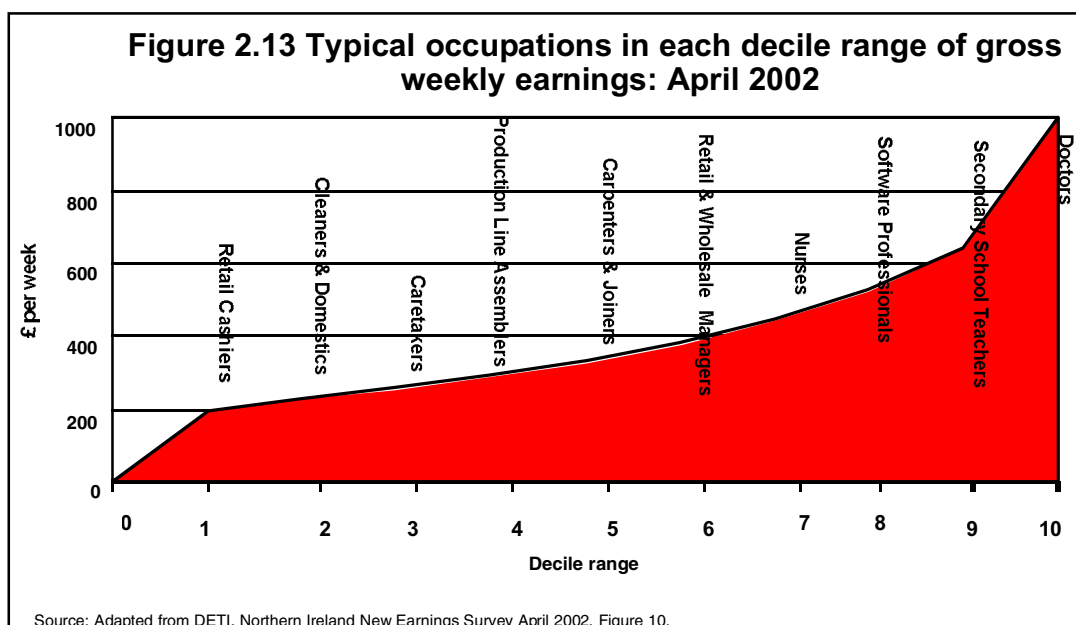


- The part-time share. In the wholesale and retail sector, almost one in two jobs (48 per cent) is held on a part-time basis. In contrast, less than six per cent of employee jobs in the IT software sector are part-time.
- The representation of women. In the retail and wholesale sector, 57 per cent of all employee jobs are held by women (Figure 2.10). In the IT software industry, fewer than one in three employee jobs (31 per cent) are held by women (Figure 2.11).
- Occupational structure. Professional and associate professional occupations pre-dominate in the IT sector whereas sales

occupations are most prominent in the retail and wholesale sector (Figure 2.12).



- Average pay rates. The divergent occupational profiles matter considerably in terms of relative rates of pay. According to the April 2002 New Earnings Survey, software professionals were in the eighth decile of weekly earnings whereas retail cashiers were in the bottom 10 per cent of the earnings distribution (Figure 2.13).



- 2.59 The differences in occupational profiles and rates of pay between the two sectors clearly signal variations in average levels of skill requirements, with the IT sector being very much a high-tech/high-skill industry compared to the average level of skill requirements in the retail sector. Thus, for example, the proportion of graduates in the IT sector is very high; over three in four employees in IT-related occupations have a degree or higher qualification
- 2.60 Notwithstanding all of the foregoing differences, the IT and retail and wholesale sectors have two very important features in common:
- Very fast employment growth in recent years in both sectors.
  - There exists a gender pay gap in the two sectors.
- 2.61 As shown in Figure 2.10 above, from 1995 to 2002 the retail and wholesale sector registered an increase of 20,000 employee jobs, accounting for almost one in four (23.2 per cent) of the net new jobs created across all industries in Northern Ireland in that period.
- 2.62 The IT sector grew at an even faster pace. Between 1995 and 2002 the software sector more than tripled in size, adding almost 4,000 jobs in a seven year period. Though the sector accounts for less than one per cent of all employee jobs in Northern Ireland, the pace of expansion in the period from 1995 onwards was such that computer and related activities accounted for five per cent of the net increase in employee jobs that occurred in Northern Ireland over the period. Indeed, its contribution to full-time employee jobs was even greater than that, representing 11 per cent of Northern Ireland's net increase in full-time employee jobs over the period.
- 2.63 In short, these two sectors alone accounted for almost 27 per cent of the net new employee jobs created in Northern Ireland from 1995 to 2002. This fact alone makes the sectors interesting from the perspective of the gender pay gap, as they are important elements in the changing structural characteristics of the Northern Ireland workforce. From the perspective of the gender pay gap, however, it is clearly of interest that a dynamic new and relatively high-paying services sector such as IT should have such a low representation of women. This is a key issue to be addressed in the IT case study reported in Section 4 below, especially in looking at recruitment processes.
- 2.64 The two sectors are also interesting because it would appear that a gender pay gap exists in each of the two sectors. This can fairly readily be established for the retail sector, though it must be said that the NES data are much less clear-cut in relation to the IT sector as the sample sizes for IT-related occupations are relatively small for both men and women. The next two Sections consider these gender pay gaps in detail.



### 3 The Retail and Wholesale Sector

#### Introduction

3.1 This Section considers the gender pay gap in the retail and wholesale trades. The objectives are as follows:

- To quantify, decompose and analyse the gender pay gap as far as the data will permit.
- Assess the extent to which the pay gap can be 'explained' by reference to male-female differences in labour market characteristics.
- Establish the trend in the gender pay gap in retail and wholesale.
- To consider how the trend in the pay gap may evolve given current patterns in employment, including recruitment, promotion and mobility of men and women, and wage-setting mechanisms in the sector.

3.2 The section is organised in line with the foregoing objectives, concluding with a discussion of equal pay issues as these relate to the sector.

#### The Gender Pay Gap

3.3 The latest position regarding the gender pay gap in the retail and wholesale sector is shown in Table 3.1. The gap is large for both full-time and part-time women. Compared to the average for all male employees, relative earnings for women stood at 70.5 per cent in April 2002, giving a gender wage gap of 29.5 percentage points.

**Table 3.1 Average earnings in the retail and wholesale sector, 2002**

	Full-time	Part-time	All
<b>£'s per hour</b>			
▪ Men	8.82	5.15	7.89
▪ Women	6.33	5.07	5.56
▪ All	7.92	5.09	6.66
<b>Relative earnings</b>			
▪ Per cent of male earnings	71.8	98.4	70.5
▪ Per cent of male full-time	71.8	57.5	63.0
<b>Memo item:</b>			
▪ <i>All industries relative earnings</i>	89.3	67.9	84.0

Source: DETI, New Earnings Survey

- 3.4 Measured against the average for full-time men, the standard reference point used in Section 2 above, the gender wage gap was even wider, standing at 37 percentage points compared to 16 percentage points at the whole economy level. The wider gender pay gap in retail and wholesale reflects both the relatively high concentration of part-time women employees in the sector (48 per cent compared to a regional NI average of 33.5 per cent) and also the sector's comparatively lower rates of pay. In April 2002, the average employee of either sex in retail and wholesale earned 70 per cent of the NI average rate of hourly pay (Table 3.2).

**Table 3.2 Average hourly pay in retail and wholesale as per cent of all industries average by employment status: 2002**

	Full-time	Part-time	All
	%	%	%
Men	89.5	73.8	83.2
Women	64.3	72.6	58.6
<b>All</b>	<b>80.4</b>	<b>72.9</b>	<b>70.3</b>

Source: DETI, New Earnings Survey

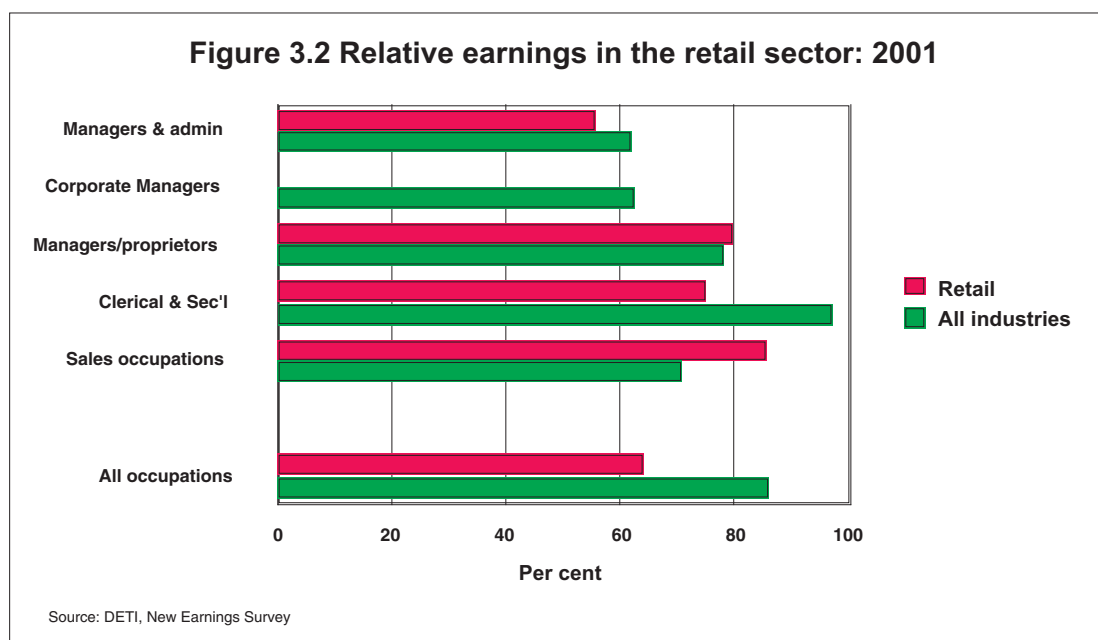
- 3.5 Even for part-time workers, the sectoral difference in average hourly pay was large, as their average earnings were just 73 per cent of the average for all part-time workers in Northern Ireland. This sectoral gap, it should be noted, did not vary much between men and women part-time employees, as women part-timers in retail and wholesale are on a par with their male part-time colleagues in average hourly pay rates (see Table 3.1 above). This again highlights a general problem of low pay that affects women more than men because of their greater dependence on part-time jobs.
- 3.6 Interestingly, the sectoral pay gap was larger in respect of full-time women, who earned just 64 per cent of the NI average hourly rate of pay for all full-time workers in NI. This was well below the sectoral pay gap for full-time men working in retail and wholesale, who earned 89.5 per cent of the NI average hourly pay rate for all full-time employees. This disparity in the sectoral pay gap for full-time women compared to men points to the need to consider gender differences in occupational profiles of employees in retail and wholesale in explaining the gender pay gap. First, however, it is necessary to examine the wage gradient or occupational rankings in pay within the sector.
- 3.7 The occupational wage gradient is very important in explaining the gender wage gap, as wage differentials between occupations play a significant role in transmitting gender differences in occupational composition through to average wage variances.

- 3.8 Regarding the retail sector, the main feature of the wage gradient is the large difference in hourly pay rates between managerial and other grades. In the retail industry in 2001, managers and administrators earned £11 per hour (Figure 3.1). By contrast, in the non-managerial grades, hourly pay rates ranged from close to £6 per hour for clerical occupations to £4.15 per hour for retail cash desk and check-out operators (Figure 3.1).



- 3.9 Outside the managerial grades, the retail sector wage gradient is not especially steep, though hourly earnings tend to be less than the average for all industries within each occupation. Indeed, a much sharper differentiation exists within the managerial grades, with corporate managers earning over £20 per hour compared to an average of £8.24 per hour for other managers in 2001.
- 3.10 A second interesting feature of the wage structure in the retail industry is that, *within* occupations, part-time rates of pay do not tend to diverge greatly from their full-time equivalents (see Dignan, 2002). This is particularly true for sales occupations and is indicative of the relatively flat pay structure for that occupation in the retail industry.
- 3.11 The average part-time rate across all occupations is, however, well below the equivalent full-time average. This is because the part-time share tends to be highest at the lower-paying occupations, ranging from over 80 per cent for women cashiers and check-out operators to fewer than one in twenty at the management and supervisor levels.

- 3.12 The second major route through which occupational composition affects the gender wage gap at sector level is the pattern of relative earnings of men and women within each occupation. The wider the gap within each occupation, the wider will be the overall wage gap. All other things equal, a gap at the upper end of the earnings spectrum will impart a greater proportionate 'stretching' of the overall gender wage gap than will similar sized gaps at the lower end.
- 3.13 In fact, the stretching effect of gender pay gaps within occupations is more pronounced in the retail sector compared to other industries. Primarily, this is because the gender pay gap is considerably wider at the more highly-remunerated managerial level than in other occupations. In April 2001, women in managerial occupations in retail earned an average hourly rate of pay that was 56 per cent of the male average in managerial occupations (Figure 3.2). This was well below the relative earnings of women in other occupations such as clerical and secretarial (76 per cent) and sales occupations (87 per cent).



- 3.14 A further point to note regarding the occupational distribution of relative earnings is that, within individual occupations, relative earnings of part-time women workers do not tend to vary greatly from those for full-time workers. This reflects the finding, noted above, that average part-time rates within most occupations in the industry, and especially sales, are not greatly different from full-time rates. Though, because part-time workers are much more likely to be found in the lower-paid occupations, the relative earnings ratio for all part-time workers is a good deal less than that for all full-time workers (see Table 3.1 above).
- 3.15 Nonetheless, this is a useful result in assessing the effect of occupational composition on the gender wage gap in the sector, which can be analysed without having to control for full-time/part-time variations in relative earnings within occupations.

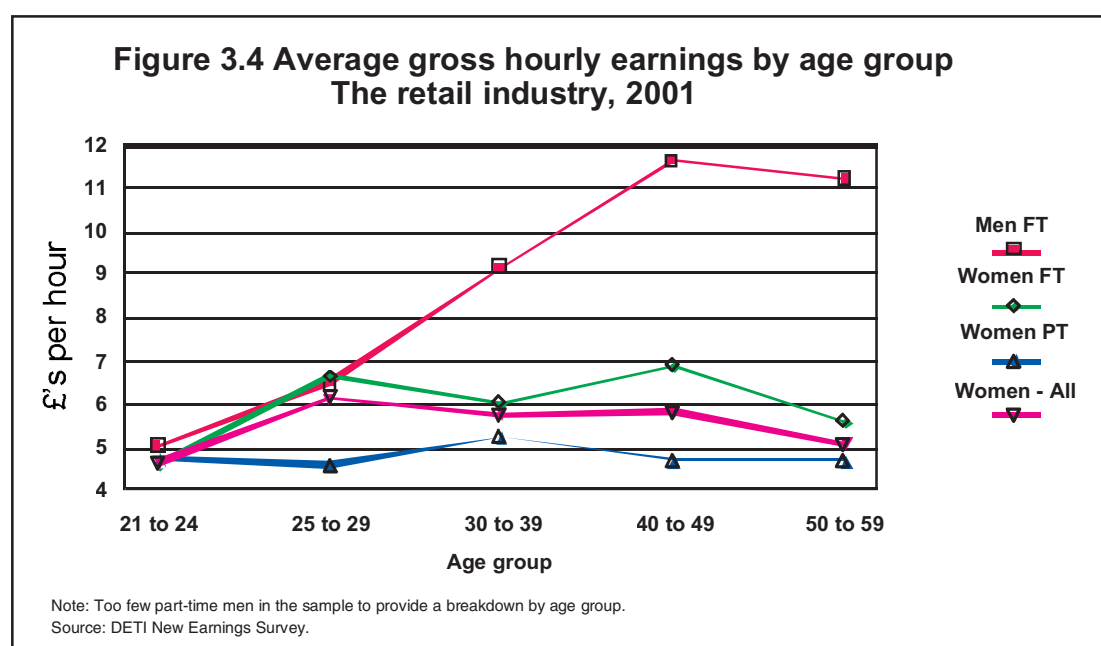
- 3.16 Considered from the perspective of the gender pay gap, the main feature of the occupational composition of employment in the retail and wholesale sector is that there is a considerable degree of occupational segregation, with women more highly concentrated in the lower-paying sales occupations and less well represented at managerial level.
- 3.17 As illustrated in Figure 3.3, the proportion of people working in a sales occupation in retail and wholesale is much higher for women than for men. Conversely, the proportion of women working at the management level (12 per cent) is only a little over half the male rate (23 per cent).



- 3.18 These differences in occupational composition between men and women working in the retail and wholesale sector are likely to influence the size of the gender pay gap within the industry. One way of addressing this issue is to pose the question: how much higher would be the relative earnings of women if their occupational composition was equivalent to that of men?
- 3.19 In fact, if men and women were re-distributed within retail and wholesale so that they had the same occupational distributions, but average earnings ratios were left intact, then the gender wage gap in the sector would fall by 12 percentage points, giving a 42 per cent reduction in the gap. This indicates that occupational segregation is an important component of the gender wage gap in the sector.
- 3.20 There is also some evidence of vertical segregation within the managerial group. Though women account for about 40 per cent of managers and administrators in the sector, they are too few in number at the more highly-paid corporate manager level to register on the New Earnings Survey. Amongst the firms that were interviewed for this study it was also apparent that women tend to be relatively under-represented at the more senior positions, such as store manager.

## Assessment

- 3.21 The main conclusion to be drawn from the above is that occupational segregation, both horizontal and vertical, makes a substantial contribution to the overall gender pay gap within the retail and wholesale industry. The horizontal effect largely derives from the disproportionate concentration of women in the lower-paid occupations, notably sales.
- 3.22 Occupational segregation does not, however, fully account for the gender wage gap within the sector. Within each of the occupations studied above, relative earnings of women were in all cases below those of men (see Figure 3.2).
- 3.23 In addition, there is a striking differential in average hourly earnings by age group within the retail sector. In each of the 30+ age groups, the gap is substantial. These variances are not just a function of the older age profile of part-time women. As can be seen from Figure 3.4 below, relative earnings of full-time women are on a par with those of men in the age groups 21 to 24 and 25 to 29. Beyond that, the wage gap widens sharply for each age group, with average earnings for full-time women aged 50-59 being only half of the average for men in the same age bracket.



- 3.24 The variations in relative earnings by age group may be a reflection of the higher proportion of men in the managerial occupations. The NES sample sizes are not, however, large enough to test for this effect.
- 3.25 Nor are the LFS sample sizes large enough to apply the approach used in Section 2 above to analyse the gender wage gap in terms of differences in characteristics between men and women and the extent of unequal treatment.

- 3.26 Based on the data that are available, from both the LFS and the NES, it is however possible to calculate an approximate decomposition of the gender wage gap in the retail and wholesale sectors. The methodology employed for this purpose is described in detail in Dignan (2002). This summary report focuses on the main findings.
- 3.27 The results of the exercise are shown in Table 3.3 below. Occupational segregation is identified as the single main contributor, estimated to account for 42 per cent of the gender wage gap in the retail and wholesale sector.

**Table 3.3 Decomposition of the gender wage gap in retail and wholesale**

	Relative earnings %	Increment to relative earnings pps	Adjusted gap %	Per cent of actual gap %
Actual	71.3		28.7	100.0
Adjustments:				
Equivalent occupational composition of men and women	83.4	+12.1	16.6	42.2
+ Full-time effect	88.7	5.2	11.3	18.2
+ Job tenure effect	89.7	1.0	10.3	3.6
+ Qualifications effect	89.8	0.1	10.2	0.3
Residual			10.2	35.6

- 3.28 The next most important effect is employment status. If all part-timers were to work full-time, women's relative earnings would be expected to rise by five percentage points, which represents 18 per cent of the actual gender pay gap. After allowing for occupation and employment status, differences in job tenure have a minor effect, reducing the gap by one percentage point (3.6 per cent of the total actual gap). Differences in qualifications have a negligible effect. Overall, there is not a significant qualifications gap between men and women in the retail and wholesale industry.
- 3.29 In the approach as formulated above, the foregoing factors 'account' for 64 per cent of the total wage gap of 29 percentage points in the retail and wholesale sector. This leaves ten percentage points of the gap, or 36 per cent, that cannot be 'explained' by reference to the factors included in the decomposition. The 'unexplained' component of the gap could reflect unobserved influences such as career attachment. Or it could reflect some form of unequal treatment of women workers in the sector, such as access to promotion or recruitment into higher-paying occupations. These issues are further examined below in reporting the results of the interviews with firms in the industry.

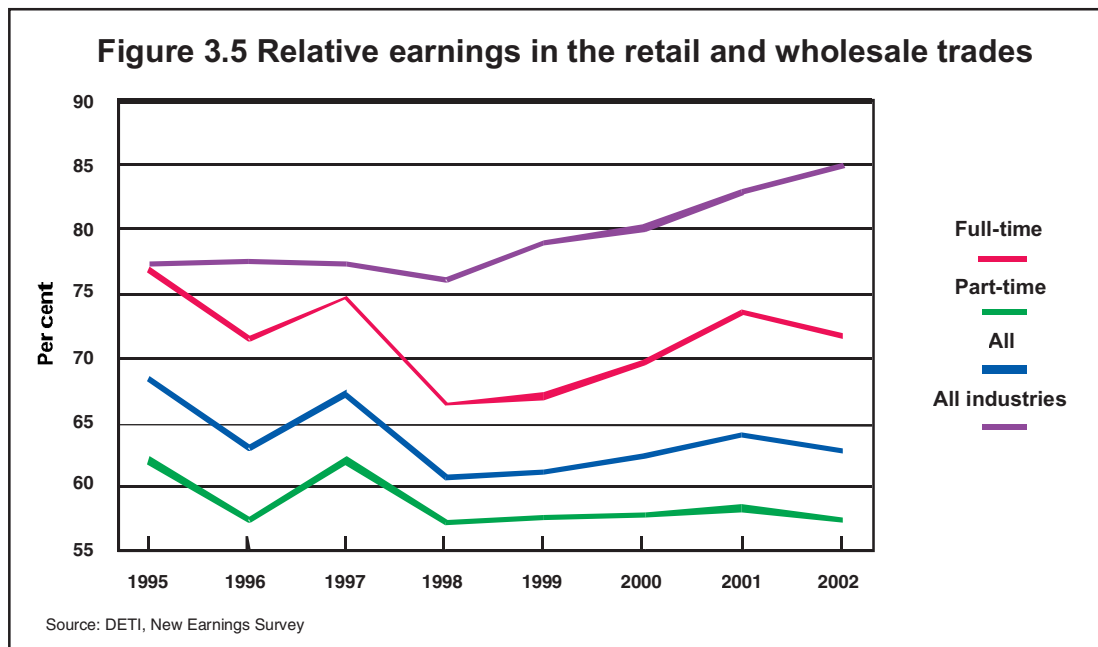
3.30 Though it is indirect and approximate, the quantification of the gender pay gap does have the virtue of setting the agenda for efforts to narrow the wage gap in the retail and wholesale sector:

- The extent to which women are concentrated in the lower-paid occupations.
- As a corollary of the above, the under-representation of women at the management level, compared to their share of the workforce.
- The issue of part-time working.

3.31 Prior to examining these issues in greater detail using the results of the interviews with retail and wholesale firms, the trend in relative earnings within the sector is briefly reviewed.

### The Trend in Relative Earnings

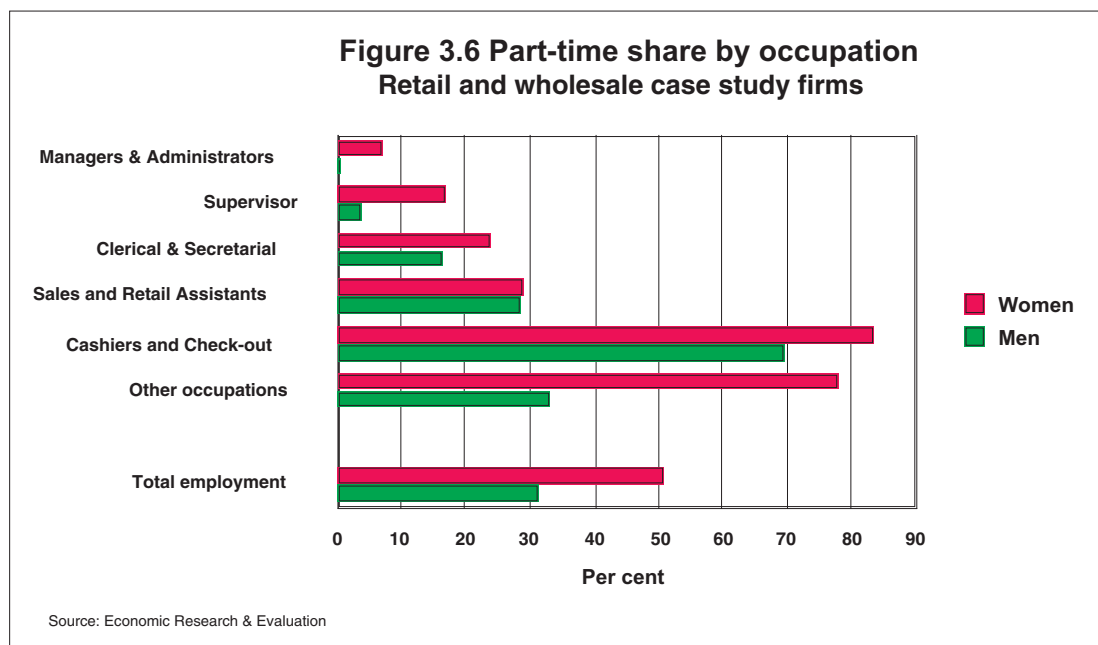
3.32 The main point of note from the trend in relative earnings is that there has been little or no improvement in the period 1995 to 2002 (Figure 3.5). If anything the trend has been one of a gentle decline, notably for full-time employees. This is in contrast to the increase in relative earnings that has been observed at the whole economy level, especially in the period since 1998.



3.33 Overall, however, it remains the case that the trend in relative earnings within the sector has not been favourable. The question then, is how might relative earnings evolve in the future? To what extent is it likely that the relative earnings ratio will assume an upward trend?

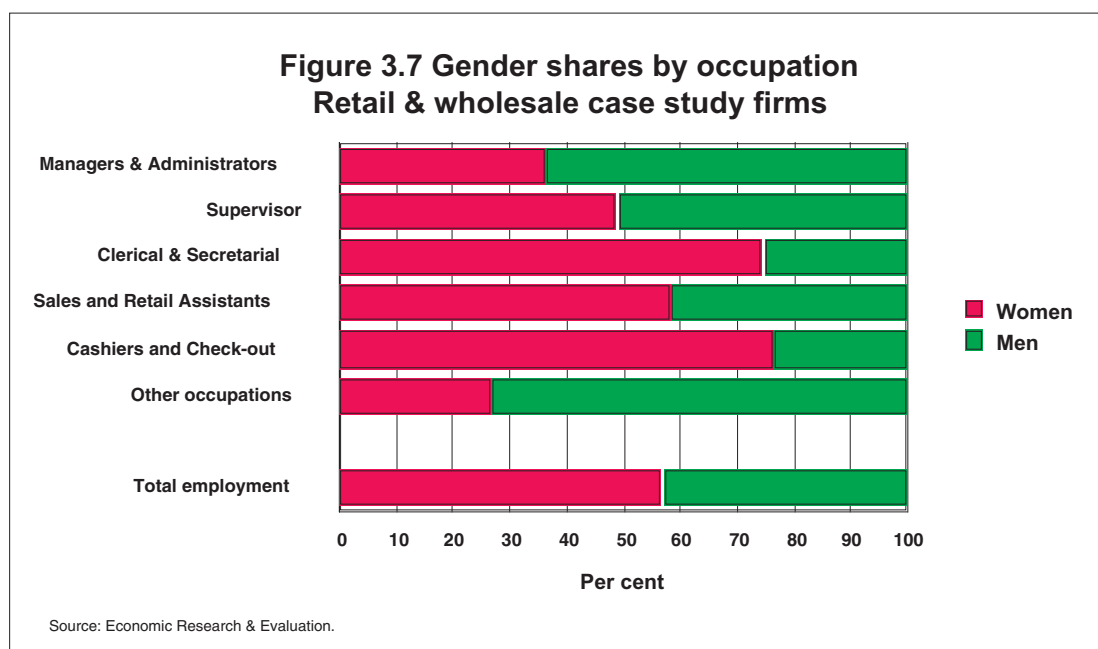
## Employment

- 3.34 The remainder of this Section focuses on the issues raised above, based on the results of detailed interviews with a total of 16 firms, 13 from the retail side and three in the wholesale industry. In order to maximise the coverage of employee jobs within the sector, the selection of firms for the survey was focused on the larger organisations. For that reason, the majority of the retail firms that participated in the survey are nationally-based, including a number of the retail multiples as well as multi-outlet consumer and household goods stores.
- 3.35 As part of the process of eliciting their participation, the survey firms were assured that all views expressed and information provided would be treated on a confidential basis. Thus, quantitative data are only presented in aggregate form. Similarly, views expressed in the course of face-to-face interviews are not attributed to any one individual or organisation. In general, the analysis presented here is a synthesis of views and opinions given by the persons interviewed, who were mostly personnel or human resources managers.
- 3.36 The study firms were broadly reflective of the industry as a whole in employing a high share of part-time workers, 43 per cent compared with 47.5 per cent of total employee jobs in retail and wholesale in Northern Ireland. The vast majority of these part-time workers are employed in the lower-paid sales occupations (Figure 3.6).



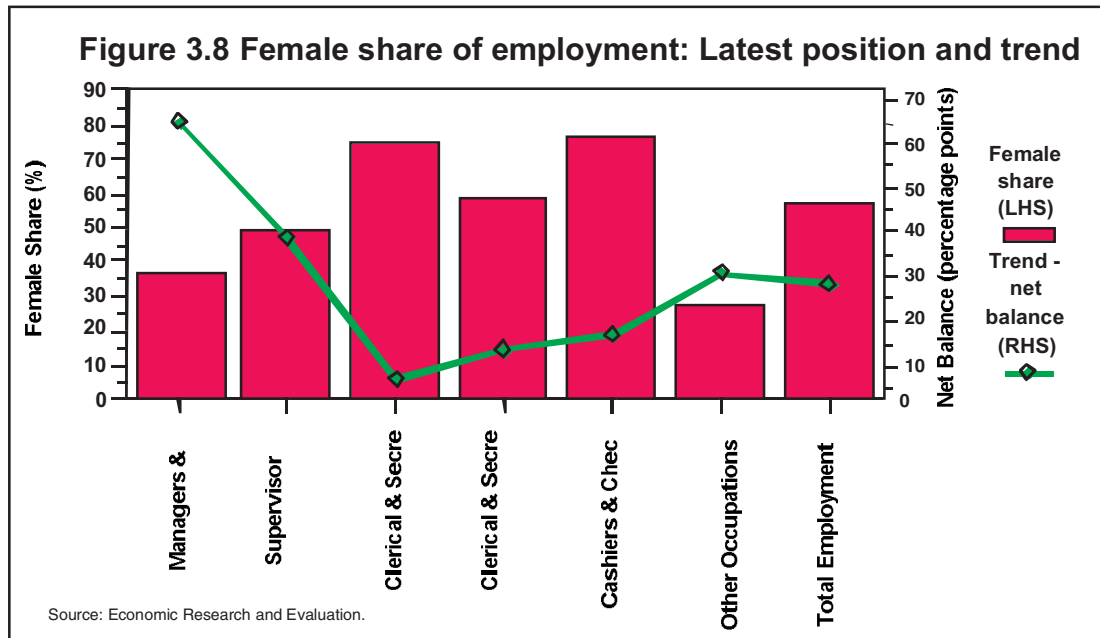
- 3.37 As described by the firms that were interviewed for this study, part-time workers are comprised of three main groups of people, working mothers, women returners and students. The latter tend to be fairly evenly distributed by gender. Part-time work is attractive to these groups, especially working mothers, because of the flexibility that it offers in terms of hours of work.

- 3.38 The high part-time share amongst sales workers also suits many businesses, which can offer a range of shifts to suit their requirements.
- 3.39 Amongst the study firms, women accounted for 57 per cent of employees, identical to the overall female share of employee jobs in the retail and wholesale industry. Partly reflecting the predominance of women amongst part-time employees, the female share was highest (77 per cent) for cashiers and check-out operators (Figure 3.7). Close to six in ten sales and retail assistants were women. As in the industry as a whole, therefore, women tend to be concentrated in the lower-paying occupations.



- 3.40 Women accounted for 37 per cent of managers and administrators, about 20 percentage points below their share of the total workforce in the survey firms. Their representation amongst supervisors was somewhat better, being close to 50 per cent.
- 3.41 Within the management level, however, women tended to occupy the lower or intermediate rungs on the hierarchy. For example, the number of store managers who are women was not high. Conversely, women were well-represented in the 'functional' areas such as accounts and personnel.
- 3.42 In order to gauge the extent to which these shares might be changing, and in what direction, the survey firms were asked to say, for each occupation, if the share of women had been rising, falling or remaining steady over the last three years. The results were weighted by number of employees and transformed into net balances between firms saying that the female share was increasing and those who said it was decreasing.

- 3.43 The responses suggest that women's employment share has been rising in each of the main occupations, but particularly at manager and supervisor level. Thus, on an employment-weighted basis, the proportion saying that women's share of managers and administrators had increased over the past three years exceeded the proportion saying that it had fallen by a margin of 65 per cent (Figure 3.8).



- 3.44 The second largest net balance (+40 percentage points) was reported in respect of supervisors followed by the miscellaneous other occupations category (30 percentage points). Though positive, the net balances in each of the other occupations were modest (less than 15 percentage points).
- 3.45 The implication of this is that, if the foregoing trends continue, women's employment will contain an increasing share of managers and administrators. This should, over time, have a quite positive effect on the gender pay gap in the sector. This issue is further explored by looking at recruitment and promotion within the survey firms.

### Recruitment and promotion

- 3.46 In the retail and wholesale trade, experience counts for much more than qualifications at the supervisory and management level. A range of different routes are used for recruitment into management posts, including external recruitment, internal promotion and, especially in some of the larger firms, graduate development programmes.
- 3.47 A common theme emerging from the discussions with the survey firms, especially on the retail side, is that more women are coming into management, partly through such schemes, but primarily because of two factors:

- The increasing pool of women within these firms coupled with their growing levels of experience in the businesses.
  - A shift in attitudes within the industry.
- 3.48 The latter factor is very important. According to one of those interviewed, in one of the smaller organisations, his firm has reached a position where, “if the most senior management position [running a store] became available, a women would probably get it”. This was regarded by the interviewee as a ‘big change’ in the industry that ‘would have been unheard of 10 years ago’.
- 3.49 It is, however, likely that women’s share of management positions in the retail industry will increase steadily rather than rapidly. It will also take time for women to reach the upper echelons within management, for at least two reasons:
- The number of available positions decreases further up the management hierarchy, but so also does employee turnover. The more senior positions, especially, are less frequently available than more junior positions.
  - The industry has not yet resolved the issue of enabling women to balance the demands of careers with family life.
- 3.50 Reflecting this, one firm commented that “work-life balance is an emerging issue” of which they are conscious, but still uncertain how it can be resolved.
- 3.51 Presently, the main form of flexibility in the retail and wholesale industry is part-time working, but this applies primarily to sales occupations. This is not the case at management level. Thus, the firms that were interviewed for this study found flexibility in terms of hours worked much more difficult to accommodate at management level and, to a slightly lesser extent, supervisor level.
- 3.52 Partly, this reflects what has historically been a long-hours and hard-driven culture at the management level, especially store management. For store managers, the absence of part-time working also reflects what one interviewee described as an ‘accountability’ issue, as many stores are open for quite long hours, some on a 24-hour basis. Historically, this long-hours culture has perhaps tended to limit access by women to management positions. Indeed, one interviewee noted that store managers tend to be men at least partly because of the demanding hours involved.
- 3.53 Some firms, especially the larger businesses, are in a position to offer career-breaks in order to retain people in whom they may have invested considerable resources on training and development. In another case, career breaks were said to be “difficult for a company of this size”.

- 3.54 Overall, while the occupational composition of women's employment in the industry is changing, this is happening slowly. Attitudes to women in management are more positive, and have certainly been jolted by the changes of the last ten years with their infusion of new businesses from outside Northern Ireland. The pace of change will be strongly shaped by the size of the 'pool' of women who are able to move into management positions as these become available. This will partly be a function of the industry approach to training and development.

### **Training and development**

- 3.55 In general, the level and scope of training and development activities tends to increase up the occupational hierarchy. Persons in sales occupations receive mostly on-the-job training in addition to what is required for induction purposes. As employees progress through the ranks, the training they receive has a more 'general' component, e.g. management skills, health and safety, and so on.
- 3.56 One trend apparent in the larger firms especially is the more proactive management of training and development for internal promotion. Increasingly, the larger firms in the retail industry operate some type of scheme for facilitating progression into supervisory or management ranks. Some of these schemes are more formalised than others, while some also have a 'fast-track' option. The main driver, however, has been to retain and develop staff in a situation of rapid expansion and high turnover of employees, especially in sales occupations.
- 3.57 The impression gained from the interviews is that, in general, women stand to benefit from these schemes in terms of promotion and progression. This is because, as one interviewee noted, the 'pool' into which these schemes tap contains a large number of women.
- 3.58 While such schemes are open to all, some groups of women may have more difficulty than others in seeking to enter such development programmes. In particular, women working part-time are often doing so for a reason other than career choice or development. These women may have difficulty in juggling home and a career. As one interviewee put it, the latter often gets 'squeezed'. The impression is that, in practice, progression tends to come more from the full-time ranks.
- 3.59 Women returners may also experience greater difficulty in accessing such schemes. This is not universally true, and interviewees were able to give anecdotal evidence of older women returners seeking to develop a career. One of the issues here would appear to be that of self-confidence, which was specifically identified by one of those interviewed. This was from the perspective that recruitment and retention are key issues for the business, and there may be considerable untapped potential amongst women returners with low levels of confidence due to having been out of the labour market for some time.

## Pay structures

- 3.60 As in the industry as a whole, the structure of basic pay rates within the study firms is essentially two-tiered. Pay rates at management level can vary considerably, from around £8 per hour to over £20 per hour. Below the management level, basic pay structures tend to be very simple, and relatively low, around £5 per hour. In terms of addressing the gender pay gap, the pay structure at management level compared to other levels heightens the importance of the issue of progression and promotion.
- 3.61 Though basic pay is relatively straightforward, the same is not quite true with respect to additional payments. Particularly in a time of low inflation, firms are making more extensive and varied use of different forms of additional payments (IDS, 2001). In most firms, overtime payments can be made to staff paid on an hourly basis, such as those in sales occupations. Beyond that, the mix of additional payments varies from one firm to another, including staff discounts, Christmas bonuses and sharing of store bonuses for achievement of targets.
- 3.62 Below management level, the incentives tend to be available on a pro-rata basis. At management level, bonuses can vary considerably as a proportion of pay. This is particularly true of store managers. In some organisations, the bonus available to store managers is a significant component of pay (up to 30 per cent in one firm). This means that the differential in basic pay between upper management and other staff, may well be wider when measured in terms of gross pay.
- 3.63 In the wholesale sector, while basic pay can be quite low and comparable to retail, it is also the case that, for some groups of workers, additional payments are a large portion of take-home pay. This is more often the case with the more heavily unionised groups, such as warehouse operatives and drivers. Some of these payment systems are very long-standing indeed. One interviewee referred to a bonus scheme dating from the 1960s. Such deeply-embedded payment systems are rather opaque. Further they may lead to differentials between workers that are more an artefact of historical precedence than the relative value of one job compared to another.
- 3.64 Within the survey firms, rates of increase in basic pay tended to be relatively uniform below management level, though there were some exceptions. For example, some firms accorded a higher rate of increase to their minimum rates. In one case, this followed the removal of a grade from the pay structure.

- 3.65 There was also a degree of diversity in the extent to which unions were involved in pay increase negotiations. Some firms agree their rates with a union, others consult while some have no union involvement. The impression gained was that union negotiations are focused on pay rates and benefits. No mention was made of unions pressing equal pay issues. But this is perhaps understandable in a situation where pay structures are relatively flat and low pay is the key point of concern.
- 3.66 Below management level, the determination of the actual level of basic pay tends to be driven very much by industry 'standards'. Most firms in the retail industry know what their competitors are paying in terms of hourly rates for sales staff. Within that context, some firms are clearly market 'leaders' in the determination of hourly rates. Other firms tend to cluster around the market leader(s), usually paying slightly less.
- 3.67 In effect, the National Minimum Wage (NMW) sets a floor for sales staff and firms pay somewhat above that, depending on local competition for labour. Though as the multiples are now so well dispersed, pay rates will not necessarily vary greatly between urban areas in Northern Ireland. Overall, hourly pay rates of sales staff in the retail industry tend to be quite transparent. Certainly, the multiples will have influenced this, especially since many of their settlements, which are determined nationally, are published each year in, for example, various Income Data Services reports.
- 3.68 As in other aspects of pay, the situation with respect to managers, especially senior managers, is quite different. At that level, basic rates of pay vary quite substantially. The variation is, however, largely influenced by the size of the manager's store or extent of their responsibilities. Thus, the pay of store managers varies depending on the size and turnover of their store. Similarly, senior team managers within larger stores may earn as much as managers of small stores.

### **Attitudes to Equal Pay**

- 3.69 The interviews with each of the survey firms concluded by posing a number of questions under the general heading of equal pay. The following are the main points to emerge.
- 3.70 A large majority (13) of the firms were 'very confident' that their pay systems are fair to both men and women. Two respondents said that they did not know as they had not assessed the fairness of their systems. The basis for this degree of confidence was primarily underpinned by the view that pay is the same for all people *within* a particular group or band and everybody has the same opportunity as anybody else to progress within the firm.

- 3.71 This degree of confidence was expressed despite the fact that the respondents did not monitor pay differentials between men and women in their organisations, though in some cases this was described as a Head Office function that would not be undertaken in Northern Ireland. Some respondents thought that it might be interesting to undertake such monitoring, but this was not a widespread view.
- 3.72 Reflecting the above, the issue of equal pay was not generally seen as an important business performance driver. One firm stressed the importance of equal pay in the context of recruitment and retention. For this firm, family-friendly policies were an important consideration, linking work-life balance to retention of staff. A number of other firms stressed the importance to the business of being perceived as a fair employer. Overall, however, equal pay is not a “burning issue” in the industry sector. For example, the survey firms did not have equal pay policies that went beyond what is required in the legislation.
- 3.73 Firms were also asked about equal pay reviews. None of the firms had undertaken this or considered it a useful thing to do, though it was noted by some that Head Office in Great Britain might have done so. Nor was there any great familiarity with the EOC-GB’s equal pay review model.

### **Concluding remarks**

- 3.74 There is a large gender pay gap in the retail and wholesale sector, in the order of 30 percentage points when measured against all men’s earnings and 37 percentage points when women’s earnings are compared to male full-time earnings. The size of the gap reflects the combined influence of:
- Occupational segregation, with women more highly concentrated in the lower-paying groups.
  - Under-representation of women in management, especially at upper levels.
  - Part-time working and the higher share of women in that type of position.
- 3.75 The trend in relative earnings of women has been broadly static, even slightly downward. This is difficult to explain, as there appears to have been an increase in the percentage of women in management and administrative positions.

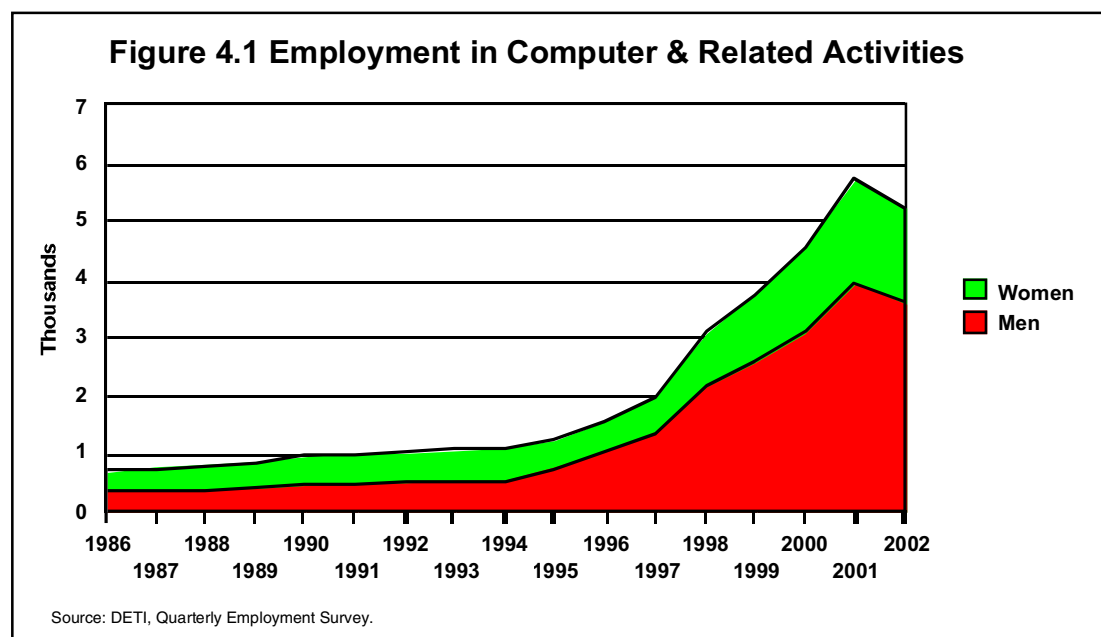
- 3.76 This increasing share of women in management is confirmed by the case study interviews and analysis of qualitative data from participating retail and wholesale firms. These interviews indicate that the proportion of women in management positions is likely to continue increasing. Partly, this reflects changing attitudes within the industry. But also the pool of women available for recruitment to or promotion into management positions is rising.
- 3.77 This is likely to continue as, given the recent growth, the industry also faces a need to develop people for management positions. The proportion of women in management positions will, however, increase relatively slowly in the medium term. The pool of women applying for management positions is still proportionate to their share of employment at that level.
- 3.78 The change is, however, happening slowly and will take time to have an effect on the gender pay gap in the sector. Accommodating the change will prove an increasing challenge for the industry, as the major type of flexible working is part-time hours. Progression into management is almost always associated with full-time commitment. However, the issue of work-life balance has not yet been resolved by the industry.
- 3.79 Part-time workers are concentrated in the lower-paid sales occupations, and this is unlikely to change greatly in the foreseeable future. This pattern of working meets their needs for flexibility in hours worked, which also tends to suit many businesses. This does mean, however, that the part-time share amongst women in the industry will remain high for the foreseeable future.
- 3.80 This will in turn tend to keep relative earnings in the sector below the whole-economy level. But the problem is fundamentally one of low pay. Indeed, when interviewees were asked what they thought would have most impact on the gender pay gap, the most common response was the need to address the problem of low pay.



## 4 The IT Sector

### Introduction

4.1 This Section considers the gender pay gap in the IT sector in Northern Ireland. As reflected in the experience of computer software and related activities, employment in IT registered extremely rapid growth from the mid-1990s through to 2001 (Figure 4.1). Since then, the industry has experienced a sharp retrenchment, suffering a 9.5 per cent loss in jobs between 2001 and 2002. This reflects the global downturn in high-tech industries.



4.2 The recent downturn means that the economic context within which this case study was prepared is quite different from that which prevailed in the boom years 1995 to 2001. Rather than recruiting, many firms have been shedding jobs in the past year. This has significantly eased the upward pressure on earnings growth in the industry. The effect of this has, perhaps been less than might have been anticipated. As with any downturn, the effects have been uneven and some firms have continued to recruit. Indeed, the study has benefited from the opportunity that the pause in growth has provided for firms to take a closer and more considered look at their pay systems.

4.3 As in the discussion of the retail industry, the section commences by considering the gender pay gap within the sector, though the assessment of the size of the gap and associated factors is rather more constrained by the problem of data availability than was the case with the retail sector. The Section then considers current patterns in employment, including recruitment, promotion and mobility of men and women, and wage-setting mechanisms in the sector, before concluding with a discussion of equal pay issues as these relate to the sector.

## The Gender Pay Gap

4.4 The latest position regarding the gender pay gap for employees in IT-related occupations is shown in Table 4.1 below. The small sample sizes for both men and women mean that the data must be interpreted with considerable caution.

**Table 4.1 Average earnings of full-time employees in IT-related occupations: 2001**

SOC 2000 code	Occupation	Sample size	Average hourly earnings			Relative earnings
			Men	Women	All	%
213	Information and communication technology professionals	32	£12.66	*	£12.20	*
313	IT service delivery occupations	13	*	*	£7.31	*
	<b>Total</b>	45	£11.48	£9.40	£10.75	82
	All full-time		£9.92	£8.58	£9.42	87
	<i>IT as % of all full-time</i>		116	109	114	

Note:

\* Too few in sample to provide reliable estimate.

Source: DETI, New Earnings Survey.

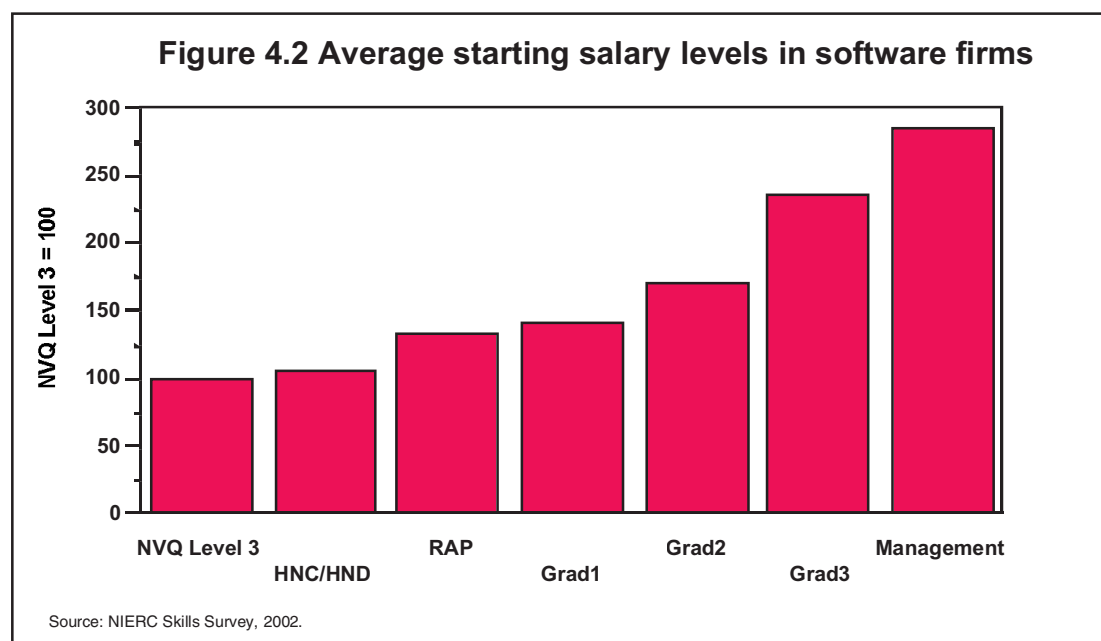
4.5 Bearing in mind the issue of sample size, the main points are as follows:

- The NES data estimate a gender wage gap of 18 percentage points in IT-related occupations.
- Due to the sample size, this estimate will have a relatively large margin of error.
- Persons working in the IT sector earn above the average for all full-time workers. Thus, an increase in IT-related occupations' share of women's employment can have a positive effect on the whole economy gender wage gap.

4.6 It is possible to obtain some indication of the wage gradient within the IT sector using the information from a NIERC survey of 83 software services businesses or organisations, conducted in August 2002. This is because the NIERC study provides data on the average starting salary levels of the following grades of staff, distinguished according to their level of qualifications (essentially degree or otherwise) and experience:

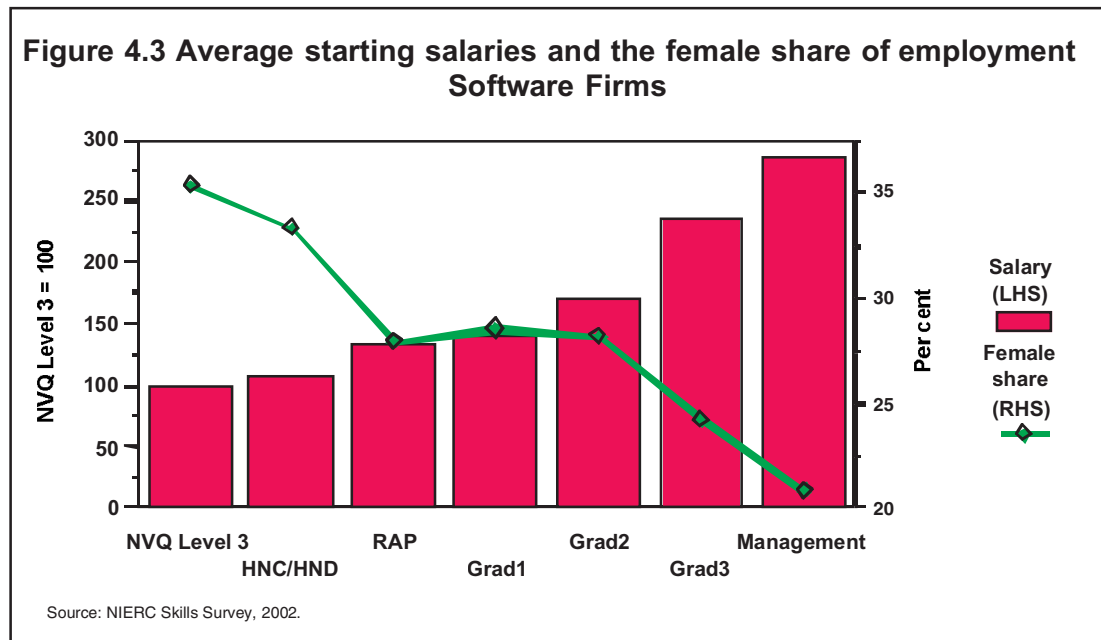
- Technical support staff (NVQ 3 level)
- Technical support staff (HND/HNC)
- RAP qualifiers with no experience
- IT graduates with no experience
- IT graduates with experience carrying out mainly technical functions
- IT graduates with experience of carrying out mainly technical functions but capable of project management
- IT graduates with sufficient experience to undertake mainly project management/strategic planning functions

4.7 The average starting salaries for each of these levels, expressed as a percentage of the starting salary for the lowest-paid level (NVQ 3), are shown in Figure 4.2 below. The main point is that average starting salaries have a very wide range, with the highest level starting at almost 300 per cent of the lowest level.



4.8 Unfortunately, data were not available on relative earnings *within* each of the foregoing qualifications/experience levels. It is not therefore possible to say how women's relative earnings vary across the wage gradient illustrated in Figure 4.2. It is, however, possible to say something about the distribution of women employees across the wage gradient.

- 4.9 The main point of note regarding the distribution of women within the IT firms surveyed by the NIERC is that the gender share is inversely related to the wage gradient. That is, the higher the salary level, the lower the proportion of women working at that level (Figure 4.3).



- 4.10 There are two points of interest from the relationship shown in Figure 4.3. First, why should the gender share vary by salary level? The fact that this is observed in the NIERC survey would indicate that the relatively low female share in the IT sector is not just a question of the gender share in the 'pool' from which new recruits are drawn, but that there are also some issues around promotion and progression within the firms.
- 4.11 The second point of interest in Figure 4.3 is that it raises the possibility that the sector may experience a gender wage gap purely as a consequence of the relative concentration of women in the lower salary levels. One way of assessing this is to calculate an expected relative earnings ratio based on the gender distribution and wage gradient shown in Figure 4.3 above. This gives an expected relative earnings ratio of 94 per cent.
- 4.12 In other words, according to the NIERC data, even if women were paid exactly the same as men at each of the seven levels in the wage gradient, their overall average hourly wage would still be six percentage points below the male average by dint of the relative concentration of women at the lower end of the wage gradient. For what is still a relatively young industry, it is perhaps surprising to find some very familiar problems emerging, that is, there is evidence of a degree of gender segregation across the wage gradient for IT-related occupations.

## Assessment

- 4.13 It is difficult to draw firm conclusions on the gender wage gap in the IT sector from the data presented above. Nonetheless, both pieces of evidence that are available would suggest that a gap does exist. It remains, however, a moot point as to whether this is entirely due to differences in human capital characteristics such as qualifications or experience or some form of unequal treatment or some combination of these.
- 4.14 The LFS data that are available would suggest that there is little difference between men and women in IT-related occupations in respect of qualifications and proxy variables for experience such as age since left school and length of time in the current job. Thus, amongst those working in IT-related occupations in the LFS sample<sup>7</sup>, 63 per cent of both men and women possessed a degree.
- 4.15 Overall, it would not be appropriate to draw firm conclusions from the LFS profile, though it does provide some evidence that women in IT-related occupations have similar human capital characteristics to their male counterparts in respect of educational qualifications. But this is likely to reflect the requirements for recruitment into the occupation in the first instance.
- 4.16 Conversely, the finding from the NIERC study would suggest that women working in the IT sector have a lower level of human capital accumulated through experience in the sector, even for those with a degree. This could reflect a cohort effect, due to women being newly recruited into the sector in the recent period of expansion. Alternatively, it may be that women working in the sector face greater difficulty in maintaining career attachment and hence progressing up the experience ladder. The available data cannot, however, distinguish between these two hypotheses.

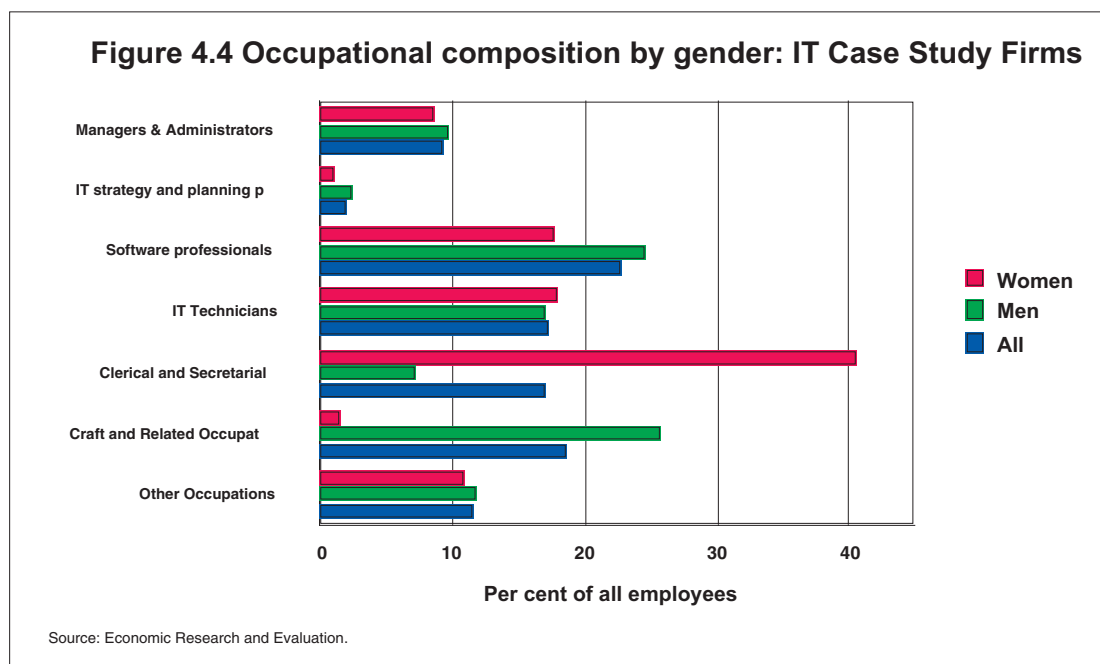
## Employment

- 4.17 The remainder of this Section is based on the findings drawn from the interviews with personnel managers in the eight organisations that participated in the IT case study for this research. These organisations included seven businesses and the IT services in the Northern Ireland Civil Service (NICS). Of the seven businesses surveyed, five were in the computer software and related activities sector, one was in manufacturing and the remainder was in the telecommunications sector.

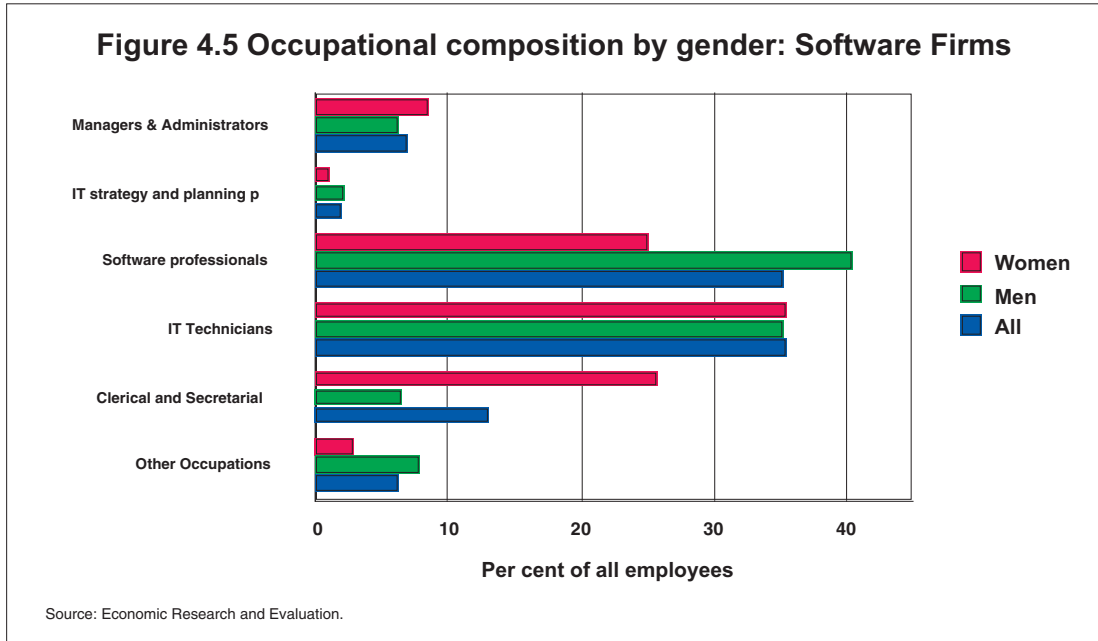
---

<sup>7</sup> Pooling the datasets for 1993, 1994, 2000 and 2001 yielded just 80 cases of individuals working in IT-related occupations, of whom 71 per cent were men and 29 per cent were women.

- 4.18 The survey of IT organisations covered 6,515 employees, including 2,423 in the computer and related activities industry. A little over 1,600 computer services professionals work in these firms alongside 1,100 IT support staff. The survey therefore achieves reasonable coverage of employees in terms of analysing factors affecting recruitment, promotion and pay structures in the IT sector, broadly defined.
- 4.19 Regarding the case study firms as a whole, the main point of note is that the occupational composition by gender does not exhibit the same degree of segregation that exists in the retail and wholesale sector. Thus, the proportion of women working as managers was about the same as for men (Figure 4.4). Women were somewhat less likely to be employed in the professional occupations, by a margin of about five percentage points in the case study firms taken as a whole.

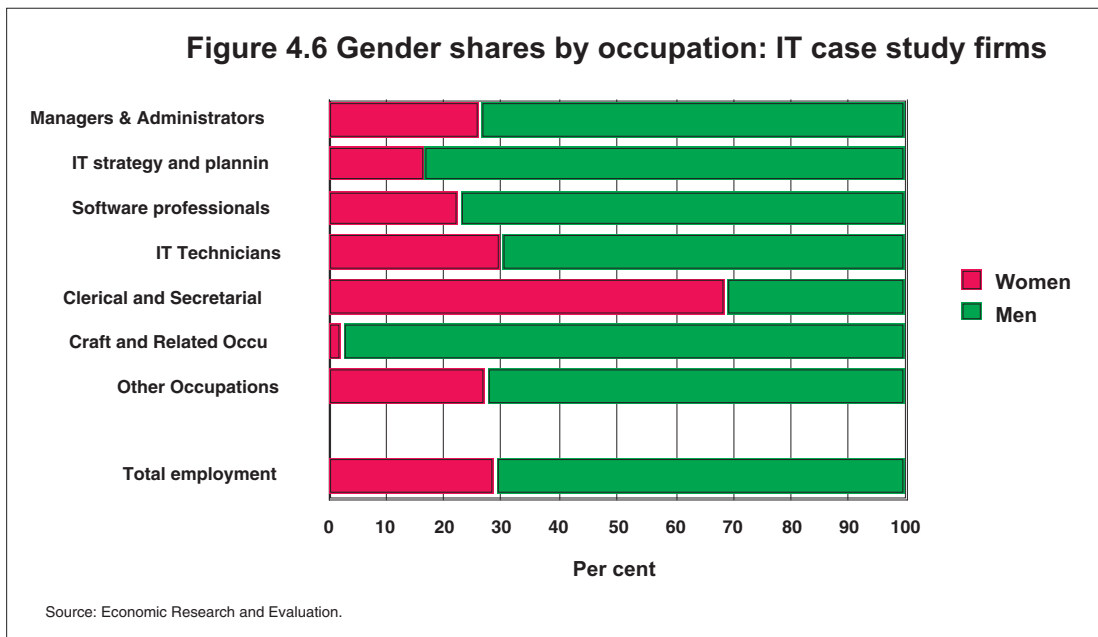


- 4.20 The difference was greater in the software firms, where 40 per cent of men worked as software professionals compared to 25 per cent of women (Figure 4.5). The obverse of this was the higher share of women working in clerical and secretarial occupations, 25 per cent compared to seven per cent (Figure 4.5).
- 4.21 At 40 per cent, the proportion of women working in clerical occupations was higher in the case study firms taken as a whole (Figure 4.4). This in turn reflects the presence of customer support call centre operations in two of the case study firms. Another one of the software businesses, part of a multinational firm, was also probably better classed as a call centre, albeit providing technical support, hence its employees, many of whom are women, fall into the IT technicians category. While not central to this study, the call centre units are nonetheless interesting because they illustrate an emerging form of gender segregation, within a very broadly-defined IT sector.

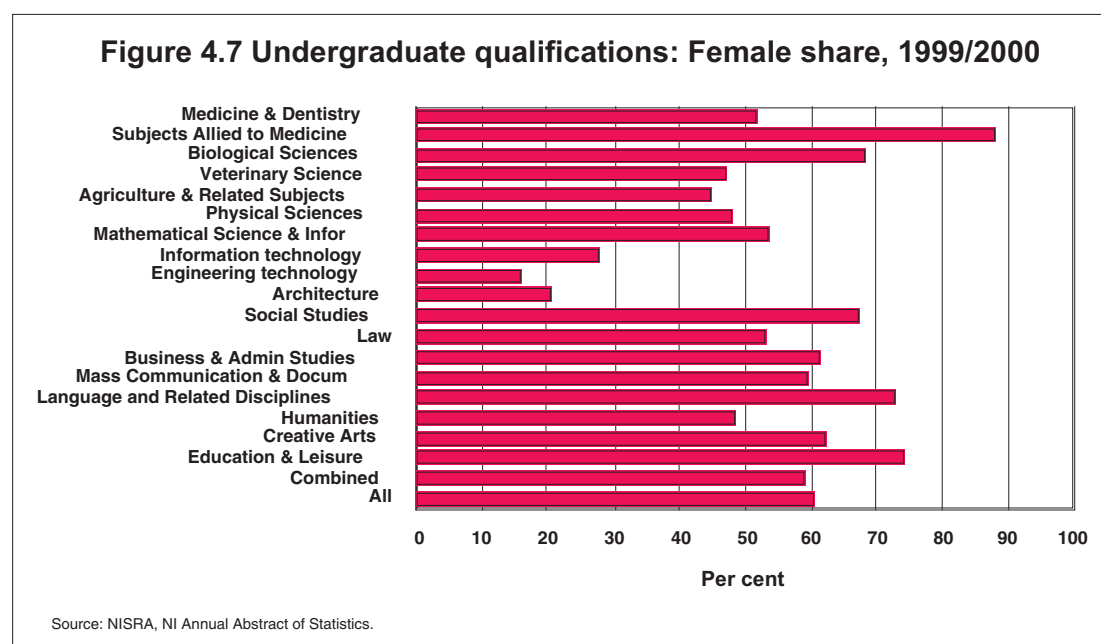


**Gender shares**

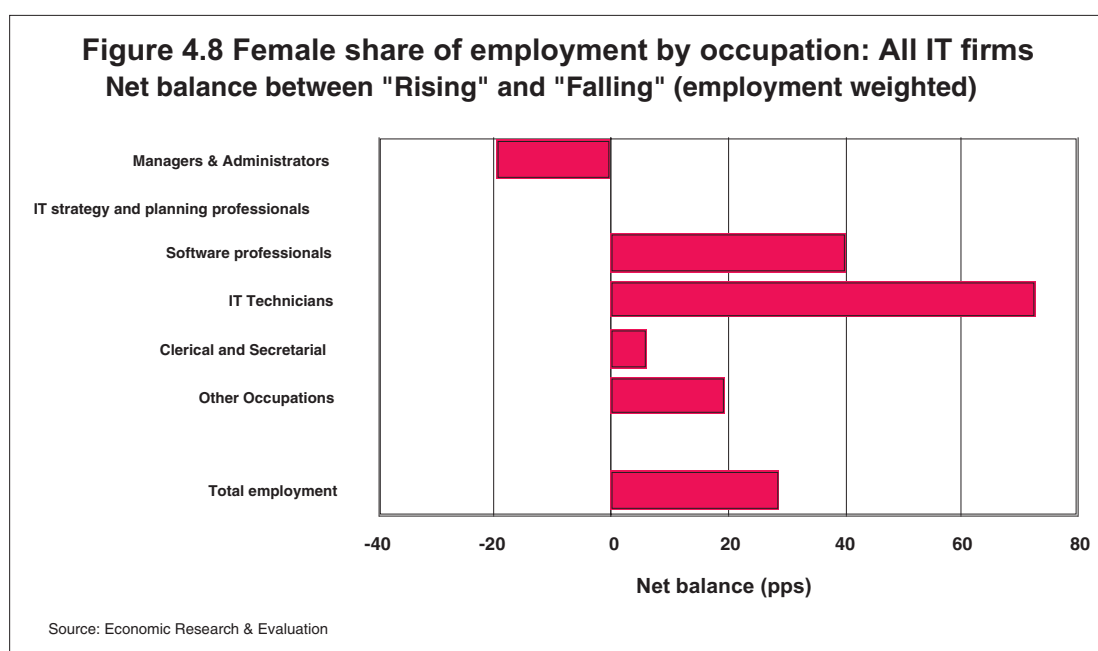
4.22 While there is some gender segregation in the IT sector, this is not as pronounced as in retail and wholesale, where a large majority of women are employed in a single occupational group. In the IT sector, the more striking feature is the comparatively low proportion of women working in the industry. This holds across all occupations except for clerical and secretarial staff (Figure 4.6). The most extreme example is in the craft and related occupations. The case study employees in this occupation are almost all located in one firm, in an engineering craft that has been traditionally male-dominated.



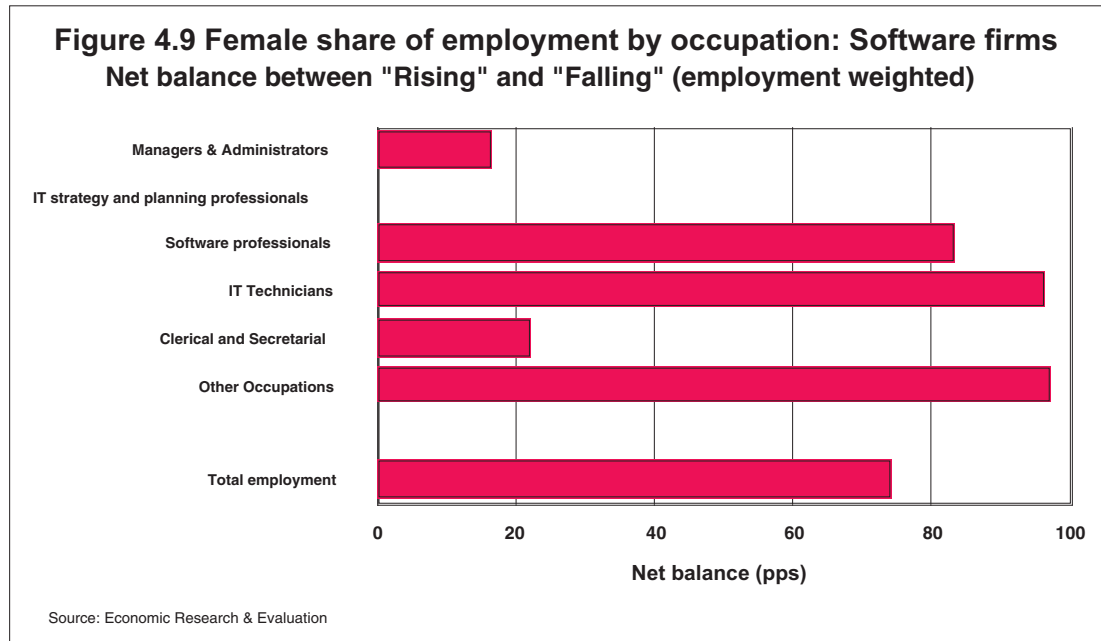
- 4.23 More surprising, perhaps, is the pattern in the IT-related occupations, ranging from IT strategy and planning professional to IT technician. In these occupations, the female share was less than 30 per cent, varying hardly at all between the case study firms. Nor was the picture any different in the public sector compared to the private sector.
- 4.24 When asked why the share of women working in the IT professional occupations was so low, the respondents unanimously stated that this simply reflected the pool of applicants that they are faced with. A number of firms were able to demonstrate this with data on women's shares of applications and appointments. These data indicated that women generally account for 25-30 per cent of applicants for IT-related professional occupations, and a similar proportion of appointees.
- 4.25 A number of respondents also commented that the gender share of applicants has to be a function of the choices that people make when deciding on prospective career paths at school or university. As will be seen below, a university degree is virtually mandatory for IT-related professional jobs. To that extent, it is interesting to look briefly at the issue of subject choice in university.
- 4.26 Considering qualifications in different subject areas at undergraduate level, it is apparent that the female share of IT-related professionals in the case study firms in fact matches very closely with the female share of undergraduates from Northern Ireland's universities in the more typical IT-related subjects. As illustrated in Figure 4.7, the female share of information technology graduates in 1999/2000 was 28 per cent. This is remarkably similar to the female share of applicants for professional and associate professional occupations in the case study firms.



- 4.27 The question that then arises is whether or not women's share in IT-related occupations is changing and in what direction. To address this issue, the survey firms were asked to say, for each occupation, if the share of women had been rising, falling or had remained steady over the last three years. The results were weighted by number of employees and transformed into net balances between firms saying that the female share was increasing and those who said it was decreasing.
- 4.28 On balance, the respondents in this survey considered that the female share was rising in the IT-related occupations (Figure 4.8). Taking all of the case study firms, a (weighted) net balance of +40 per cent said that the female share in software professionals had been rising.



- 4.29 The trend was stronger in the software firms, with +80 per cent saying that the female share had been rising (Figure 4.9 overleaf). There were also large positive net balances saying that the female share of IT technicians was on an upward trend. The responses were less positive in relation to IT strategy and planning professionals, with a zero net balance for the case study firms taken as a whole. This is likely to be, at least in part, indicative of reduced employment and/or retrenchment in some firms over the past number of years. Conversely, the five software firms identified a strong positive net balance for this occupation over the past three years.



4.30 Regarding the future, however, it is likely that the female share of IT-related occupations will rise only slowly. Partly, this is due to the reduction in hiring rates amongst many firms in the IT industry. But it also reflects the existing size of the potential applicant pool, both those who are currently in jobs and the qualifications profile of university graduates. The latter is, however, subject to some policy influence in terms of expanding the pool of potential applicants. This issue is further addressed below.

### The part-time share

4.31 The part-time share in the study firms was minute, less than one per cent. In large part, this reflects a lack of demand on the part of workers for part-time hours within these case study firms. This is true even in the public sector unit, where the full plethora of flexible working arrangements is available.

4.32 The absence of part-time workers partly reflects an age effect, as the software industry in particular tends to have a relatively young workforce. But a younger age profile is not the only reason why part-time working is almost absent. In fact, one important reason is that many employers in the industry are able to offer flexible start and finish hours. These are what enable women, mostly, to attend to family responsibilities while also holding a full-time job.

4.33 Fundamentally, however, part-time working is not, as one manager put it, in 'the nature of the business'. The business is not always nine-to-five and workers are expected to be 'flexible' when circumstances dictate. Some firms spoke of an 'output-driven' culture. Another respondent spoke of a culture of 'presenteeism'.

- 4.34 At least in the private sector, part-time working appears to be hardly considered, especially at management level. One respondent described the business as having a mindset that 'there is no such thing as a part-time manager'.
- 4.35 This may be changing, as a very consistent theme in the interviews was that work-life balance issues were 'looming' and would have to be addressed at some stage.

### **Recruitment and promotion**

- 4.36 In contrast to the retail and wholesale sector, qualifications are very important in determining entry into the IT sector. At management and professional level, a relevant qualification at degree level is the norm. For management, this will be dictated by the nature of the person's role, which could be functional or operational. Regarding the functional roles, women are not under-represented amongst business and administrative graduates (Figure 4.7 above). IT-related professional positions typically require a degree in computing or a related discipline. Women tend to be under-represented in these areas (see Figure 4.7 above).
- 4.37 Interestingly, when the industry was expanding most rapidly in the late-1990s and through to 2001, a number of firms either designed conversion courses for those who possessed a degree, or made use of a Government programme. These initiatives met with mixed success from the perspective of increasing the female share (which was not the objective of the initiatives). Thus, one firm that introduced a conversion course did not notice any increase in the female share of applicants.
- 4.38 Another firm made use of the Department for Employment and Learning's (DEL) Bridge to Employment programme. This is a programme that is targeted on the unemployed and provides a firm with grant support for participants on work placements. The personnel manager who had used this programme noted that it had expanded the scope of their recruitment beyond IT-related disciplines and, as a by-product of that, helped to increase the share of women.
- 4.39 The lesson from this experience is the pool of applicants for IT-related occupations is not necessarily constrained by the pool of persons with a degree in that subject area. But initiatives such as those discussed above may not help greatly in the short-term, as the sector is still experiencing sluggish overall demand. Thus, while recruitment was a critical business concern up to a year ago, it is less of a factor at this time. Indeed, a number of firms have been more engaged in redundancy programmes.

- 4.40 Experience is also an important factor in the IT sector, primarily as it affects promotion and progression. Historically, people in the professional and associate professional groups tended to progress with experience. But firms are now taking a more careful look at how to manage progression. Presently, the 'steps' model that is illustrated by the wage gradient in Figure 4.2 above probably best describes the model for progression as it currently exists within the sector. Within that context, progression occurs with the acquisition of experience, strongly supported by training and development.
- 4.41 This progression model, however, is linked to the individual appraisal system that predominates in the sector, and which is discussed below under pay.

### **Pay structures**

- 4.42 Due to recruitment difficulties and intense local competition for the available pool of labour, there was considerable upward pressure on the growth of salaries up until recently. One legacy of this appears to be that, in the private sector at least, salary levels were often negotiated virtually on an individual case-by-case basis, leading to a profusion of salary points within grades. As one respondent remarked, the more someone pushed, the more they got, due to the recruitment pressure.
- 4.43 These pressures have since abated and a number of firms are taking a more careful look at their salary structures. Clearly, within a sector where individual skills can be in high demand at any one point in time, there will always be some degree of 'flexibility' in salary scales. For a number of firms, a key concern in this more settled market is to make their salary structures more transparent.
- 4.44 In that context, some firms are either looking to use, or have already made use of, some type of job evaluation. More commonly, however, pay is determined by reference to benchmarking against the rest of the industry using, for example, salary surveys. Unions are mostly absent from the sector, especially in the software sector, though they are present in the public sector unit and also some firms that had previously been in the public sector.
- 4.45 Each one of the organisations interviewed for this case study uses some form of performance appraisal system to determine salary increases and progression. Clearly, such a system offers potential for differential treatment that may affect some groups more than others, depending on the criteria used and the application of these criteria. In such a context, monitoring outcomes is very important to ensure fairness. Monitoring for fairness did not appear to happen on any kind of systematic basis, though one manager was able to produce bell curves to illustrate how teams were monitored. More often, managers spoke of the difficulties with the system, notably the tendency to cluster around the mean.

## Attitudes to Equal Pay

- 4.46 Reflecting their more complex and differentiated payment systems, as well as the use of individual performance appraisal, the IT sector firms were somewhat less sanguine than the retail and wholesale firms regarding the fairness of their pay systems. Half of the eight participants were 'very' or 'fairly' confident that their pay systems were fair. In two of these cases, the confidence was based on the fact that they had undertaken an analytical job evaluation study. One of these was the NICS, the other a large firm that has been active in the promotion and use of equal pay reviews.
- 4.47 One of the organisations expressing confidence in their pay systems also noted that, while they were very confident regarding pay bands and relativities, the individual appraisal system was a potential problem area.
- 4.48 The remaining firms did not express a lack of confidence. Rather, they took the view that they had not assessed the fairness of their pay systems and could not therefore give a definitive answer.
- 4.49 It was, however, also the case that few of the survey participants monitored their pay systems from an equal pay perspective. One respondent said that their organisation did monitor pay differences. A second interviewee said that their organisation did this informally. Another firm monitored bell curves for performance appraisal outcomes. Overall, however, despite payments structures that can be somewhat opaque, and the use of individual performance appraisal, there was no systematic approach to monitoring pay systems for fairness. This is not to say that fairness was absent, rather that it cannot be demonstrated.
- 4.50 Most of the organisations (five of the eight) said that equal pay is a very important business issue for the firm. Often, this was because the organisation felt that it was important to be seen to be a fair employer. In the public sector, there was also a view that it has to be seen to be in the lead on this issue. In the private sector, the importance of the issue was more often driven by fairness than profit, though one firm was very keen on the issue as part of a policy to help improve its customer focus by increasing diversity within the firm. Along with the public sector, this was also the only private sector firm to have a policy on equal pay that went beyond the minimum required by legislation.
- 4.51 This same firm had also implemented an equal pay review system and was fully apprised of the EOC-GB's Equal Pay Review Model. Knowledge of this, and willingness to undertake an equal pay review on a voluntary basis, was more mixed amongst the remaining private sector firms. Half of those interviewed said that they would definitely or probably undertake an equal pay review on a voluntary basis. The others did not object to this, but there was a view that if it was voluntary, then equal pay reviews would be 'long-fingered'.

## Concluding remarks

- 4.52 It is not possible to establish the precise magnitude of the gender pay gap that exists in the IT sector in Northern Ireland. Based on the evidence that is available, it appears that such a gap does exist. Partly, this may reflect a higher concentration of women in the lower-paying levels within IT-related occupations. These levels themselves are determined by experience and qualifications.
- 4.53 It is not clear, however, if this greater concentration of women in the lower end of the wage gradient reflects the impact of career interruptions or is a mix effect deriving from a more recent increase in share at the more junior or entry levels. If the latter is the key factor, then the gender wage gap ought to close as that cohort progresses within the sector.
- 4.54 On the other hand, much of the sector has an output-driven culture, which is probably reinforced by the extensive use of individual performance appraisal in determining pay and progression. Most often, the outcomes from this type of process are not monitored for their fairness. Doing this would help to better understand the nature of the gender pay gap in this sector.
- 4.55 Flexibility in the industry for women workers comes from the use of flexible hours. But this may not be sufficient. A consistent refrain amongst those interviewed was that the issue of work-life balance was a 'looming' issue that would need to be addressed by the industry.
- 4.56 Regardless of the precise reason or reasons for the gender pay gap that may exist within the sector, it is also the case that its potential impact on the whole economy gender pay gap is constrained by the fact that women account for fewer than one in three employees in IT. This is related by those working in the sector to the choices that people make at school or university, that is, subject choice. The evidence from the pattern of undergraduate qualifications by subject type indicates that proportionately few women obtain degrees in the subject areas that are of most direct relevance to the industry. This has the effect of limiting the potential pool of employees from which IT-related firms recruit. Since rates of pay in the sector are above-average, encouraging an increase in women's share of employment in the sector would have a positive impact on the gender pay gap.

## 5 Conclusions and Recommendations

### Introduction

- 5.1 The purpose of this Section is to assess the scope for developing Northern Ireland specific recommendations on actions to reduce the pay gap.
- 5.2 The approach taken to meeting this objective is as follows. The Section commences with a discussion of the implications of this research for the setting of overall objectives in relation to the whole economy gender pay gap. This is based on the findings from Section 2 above.
- 5.3 The Section then considers, in light of the findings from Sections 3 and 4 above, the rationale for sectorally-focused strategies as one element in the effort to reduce the gender pay gap. The Section concludes by making a number of recommendations in that regard.

### Objectives

- 5.4 This report has focused on the gender pay gap defined in terms of women's earnings, both part-time and full-time, relative to those of full-time men in Northern Ireland.
- 5.5 The key findings to take into account in formulating objectives for an equal pay strategy are as follows:
  - The gender pay gap for full-time women now stands at 11 percentage points. The trend is upward, with the gap closing at a rate of about 0.8 percentage points per annum.
  - The gender pay gap for part-time women is wider, standing at 32 percentage points in April 2002. This gap has not been improving.
- 5.6 These key trends in turn dictate the overall policy issues that need to be addressed in the context of promoting equal pay for women.
- 5.7 Convergence is occurring in the case of full-time women. The key policy issue is therefore whether the rate of convergence can be accelerated. But this will only affect one in two women workers.
- 5.8 It is not obvious that convergence is also occurring in the case of part-time women. The need is therefore to embed an upward trend in the relative earnings ratio for women working part-time, who account for half of all female employee jobs.

- 5.9 The research evidence also indicates that differences in measurable labour market characteristics (e.g. qualifications) do not explain the gender wage gap for full-time women. That is, the results suggest that full-time women's earnings should be on a par with those of men. The policy objective should therefore be for women full-time workers to achieve parity with men's full-time earnings.
- 5.10 Regarding part-time women, the econometric results indicate that their relative earnings are significantly influenced by differences in characteristics, such as lower levels of qualifications. The analysis further suggests that these factors explain most of the current wage gap between full-time women and part-time women.
- 5.11 The policy objective should therefore be to seek to ensure that growth in part-time women's earnings should at least keep pace with those of full-time women. Another way of putting this is to say that the objective should be to see a sustainable positive trend in the relative earnings of part-time women workers.
- 5.12 The evidence from this report is that the first of these two objectives is achievable, *as long as present trends are maintained*. The second will be much harder to achieve:
- It is inextricably linked with the general problem of low pay and inequality.
  - Part-time working is itself a response to the constraints that many women face in balancing the need for additional income with caring responsibilities. This may constrain their capacity to enhance their labour market capabilities.
- 5.13 Regarding the issue of low pay, there already exists a national policy framework, in the shape of the National Minimum Wage. The key to enhancing the effectiveness of the NMW is to ensure that it is up-rated on a regular basis.

### **Rationale for a Sectoral Approach**

- 5.14 To quote the EOC-GB guidance notes, unequal pay usually comes in two forms:
- Women being paid less than men for doing the same or a similar job.
  - Women being paid less than men for doing work of equal value. A job of equal value would be a job which is different but which requires the same levels of skill, knowledge and responsibility.

- 5.15 In law, this applies only to men and women in the *same employment*. But it is clear that unequal pay exists both across and within industries and occupations. There is therefore a need to promote and encourage more equal pay at those levels, given the large and persistent disparities that are documented in this report.
- 5.16 The second element of a rationale for a sectoral approach is well stated in the Kingsmill Review, which asserts that the primary labour market outcome which is driving unequal pay is:
- The clustering of women in lower paid and lower status roles within firms and within a limited number of occupations across the labour market.

## Recommendations

- 5.17 The findings of this report indicate that there does exist scope for sectorally-focused strategies as one element in the effort to reduce the gender pay gap.
- 5.18 The following are a number of recommendations in respect of the development of a sectorally-focused strategy.
- 5.19 There is a need to build awareness amongst firms that unequal pay exists within their own industries and, by implication, their own organisations. For example, there was very little recognition amongst retail firms in particular that any issue exists regarding equal pay. This was in an industry where the average woman in management earns less than 60 per cent of what the average male manager earns.
- 5.20 There is a lack of monitoring of fairness in pay systems that must be addressed. In the retail sector, this is would best be directed at the disparities that currently exist at management level.
- 5.21 Within the IT sector, this would best be directed towards processes such as performance appraisal and the development of greater transparency in pay levels and structures.
- 5.22 It may be useful to focus on these two contrasting sectors initially, since they encompass many of the problems that need to be addressed, with a view to developing cost-efficient best practice models capable of winning support from firms.
- 5.23 This is not, however, a priority issue for the business sector. There will therefore also be a need to build a business rationale for monitoring fairness in pay systems.

---

## References

- Anderson, T., Forth, J., Metcalf, H., and Kirby, S., 2001. *The Gender Pay Gap*. Final Report to the Women and Equality Unit. London: Women and Equality Unit.
- Barrett, A., Callan, T. (ed.), Doris, A., O'Neill, D., Russell, H., Sweetman, O., and McBride, J., 2000. *How Unequal? Men and Women in the Irish Labour Market*. Dublin: Oak Tree Press in association with the ESRI.
- Borooah, V.K., and Forsythe, F.P., 1997. *Gender and the Earnings Gap: Unequal Treatment or Unequal Workers? An Analysis of the Northern Ireland Labour Force Surveys, 1993 and 1994*. Belfast: Equal Opportunities Commission.
- Dignan, T., 2002. *Gender and Pay in the IT and Retail Sectors in Northern Ireland*. Report prepared for the Equality Commission of Northern Ireland.
- Equal Opportunities Commission, 2000. *Women and Men in Britain – The Labour Market*.  
[http://www.eoc.org.uk/cseng/research/wm\\_labour\\_market.pdf](http://www.eoc.org.uk/cseng/research/wm_labour_market.pdf).
- Harkness, S., 1996. "The gender earnings gap: Evidence from the UK". *Fiscal Studies*, 17(2): 1-36.
- Income Data Services, 2001. "Pay in the retail sector 2001". *IDS Report No. 841*, September 2001.
- The Kingsmill Review, 2001. [www.kingsmillreview.gov.uk](http://www.kingsmillreview.gov.uk).
- NIERC, 2000. *A Study of the Northern Ireland Labour Market for IT Skills*. Report prepared for the NI Skills Task Force.